

Creating Community through Collaboration and Technology
*A study of the collaborative process created to produce a provincial curriculum guide for
the education of certified dental assistants in British Columbia*

By

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We accept this thesis as conforming
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Abstract

Creating Community through Collaboration and Technology

By Debbie Payne, CDA, MA

This research study, *Creating Community through Collaboration and Technology*, was completed for the Master of Arts in Leadership and Training at Royal Roads University. It explores collaboration in the context of developing a provincial curriculum guide for certified dental assistant education. Communicative technologies such as email, computer and audio conferencing, and fax enhance the collaborative approach so that work continued virtually. The team of people, representing nine college programs, became a learning community as they experienced the joys and pain of true collaboration.

Five themes emerged about collaboration in this research study: feeling of collaboration; goal, purpose and commitment; influence of beliefs, values and perception; technology comfort; and learning to collaborate. In addition issues such as gender, group size and inter-institutional partnerships were examined. Key success factors in collaboration include shared leadership, commitment and trust, adherence to shared values, and the importance of creating shared space to seek shared meaning.

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GLOSSARY

For the purpose of this research study the following terms are explained for the reader.

Certified dental assisting: As defined by the Rules of the College of Dental Surgeons of British Columbia as a Level II Certified Dental Assistant, registered and licensed as a dental professional in British Columbia.

Collaboration: Collaboration essentially means working together with others for a specific purpose and creating something new. Schrage (1995) describes collaboration in several ways. “The act of collaboration is an act of shared creation and/or shared discovery.” (p.4); “collaboration isn’t communication or teamwork, it’s the creation of value” (p.32); “collaboration creates a shared meaning about a process, product or an event”(p.33)

Collaborative process: An approach to collaboration. In this context the collaborative process is a journey of discovery, a continuing exploration about working together in creation. A suggested collaborative process is described in the Study Conclusions.

Curriculum Guide: A guide that represents CDA education, is both reflective and visionary, and provides faculty with direction for evolving and changing their curriculum.

Technology: Technologies referred to in this research study are tools designed for distance communication and include fax, email, computer conferencing, audio conferencing, telephone, and regular mail.

Virtual team: A team that chooses to work for any reason using various technologies for communication, rather than using face to face interactions.

CHAPTER ONE: STUDY BACKGROUND

The Challenge and Opportunity

*“It always takes a group of people working together with a common purpose in an atmosphere of trust and collaboration to get extraordinary things done.”
Kouzes and Posner (1995)*

This major project for the degree in Master of Arts in Leadership and Training is entitled *Creating Community through Collaboration and Technology*. It is a research study of the collaborative process created to produce a provincial curriculum guide for the education of certified dental assistants in British Columbia. The researcher explored the following key questions in this research study.

- 1.) Is collaboration a viable approach for developing a provincial curriculum guide?;
- 2.) Can technology enhance the collaborative process?; and,
- 3.) Can community be created through collaboration?

The context of the Master of Arts in Leadership and Training major project, *Creating Community through Collaboration and Technology*, is the certified dental assisting (CDA) educational community in British Columbia. CDA education in British Columbia has evolved into eight traditional, regional vocational programs and one distance provincial program offered through the post secondary system. Each nationally accredited program was developed from provincial skill based competencies last revised in 1989. The competencies address clinical and support skills with associated related knowledge and procedures but do not address employability skills, learning outcomes, or assessment strategies. Each of the nine programs has developed and structured their own unique curriculum based on regional needs as well as faculty and college preferences. For example, one college program has four courses; another college program is organized

into twenty-seven courses; and some programs use themes or semesters rather than courses to describe their curriculum.

A project, the *Curriculum Guide 2000: Education of Certified Dental Assistants in British Columbia*, was envisioned by the CDA Sub-committee of the Articulation Committee of Allied Dental Educators of British Columbia to provide programs with a common vision, learning outcomes, and assessment strategies based on a best practice approach. The curriculum project began in 1996 and the first stage, entitled Curriculum Guide for Certified Dental Assistant Education Stage One was completed in June 1998 (Reagan, 1998a).

Stage One was developed through a typical approach and what was deemed to be a collaborative process, as noted by Reagan (1998b). Techniques employed were a written survey on the use of the existing 1989 Competency Guide, a provincial advisory committee that provided advice and support to the writer, a vision workshop with all stakeholders, and a review of each draft by program faculty. Despite this inclusive process, plus given other mitigating circumstances, the program faculty lacked complete ownership of this first stage as became evident at the Certified Dental Assisting Educators sub-committee of Articulation in April 1999.

The researcher was provided the opportunity to lead and manage the next phase beginning in September 1999. The mandate was to produce a comprehensive, user-friendly guide for future curriculum changes in programs. Three major issues emerged through a facilitated process in April 1999: the project needed a creative more inclusive collaborative approach, there were new limitations in funding, and there was a significant reduction in project scope from the original vision. (Appendix A)

The Curriculum Guide 2000 clearly needed a different approach that involved faculty in the development of the product. This sparked the idea for this research study.

The challenge of the research study, *Creating Community through Collaboration and Technology*, was to create, implement, observe and reflect on the collaborative process for the Curriculum Guide 2000 project. The stated goal of the collaborative approach was to fully engage faculty in the process and to create ownership of the product to the degree that it became a useable guide for their programs. Crafting and creating a collaborative process while managing the project development provided an opportunity to be flexible, adaptable, and make changes to both the process and the development product as it proceeded.

In this particular situation, there was no overarching “partnership” amongst the nine colleges to guide the project development. Inter-organizational collaboration and partnerships often are formed and developed at the corporate level. They tend to center on organizational philosophy, intention, or principles and sometimes break down at the program or delivery level for implementation. Paul (1990) notes,

Collaboration sometimes becomes more difficult as it becomes more specific. It is usually easier to agree about general principles and grand schemes than it is to work out the details of who has what authority and who does all the work. ...inter-institutional agreement is more likely the higher one goes in the organization. Hence, presidents will agree to almost anything with each other, vice-presidents will usually find a way through, while deans are more skeptical. Faculty are strongly resistant and academic secretaries don't want to know. (p.148)

Although this observation was not consciously noticed by team members, it might have influenced the intention to collaborate, as the team was able to set its own principles and working relationships without having to consider corporate influence. This was explored in the interview process in a subtle manner, and the researcher noted a few observations.

Significance and Potential Causes of the Opportunity

The opportunity to create a collaborative process with the program faculty, and then modify, adapt, and change the process was anticipated to change the context of the development so that ownership of the project was experienced by those engaged in the collaborative work. By exploring the meaning of collaboration and what it both looked like and felt like, it was hoped that program faculty would become a more effective team and create a learning community. Bridging the distance through technology was a key factor in maintaining momentum of this approach.

The Curriculum Guide for Certified Dental Assistant Education Stage One was started as an apparent collaborative process; therefore, there was an opportunity to explore what worked, what did not and why at the beginning of the next phase. Creating a new process together to support the development was expected to be challenging and “messy,” but meaningful for faculty. The opportunity to learn from history was hoped to be of benefit for this particular group but perhaps also provide a model and guidance for other collaborative groups. An additional anticipated benefit was that group learning and self-knowledge would occur thereby establishing some protocols and expectations about working together on group projects.

It is hoped that the results of this study will benefit other disciplines and groups who will be attempting to collaborate on projects, whether face to face or at a distance. Future projects may benefit from the examination of this collaborative approach by providing some insight on how the collaborative process was developed, what occurred, and some recommendations on what should be considered when groups attempt collaborative projects.

CHAPTER TWO: LITERATURE REVIEW

“Trust provides the foundation for collaboration and coordination at the work level so that joint efforts can be maximized.” Jim Harris (Learning Paradox, 1998)

Review of Existing Documents

In addition to The Curriculum Guide for Certified Dental Assistant Education Stage One previously mentioned, considerable information and resources existed in the dental assisting educational community and in the system that supported, and was a resource for, this major project on collaboration and technology.

Certified Dental Assisting Vision Workshop, December 1997

This one-day vision workshop was held during Stage One on December 1, 1997. Participants included representatives from each certified dental assisting program, from the member services and regulatory college for certified dental assisting, as well as practicing certified dental assisting and dentistry. The purpose was to explore and reflect on CDA practice and education. Then using the group’s collective information, create a vision of a future CDA practitioner, thereby helping to determine what education would be required. Both an examination of the process and the results of this workshop would provide some direction for this major project. Many of the same people were involved and the workshop was deemed to be a milestone in which major learning occurred for all.

Information from a two day workshop with Articulation members, November 1998

Representatives attended this workshop from each CDA program. The process was essentially one of discovery in which we attempted to understand the curriculum project and what action we wanted to undertake. The process itself was not clear; therefore the

results were confusing to participants. An examination of the process and reflection on this experience provided an opportunity to look at both process and how well the group functioned in this environment. This information was helpful in creating a model to initiate a collaborative process.

Process and Results from the April 29 and 30, 1999 Articulation meeting

The process from this meeting was clearly documented, observations noted, and the researcher completed a reflective journal. The process reestablished a level of trust in the group, set the tone for a collaborative approach, and provided an opportunity to pilot some distance collaboration on a very small scale. The individuals took information back to their faculty, discussed the process and results, an email discussion followed and consensus for the direction resulted. All this information was valuable to both reflect on and use with the group during the creation of the collaborative process.

Dental Hygiene Learning Outcomes Project

Dental hygiene educators recently completed a project on learning outcomes that was developed somewhat collaboratively, although in actuality it appeared to be more consultative. Three colleges were represented in this dental hygiene project. The Dental Hygiene Project was reviewed; however due to time restraints an in-depth examination of the development process was not possible.

Relevant curriculum projects from the Center for Curriculum, Transfer and Technology

The Center has contracted many educational projects over the years. Most have been faculty release approaches, however more recently there has been direction to develop collaboratively. The Center may have information on collaboration and what they would like to see accomplished. The November 1998 workshop was initiated by the Center as one approach to collaboration.

Skills Guide for Allied Health Professions from Washington State 1998

This Skills Guide was developed in Washington State over a period of four years with a large number of stakeholders. The approach to development, although not extensively documented, is explained in this Skills Guide.

Curriculum Guide 2000 Workshop September 23 and 24, 1999

This workshop was held to launch the Curriculum Guide 2000 project that stems from the Stage I project. The primary purpose was to establish the team so that it could work collaboratively by distance. Some members were new to the project; others were involved since its inception. Based on previous experience in working with groups, recent learning from the Master of Arts in Leadership Program, and the literature review, the researcher facilitated and led this workshop attempting to establish a strong identity and fundamental values as well as a working level of trust. Expected results were discussed at the start of the workshop and reviewed at the end. Considerable energy, enthusiasm and action resulted from this workshop. (Appendix B)

Review of Supporting Literature

To support the creation and exploration of collaboration enhanced with technology as a process for development of curriculum, the following grouped topics were explored in the literature review:

- 1) Collaboration, teams, and leadership; and
- 2) Curriculum development approaches.

Collaboration, Teams, and Leadership

*“Politeness is the poison of
all good collaboration.”
Frances Crick*

Key Success Factors in Collaboration

- Commitment to collaborate
- Recognition of the complexity of collaboration
- Shared vision and values

Collaboration essentially means working together with others for a specific purpose and creating something new. Generally, it is anticipated that through collaboration an improved product will result and relationships will be enhanced. It is also anticipated resources will be shared more efficiently. What Paul (1990) says is “the whole may be greater than the sum of its parts-the synergy that comes from collaboration can often yield benefits well beyond those originally envisioned”(p.144) is quite applicable when considering the potential effects of collaborative relationships.

Collaboration requires intentional, deliberate sharing or partnering with the expectation that a better result will be evident because of the collaboration. Individuals, corporations, companies, and organizations are collaborating and sharing resources much more than ever before. Perhaps much of this activity stems from economic forces or other factors, but it is visibly apparent that partnerships and strategic alliances are becoming important to organizational survival. As noted by Parker (1998)

From business comes the view that collaborative leadership increases motivation, job satisfaction, and commitment to quality by allowing workers to experience empowerment and ownership.

The argument from economics is that collaborative leadership is appropriate to a global and information-based economy, in which

interdependence and information flow have usurped competition and material production as the keys to economic success. (p.3)

It is further evident in much of the educational literature that collaboration on projects and initiatives is encouraged, and has become the norm in practice rather than the exception. Grants and funding are provided to institutions that are servicing the system, producing products for use by other institutions, and working in collaboration and partnership with each other. After exploring the inherent paradox in academy, which has a sense of “valuing as it does the balancing of individual insight and collective wisdom, defining itself as a community-not a factory,” Parker (1998) provides us with some advice about working in collaboration in academic institutions. She suggests that we should

...recognize the ways in which roles and structures of the academy foster certain kinds of collaboration but inhibit others....encourage awareness of who is at the table, what perspectives are missing, how the frame of reference is defined, where possibilities for collaborations exist and where other goals are appropriate. (p.8)

McKendall's (1996), dissertation, Factors Facilitating Interorganizational Collaboration, outlines a continuum of collaboration definitions. She describes the four terms as networking, cooperation, coordination, and collaboration, with collaboration being the most complex and diffuse. Collaboration supports deliberately designed relationships, solutions to problems emerge, high-risk factors are present, responsibilities and rewards are shared, and there is sustained relationship and effort that is durable and pervasive. The process is also emergent rather than focused. The researcher would further add to this definition that leadership may be shared, and most likely should be, in the collaborative process.

Moran and Mudgridge (1993) explore inter-institutional collaboration in education through a number of international projects. The agreements to collaborate were formed at the corporate level in institutions and had varying degrees of success. It seems that the factors which created the most challenges were the complexity of administration,

differences in culture, issues of time for decision making, distance, trust, and something they called “programme-bending: the finding to the lowest common denominator or most inoffensive route in order to minimize disagreement” (p.142) which may be positive or negative depending on the situation. They also provided a number of important factors and themes in inter-institutional collaboration, which emerged from the case studies they studied. The themes included the following: accommodating institutional cultures, building trust relationships, and perceiving mutual benefits. Moran and Mudgridge (1993) also note that “Sustained relationships based on personal trust and shared values cannot be overestimated as factors in successful collaboration.” (p.154)

Marshall's (1995) explanation also focuses strongly on the value of the relationships, an important factor in successful collaboration. He notes, “ It is a principle-based process of working together, which produces trust, integrity, and breakthrough results by building true consensus, ownership, and alignment in all aspects.”(p.4)

Inherent in these explanations of collaboration is a strong sense of understanding the value in working together and more importantly, creating and living the values and shared vision of the team. Schrage (1995) says that it takes a sense of “shared space” to create shared understanding and that successful shared spaces make collaborators feel like they are together even when they are not. He says definitely ingredients are present when collaboration exists, although this does not necessarily mean that collaboration will occur when the fourteen ingredients he identifies are present. Schrage explains in detail the importance of competence, of having a shared understood goal, of fostering mutual respect, and of creating an environment for tolerance and trust. He explains why collaboration demands the creation and manipulation of shared spaces, why there are multiple forms of representation, the importance of play, and why continuous but not continual communication is required. He further indicates the need for formal and informal environments, the necessity for clear lines of responsibility but not restrictive boundaries, and makes the observation that decisions do not have to be made by

consensus. Schrage is careful to note that physical presence is not necessary for collaboration, that the selective use of outsiders for complementary insights and information is valuable, and especially notes the fact that collaborations end. (p.154-164)

From Bourget and Ryan (1999) we learn about the twelve conditions they identify are present in collaboration, which are similar to Schrage's (see Appendix D).

These conditions for collaboration, in condensed form, are:

- 1) A clear and a compelling purpose, mission or goal;
- 2) Agreement that collaboration is the best way to proceed;
- 3) A commitment to a win-win approach with a conscious choice to collaborate;
- 4) Leadership support from upper management and a whole systems perspective;
- 5) Active partnering and involvement in decision making;
- 6) Well-defined, systematic, open and honest inclusive communication process;
- 7) Clear expectations of roles and responsibilities and risk tolerance;
- 8) Group members committed to creating a positive working atmosphere;
- 9) Commitment to ongoing learning;
- 10) An appreciation of diversity as a catalyst for creativity;
- 11) Clear action planning process, both strategic and operational;
- 12) Recognition that the group strengthens individuals and the individuals strengthen the group.

The researcher agrees with Schrage, Bourget and Ryan and believes that creating the right environment to work in collaboration, and using technology to enhance it, can be an effective and viable approach for a project. Furthermore, it can contribute to both individual and collective growth that strengthens community.

Relationships in a Collaborative Process

- Interdependent relationships
- Inspiring, creative leadership

- **Communication flow**

Beliefs and values of group members are important to consider in the collaborative process. The complexity of relationships leads us to look at how people relate, what they base their decisions on, and most importantly how the issue of leadership is dealt with by the group. People need to be heard and listened to; diversity of thought increases the potential opportunity for good work. Spears (1995) indicates that “interdependent relationships help create collaboration and...minimize competition.” He goes on to say that collaboration occurs when “everyone has had a say, been listened to, and can support the wisdom of the group.” Of servant-leadership for groups he notes “the implications of this style in terms of trust, communication, shared information, ownership, and empowerment are quite clear” (p. 211).

Bennis and Biederman (1997) look at creative collaboration by examining what they call great groups. It seems that these highly effective groups rely on a leader or “organizing genius” to gather highly talented people together and figure out how to get the most creative effort from each of them. It seems apparent from these observations that the leader is critical in forming the team at the initial stage.

In a subsequent article Bennis (1998) reinforces what many others have said. Finding meaning in work is inspiring, trust is absolutely essential, and leaders that work with great teams have a “contagious optimism.” “Allowed to flourish, people spark greatness in each other.” (p.8)

Schrage (1995) gives us an important point to ponder on the importance of belief as it relates to building a collaborative team.

The thing that matters most is that the collaborators possess a modicum of mutual trust, the belief that they are adding value and a genuine desire to solve the problem at hand or create something new. (p.36).

On communication in collaboration he has the following to say, “Successful collaborators try to create an appropriate flow of communication rather than a structure for communication.” (p.158). As noted by Pallante in Christianson et al. (1997) collaboration requires practice and generous and sustained mediation to mature.

As we move from the information age to the knowledge age, we continue to realize the importance of relationships and the impact of these on how we will work together. In particular, Schrage (1990) states management power is likely to shift from information to relationships if collaboration becomes more evident in the workplace of the future.

...the true medium of collaboration is other people. Real innovation comes from this social matrix. And if the nature of our interactions is more important than accelerations in the delivery and increases in the quantity of information, then management of relationships should supplant the management of information as the source of real information, increased productivity, and new value in the enterprises.

Christianson et al (1997) also provides us with some metaphors for describing collaborative relationships. The description of these metaphors gives us a sense of continual movement and change, of relationships that flex, occasionally breaking through to new places. The metaphors represented are: a troupe of travelers, a sea anemone, King Arthur’s Knights of the Round Table, a web, a quilt, a catalyst, a jazz ensemble. She further notes that these metaphors evoke images that

“strongly suggest interrelatedness. Many focus on the emergent, evolving, self-constructive nature of collaboration and many suggest the potential for enriched and multilayered perceptions and knowledge development emerging from the convergence of many perspectives and wide diversities.”

Shapiro, in his book review of Schrage’s Shared Minds: The New Technologies of Collaboration, came to understand that “Good collaborative teams, therefore, have a tacit understanding that individual ego must necessarily be subsumed to the larger team goal.” One simple quote from Mink et al. (1994) summed up the importance of giving relationships in a collaborative process. “...collaboration demands generosity from all who agree to participate.” (p.8)

Learning for both individuals and teams is evident through the interdependent relationships that exist in a successful collaborative project. Pasternack and Viscio (1998) in a discussion loop on knowledge, learning and change say “All learning occurs in some form of collaboration, most powerfully in team collaboration with others, but also in one person collaborating with others.” (p.100)

Resistance to Collaboration

- Speed of decision making
- Individual accountability
- Lesser product quality
- Impact of change

The benefits of collaboration are espoused in the literature to a great degree. However, there is some resistance to collaborative efforts from those who particularly work in a more autocratic environment and who believe that quick responses and decisions can not be made collaboratively. Resisters also suggest that collaboration does not support individual accountability and that it sometimes leads to a lesser quality product.

Parker (1998) notes some strong resistance to collaboration and that “an emphasis on collaboration is really just an evasion of individual responsibility.” (p.3) She further points out “sometimes collaborations tend to settle on the intellectual lowest common denominator, the ideas on which the most and least insightful can readily agree.” (p.4) The researcher agrees that there is danger inherent in the collaboration process, however she suggests that establishing and adhering to clear purpose and vision, creating a values-based effective group, and collectively creating and paying attention to both process and task can diminish these tendencies.

Although not specifically identifying resistance, Briskin (1998) speaks of the unpredictability of teams.

...the concept of team building breaks down with the uncertainty inherent in human systems. We cannot foresee when the assertion of one individual or the changing demands of the workplace will break down the intent of working together. (p. 252)

This complexity and fluidity is exactly what makes teams creative. Harnessing that energy, providing a safe environment for exploring the meaning, and helping the team to honour the relationships are challenges for the leader. Briskin (1998) explains that deep listening and real dialogue help “to tune in to the sphere of the between” (p.261) and understand how important the relationships are in collaboration. Collaborative teams are clearly not simply a group of people, working on a task or producing a product. This is much too mechanistic a model. Some resistance to collaboration may be rooted in fear of the unknown, the messiness of relationships, and the time it takes to work through this. Leaders must allow for this. Balancing task and process in collaboration is a key element to consider.

Marshall (1995) also gives us an important point to remember that collaboration will not work well in situations where there is not a fundamental belief and value or a high level of commitment for the process. Therefore ensuring that those involved in collaboration understand it and want to participate is key to its success.

Team Purpose and Meaning

- Meaningful goal
- Shared vision

What inspires a group to become a great team? What differentiates a great team from just a group of people? Kouzes and Posner (1995) say

...believing that we're not just part of the team but part of something significant and larger than the moment creates a compelling

motivation to achieve and succeed (p.301) ...as people give, they get; and thus they become interconnected and caught up in one another's lives. It always takes a group of people working together with a common purpose in an atmosphere of trust and collaboration to get extraordinary things done. (p.304)

Finding a specific purpose or attributing meaning to work in the context of groups of people working together seems to be essential to creating a collaborative process. Wheatley (1999) speaks of this.

“We are always seeking meaning in what we do. We find this in small tasks, in large causes, and in our relationships. Whatever the form, the desire to create meaningful lives is an irresistible current in all organizations.” (p.92)

The sense of purpose, of having a direction, is essentially what is referred to in the literature as having a shared vision. Yuki (1998) says that when effectively developing vision the leaders inspired people to a greater purpose and helped them see the future. He also says that aside from helping individuals make good decisions that vision will “inspire followers by giving their work meaning and appealing to their fundamental human need to be important, to feel useful, and to be part of a worthwhile enterprise.” (p.338)

To collaborate effectively a team needs a clear, shared purpose. The team that will be working on the Curriculum Guide 2000 has established a clear defined purpose and approach as identified in April 1999. (Appendix A)

Team as Community

- Community as relationships
- Diversity of individuals is a strength

Because teams are in essence a small community a brief review of the literature on building community is relevant to this research. Many of the same principles apply. Authors such as Bellah et al. (1996) and Manning, Curtis, and McMillen (1996) speak of

the paradoxical tension between the value we place on the individual and the importance of meaningful interaction with others in community. Shaffer and Anundsen (1993) provide insight about community as being not a place but a concept defined more by process than form. They say

The kinds of communities that are emerging today tend to be more fluid than those of the past. They consist of systems of evolving relationships...members may leave, and new members join, without destroying the group...they shift form and function and move from one level of consciousness to another. (p.16)

Capra (1996) relates ecological communities and their self-organizing interdependence with human communities. He explains the importance of awareness of ecological literacy and relationships to our survival in the future. "A sustainable human community is aware of the multiple relationships among its members. Nourishing the community means nourishing those relationships." The dynamic balance required in communities is noted when he says, "the community will need stability and change, order and freedom, tradition and innovation" and that these contradictions are a sign of its diversity.

Collaboration requires attention to diversity, to balance, and to system co-evolution, and, as a result, it could foster community development.

Team Roles

- Role definition and communication
- Multiple connections and self-awareness

The term collaboration, like partnership, seems to have a sense of equal status. That is, no one partner is dominant, rather they work together towards a common purpose. How the people function in groups becomes important.

For teams to function effectively roles must be clearly defined, communication strategies understood, and decision-making and task delegation clear. Bolman and Deal (1991) examine several structures for groups. The group structure applicable for amorphous or complicated tasks is what small group researchers call the all-channel or star network.

This type of network

...creates multiple connections so that each member can talk to anyone else. Information flows freely; decisions require touching multiple bases. Morale in all-channel teams is usually very high....Team members need well-developed communication skills. They must also enjoy participation, tolerate ambiguity, embrace diversity, and manage conflict. (p. 87)

Teams need a strategy for learning and also need to have some guiding principles. Senge (1994) gives us five key points that teams can use when they are engaging in what he calls skillful discussion. He suggests that if teams do the following they will improve the quality of their thinking processes and hence their productivity.

- 1) Pay attention to their intentions;
- 2) Balance advocacy with inquiry;
- 3) Build shared meaning;
- 4) Use self-awareness as a resource; and
- 5) Explore impasses.

Virtual Teams and Technology

- Importance of communication strategies
- Technology as a tool to bridge distance
- Importance of social connections

Teamwork requires good leadership and the dedication and commitment of all team members. It is difficult work done face-to-face. Teams that need to work at a distance face even greater challenges.

A virtual team is a group of individuals working on a specific project, where the members are not in the same location. Establishing communication strategies, ground rules and a sense of group ethos is critical to working in a virtual environment. Solomon (1998) suggests even virtual teams need some face-to-face time to develop relationships. She stresses the importance of communication and basic team building skills that need to be established face to face before virtual teams can work effectively. She says

This face time together is when the team leader typically solidifies the group and guides it towards working jointly. Again, several points should be established clearly at this stage: specific team objectives, how to accomplish them, who is responsible for what and when and general project timetables. (p.4)

Virtual teams use technology to bridge the distance. Lipnack and Stamps (1999) explain the factors that contribute to the success of virtual teams. They believe that new organizational order will emerge from virtual teams, more of a networked linked organization where information flows to those that need it. They cite three competitive publishing magazines that

...learned to put their competitive instincts aside and cooperate for their mutual benefit. They used virtual teams to cross their physical and corporate boundaries to put this highly lucrative deal together. (p.4)

According to Lipnack and Stamps (1999) there are three basic principles for virtual teams: purpose, people and links. A strong definite purpose, task, or project will bind people in a virtual team. Encouraging people to share leadership is a strong component as it creates flexibility and uses the talents of each member as the project evolves. Links constitute the interactions through technology that build the personal relationships.

The kinds of technology used by virtual teams will vary depending on the needs of the team, the accessibility and availability of the technology, and the technology capabilities of each team member. Use of telephone, audio conferencing, fax, and email seem to be most common. However, videoconferencing and some of the new video, graphical

computer or digital technologies will impact the effectiveness of virtual teams as confidence, accessibility and availability increase.

Solomon (1998) suggests that using technology for communication improves with experience. Companies have learned through experience that audio conferencing seems more efficient than video conferencing; that visuals and handouts for meetings need to be faxed or emailed ahead of time. Planning and timing of the conference call is critical as members may have different schedules or even be in different time zones. She later explains that leadership identification and shared leadership becomes of paramount concern once groups are efficiently communicating. She calls this “cultivating distributed leadership”(p.6)

Both Gellerman (1994) and Bernard and Naidu (1990) speak about using telephone technology to aid in distance communication. Voice mail can be used effectively to leave informational messages, to provide a sense of “voice” and personal communication and used for timely, important or sensitive issues that need explaining. Teleconferencing, or more accurately audio conferencing, provides an opportunity to bring all team members together in a phone conference in real time and can be very effective. It is important to note that paying attention to timing and location is critical so that all members can participate.

Virtual teams rely on technology and use it for communication, but it is not the technology that is the focus, it is very much the people and relationships that breed successful teams. Lipnack and Stamps (1999) express this very well.

Virtual teams are a type of small group. They differ from other small groups in forms of communication, number of relationships, and in the ability to create a global context.....Successful virtual teams, however, depend more on people than they do on technology...Its 90 percent people and 10 percent technology... the technology won't work unless the people issues are addressed first. Working in a virtual environment requires a new kind of organization, a new kind of management, and a new kind of leadership. (p.5)

From Schrage (1995) comes a message about technology and people,

This is the real power of technology: not just to serve as a tool or medium but to redefine the way people perceive their environments. Technology is the environment and it inevitably shapes the way people relate to one another. (p.137)

He further goes on to say

What if technology could augment the process of collaboration with the ease that the pocket calculator augments computation? What new kinds of conversation and collaboration would occur? ...it is using technology to enhance the collaborative relationship. Technology here does not substitute for people; it complements them. (p.92)

Sudweeks and Allbritton (1996) did an inductive qualitative research study to reveal communication patterns and group development in collaborative work. Their study focused on a self-selected virtual team of more than one hundred researchers over a period of twenty-three months. The participants had never met and therefore were considered a fully virtual team. They found that the virtual team took longer to develop norms and social relationships and plan and assign tasks, but that they went through very similar stages of group development as a face to face group. They did note that the interplay and inherent conflict of task-oriented and socio-emotional needs created tension, as it normally does in a face to face group. Learning how to manipulate communication to reduce stress and conflict could improve satisfaction and productivity in collaborative relationships.

The importance of establishing clear communication paths, finding ways to strengthen the social community of relationships, having a specific purpose, and sharing the leadership role are attributes of successful virtual teams.

Team Leadership

- Leadership self-knowledge
- Leading in change

- Shared leadership

Leading a group or team in today's environment requires leaders to bring who they are to the table, who listen and create a shared vision, and most of all who help the group establish values and demonstrate those values in behaviour. Bird (1999) stresses that it is important to "lead by example, to hear from their points of view what is working and what needs to be changed and to communicate the vision." (p.1) She further points out that "trust is built through consistent communication." (p.2)

The literature on leadership is extensive, pervasive, and varied. However, many authors including Covey (1992); De Pree (1989); Kouzes and Posner (1995) and even Heider and Lao (1985) speak mostly about the importance of self-knowledge in the leadership journey. Only by first knowing oneself can one do leadership with some degree of success. Helping others develop their own leadership abilities becomes another level of complexity that affects leadership capacity. Chatterjee (1998) says that

The greatest challenge that faces leadership today is to be able to strike a balance between the sustenance of the entire context of an organization while nurturing individual identities.

Striking this balance requires focused concentration and detached awareness, then a level of transcendence that permits a letting go of the past so that a transformation can occur. It is important to recognize this need for balance as leaders today need to pay attention to the incredible change environment that is the norm while at the same time honouring the importance of relationships. As the relationships continue to be recognized as being important, it is clear that leading a team requires an awareness of leadership abilities and hence a need to begin to share the leadership role if one is to honour the leadership in others.

Many writers explore leadership in groups. Group leadership issues become of extreme importance in collaborative teams, particularly if there is no identified positional leader. Often one person or organization will take the lead; however in a collaborative relationship there seems to be an understanding that leadership will shift and be shared.

Gordon (1955) indicates that group-centered leadership springs from two principal sources, the group dynamics movement and the practice of psychotherapy. Terms such as student-centered leader, nondirective leader, social therapist, group facilitator, participant leader, group integrator, permissive leader and democratic leader were used by researchers to describe leaders in groups who honour and value group members, allowing leadership to emerge within the group so that people are self-directing and self-responsible. He says that “the basic aim of the leader is to tap and develop the creative resources of his group members.” (p.viii)

The literature supports the premise that leaders of groups need to be extremely flexible, adaptable and primarily situational. That is, they must be able to adapt their leadership style to various situations, and also change as the group evolves and matures. In most cases, they must be prepared to share the leadership role with the individuals most capable of leading in each specific situation. Katzenback and Smith as cited in Bolman and Deal (1991)

found that a key characteristic of high-performance teams was mutual accountability, which was fostered when leaders shared in the work and team members shared in the leadership. (p.157)

Yet another view of leadership and the concept of the team is emerging as noted by McCauley et al. (1998).

The new idea of leadership invites a different conception of the team and the organization: not as an entity outside the individual that the individual “joins” but rather the sum total of all interactions. It is less a “thing” that individuals can join and upon which they can act than it is a constantly evolving and changing pattern of interrelationships that individuals create and that creates them. (p. 423)

This notion of fluidity and movement, as well as focus on the interactions, helps us understand why any change to a group requires grounding and re-purposing of the group, why it could be a source of conflict, and further supports why fostering relationships in groups is important.

Volkoff et al. (1999) made an important and relevant point when they suggest that there is little research on the “horizontal alliances to allow collaboration on the collective production of goods and services.” They further suggest that when developing collaborative inter-organizational relationships that the traditional approach to leadership of using one project sponsor is insufficient and that throughout the various project stages leadership changes and becomes more fluid.

Leading Virtual Teams

- Creating team identity
- Expectations of team members
- Value of trust

Considering the complexity of leading groups in a face to face environment, how does one effectively lead teams in a virtual environment? Bird (1999) notes how critical trust is to establish in a virtual group and as noted by Kostner (1997), it is most important to “instill trust and cooperation”. He also mentions key points to remember when leading a virtual team. First, face-to-face interaction is needed initially to build a sense of team identity; and, second, that you should jointly prepare a communication strategy so that team members know how often to expect email communication and what the expectations are. In addition the researcher suggests that trying to build a sense of community on email by having a team name or identity, injecting some humour as appropriate, and occasionally sending social emails help improve team effectiveness.

Alford (1999) reflects on the experience of a company that established virtual teams and recognizes what contributes to a positive virtual collaboration team. He indicates that it is important to check voice and email messages frequently, be proactive in communication, and make it a priority to invest time in maintaining a personal relationship during interactions so that connections are not purely task driven.

Kostner (1996) tells us through a fable story of Merlin and his magic about virtual or remote leadership. Key points about leading by distance included: trusting unity, trusting relationships, and trusting a shared future. The key word again is trust. In addition a virtual team needs clear agreement on what they are creating together, they need to care on a personal level that the task is worthwhile, and they need to receive the same information at the same time.

Through this review of the literature on collaboration, teams, and leadership a number of important elements about working collaboratively at a distance seem to be critical. These elements are:

- 1) Collaborative teams need a leader to help them form and inspire them with purpose;
- 2) Collaborative teams need to develop a shared vision;
- 3) The leader needs to pay close attention to process and help the team make decisions according to their values;
- 4) The need to find meaning in the work is balanced with a focus on finding ways to develop relationships through the distance;
- 5) Choosing the appropriate technology is a key factor for distance collaboration;
- 6) As the team matures the leader must find ways of using the group's talents and sharing the leadership; and,
- 7) Building trust through open, consistent, and reliable communication fosters a strong team.

As the collaborative process is created and implemented it will be important to continually reflect and readjust the process, trying to pay attention to the elements that have arisen from the literature. It will be interesting to see how well the process actually correlates with what is revealed in the literature.

Curriculum Development Approaches

A review of the literature on approaches to developing curriculum has revealed little, particularly in relation to the post-secondary system. There is a multitude of literature on curriculum development and design, however it seems to be focused on curriculum models, and other structural or content based information rather than how curriculum is developed or what approaches are used to develop curriculum.

In British Columbia's post-secondary system, the predominant model or preferred process of developing curriculum projects, has traditionally been the assignment of the project to one faculty person. This individual is released from his or her normal responsibilities to consult and do research as required, then writes the curriculum project. The researcher considers this a consultative development model. The consultative model allows for input, ensures stakeholders are informed and can contribute to the process and content, and provides professional development opportunities for the writer. It does not necessarily support inclusivity or ownership nor does it ensure that stakeholders and users will actually find the product meaningful, applicable, or useful.

Gordon (1955), years ago, said of curriculum change

“this assessment of the problem of curriculum change emphasizes the importance of viewing the administrator as a person who must be skilled in dealing with human relations. It implies a dissatisfaction with traditional concepts of leadership which have neglected the human aspects of change. We have forgotten that curriculum change requires of the people who manage school programs that their leadership facilitates a change in *people*, not simply a change in the “content” of the curriculum...”(p.16)

Zellermayer (1997) explored, through an extensive qualitative research study of teachers, what collaboration means in the context of writing instruction. Although the term collaboration is used in a different context and was done solely face to face, some of the meanings discovered seem particularly relevant to this major project. The ten women teachers in this study collaborated together to develop curriculum. Their meetings were scheduled to accommodate both personal and professional agendas and were held in a

social location. In-depth interviews were held with these teachers to try and come to an understanding about the “meaning of their collaborative experiences” and also for “developing a richer and deeper understanding of collaboration” (p.191). From these interviews, five recurrent themes emerged.

...letting go of control and one’s old image of the teacher; noticing and perspective taking; connecting between life in and out of school; discovering the significance of a moral and physical space; and orchestrating simultaneous activities in class. (p.192).

Zellermayer says, “collaboration is a process of shared inquiry, and of being both separate and connected, but she emphasizes the authenticity of that process.” (p.198) How does collaboration feel? Zeichner , as cited by Zellermayer (1997), learning to see and feel and sense the life, knowledge, and inquiry efforts of another as one’s own is another way of conceptualizing collaboration. Collaboration is about learning with others, not merely from others.

The review of literature on collaboration and teamwork emphasized the importance of team roles, of listening, and of finding the meaning inherent in the work. Careful and active listening allows us to seek common understanding, which leads to collaboration.

Levin as cited in Zellermayer (1997) says that

personal experience is a filter through which people listen to dissonance and are touched and moved by what they see. It is this listening, he says, that helps people develop their listening capacity so that they can help others develop theirs. (p.210)

Henderson and Hawthorne (1995) focus on a new approach to developing curriculum which explores the concept of “bottom up” curriculum. They further illustrate how to capitalize on a variety of points of view and incorporate the input of all persons involved in curriculum design, development, and evaluation. The importance of building learning communities is noted and a four-part model on collaborative curriculum is explained. Although this reference is geared towards the elementary and secondary educational

system, much of the information is relevant and applicable to this major project and also the production of the curriculum guide itself.

CHAPTER THREE: CONDUCT OF RESEARCH STUDY

“Collaboration is the process of shared creation or shared discovery that individuals realize they could not have done on their own.”
Michael Schrage

Research Methods

The Beginning

The seed of the idea for this research study was born in April 1999 at the CDA sub-committee of the Articulation Committee of Allied Dental Educators of British Columbia. There was an opportunity to explore in depth the purpose and need for a provincial curriculum guide for the education of certified dental assistants in British Columbia. The development of a guide had actually begun in earnest in 1996, was drawn off course, and was stalled for a number of reasons. It was imperative to reestablish the initial need and provide direction for this important curriculum project to continue.

The researcher was interested in continuing work on this curriculum guide provided there was clear support from the Committee. By working through a variety of small and large group activities, as well as silent reflective thinking, the researcher was able to uncover from the Committee a strong level of support given certain conditions. The Committee was adamant that the curriculum guide project continue and be “truly collaborative.” The researcher established trust and a solid, respectful working relationship through this meeting. It was important at this point to determine what collaboration would encompass and how viable it was for this project, given the geographical distribution of the nine colleges and given the limited resources available to complete this work. After consultation, the researcher decided to make this the subject of her Major Project for the Master of Arts in Leadership and Training. The focus of the research study became Creating Community through Collaboration and Technology.

The relationship of the research study to the Curriculum Guide 2000 was important to clarify for the both the researcher and the participants. The Guide was a funded project with particular deliverables. The process by which the Guide was developed was not dictated by the funding partner, but was identified and recommended by the end-user group that it be “truly collaborative.” This “truly collaborative” process was not well defined and seemed mostly to be based on feelings, rather than a concrete picture of what collaboration would look like. The researcher examined models and processes and reviewed the literature to lead the group through a collaborative approach for the Curriculum Guide 2000 project.

Researcher’s Profile

The researcher has considerable experience working with groups at a distance. She has managed a faculty team of thirteen tutors located throughout British Columbia for the last ten years. Communication is by electronic conference, email, fax, phone, audio conference and regular mail. Once or twice per year the team meets for one-day workshops. In addition she has worked with colleagues by distance for a number of years.

This experience coupled with additional experiential learning on group development in the master’s residency environment, facilitative leadership skills, and a review of the literature helped provide direction for a collaborative approach for the curriculum guide.

Research Participants

There were nine college Certified Dental Assisting or Certified Dental Assistant (CDA) Programs involved in the Curriculum Guide 2000 project. Eight CDA Programs housed

in community colleges, and one distance program, existed in British Columbia at the time of this study.

The number of faculty membership at the colleges ranged from three to thirteen in these program areas. Each college was asked to provide one faculty person to be the main contact for the Curriculum Guide 2000. Their primary role was to collaborate by participating in workshops, generating or delegating work from their program as required, and being a conduit for information and communication between their faculty and the project team. Some faculty had been involved since the inception of the project in 1996; others were new to the team in the September 1999 workshop.

The following colleges participated in the Curriculum Guide 2000 project.

College of the Rockies

College of New Caledonia

Okanagan University College

Vancouver Community College

University College of the Fraser Valley

Open College

Camosun College

Malaspina University College

Douglas College

Center for Curriculum, Transfer and Technology (funding partner)

The researcher represented Open College. Each college selected a faculty representative for the Curriculum Guide 2000 project. All team members, with the exception of Douglas College, participated and contributed to this Major Project research study and signed appropriate consent forms. (Appendix C) The funding partner member provided input, but was not a full participant in the research study. To protect faculty identity,

pseudonyms are used throughout this study. The relationship of the faculty pseudonym to the college is not named as it was deemed irrelevant and also further preserves anonymity. All participants in this study are female and therefore names of women are used.

The pseudonyms used in this study for the seven participating faculty members are Susan, Alana, Roberta, Emma, Laura, Miriam, and Lisa. Each faculty member is a qualified certified dental assisting educator with several years of teaching experience. The researcher provides the reader with her brief observations of each participant to provide some context to the findings. She notes that there are limitations and assumptions made when providing this information; however personalities, perceptions and values influence dialogue and participation. It also serves to demonstrate the group diversity.

- Susan is an intense individual, speaks quickly and seems to think out loud. She likes to see the “big picture” and seems mostly concerned about future implementation and implication of what the team is creating.
- Alana is a quiet, introverted person who researches information and speaks with tremendous insight. Her contributions are significant when they are made.
- Roberta has a strong sense of values, cautious yet eager to contribute and participate. She surprises the group and provides balance.
- Emma reflects her own personal growth and strongly indicates that she likes to feel that everyone is participating and feeling valued to work effectively.
- Laura is very trusting of the group, likes to ensure that she is really representing her faculty when she contributes, and is a caring, supportive member.
- Miriam also thinks out loud, like Susan, and is persistent and clarifying in her approach. She needs to understand both process and task and her questioning keeps the group both aware and consistent.

- Lisa is eager to participate and contribute, recognizes that she is learning, and is positive and supportive of the team approach. She provides an element of humour that lightens the tone of dialogue.

Collaborative Approach for the Curriculum Guide 2000

“We have to recognize a new paradigm: not great leaders alone, but great leaders who exist in a fertile relationship with a Great Group. In these creative alliances, the leader and the team are able to achieve something together that neither could achieve alone. The leader finds greatness in the group. And he or she helps the members find it in themselves.” Warren Bennis

As noted by Mattessich and Monsey (1992), six categories of success factors should be considered before embarking on a collaborative process. Collaborators should assess and consider the “environment, membership, process/structure, communication, vision, and resources” and see how these will affect the collaboration. The more open, flexible, value driven, inclusive, diverse, and creative these elements are the more likely the project is to be successful.

In approaching this project the researcher also explored and read about collaboration in Winer and Ray (1997). They say that there are essentially four stages of collaboration. In the first stage one envisions the results by working on an individual basis by bringing people together, enhancing the trust, confirming the vision and specifying the desired results. Stage two brings in organizational factors that may include authority, conflict resolution, structure and support. During stage three of collaboration work is managed, systems and agreements are developed, results are evaluated and improved, and celebration occurs. Stage four continues the collaboration by creating visibility of the product, promoting the results, and integrating them into the system and the community.

Given the limitations of geography, workload, budget, and commitment identified by the researcher, the approach of forming a team through an intense workshop and then using a variety of technologies to continue the work was deemed to be the most plausible.

Consideration of the factors mentioned by Mattessich and Monsey, the stages described by Winer and Ray, as well as other literature and personal experience aided the researcher in formulating the approach. By creating the right environment, collaboration could be fostered and encouraged. The actual approach was modified from the following plan during the process, however presenting the proposed approach helps the reader understand what transpired during the actual process.

The researcher developed the following general approach in the summer of 1999 as an attempt at providing a framework for collaboration on the Curriculum Guide 2000. It is represented graphically followed by a list of activities.

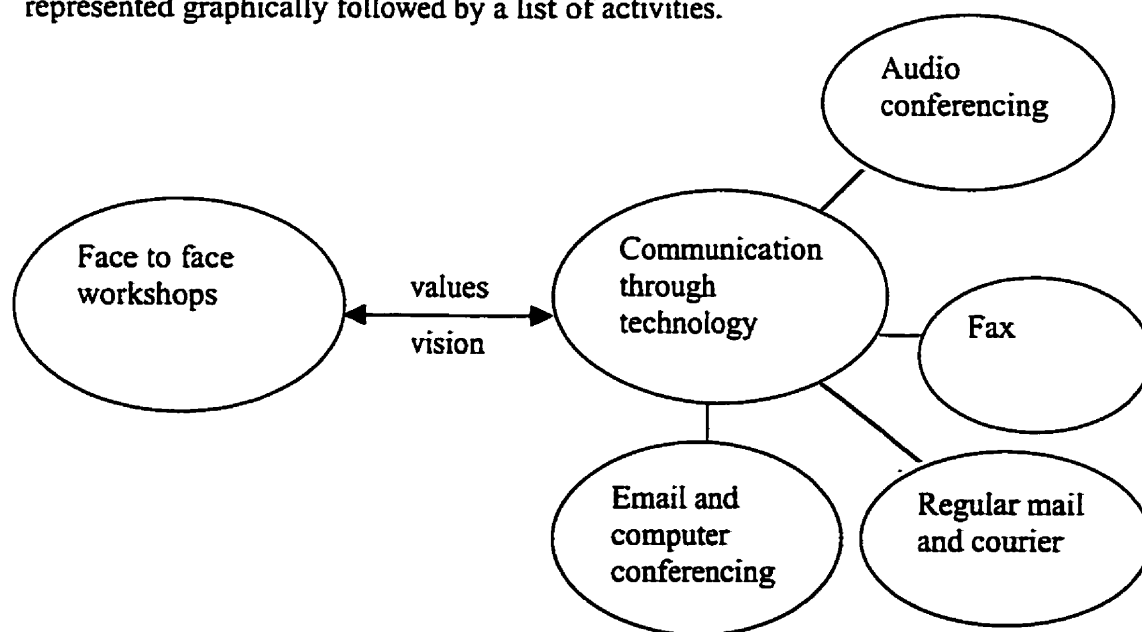


Figure 1: Proposed collaborative approach

- Establish the team through a two-day interactive workshop that ensured team members do small, medium and large group work. Use trust-building exercises. Have a little fun. Use some silent reflection so all can think. Encourage open and honest communication. Have clear communication strategies in place so all understand use

of technology and protocol. Develop a team name. Develop a clear action plan. Establish, then review, expected results.

- Immediately after a workshop continue momentum by sending out encouraging social emails as well as work related issues. Establish regular weekly progress updates from each college. Remind a day ahead; encourage timelines to be kept. Each of us should hold each other accountable.
- Investigate using computer conferencing for communication. Resistance from some college representatives will be felt due to unfamiliarity and concern about learning a new technology. Constant encouragement will be required.
- Send personal encouraging emails as well as group emails. Encourage group interaction online as time and energy permit. Use phone contact sparingly and reserve this for specific purposes.
- Periodically survey team members about approach, communication and teamwork.
- Hold a conference call monthly, or as required until project is complete.
- Hold another workshop in January to review the work to date, to renew the team energy, and to set out an action plan for completion.
- Continue to work at a distance, adjusting and refining use of technology as appropriate.
- Determine a way of celebrating the success of the project on completion.

Once the curriculum guide project was underway the researcher continued her learning and came across other work of relevance that influenced and improved the approach. One such piece entitled, Twelve Conditions for Collaboration (Appendix D), was particularly helpful. Bourget and Ryan (1999) developed a list of twelve conditions that should be present for successful collaboration.

Research methodology

The research approach taken in this study was primarily reflective, qualitative action research (Appendix F). It searched for meaning, themes and ideas to find out what was necessary, what should exist, and what was important in a collaborative venture in this context. The impact of technology on human communication was also explored in this context to determine if collaboration could exist, and to what level, in a technological environment. The researcher also wanted to explore how well technology could enhance collaboration.

Triangulation in research or education is used to “reduce the distortion produced by evaluating in one context by one method” (p.72) as noted by Harris and Bell (1994). They mention six methods of triangulation.

- 1.) Methods triangulation that involves the use of different information collecting techniques;
- 2.) Investigator triangulation where three or more observers are engaged;
- 3.) Time triangulation that provides perspectives from different points of time;
- 4.) Space triangulation that addresses cultural attitudes;
- 5.) Levels triangulation that requires use of different groups; and lastly,
- 6.) Theoretical triangulation that involves using different investigators using competing theories.

Harris and Bell also advocate the use of multi-methods for human interaction that is complex, as it will provide more confidence in the result. In this research study data was

gathered at various times in the project and by a variety of methods. Perspectives of participants were also explored. A number of research activities were undertaken to provide data from a variety of sources in order to increase the confidence in the qualitative approach.

The research plan proposed the following activities. The plan evolved and was modified during the evolution and execution and this is further explained in the subsequent section on Conduct of the Research Study.

- Reflect on the April 1999 workshop to determine the level of interest and confidence in a collaborative approach.
- Reflect on the September 23 and 24 1999 workshop and adjust the proposed collaborative approach as required.
- Save emails as data under electronic files for each participating member for later analysis of communication.
- Conduct periodic surveys by mail or email.
- Complete in-depth, 90-minute interviews of collaborative participants.
- Once interviews were complete, if warranted, hold a focus group by conference call to reflect as a group on the meaning of collaborative approach we used.
- Transcribe and analyze the data collected from emails, interviews, and personal reflections and observations to seek out trends, commonalities, differences, and perceptions. Look for main themes and consider the impact of the individuals on the team.

In November and December 1999, the researcher planned to do individual face to face interviews. The interviews were hoped to uncover data in such areas as:

- What has worked and what has not?
- What else can be done?
- Does it feel collaborative? What does collaboration feel like?

- Where are the concerns?
- How does the distance affect the collaborative nature of project?
- How can distance communication be improved?
- How does technology improve our collaborative approach?
- How does it raise barriers?
- What are the limitations of each technology for our team?

The actual interview questions that were developed and used are found in Appendix G. Originally, it was expected that interview tapes would be accurately transcribed as is the traditional research approach. However, given time constraints the researcher, in consultation with her advisor, elected to try a different approach of listening to the tapes, note taking, observing, reflecting, and integrating the interviews. This approach, although non-traditional, provided opportunities to keep the interviews “alive” and hear tone, inflection, excitement, and passion.

Data Gathering Tools

The following data and tools were actually gathered or used during the research process:

- Workshop Process and Results from April 1999 workshop (Appendix A)
- Summary of September 23 and 24, 1999 workshop (Appendix B)
- Evaluation of September 23 and 24, 1999 workshop (Appendix H)
- Subsequent written survey on team function sent in October 1999 (Appendix I)
- Audio conference tape October 28, 1999
- Personal interviews with team members in November/December 1999 (Appendix G)
- Workshop summary and personal reflections from December 13, 1999 workshop (Appendix J)
- Workshop results and observations from January 13 and 14, 2000 (Appendix K)
- Evaluation survey sent to members in January 2000 (Appendix L)
- Email communication over the period September 1999 to January 2000.

- Personal reflections on workshops and the distance communication using technology
- Personal journal
- Literature review

Conduct of the Research Study

The conduct of the research study is presented chronologically to demonstrate the context that led and supported the progress, interactions, decision-making, and changes. The key elements that the reader may like to watch for include:

- forming the team and establishing communication protocol;
- working and communicating at a distance;
- using technology for communication and attempted collaboration;
- conducting interviews; and
- analysis of the data.

AUGUST 1999

Workshop preparation

The collaborative project had its beginnings in April 1999, slowly developed and congealed through the summer, and began in earnest in August 1999 when team members were identified for the project and dates for the first workshop were established.

Communication was primarily by email, however the researcher made personal phone calls of a welcoming, social nature once dates, times and people were confirmed. This personal contact was welcomed by participants and seemed to be appreciated.

Basic email communication protocol was established for consistency and tips on email communication sent to participants. General principles were agreed to; for example, all subject lines in emails started with CG (curriculum guide) followed by the topic of the email so that message threads could be followed. We also agreed to use “reply to all” as frequently as deemed appropriate so that communication would be open.

By establishing some basic communication on email to set up the meeting, the researcher felt that participants would begin to experience the initial stages of online communication and start to form an identity. This happened to a small degree in that the newest member of the team received a few welcoming emails and excitement seemed evident by the volume online.

SEPTEMBER 1999

Communication occurred more frequently in September just prior to the workshop as travel arrangements were discussed and questions raised about what to bring and how to be prepared. The researcher noted that the level of communication was quite high as the dates for the workshop approached. In mid-September the researcher circulated preliminary work to date by sending a copy by courier for review prior to the workshop on September 23 and 24, 1999.

Workshop

The workshop focused on team development and forming an identity, as well as producing work and a follow-up action plan. A Summary and Action document was produced to capture what happened. This was sent to participants for review and validation on September 27, 1999 (Appendix B). No changes were identified and therefore the document was deemed to be a reasonably accurate representation of the workshop. An evaluation of the workshop was also completed. (Appendix H)

The researcher was pleased with the workshop as it met the intended expected results. The name of the project was established, *Curriculum Guide 2000-Education and Training of Certified Dental Assistants in British Columbia*. The team named themselves the Xteam for ease of communication.

The researcher presented a brief overview of the MALT Major Project during the workshop and invited participation. Eight out of nine participants immediately signed the consent form and returned it that day. (Appendix C). Support was clearly evident.

Comments from participants about the Major Project included:

“ this can only help improve our communication”, “it is great to have the process examined”, “Id like to be part of this research- it seems to be exploring what works and what does not” and “ it seems like a lot of work, but very worthwhile work, especially if it helps other groups work collaboratively.”

OCTOBER 1999

Distance communication

After the workshop communication was almost frenetic. It seems that the community had embraced email as the researcher received only two phone calls, and numerous email communications. Several participants had self-selected to take work back with them to their faculty to work on the Curriculum Guide activities.

Trust within the group seemed evident. Work was not evenly shared, but it seemed understood that the overall team was responsible. In addition, participants appeared comfortable allowing their colleagues to continue some work at a distance, then send it to the researcher to continue the work and create a second draft compiling the work.

Work taken back was returned promptly and email communication settled into frequent but fairly calm level of communication. The researcher investigated setting up an electronic conference and sent out information to participants. The electronic conference would allow the Xteam to have a virtual space for communication.

Written survey

A follow-up team evaluation survey (Appendix H) was sent out to determine the perception of the participants on how well the team collaborated at the workshop and

continued to collaborate by distance. This mailing also included a copy of the signed release form and an article “New Ways of Working Together” by Jim Taggart that explores collaborative team communication. Providing learning opportunities by supplying short articles for reference was intended to create a learning environment and awareness about collaboration to improve team effectiveness and learning.

Only one survey was returned. This was rather surprising, given the level of commitment demonstrated by the team to date. However, on reflection it was recognized that the covering letter did not ask them to return the survey even though the survey itself indicated to do so. It seemed like a small detail but obviously one that was important in understanding expectations.

Conference call

The first conference call was held on October 28, 1999, a little over a month after the two day workshop. The purpose of the conference call was to update participants on what had been done to date, but more importantly to create a shared space where we could speak concerns and ideas about the curriculum guide. In actual fact, the researcher had received quite devastating news about her work and although that was not a major topic of conversation in the conference, it did change the expected tone to a degree. The Open College Certified Dental Assisting Program was being closed after 17 years of operation. Team members needed to be reassured that the researcher was able to continue with the curriculum guide project.

The conference call really seemed to draw the team in again and focus on the curriculum guide. In addition, members could share their frustrations trying to set up the electronic conference. We agreed that it was worthwhile to continue trying to access this as it would make the process much more efficient in the long term.

Even though the team appeared, through email communication, to feel comfortable with what had been accomplished to date and to continue with the work, during the conference call it became evident that they really needed to see the work done to date on the Guide. The timing of the conference call seemed most appropriate and most needed to keep the team cohesive and focused. The researcher sensed a renewed enthusiasm and energy for the Curriculum Guide 2000 project. Several action items came out of the conference call, with team members volunteering to do more work.

NOVEMBER 1999

Clarification

Work to date was faxed to team members at the beginning of November. Feedback was requested by November 6. During this period of time the researcher began to feel uneasy. Trying to “read” the group and take a pulse on feelings that may be shared through the technology was particularly challenging. Of note, some team members provided direct, individual feedback to the researcher without sharing with other members. Others did not respond at all. Some responded with detailed comments, others were more general. It seemed as though there was an element of concern- what if others liked the work and they did not? What if they were significantly different than their peers? Perhaps with the distance the risk to state one’s opinion to a group was too great.

The researcher decided to make individual phone calls to members, seeking further understanding. This helped in deciding to hold another conference call to decide whether a workshop in December was required to sort through differences and allow the group to move ahead or to continue to work by distance. The conference call was set up for November 18, 1999. It was relatively short. Members were asked to prepare for this by revisiting the results of the September workshop and see if they were still in agreement with the direction we had set at that time. It worked well. Communication was open, and agreement was reached to hold another workshop on December 13, 1999. The researcher

was surprised, yet extremely pleased with the level and intensity of commitment demonstrated by the team members to attend a workshop on such short notice.

Interviews

During the month of November and early December the majority of interviews took place. The interviews produced a surprising depth of knowledge and rich data. The researcher elected not to transcribe the tapes into written text to analyze, but rather to listen to the tapes at least three times each. Tone, inflection, silence, hesitation, passion, pace, speed and enthusiasm were portrayed on the tapes. These factors contribute much to the interpretation of oral dialogue. As the tapes were listened to, the researcher began to find emerging themes, elements and commonalities about collaboration. Given the nature and informality of the interview and the qualitative approach, the data collection process provided opportunity to meld and thread information together. These interpretations integrated into the thought processes of the researcher and led to insights about collaboration as noted in the next chapter. This approach to data analysis forced the researcher to keep the situations “alive” and allowed blending and integration of ideas to coalesce into patterns.

The seven interviews were conducted in locations that the interviewees chose. One was held at the researcher’s office, one at the researcher’s home, four at interviewee’s workplaces, and one done on two separate occasions before and after workshops. Timing was also negotiated with the interviewees so that there was transitional time before and after the interview whenever possible. The opportunity to chat and relax helped set the tone for an informal dialogue. All interviews were taped and done face to face. Interviews averaged ninety minutes each.

Listening to the interview tapes

The researcher has worked with, and known, the interviewee’s for a number of years as professional colleagues. Linkage of the data to the real interviewees was done initially

and then pseudonyms were assigned. Subsequent analysis and extraction was done using pseudonyms to the degree that the researcher consciously did not recall easily the original interviewee. This process helped in separating any personal relationship bias from the actual data collected.

Each tape was listened to once after the interview was concluded and notes and observations made. Each tape was also listened to within two days of the interview and prior to the next interview. This helped in recording observations without the influence and confusion of a subsequent interview. The researcher would take this approach again. After all the interviews were concluded the researcher again listened to all the tapes one after the other during an intense session, without making any notes. She then listened to each tape one more time, highlighting important insights and referring to original notes.

DECEMBER 1999

Research interview analysis

Many factors contributed to the varying results obtained during the interview process. It was expected that results would vary considerably, that each interviewee would provide rich new insights and that the researcher would benefit from each interview. This did occur, and as a result learning and reflective thoughts became clear and integrated.

Interview questions are provided in Appendix G.

Once interviews were complete the researcher began to blend, integrate and learn from the interviews collectively. This approach was used for a number of reasons. Since this project was collaborative in nature, the researcher felt it important to keep the entire effort collaborative. The researcher chose to listen to interview tapes several times, integrating and sifting through to find common thoughts and ideas around collaboration. Even though the interviews were not intended to be prescriptive, interviewees seemed to like the format and it was used for all interviews. Given the collaborative integration of

meaning uncovered in the interviews it would be less meaningful to keep the data separate. Identifying the source of the learning also seemed less important than the actual learning acquired.

The researcher listened to the tapes and took notes of important dialogue that emerged. In addition she highlighted her own thoughts that were sparked and gelled as a result of listening to the tapes. Several approaches were used to glean information. The following process was used for analysis of the taped interviews:

- 1.) Reflect and make journal notes immediately following each interview;
- 2.) Listen to the tape slowly, typing notes, direct quotes, and observations. Do this within two days of the interview and prior to the next scheduled interview;
- 3.) Listen to all the tapes during an intense listening session once all interviews were concluded;
- 4.) Listen to each tape one more time, referring to the notes and making additions as necessary; and, finally,
- 5.) Merge, reflect, integrate and search for recurring themes and patterns.

This research approach of listening to tapes several times, rather than directly transcribing them seemed very workable. The researcher was concerned that something may be missed by not directly transcribing the interviews, as is the traditional research approach. One interview was transcribed and analyzed to validate and compare the interview learning. The researcher noted the following: when listening to the conversation anticipation, energy, life, and focused pace is evident. When reading a transcribed tape it seemed flat, easy for the researcher to skip or ignore unintentional inflections, and meaning seems somewhat lost without the verbal dialogue. However, it should be noted that analysis of transcriptions does provide a different form of interpretation and reflection and certainly has been the more traditional research approach. Given, that integration of ideas was deemed to be a strong goal, the researcher elected to continue with the original listening approach. This research method provided

rich data that seemed to bring out the reflective thoughts, and keep the verbal dialogue alive and meaningful during the research analysis.

December 13, 1999 Workshop

On December 13, 1999, a daylong workshop was held at Douglas College. (Appendix J) All but one participant attended. The tone of the workshop was different than September. Very little time was required to warm the group and we moved to task quite quickly. The morning went well however in the early afternoon confusion, dissension and loss of direction became evident. The researcher had let the leadership become more diffuse and the group was most definitely sharing the leadership. We spent over an hour trying to determine what process to use to approach a task, however dialogue was rich, respectful and seemed honest as everyone spoke and participated until we came to rest. By the end of the day it appeared that consensus and understanding had been reached in many areas.

This workshop was less directed by the researcher for a number of reasons, primarily due to low personal energy, but also to allow the group to own and work with the material and help determine the direction. Whereas, in September, the group needed to work on process at the beginning, at this workshop process was more integrated within the day. Considerable work was accomplished and the group seemed content and inspired to continue the plan to meet in January.

Communication Analysis

Communication analysis was started in December and continued into January. The researcher saved all email correspondence with the participants. In addition a log of phone calls and file of faxes was kept. Communication volume as well as content was analyzed qualitatively and, in relationship to the interviews, to see the level of correlation. It was not analyzed quantitatively or statistically. However, the following observations were made:

- Email activity was highest from all participants immediately following either a workshop or conference call.
- Participants use of technology varied and most used email, but some definitely preferred phone or fax to communicate. For example, they would respond to an email with a fax or phone call.
- The communication behaviour was similar to the results of each participant's interview. That is, what they said is actually how they used technology.
- The researcher initiated most of the emails at first, but gradually others began to send out information, ask for clarification, and seek understanding or to seek out connections. The leadership became more shared through the technology as more trust was established.

JANUARY 2000

January 13 and 14, 2000 Workshop

This workshop was a pivotal workshop in the mind of the researcher. Two members were absent due to illness. The researcher, upon reflection, spent probably too much time on process due to an underlying concern and conflict that was not clearly identified. Some of the work done was deemed by the group to be an "exercise" and not really solid content. Although there was a level of authenticity and respect, there also appeared to be a small amount of mistrust developing. The group seemed to be experiencing more pain in the process than joy during this particular workshop. The group also seemed to have lost a sense of the product we were trying to produce. Agreement was made that a collation would be done and a new binder of information sent to each member. Given the energy and commitment, the researcher was confident that remaining positive, continuing to communicate by distance, and staying focused on the good work done to date would get the group through this difficult time. Often, just before a breakthrough or exciting discovery, there is chaos and confusion. Although it was clear that the group was still functional, it was thrown off balance as two members were not present. This observation demonstrates how the group diversity lends strength to the process.

Email survey

An email survey on collaboration was sent to participants following the workshop to determine their perception of the collaboration process. This would allow members to reflect on the entire process, remind them of the pain and joy of collaboration, and encourage them to continue with it. It would also provide the researcher with some data that may influence decision making and direction. The survey was created based on Bourget and Ryan's (1999) "Twelve Conditions for Collaboration." (Appendix E)

Continued analysis and writing

With data collection complete in January, analysis and writing was done in earnest to produce a complete first draft of the research study in February. The collaboration process for the completion of the Curriculum guide is expected to continue. Work continues by distance and additional workshops are planned for February, March and April with a final product expected in June 2000. It is anticipated that the group will continue to learn, will complete its task, and will have grown tremendously from this experience. As they work collaboratively they are forming a learning community. This is evident in their communication, their ability and willingness to share information and attend workshops, their desire to continue working together, and their determination to stretch and learn so that a collaborative product is produced.

The research stopped before the Curriculum Guide project was complete. Some more concrete readers may feel that the research is therefore 'incomplete.' Continual learning is an ongoing process and we are never finished in our learning. This research study examines a group working in collaboration during a segment of their time together. The experiences they shared create meaning together, and as they complete the task they will go through even more experiences. Some literature alludes to a cycle or stages of collaboration. Perhaps these stages were not explored in this research. Ideally, it would be wonderful to follow this community over time, reflecting and learning about their

collaboration. Given the unfortunate finite restrictions of time and resources, this is not possible. However, the researcher feels that this study provides insight into the nature of relationships, perception of collaboration, and above all confirms for us that community can be created through collaboration, and enhanced by technology.

Delimitations, Limitations and the Influence of External Factors

Delimitations

- timing of the interviews
- interviewer confidence
- listening analysis

Interviews occurred during the months of November and December 1999. During this time, work continued on the Curriculum Guide 2000 project. Interviews conducted at the beginning of November differed in content from those in December. This was due to the timing as more relevant information resulted from December activities. Consequently the content of the interviews, and individual's perceptions, may have changed considerably over time. For example, the first person interviewed may have responded quite differently had they been interviewed last.

The researcher became more comfortable and confident as an interviewer during November and December. This factor alone may have influenced the results of the interviews.

The researcher, as noted earlier, listened repeatedly to the interview tapes rather than transcribing them. Traditional transcription may have uncovered other information as the analysis approach is different. The researcher does recommend this listening approach for similar reflective qualitative action research studies.

Limitations

- time constraints

- gender
- distance

The Curriculum Guide 2000 project spanned a period of fifteen months from April 1999 to June 2000. The research study was constrained to a period of ten months, concluding in January 2000. Data collection was restricted to the ten months and therefore the entire collaborative journey was not followed. The researcher, however, is confident that the experiences and feelings of the participants are valid, important and representative of collaboration.

All participants in this research study were women. Should a similar study be conducted with men, or a mixed group, there may be gender influences that alter the dynamics. Individual perceptions and personalities reflect the diversity of the group and do demonstrate the richness of information uncovered in the interview process.

Geographic location restricted the frequency of face to face interaction and limited the flexibility of responding to participants' needs. For example, meeting one on one or creating small work groups was not possible. The approach taken encourages virtual teams to attempt collaboration, recognizing that technology can enhance it provided conditions for collaboration are created and established.

External factors

A major change occurred during the life of the project that had the potential to affect the outcomes tremendously. On October 25, 1999, the Open Learning Agency announced the closure of the Open College CDA Program. This decision greatly impacted the researcher, who was the leader of this program, as well as the rest of the system. This change initially resulted in reduced energy and momentum for the project as well as reduced activity and interest on the part of the researcher. Despite this, the researcher conducted interviews as scheduled. Had this research occurred in a more stable time the

process may have occurred quite differently. Given the situation, the group was supportive and persistent in obtaining its goal.

Illness prevented some members from attending workshops. This provided communication challenges for the team, tested the values of trust, but also helped us recognize the strength of our diversity. We often found that we would consciously consider how the absent members would perceive or respond to decisions.

These delimitations, limitations and external factors constrained and affected the qualitative action research. "Life happens", as noted by two of the participants during their interviews. Change is also a constant in our reality. The team was cognizant of their need to adapt and be flexible and openly discussed this on the conference call in January. The nature of action research is such that responding to unexpected factors, adjusting direction, and creating new opportunities becomes the norm.

CHAPTER FOUR: RESEARCH STUDY RESULTS

On collaborative groups- "Team members need well-developed communication skills. They must also enjoy participation, tolerate ambiguity, embrace diversity, and manage conflict." Bolman and Deal (1991)

Study Findings

The preliminary research began in April 1999 and for the purpose of this research study was concluded on January 31, 2000. The following section, Study Conclusions, pulls out of the Study Findings the important learning that the researcher has noted.

In presenting this information it is hoped that others will benefit and learn from the approach taken in this research study. Details are provided so the reader can see how the process unfolded, where decisions may have either positively or negatively influenced outcomes, and to invite the reader to share the learning as a reflective observer. In addition, external factors that altered the energy of this project are brought to the reader's attention. Learning to live in an ambiguous, changing environment is challenging, yet essential, and seeing how others have chosen to respond to change may be valuable. As noted by one of the interviewees, Laura, it is very much like the concept of the "reflective practitioner" that is advocated in teaching and other professions and by Schon (1987). That is, to reflect, learn and make changes while going through a process; essentially a continuous improvement model.

This research study is not repeatable as the situation and context will never exist again. However, observations made in this research study can provide a base and place to improve on other collaborative endeavours. The research study is qualitative and meaning has been explored through the researcher's own observations coupled with dialogue with the research participants. Three written surveys at various points in the process also provided some interesting data.

The researcher's original premise was wondering about the viability of technology for a collaborative project. Interest was developed and learning acquired that led to an exploration of how technology can enhance the collaborative working environment. The project evolved over time and the researcher realized, as the interviews were concluding, that the really interesting aspect of the research was not only about the technological enhancement of collaboration, but about collaboration itself and how it could foster community.

Integrated learning, reflections and observations are woven into the research "story." The reader is invited to share in this story, to reflect on his or her own collaborative experiences, and if so inclined to contact the researcher with his or her thoughts on creating community through collaboration, and in particular its enhancement through technology. This research study is about collaboration and the approach taken to present the information is therefore somewhat collaborative in nature. The findings are presented as data, thoughts, musings, observations and collective wisdom of the women involved in this project.

The researcher presents this narrative, not chronologically, but rather from a theme perspective. She analyzed the interview data, literature review, journal notes, communication, observations, and reflections. Five themes about collaboration in this context emerged through this analysis. These themes are:

- 1) feeling of collaboration;
- 2) goal, purpose and commitment;
- 3) the influence of beliefs, values and perception;
- 4) technology comfort; and,
- 5) learning to collaborate.

Each of these themes is explored and data from all sources brought in to clarify and support the findings.

Feeling of Collaboration

What does collaboration actually feel like? Can one articulate the emotion or feeling associated with collaboration? Is there one? How would you describe it? The participants were asked if they had experienced collaboration, given their own sense of the meaning of the word. They were then asked to describe what it felt like. It is important to note that these responses were not necessarily linked to the particular team or project that these women were currently involved in. Rather, they were asked to explore collaboration in any context that they had experienced. By exploring the feeling that exists when collaboration is present it was hoped that we would recognize it when it happened.

Many of the participants described themselves as being “excited” during collaboration. Miriam described it a little differently, the “feeling when collaborating is comfort, pleasant, the fact that everybody is comfortable and we can move on to the next stage.” Indicating balance, Roberta described collaboration as a “feeling of being uncomfortable, sometimes a sense of dread, of being overwhelmed, coupled with comfort, excitement.”

Susan expressed how she feels when collaborating as follows

“ Its very empowering, you feel you are on a roll, feel the passion in your voice, feel wrapped up in the moment, which is rare. If you are really in a collaborative mode you feel safe in your environment, feel comfortable in the environment, ready to run a race, enthusiasm feeds on itself.”

Susan went on to say that when she is collaborating she “feels passionate, excited, can not write things down fast enough, doors open, synergy exists.” Her observation on collaboration provides an insight that was quite revealing, sometimes I am “feeling somewhat fragmented as the sense of shared space starts to breakup with the distance.”

Alana described the feeling of collaboration as “ we have a sense of trust, the product is progressing, people are interacting and a positive energetic environment is felt.”

Laura's voice was animated when she spoke on this topic and she said of the feeling of collaboration " collaboration feels like an adrenaline rush, collaboration...isn't it great, its going to work, aren't we the smartest most brilliant people, its exciting, you get a brainwave."

Lisa took a little more time to come to her description of collaboration as a metaphor of erupting volcanoes.

"Collaboration has a purpose, a need to create or make a decision. It is a creative process where we explore each other's understanding, feelings, and come to some agreement. I think it is exciting, erupting like a volcano, brings out peoples ideas, there may be a series of volcanoes of different sizes. You never know what is going to burst forth. Collaboration exists between and among people."

Lisa's comment of "collaboration exists between and among people" is similar to what Schrage (1995) says of shared space. " Successful shared spaces create the aura of co-presence; they make collaborators feel like they're together, even if they are not.... The shared space becomes the collaborative environment."

Lastly, Emma described collaboration as follows,

"Collaboration is all about communicating, being open, honest, truthful, respectful, trying to create an atmosphere of trust, being able to be open."

She was also careful to explain that for her she

"needed to feel accepted, trusted and respected, and that my voice is valuable. It would not be a valuable opportunity for me nor would it be collaborative if I did not feel these things."

The researcher has experienced collaboration in a number of settings. The feelings she has felt are similar to those expressed by the interviewees. Being caught up in the moment and subsequently becoming unaware of egos, agendas and personalities but instead focusing on the purpose at hand seemed to be common. In addition, one feels a sense of elation, of breakthrough wisdom to either a new creation or a common

understanding. The researcher can best describe this as a sense of “common intuition” and there is a lightness in the air. In collaboration it is the space between and among participants where meaning and understanding exists that becomes the focus; and where energy is directed.

Has the team experienced and felt collaboration in this project? Susan said at one point, “perhaps in small groups we have reached a small amount of this feeling...been through so much change...feel we keep starting over and it takes time and energy.” Alana seemed quite adamant that we are collaborating, although the ‘highs’ one can feel in collaboration are not as frequent as we would like, because it is “hard work.” “Bumps, highs, and lows” is how Roberta explained the groups experience, the road of collaboration beings carved as we go. Alana thinks

“we are working very well together because we have a sense of trust, the product is progressing, people are interacting, and a positive energetic environment is felt.”

Emma noted that we have to be collaborating within her meaning because she feels so good and wants to come to workshops. One thing that Emma said she believed, in a soft quiet voice, was “if you love something let it go, if it comes back it was meant to be.” We spoke of this in the context of the collaborative project. We put forth ideas, then when we let them flow out and do not try to control direction, if they resurface in whatever form then it seems to be right.

Members provided a written evaluation of the September workshop. One of the questions was “To what extent do you feel that distance collaboration for this project will work?” With their limited experience and understanding of collaboration at the beginning of the project, members were positive in their response. Comments ranged from “we’ve built a strong foundation” and “with today’s technology we can accomplish the bulk of the work off-site” to “as long as we maintain regular contact I feel we should be able to stay focused.” Complete results are noted in Appendix H. The participants struggled with

understanding collaboration, yet were drawn into creating the process and exhibit many of the attributes touted in the literature.

Goal, Purpose and Commitment

Having a clear purpose or goal for the team was an important factor in the success of the collaboration. In the September workshop summary (Appendix H), comments included “we have established a clear direction,” “I’m pleased to see the continuance of our Articulation 1996 goal,” and “gained an understanding and clearer image of the overall concept.”

On the survey in January one of the questions was “We have a clear and compelling purpose, mission, or goal that provides us with a meaningful reason to collaborate.” The respondents collectively answered this as 1.8 on a scale of 1 to 5, with 1 being strongly agree and 5 being strongly disagree. Clearly, the goal was well articulated, participants understood it, and gave it value.

Participants in this research study demonstrated an incredible commitment to the Curriculum Guide development. They not only seemed to feel an intense need to have ownership of the intended product, but seemed to want to develop, create and own the collaborative process to a degree as well. From the literature review on groups, it seems that where breakdown often occurs is the insensitivity to the need for flexible leadership as the group matures. Often, a group is brought together by a strong leader, starts a journey but then breaks down as the leadership remains very strong and does not get diffused and shared as time progresses and the group matures. Leading this group has been a learning journey, pulling on all the resources on leadership that the researcher has at her disposal. Reflecting on the process, while being in the process, then making adjustments and changes in the moment has been particularly challenging. Recognizing

when to lead and when to follow and consequently learning from the mistakes provided opportunities for change.

The participants in this group demonstrated their commitment to both the product and the process in their behaviour, distance participation, and willingness to attend workshops. Miriam used a wonderful analogy of a dinner party to discuss commitment and collaboration. When no one person has the master menu, but everyone talks and discusses what to have, who will bring different dishes and describes them in varying levels of detail. Somehow it all works out and you have a great time enjoying the process of creation and the product. People need to trust, to commit, and to agree. However if new things are brought to the table there is celebration and surprise, people are flexible, it evolves into something not quite imagined and the dinner party always seems to work out. The principles of collaboration exist in this analogy, somehow we seem to take work much more seriously than a dinner party and perhaps we stifle our own creativity in the process.

Collaboration allows you to “work with a product, massage it, and make it your own. We need to internalize it— to own it” as noted by Emma.

Roberta was trying to explain her concern for groupthink that could occur if people were fearful of speaking out and were just being ‘nice’. She felt being real and honest, while respectful, was challenging. Occasionally she has noticed what she called “echoing”, in a round table discussion for people to express where they were at. She appreciated the silent reflection tool we used that encouraged us to write out our thoughts in silence before speaking thereby reducing the influence of others. (Appendix M).

Of note was that Alana was asked the question, what would you do if you were told that we were not going to continue to collaborate and that one person was going to complete this project? The response was so emotional, she was so horrified at the thought and

wondered if there was information she should know about that it affected the interview. It created such a strong reaction that the question was not raised to other interviewees as it was detrimental. This in itself demonstrates the intensity of the commitment that was felt.

Roberta also spoke of having a “deep, strong level of commitment” for both process and task. She also said that on the audio conference people were expressing differing levels of anxiety about content, but were probably really trying to say, “I just have a need to be together” and that attendance at the December workshop demonstrated this level of commitment.

It was evident from the data that being clear about the goal and purpose, as well as cultivating commitment to the process, was vital to the success of the collaborative approach.

Influence of Beliefs, Values and Perception

We bring our own beliefs, values and perception with us in every interaction that we encounter. How we intuitively feel and then subsequently try to use language to interpret for others our feelings and intellectual ideas is colored by how we perceive the world. The diversity of values and beliefs provides an opportunity for a group to seek understanding through language and communication. As we strive for collaboration that takes us beyond basic messaging, meaning can emerge and innovations occur.

Some of the values that emerged in the group that seemed essential to our process were trusting, learning, risking, believing, and respecting. Alana said the “group is learning, trusting, and will be more focused and able to work together in the future as a result of this collaborative project.” Susan expressed some of her strong sense of values as follows,

“Trust is to me first and foremost, if there is no trust you are not a team and you are operating in a very dark space. The violation of a trust can be incredibly damaging and quite often something that cannot be repaired. When that type of fragmentation occurs any hope of collaboration is seriously tested.”

She went on to say,

“Trust is essential in any situation and if you don’t have it then you don’t have the opening dialogue to create the relationship that leads forward to what becomes a collaborative relationship.”

Roberta observed that we

“need to respect each other, and recognize that we all have different values...that we respect each others differences so we can honor thoughts and ideas, not worry where they came from.”

Emma was quite emotional and excited as she explained how she views the collaborative process,

“Perception guides whether we want to be collaborative or not. Our perception is not someone else’s perception. Beliefs, values, cultural background all influence how we view collaboration. Growing pains- we’re learning, sharing, growing, caring and we’re trying!”

When speaking about the environment in which we are working, Laura observed that

“collaboration is not necessarily that everyone agrees with everyone else, people can put aside their individual concerns and look at the whole situation, it needs to be a respectful environment, trust is important.”

Miriam pondered somewhat about people who are extroverted and think out loud to process information, as opposed to those who are introverts and tend to be internal processors. She often wonders whom she should listen to and follow, the practical or the academic, and seems somewhat torn by this. She believed that for some people perhaps “the opportunity to create your own thing is new to some people, that they are not comfortable with having that amount of control and may not have developed their thinking and working processes to contribute at the same level as others.” She senses that they want someone to give them the final answer and describe the Curriculum Guide, that

is, describe the big picture so they know where they are going. She definitely noted that “trust and competition influence collaborators more than we will ever know. Perception plays a large role.”

Trust is a value that surfaced in conversation during the workshops and in the interviews. According to Zukav (1989) “trusting means that the circumstance that you are in is working toward your best and most appropriate end.” He goes on later to say “Trust allows you to give...trust allows the experience of bliss...trust allows you to laugh.” (p.240-245)

In October, from the one survey that was returned, there was an indication that our outstanding strengths are our evidence of laughter, energy and enthusiasm; that we share workload fairly, and that we were satisfied with the product produced to date. The area we needed to work most on was learning to question and criticize ideas in a respectful manner. Although this is only one survey, and not fully representative of the group, it provided one member’s perception about the collaborative approach. (Appendix I)

Perception is the way in which we perceive the world. The diversity of perception of the research participants demonstrated how it can enhance collaboration. Members viewed the activities in the Curriculum Guide 2000 project either from a sense of the past, the present or the future. Some members needed to ensure that the new approach was based on history, considered what we have done in the past, and reflects where we have come from. Other members very much have the perspective of the present in mind, wondering how the Guide will be used and implemented in their program, what effect it will have and what they have to change. Still others have a future perspective, wanting to be sure the Guide reflects our vision, that it is creative and new and demonstrates our potential for growth. Some of the collaborative struggles we endured were related to these various perspectives and seeking to understand one another.

It does seem that as people grow and learn together that their values may actually shift. Throughout this research study it was evident in the dialogue that the group was identifying and clarifying the values they were committed to for the curriculum guide project. Seeking to understand one another, trying to see the way in which each member perceives the world, and respecting diversity was important to this group. They appreciated the importance and influence of beliefs, values and perception in the working collaborative relationship.

Technology Comfort

Great distances geographically separated participants in this research study from each other. In order to bridge the distance we used communicative technologies to keep the project alive and continue working when we could not be face to face. The researcher spoke with, and surveyed the group to determine their initial level of comfort with these technologies. The women in this study were not technologically highly proficient, yet possessed general working knowledge of typical technologies such as email, fax, and audio conferencing. The variation in comfort, access and skills was considerable. In order to function each participant had to be willing to stretch and to learn some new technology in order to be on the team. Most participants were eager to learn and try some new ways of working together; however, there was a small amount of resistance to embrace the technology. This was due to the time required to learn how to use the technology, their own personal interest, and/or the perceived value in learning how to use the equipment.

For the most part, the participants surprised themselves with what they learned and what level of comfort they achieved. Each participant that was interviewed expressed comments that reflected this observation and noted how they felt about the various technologies. Here are some comments directly from the participants about the use of technology for this project.

Alana says she was

“very comfortable with email and likes electronic conferencing especially due to the time for reflection, which allows time to consider thoughts before "speaking"... the delay helps introverts like me build confidence and take their time in replying. Technology does not limit us in our communication as we have momentum, trust, and understanding from our face to face workshop.”

The “acceptance of technology depends on the type of day and individual need for human interaction” for Laura and she explains her observations and reservations.

“I prefer telephone contact as this is the closest to face to face contact... Feel email frustration, do not like long emails as I tend not to read the whole thing, read just for a general message and do not really tend to read it as carefully as a hard copy. Fax, voice mail has limitations due to access. I really like and support audioconferences, but need a skilled moderator to keep people engaged. Have used audioconferences for 10 years with familiar people and therefore comfort level is good. Audioconference is not good for making serious decisions, good for information sharing. ...we are not yet really cohesive, it seems that we left the workshop being careful to determine the direction, still not all on the same train going to the same destination. Can we do this through technology? Not convinced that we can work through this.”

From speaking with participants it seemed that as long as we had common ground and vision we could continue to work at a distance from each other. Whenever doubt crept in we started to disintegrate and needed to revisit the vision in a face to face mode.

Miriam’s tone when asked about technology was excited, frustrated, and hurried. The questions on technology seemed to provoke significant emotion for her. She said

“it has been a real effort trying to work with the technology because I do not use it normally. Great source of frustration... felt forced into it. Find email to be almost an interruption, like an unexpected phone call. Email- advantage is that I can print it out and deal with it later, but on the other hand, when it grabs my attention I feel confused. Fax is ok, sometimes quality is not great but like getting a letter. Don’t really like conference calls, email probably better because at least know who is paying attention, likes nonverbal, facial communication. Conference

calls can't tell who is there. Found the process difficult, as I really prefer the face to face communication. Really find some of the expectations using technology rather an imposition, as others can send out their thoughts and I feel that I have to "pay attention" right now. People forget that they have choice in responding to email. I'm learning to ignore email, part of it is lack of knowledge on use of technology, but it is also not a priority for me. Given my resistance, I am managing. It is a second best, but work is getting done. Do acknowledge that technology has allowed us to keep the project up front and center in our minds, but it is also an intrusion- the project is able to continue to "live and progress" between the workshops."

Miriam indicated to the researcher that most of her information and how she interprets communication comes from her observations of body language and reactions. With technology we share only part of the picture and she finds it hard to interpret people's messages. She also acknowledges that her resistance to technology is because of her preference for personal communication.

Roberta, on the other hand seemed very comfortable with the technology and felt that this project is becoming successful because of the technology.

"The more frequently we communicate the more collaborative we feel. It is easy to become disassociated when we are so far away; we have to keep maintaining that touch. Technology is bridging us and keeping the project alive."

She spoke quietly and with a deep breath and here are a few of her comments that illustrate her level of comfort with technology.

"Technology to me has been a huge learning curve over the last ten years. I'm still amazed myself at a very personal level that I can actually keep up", "faxing is great, nice to have a tangible printed word", "technology has a way of breaking down walls and barriers between people" and "curiosity forces me to just open a message, its exciting to see it happen so fast."

Emma finds that

"email, snail mail, voice mail can almost take over your life due to the barrage of information, needs to be organized. Can talk and listen

better than I can type, so face to face or phone is a more efficient form of communication”

Although Emma clearly prefers face to face communication, she noted that

“improved technologies like fax, audio conferencing, and email improve communication.. If we had attempted the curriculum guide project ten years ago it would not have worked as well, new technology has helped immensely.”

For Emma the most important use of technology is reducing the feeling of isolation.

“Distance is quite a barrier. Feeling of isolation due to geographic distance, technology helps.”

Lisa explained some of her feelings about technology a little differently. She

“likes the speed of technology, likes email and fax as I have a hard copy, concrete as a result of the conversation; as conversation itself normally disappears in the air. And it never comes back. It is a challenge to represent oral conversation, danger of interpretation of other people’s words. Silence in dialogue, people are afraid of silence but we need time to reflect. Email does allow you reflective time.”

She noted that there is the potential for “emotion when writing email, better to let it sit.

We have the immediacy of being able to reply, and sometimes forget that we have choice of responding.” Of faxing she noted “ faxes- never sure if I receive all the pages or if they go into ‘neverland’ and trusting information goes where it is intended.”

Susan feels that technology can give some people a voice that they normally would not raise in a personal group situation. “some people who are introverted actually prefer email and come alive and have a voice that they may not normally have.” Of the various technologies she says,

“ face to face affords us body language, opportunity for thought, so much hidden between the lines. First choice of technology is audio conferencing as you can sense the tone of voice, sense of hesitation, number of times returning to a point, and silence. Email has limitations as people may feel excluded due to lack of confidence in system, it limits responses that may be honest. Collaboration is possible,

expectation of fast turn around time is self-imposed, I like more privacy of e-conference concept. Communicating quickly not necessarily a good thing. Anticipated learning attached to collaborative work over distance, discovering what you don't know gives you a better sense of group dynamics, have more time to digest information, more time to reflect which actually may improve overall communication."

Technology was used in this project by the team in various capacities to help maintain the momentum and continue work at a distance. This was moderately successful due to varying comfort levels and use and individuals willingness to communicate using the technology. Some people felt without the technology we would not have been able to do this project, others found that the technology helped but was a barrier due to the learning required. All seemed to agree that technology allows us to communicate, but the choices and use can be confusing. Collaborating in a technological environment is challenging, yet will improve as technologies become more user friendly and participants have both access and working knowledge of the technology.

Can we collaborate over distance? Several times various participants worked on both phone and in the electronic conference concurrently to try to collaborate on the creation of a piece of the work. We became very excited by both the process and the product. The many distant miles between us seemed non-existent. This is one example of how this group successfully used technology to enhance collaboration. Of the group process and what we are doing Laura expressed this as "collaborating and uncollaborating", recognizing that at times we are collaborative, that at a distance it is more difficult, and there are times when collaboration is hard to see.

Technology, as it was used in this context, can be a barrier to collaboration initially if relationships are not developed. It can, however, further the work of people who have established a collaborative environment. Technology is therefore clearly facilitative of the work, but not necessarily facilitative of the relationships.

Finding ways to enhance personal relationships via technology will be important in the future. As the technologies become more holistic and organic, and human social needs are able to be addressed, it is hoped that we make right choices and can evolve as Bates (1995) says into “a networked learning society that keeps human relationships at the center of learning” as opposed to creating “knowledge in a box that is impersonal, individualized, and socially isolating.”

Learning to Collaborate

An interesting situation occurred for the researcher in early December. She attended a two-day provincial meeting on another topic. Representatives attended this meeting from institutions in British Columbia and an attempt was made by the organizers of the meeting to collaborate toward consensus decision making. Unfortunately the group was neither primed nor ready for this new approach and extreme resistance was exhibited. Eventually the group was able to share some insights and working through the issues helped immensely; but it was a very painful process. This experience was valuable and this new context provided additional support for the necessity of group preparation and ownership for introducing a collaborative process. Was this group actually willing to learn about collaboration? More than likely, however they were not given the opportunity to explore, create or commit to a collaborative process and that may be one factor in the extreme discomfort that was felt in the meeting.

Research participants expressed thoughts on their own and the group’s willingness to learn about collaboration. Embracing opportunity and choosing the collaborative approach is a risk, a leap into the unknown, and individuals recognized that this was what they think they wanted. They did seem to find that once they were in the collaboration that they had such an investment of time, personal energy, and commitment that they were more willing to try, to learn, and to continue to work together. Emma notes that participants “need to come willingly to a meeting, if they come under force they come with resistance which limits creativity.”

Emma spoke of what she is learning and what the group is learning. She noted that you
 “can’t separate where all your learning goes and comes
 from....Group is maturing, experience and comfort level improve....
 Learned that there is strength in viewing ourselves as a system, that we
 can co-exist. Before there was fear, now there is more trust and
 sharing.”

Of her own learning about change Laura observed, “ If I support a change what does it
 say about what I’m doing right now, isn’t it quality?” Laura spoke also of her own
 personal learning about people, perception, and patience. She feels that by “creating the
 path as we move and making sure we are all on the same path” forces us to “support,
 reassure and encourage each other when doubt creeps in.” It certainly has made us pay
 attention to relationships and perspectives and as a result we have become “a more
 cohesive group.”

One challenge for a collaborative group is to realize that the discomfort is part of the
 change process, and that by experiencing this and working through it we prepare
 ourselves and learn to live in change. Harris (1998) provides some rich insight into the
 discomfort of change. He indicates that people who can get used to the discomfort that
 comes from learning, “develop greater comfort with ambiguity, uncertainty and not
 knowing.” He later says, “sometimes our fear of failing inhibits learning and adapting to
 change.” Harris (1998) says that we need to “live a life of learning.” Given the emerging
 importance of values in our workplaces today, he also suggests how important it is to
 learn how to “adapt to changing realities without sacrificing changeless values...result,
 inner confidence.” (p.15). Participants in this study reflected the importance of holding
 fast to such values as respect and trust, yet being willing and open to learn and create,
 noting the inherent paradox of struggle that comes from seeking this balance.

Additional observations and findings

Three other areas were quietly explored in this research study, although their significance is not entirely clear as they were not a major focus. These were gender, group size, and inter-organizational influences.

Gender

Interviewees were asked about the influence of gender. This collaborative group is all women. Seeking an understanding of the participant's biases, needs, perceptions, possible "stereotyping", and experiences helped the researcher observe and be aware of gender influence. Generally speaking most interviewees had not really given much thought that the group was all women. They generally work in a female dominated profession, and colleagues are female. Many of them felt they would resort to a stereotype to answer the question but did make some observations that are of interest. Susan indicated, "women get hung up and are process oriented, affective domain, tend to think that men in a group tend to be more factual, driven." Alana seemed to feel that "men would not need as much social warming time, would probably get to task sooner, would they be collaborating? Maybe, but not in the same way." Laura said that her influence in life has been female and she does not have a lot of experience working in mixed groups. She feels that,

" When there is conflict, women seem more concerned about feelings; the healing and the problems around the conflict get wrapped together. Men seem to be able to separate feelings from the issue. Men would probably not have the same patience to work in collaboration the same way as women....mixed environments provide a better balance for work (process and task), perhaps process tends to be "feminine" and task tends to be 'male'?"

The participants sensed that it would be different to be in a group with men, or if the group was all men, but they were not entirely sure of what those differences would be. Part of the difficulty was isolating gender from personality, noting that our team is very diverse and that changing gender would add another dimension of complexity.

Group Size

There were ten people in this collaborative group. Was the number significant? Did it hinder or enhance our collaborative approach? Miriam observed that it “would be easier with less people...more people it takes longer, more things to think about, explore more options, more struggle and as a result we have more success.” Alana felt that if the group was any larger it may be difficult. She said, “the diversity of opinions makes for more need for open communication.” Susan felt more importantly than the number we had on the team was how the collaboration would extend to the rest of the faculty in British Columbia.

Did we have an optimum number, too large or too small? It seems that the participants felt that we had a workable size, that we had the right representation therefore the group consisted of the number it did. The researcher has felt that a more ideal group for intense collaboration would be seven, simply as it seems more difficult to schedule and communicate with ten people. Much larger and it would very difficult to experience any real form of collaboration amongst the entire group, although small groups within a larger group may feel collaborative.

Inter-organizational influences

Many factors enter into play during inter-organizational collaboration. Each individual exists most of the time in their own work culture and sub-cultures; and each organization has its own mission, vision, values, and assumptions about working together. These influence the perception of each member; especially as they try to reflect, integrate and confer with faculty about this project.

It seems that this particular group actually may have found it easier to establish goals and trust as they were not in the same organization. They had an opportunity to leave their organization behind and create their own group ethos. However, they also were not as able to move to task as the culture was not known. Alana noted, “Misunderstandings and assumptions can occur based on own culture and organization that need to be addressed

in inter-organizational collaboration.” Emma was able to articulate this as follows, it’s a “different space we create provincially, transferring this to our own culture is challenging. Retreat atmosphere is valuable to escape from the forces and daily pressures. More time to reflect in a new space, to view things differently, to consider other perspectives.”

This group was not part of a corporate strategy, that is they were not “told” to collaborate by their organizations, but rather moved into this collaboration freely and of their own will. As noted earlier by Paul (1990) often collaborations break down at the faculty level. In essence this may be because agreement in principle does not always translate to the practicality and procedures of implementation. This particular group was not faced with this situation, but rather created their own principles. This may be a contributing success factor to the collaboration.

The findings in this research study illustrate that when groups are working together and striving for collaboration there are many factors that influence success. It is important for the leader and for the group to understand these factors and create a process that is appropriate for the individuals in that group.

Study Conclusions

The study findings illustrate the richness of the data collected, the tremendous dedication and commitment of the people involved in this study, and the five themes that emerged through analysis of the data. As a reminder, these five themes are:

- 1) Feeling of collaboration;
- 2) Goal, purpose and commitment;
- 3) Influence of beliefs, values and perception;

- 4) Technology comfort; and,
- 5) Learning to collaborate.

As a conclusion the following model for a collaborative approach enhanced with technology is suggested. It illustrates the five themes in the collaborative process, the tools for communication tasks, the importance of shared leadership, and demonstrates the balance of task and process. The shared values, supported by the shared leadership, draw process and task together. The vision includes both the desired product and collaboration itself.

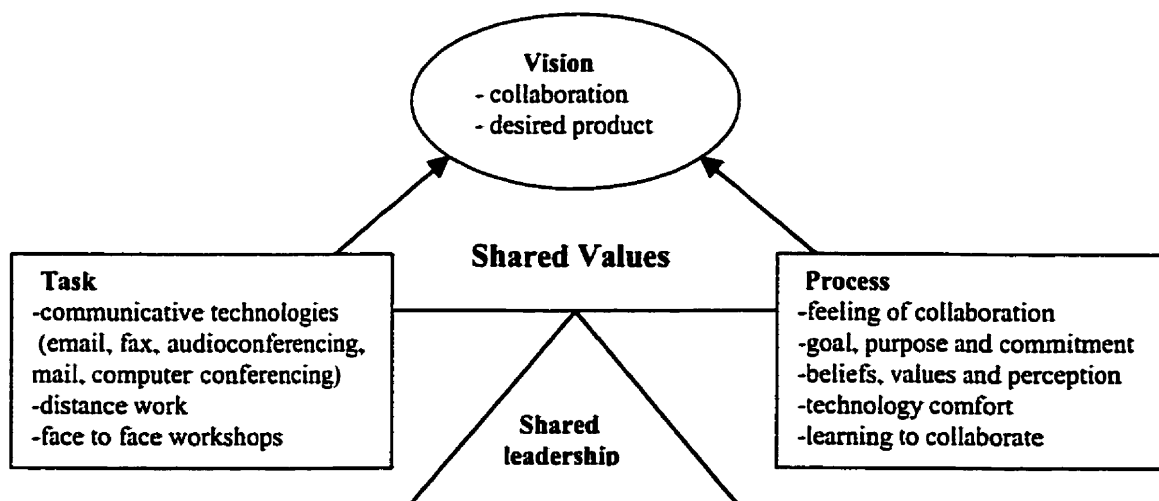


Figure 2: Collaborative approach enhanced with technology

To reflect and conclude, we return to the original research study questions:

- 1) Is collaboration a viable approach for developing a provincial curriculum guide?;
- 2) Can technology enhance the collaborative process?; and further,
- 3) Can community be created through collaboration?

Revisiting these brings us to conclusion, understanding and reflection.

Is collaboration a viable approach for developing a provincial curriculum guide?

Collaboration is a painful, exciting, and uplifting experience. Is it the best approach for a group of ten people to take to produce a product? As noted by Doug Bowie (personal communication, July 1998) “it depends.” Doug, as a MALT faculty member, gave learners considerable ideas to ponder, and his answer was often it depends. The factors and situations; the perspectives and diversity; and the abilities and resources must be considered in deciding to launch into a full collaboration.

Collaboration is defined and perceived by people differently. Before embarking on a collaborative project, it is important to establish what collaboration means to people, what their expectations are, what level of commitment they are able and willing to make, as well as their ability to invest time, energy and resources. This is critical to establishing a common understanding so the group can create a collaborative environment that fosters innovation, creativity and community.

Without values as an anchor, vision as a beacon, and leadership to guide; a collaborative group will drift and be lost. Individual perceptions, beliefs and values guide, limit and encourage us in our ability to contribute, participate, and engage in collaboration.

Establishing and adhering to group principles and values is what can maintain a group through a collaborative process. The vision or goal of a group must be clearly defined and constantly revisited so that participants understand and find meaning in the process. A leader of a collaborative group needs to consider the diversity as a strength, but recognize that struggle and pain is part of the collaborative process. Learning for individuals and groups and creating the shared space so collaboration can occur requires leadership sensitivity, extreme flexibility, a focus on the shared space and most of all trust.

The results of this research have revealed some insights on collaboration and the use of technology that are very valuable to the team of people involved in this project. Others can learn from these experiences and benefit from this study of collaboration. Through

this research other groups may make an informed decision before embarking on a collaborative approach.

Can technology enhance the collaborative process?

As individuals and groups emerge, develop and grow; and learn to feel more comfortable and proficient with technology, they will learn to trust technology to help them be collaborative and to be less dependent on real-time face to face interaction for collaborative work. The shift and movement is occurring in small, visible ways in our daily lives. This collaborative team is typical of a group in transition, one that exists and embraces technology and yet at the same time, prefers to be face to face and recognizes that the limitations and barriers of distance can also be advantages. In our fast paced, “want it now society”, we still need time for reflective thought, for distancing ourselves and giving us time to integrate ideas and thoughts.

Technology can help us if we use it to our advantage and do not let it control how we work. If we consider carefully, how and why we use technology, and not just use it because it is there, it will provide us with tremendous vehicles to continue learning and creating collaborative products and environments. One wonders, however, whether it is actually the technology that bridges the distance or if there are other factors we do not understand. Wheatley (1994), gives us much to ponder when she speaks of distance and the change in our perception of space. “No longer is there a lonely void. Space everywhere is now thought to be filled with fields, invisible, non-material structures...explaining action-at-a distance, helping us understand why change occurs without direct exertion.” (p.48)

Can community be created through collaboration?

Community is being created through the collaborative process that this group has embarked upon. Although this is a small group, it illustrates the essence of collaborative effort. Senge (1994) gives us a definition of community that evokes images of spirit,

involvement, teams, relationships, volunteers, and commitment. He explains that the word community stems from Indo-European roots and means “change or exchange, shared by all” (p.509) As organizations blend and become more community-like it will be important to notice the core processes that Senge says are “fundamental to creating and sustaining organizations as communities....capability, commitment, contribution, continuity, collaboration and conscience.” (p.512). As information begins to flow more freely, as relationships built on values create a web of mutual trust, and as technology advances our ability to collaborate, small healthy communities will converge creating a global community.

The researcher concludes that collaboration is hard work, but incredibly rewarding. She also concludes that preparing a group for a collaborative process is essential for success and that technology can effectively enhance the collaborative process, although there are barriers and limitations that must be acknowledged.

Study Recommendations

The researcher recommends:

- That a group embarking on a collaborative journey spend time initially articulating what this means to each group member;
- That reflection time be built into the collaborative process;
- That leadership be shared in the collaborative journey; and,
- That the group consider:
 - seeking common understanding of the feeling of collaboration;
 - how it defines its goal or purpose and demonstrates its level of commitment;
 - the influence of beliefs, values and perception;
 - exploring individuals comfort with technology;
 - its willingness to learn about collaboration; and,
 - the possible influence of gender, group size and inter-organizational issues.

The approach taken in this research study was to examine a collaborative process that was developed by a group of individuals working on a project together. The group recognized that they wanted to work together and be “truly collaborative.” The researcher initially made an assumption that this meant the same thing to all participants and that is one of the major areas that needed constant attention. The researcher recommends that a group embarking on a collaborative journey spend time initially articulating what this means to each group member. By coming to a common understanding on the collaborative process as well as developing the shared vision and goal for the content, a group may be able to move through the collaborative stages more effectively, or at least with increased awareness of process.

Leaders can use and encourage good communication that fosters an environment for collaboration to occur. An important element to consider is time. Decisions sometimes are best made when there is time to reflect, but the amount of reflection time required is relative and dependent on the issue and size of the project, especially when the stakes are high and there is doubt. As Lisa noted, “people are afraid of silence in dialogue but we need time to reflect.” Participants need to be “away” the right amount of time and it is critical to reflect and to balance within the scope. Sometimes reflection can be done in a couple of minutes, other times groups need to be “away” for an hour break, other times a month of reflection is valuable. Leaders who are sensitive to this will help the group understand the value of reflection.

Although a thorough exploration of leadership was not done in this study, it is relevant to note that group maturity seemed to influence leadership and whether it could be shared or not. Confidence of the leader in the group as well as confidence in the leader by the group will influence how shared the leadership can become in a collaborative process. Full collaboration seems to evoke a sense of shared leadership; however the researcher tends to feel that this requires a slow letting-go, developing process rather than one that can be

instituted at the beginning. Jaworski (1998) provides us with an explanation of what he calls collective leadership, which comes through open dialogue and trust. He says that when people "...sit in dialogue together, they are exercising leadership as a whole. This is nothing less than the unfolding of the generative process. It's the way that thought participates in creating, but it can only be done collectively." (p.116)

It becomes apparent from the study findings that in order for a collaborative group to function and be successful there are a number of factors to consider when designing the approach. These factors are seeking common understanding of the feeling of collaboration; to know and define its goal, purpose and commitment; to recognize the influence of beliefs, values and perception; to explore individuals' comfort with technology; and to demonstrate a willingness to learn about collaboration. In addition factors such as gender and group size need to be considered in designing a process. If it should happen to be an inter-organizational group that is formed to collaborate they need to be cognizant of the elements of trust, competition, culture and values. Realizing that ultimately the goal may be to create community would provide a group with a sense of belonging that may be more intuitive than concrete, thereby rationalizing for some the importance of paying attention to process.

CHAPTER FIVE: RESEARCH IMPLICATIONS

*“There is no ‘We,’
There is no ‘Them,’
There is only You
and Me
and all of Us.
And then the Dance begins.”
(Barry Oshry, Seeing Systems)*

Unlike some other major projects, implementation of the proposed collaborative approach was actually undertaken during this research study. The proposed approach was modified and adapted during the project and was explained in the study conduct and findings.

The collaborative process that evolved and transformed over time was very much influenced by this research study. Participants learned about collaboration, lived collaboration, experimented with technology and were given the opportunity to reflect on how well it was working.

The researcher knows that the group will continue to collaborate to finish the Curriculum Guide 2000 project and will be able to modify, change and adapt their style, leadership and processes as they continue in this journey. If collaboration should be discontinued, the group will still have gained and learned from the experience so that future collaborations will be even more successful. As these individuals move into other collaborative endeavours they bring with them their experiences, increasing the web of interconnectedness and influencing others.

The research completed in this major project adds to the body of literature on collaboration and technology. It provides an example of how a group of people created and struggled; trying to both learn and use technology while collaborating on a project. As they worked together, the pain and challenges as well as the joys and excitement were

uncovered. This research explores the meaning of collaboration in this context and helps us understand that while collaboration was a process goal, it seemed that the ultimate goal was to build community. This we did not realize until late into the project when we began to learn more about each other as individuals and realized that our dental assisting educational community was developing as a result of our collaboration together on the Curriculum Guide 2000.

The researcher would hope that others will continue to develop, explore and use collaborative processes as they converge and work on projects and community development. Collaboration allows us to focus on the “in-between” space that draws us together, rather than on the individual. As our society moves away from a focus on the mechanical, materialistic, individualistic approach to one that is holistic, inclusive, interconnected and spiritual; collaboration can be one vehicle that may help us strengthen our communities and develop shared leadership.

As researchers continue to explore collaboration as a way to promote a community of people to create together, it will spawn new technologies to accommodate such groups. Such technologies will need to be more accessible and useable. In the future, global work will not be limited, nor restricted, by geographical location. Distance barriers will begin to disintegrate and we will be more and more able to collaborate and work together based on interest and opportunity. People seeking meaningful rich collaboration seem destined to struggle with interpersonal relationships as they strive to develop language that enables more than communication. They will endure the struggle of collaboration purely for the joy experienced when the common ground of shared meaning is reached. Creating and developing communities through collaboration and technology can lead to a richer, more meaningful global society. Ultimately, as Percy (1997) says, “team is another way of saying community...true communities live as close to a state of perpetual spiritual wisdom as is possible.” (p.126)

CHAPTER SIX: LESSONS LEARNED

“Collaboration is also strengthened through weaving the web of personal relationships” Peter Senge, 1994

Research Study Lessons Learned

Through this Major Project research study much has been learned. First, identifying and articulating that learning is challenging and superficial at best. Often the learning is deep, unintended, integrated, and even unknown until an application is required and then it surfaces. The following three key questions will attempt to demonstrate and pull together some of the key aspects of learning as discovered in this research study.

What have individual participants learned?

Individuals within this collaborative group have acquired their own learning and interpretation of the approach. Some participants have learned new technology and are excited by their surprising level of growing comfort. Others learned about themselves, digging deep to find out their own perceptions and beliefs. Still others found considerable learning about the content- curriculum, learning outcomes, and authentic assessment. The collaborative approach allowed individuals to become intensely involved and committed to the project and hence they shared, laughed, and struggled together noting that they were being “truly collaborative” and learning to work together in respect.

What has the group learned?

The collaborative group has learned the importance of trust and the need to rely on each other realizing that there were times that some could participate and some could not. These times made us realize that as long as we adhered to the goals, used the values, and continued to move ahead we could continue to work. The group has also learned about collaboration and will be able to embark with greater knowledge on the next

collaborative opportunity, or choose not to collaborate knowing the challenges and requirements.

What has the researcher learned?

The researcher has learned to be calm in what appears to be a storm; to persevere respectfully and listen carefully; to know that the answer evolves through collaboration; and that the most challenging aspect is to see the problem, not solve the problem. She has also learned that leading a collaborative group requires attention to many facets, that there is no right way, that listening to intuition is critical, and that reflection is as important as focused attention.

Program Lessons Learned

As a researcher and learner I have learned through the Master of Arts in Leadership and Training program about myself. I understand more of who I am, of who I am becoming, and how I can serve and lead others. I have come to understand the complexity of relationships and that assumptions, perceptions, and beliefs vary considerably. Probably I have best learned that I really know very little. However, the little I know can influence others in most powerful ways when shared at the right time, in the right place and in the right way.

I have learned more to trust, to believe, and to savor the moments. I have learned about a body of knowledge in leadership and learning that is exciting, complex, confusing, insightful, uplifting and inspiring. I have discovered some wonderful authors and resources that I will continue to follow and learn with in my pursuit of personal growth. My learning journey has included a deepened understanding of the power of relationships, of thought, of intention, and of commitment.

I am learning to apply my knowledge in new situations, to take more calculated risks and to find ways to share my learning respectfully. I am learning to share my knowledge in quiet, leaderful ways. The opportunity to be in community with other leaders and followers provided me with fuel and energy for a tremendous growth spurt and for that I am eternally grateful.

I am learning to live and be more comfortable with ambiguity and change. In the external chaos and confusion I seek an inner, spiritual space for serenity and peace. I am learning when to listen and when to raise my voice. I believe that by learning to collaborate effectively our communities will learn and grow together, our workplaces become healthier, and our relationships grow stronger.

I leave you with my learning, hope, and a small poem to reflect on.

*Community is a spirit of learning
soaking deep within,
constantly transforming
through collaboration.*

*Knowing the space in between connects
hearts, minds and souls,
in our learning journey
we trust, believe and converge.*

*Technology enables us to reach each other
creating meaning in the space between,
volcanoes erupt in our struggle to bring us joy-
seeking balance, newness and love.*

Debbie Payne January 2000

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APPENDICES

Appendix A:	April 1999 Workshop Process and Results
Appendix B:	September Summary and Action Plan
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Appendix D:	Twelve Conditions for Collaboration
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Appendix M:	Silent Reflection Tool

Note 1: To preserve confidentiality individual names have been removed from the Appendices and only the names of the colleges are used.

Note 2: The Open Learning Agency has granted permission to use the following documents in the Appendices of this Major Project. The researcher created them in the course of her employment.

Appendix A	April 1999 Workshop Process and Results
Appendix B	September Summary and Action Plan
Appendix H	Workshop Evaluation September 23 and 24, 1999
Appendix J	December Workshop Summary and Action
Appendix K	January 2000 Workshop Summary

Appendix A: April 1999 Workshop Process and Results

CDA Articulation Sub-Committee

WORKSHOP PROCESS and RESULTS

April 29,1999 University of British Columbia

Present:

Okanagan University College
College of New Caledonia
University College of the Fraser Valley
Vancouver Community College
College of the Rockies
Camosun College
Douglas College
Debbie Payne, facilitator Open College
Center for Curriculum Transfer and Technology

Regrets:

Malaspina University College

OPENING QUESTION:

Do you believe that your faculty/program desires/wants/ needs/ an effective provincial curriculum guide?

Five programs were able to answer yes immediately to this question. Three programs were not able to answer yes at the beginning of the workshop due to the following issues and questions that needed clarification:

- that it was important to honour each program's uniqueness, regional difference, and community focus and they were not clear whether the guide would be able to reflect this
- that the words "guide" and "curriculum" were not comprehended the same by all
- that there still seemed to be a question about the relationship of the competencies to the learning outcomes and without clarity it was difficult to support
- an issue was raised about whether cross cultural issues around values, attitudes and beliefs were reflected in the learning outcomes
- that there needs to be a guide to observable behaviour around the learning outcomes in order for it to be an effective guide.

Note: By the end of the workshop, two of the programs felt considerably more ownership and acceptance of the process. One more college felt that they could answer yes to this question.

WORKSHOP GOAL AGREEMENT

To have a clear picture of what the final curriculum project/guide consists of.

PROCESS

Reviewed project history timeline and budget.

Through individual reflection, small and large group silent activities, and dialogue, we approached this by placing ourselves in the year 2003, imagining the use of an effective guide, and asking ourselves the following questions:

What makes the guide so valuable?

What is in the guide?

components

content

structure

What guides you in your decision making?

We then grouped and clarified the responses around two themes: philosophical and structure. This helped us come to an understanding of what we collectively would like in an effective Implementation Guide.

Using the *Curriculum Guide for Certified Dental Assistant Programs in British Columbia Stage One draft June 1998* as a resource, we collaboratively extrapolated appropriate content for the proposed Implementation Guide.

ACTION PLAN:

- Debbie to collate information and circulate for discussion
- 4) Debbie to draft and circulate a letter regarding a proposal for the completion of an Implementation Guide.
- 5) Send a letter from the CDA Sub-Committee of Articulation to the Center for Curriculum Transfer and Technology with a suggestion that a Call for Proposals be sent out as soon as possible for a project, using the remaining funds, to be done from Sept 99 to June 2000. This would result in completion of an Implementation Guide.

CDA Education Implementation Guide

(working title)

On April 29, 1999 Articulation members agreed to the following:

Through a visioning process, we agreed that an effective, user friendly guide should include the following structural and philosophical elements:

STRUCTURE

- assessment tools and ideas
- performance indicators
- evaluation guidelines/tools
- educational standards
- learning outcomes for the programs
- specific learning outcomes related to topics
- attitudes and values that can be articulated to be measurable
- reflect the delegated duties as contained in Article 10 of the Rules of the Dentist Act
- critical criteria for clinical skills
- defines core requirements for programs
- clearly articulated didactic content
- provides guidance as to depth of knowledge
- integrates the competencies where appropriate and still relevant
- provides a framework for calibration
- assists in portability, prior learning assessment, transfer credit
- flows from general to specific
- reflects problem-based learning or case study approach where appropriate

- includes philosophy of teaching and learning

PHILOSOPHICAL

- inclusive and collaborative development process that leads faculty to feel ownership of the document and recognize elements of their programs within it
- facilitates discussion and sharing among all college programs
- living, flexible, adaptable document
- establishes relative importance of competencies
- honours diversity of students, programs, and faculty
- acknowledges the value of CDA credential and encourages access to additional educational options
- reflects and recognizes unique delivery options
- promotes teamwork and respect
- valuable because it is clear, easy to use, flexible
- an aid to help an institution develop a new program
- provides academic freedom
- visionary, yet grounded in best practices
- exhibits and recognizes existence of curriculum threads and themes

We agreed that the work in *the Curriculum Guide for Certified Dental Assistant Programs in British Columbia Stage One Draft June 1998* be accepted as a resource to develop and complete a user friendly Implementation Guide. We observed that the following elements should be considered, questions need to be answered, and decisions made for the Implementation Guide.

OTHER IDEAS FOR CONSIDERATION

- Resource database
- Web sites
- Case study database
- Course sequencing
- Lesson planning
- Budget setting

- 6) Restructure the acknowledgement page to be inclusive of college faculty and Articulation, rather than using the term "college programs".
- 7) Take the essence of the vision and reduce it to one page. The remaining information would be attached as an Appendix.
- 8) Combine program goals and learning outcomes in some way so that there is only one way of representing this.
- 9) Remove Bloom's pages for the implementation guide.
- 10) Consider obtaining other external organizations and associations input.
- 11) Noted that only 2/3 of the programs responded to the competency questionnaire.
- 12) If we use learning outcomes then they need to be equal in value or set up in a hierarchy.
- 13) Use of the word "skills" was determined to be a misnomer. A suggestion was made of using the term "content groupings" and changing foundation to foundational.
- 14) What is the relationship of the "skill sets" to the program goals/learning outcomes? This was deemed to be a significant gap in understanding and linkages need to be established that are clear and easy to follow.
- 15) Assessment strategies need to be included.
- 16) Is the model of assessment, planning, implementation. Evaluation/adaptation able to "fit" into the guide.
- 17) Do we include bridging, life long learning, competency to proficiency models, expanded modular education, advanced credentials, laddering, and other educational options?
- 18) Any graphical representation of the model needs to be holistic and reflect the philosophy and beliefs of the programs.

A Proposed Structure was suggested for an Implementation Guide.

Section 1

- 6) Table of Contents
- 7) Acknowledgement page
- 8) Purpose
- 9) Philosophy and Goals
- 10) Teaching and Learning Beliefs
- 11) Vision Statement

Note: Section I information can be taken directly from parts of the *Curriculum Guide for Certified Dental Assistants of British Columbia Stage One Draft June 1998*.

Section 2

The core of the document would be in this section which would contain an integration and linkage of program learning outcomes, specific learning outcomes, a "clustering" of topics, reference or integration of competencies as appropriate and still relevant, assessment strategies, and reference to calibration. This section needs to be clear, easy to use, yet flexible for program delivery.

Note: Some of the information in the *Curriculum Guide for Certified Dental Assistants of British Columbia Stage One Draft June 1998* can be used to develop this. The bulk of the work that remains to be done is in this core section. It requires a collaborative approach coordinated by one person, in order to reflect the needs of all programs. A sample model/design for section 2 would be required as submission with a Proposal.

Section 3

Appendices

- 8) Project Description
- 9) Competency Document Evaluation
- 10) Vision research and rationale
- 11) Others TBA

Appendix B: September Summary and Action Plan

Summary and Action Plan

September 23 and 24, 1999 Workshop

Curriculum Guide 2000- The Education and Training of Certified Dental Assistants in BC

Vancouver Community College

Name of Project:

Curriculum Guide 2000

"The Education and Training of Certified Dental Assistants in British Columbia"

Project Team:

X-Team

Okanagan University College
Douglas College
University College of the Fraser Valley
Malaspina University College
Camosun College
College of the Rockies
College of New Caledonia
Vancouver Community College
Center for Curriculum, Transfer and
Technology, resource
Debbie Payne, Open College, project leader

Results:

We identified expected results of the workshop in the morning on Thursday and then reviewed them late in the afternoon on Friday. Our review led to this understanding:

- We established the team, chose a name, and developed an understanding of who the team was and its purpose. The name of the team is the "X Team", the X being derived from a number of words such as explorer, excellent, or x-ray. The name is to help us keep communication clear and remind us that the Curriculum Guide 2000 project team is separate and distinct from Articulation. The purpose of the team is to work collaboratively on the Guide.
- We discussed communication approaches and the use of technology to continue our collaborative work. We recognized that there are individual barriers and limitations, as well as comfort levels and choice of technology for team members. Debbie will work with each team member and try to communicate efficiently. A few suggestions:
 - Email will be used for general information and relatively short messages. One message or topic per email please as this helps with organizing and retrieving information. When responding to email use "reply all" unless the message is not relevant to other team members. (eg. personal messages). All email from now on related to this project will start CG 2000 in the subject line, followed by a short topic.
 - Debbie will send out an attachment to an email to test the technology and see what people are able to download.
 - Fax may be used for paper documents up to 10 pages in length.
 - Courier will be used to send larger documents for review.
 - Debbie will investigate the possibility of setting up a conference on a web site specifically for this project.
 - Audioconferences will be set up on a needs basis for discussion.
 - We may have another face to face workshop in January to review another full draft and discuss progress. Date and location TBA.
- As we worked through various issues and tasks we developed an exciting and trusting environment.

- We discussed the roles and responsibilities of team members and the project leader. Team members are to be primarily "conduits" or links to their faculty to disseminate information, encourage participation, obtain support and advice, and continue the collaborative process we have started. In addition, it was clearly recognized by the team that there are very real limitations for faculty with regards to completing tasks and that clear, open communication is most important to the process. The project leader, Debbie Payne, is accountable for the project to the Center of Curriculum, Transfer and Technology. Due to the need to collaborate and the limitations of funding she will be the project manager, collating information, and guiding the process. Tasks will not be assigned, but rather offered with clear expectations, so that team members can offer to help where they can and negotiate timelines as required. Not all colleges will be able to participate in each area, however review at each stage will be possible. We trust that work began at the workshop will continue collaboratively.
- Timelines have not been clearly established. Debbie will draft up the project timeline and send to colleges for review and confirmation.
- Section 1 of the Curriculum Guide 2000 was not finalized and needs additional work. It was decided to table immediate changes to this section until work on Section 2 was further along given the limitation of time we had to discuss and confirm suggestions. It may make our decision-making easier if we leave it for now. Several suggestions were raised and will be considered at a later date. The second draft may have some changes to the learning outcomes, but other items in Section 1 may be left for the third draft.
- Work on knowledge cluster identification was begun. A comparison of the work we did in Nov 98 with the 1989 competencies helped us clarify the clusters to a degree. Work on this will continue by distance with a preliminary listing included in draft 2.
- A draft conceptual model was developed to help us visually represent the relationship of learning outcomes, knowledge clusters, and CDA scope of practice. This will be reviewed in draft 2. Curriculum mapping(grid) were suggested and seemed to be a good vehicle for explaining the relationship of learning outcomes to the knowledge clusters. Further maps will allow programs to articulate their own curriculum with the map that will provide a language for communication.

- An immediate action plan to continue the work started was developed. A longer term action plan was not attempted at this time. Once timelines are established the action plan will be more apparent.
- Debbie presented some information on her master's research project and explained the relationship to the Curriculum Guide 2000. The Guide is independent of the master's research. The research project explores the creation of a collaborative distance process for developing the curriculum guide.

Action Plan from Workshop:

Malapina: Continue with the knowledge cluster comparison and sorting. She will send the flip chart paper and competencies to Debbie packaged under each of the six topic areas.

Camosun: Work on a paragraph description of the conceptual model we drafted and send to Debbie for inclusion in the second draft.

CNC: Draft out the framework and curriculum map outline and send to Debbie for inputting of data and inclusion in the second draft.

Debbie Payne: Develop an electronic graphic of the conceptual model. Work on the 4 groupings of program learning outcomes and the specific learning outcomes for the second draft. Input the preliminary identified knowledge clusters into second draft for review. Also need to:

- Set up timeline
- Summarize workshop results, action, and messages.
- Follow through on communication strategies

Note: Please refer to Project Timeline (to follow) for suggested deadlines for action items. Contact Debbie to negotiate different times if these are not doable.

Points discussed and understood (key messages)

- There is now a fairly clear picture of the integration of the learning outcomes to the discipline content
- The proposed curriculum map seems to help in correlation

Appendix C: Information and Consent Form

A Very Brief Overview of this Major Project for Potential Interview Participants

“Creating Community through Collaboration and Technology”

The Creation of a Distance Collaborative Process
for the
Development of a British Columbia Curriculum Guide
For
Certified Dental Assisting Education

Debbie Payne

Candidate in the MA in Leadership and Training Program
Royal Roads University

Research Question:

Is distance collaboration a viable approach for developing a provincial curriculum guide?

Context

The final phase of the Curriculum Guide will need to address three issues: a creative inclusive collaborative approach, limitations in funding, and a reduction in project scope. The challenge of the major project is to create a collaborative process for this final phase so that the stakeholders fully engage in the process and have ownership of the product to the degree that it is a useable guide for their programs. Crafting and creating a collaborative process while managing the project development provides an opportunity to be flexible, adaptable, and makes changes to both the process and the development product as it proceeds.

The opportunity to create a collaborative process with the program faculty and then modify, adapt, and change the process as we work together to develop the Guide may change the context of the development so that ownership is felt. By exploring the meaning of collaboration and what it both looks like and feels like, it is hoped that program faculty will become a more effective team. Bridging the distance through technology is key to the success of this approach.

As the Stage 1 Guide was started as an apparent collaborative process there is opportunity to explore what worked, what did not and why at the beginning of this final phase. Then creating a new process together to support the development will have meaning for faculty. The opportunity to learn from history will benefit this next phase.

It is hoped that the results of this study will benefit other disciplines and groups who will be attempting to collaborate on projects at a distance. An additional benefit is that group learning and self-knowledge for these specific program faculty will emerge so that collectively the group establishes some protocols and expectations about working together on group projects. This means that future projects may benefit from the examination of this collaborative approach.

Research Process

This is a qualitative, action research study. This means that searching for meaning within the context is important, that applying and learning from experiences is valuable, and that the interviewer and interviewee dialogue to explore the meaning.

A review of the literature on this subject has already been conducted. The collaborative process begins by establishing a team at the September workshop and continues through the use of technology to bridge the distance. Members of this team will be asked to participate in the research study through an in-depth interview about their experiences with the collaborative process and possibly to participate in a subsequent focus group. The attached form explains the terms and conditions of the research.

Action Research Study:

- *Members of the Curriculum Guide project team will be asked to volunteer as research participants.*
- *Research participants will be interviewed for approximately 90 minutes in November 1999 about their thoughts, feelings and experiences in the collaborative process.*
- *Research participants may participate in an additional focus group or further conference calls.*
- *Observations will be made on the use of technology and the effectiveness of it on the collaborative process*

Master of Arts Leadership and Training (Royal Roads University)**Research Participant Consent Form**

Research Project Title: The Creation of a Distance Collaboration Process for the Development of a British Columbia Curriculum Guide for Certified Dental Assisting Education

Researcher: Debbie Payne, Masters candidate

The purpose of the research study is to explore the collaboration experience, what works, what does not and how it feels. The intent is to come to an understanding of what collaboration both looks and feels like and to understand the meaning of it in the context of developing a curriculum guide by distance.

Please read the following information carefully. If you agree, and consent to participate in this research study, please sign below and return this to Debbie Payne.

- The interviews will be held face to face or by telephone at your convenience. Interviews will be approximately 90 minutes. Subsequent interviews may occur.
- All information obtained in this study will be kept confidential in a safe and secure place by the researcher.
- All interviews of focus group sessions will be audio taped and/or transcribed by the researcher.
- At any time during taping you may choose to turn off the tape or request that the tape not be transcribed.
- Email or conference calls may also be used for data collection.
- Your identity will be kept confidential as pseudonyms will be used in the study.
- The faculty advisor from Royal Roads will have access to the cumulative data

- Questions and comments about the research process are welcomed at any time.
- All rough notes, journals and tapes will be destroyed on project completion.
- Every effort will be made to maintain all ethical and personal standards to honour all the participants in this study.
- The data from your interviews may be used in other forms such as submissions to professional journals, maintaining the same standards of confidentiality and anonymity.

Your participation in this study is voluntary and you may withdraw at any time.

Your signature indicates that you have understood the information regarding the research project and agree to participate under these conditions. You should feel free to ask questions for clarification at any time during the research study. If you have further questions concerning matters related to this research, please contact Debbie Payne.

Participant Name(please print and sign

Date

Researcher

Date

Appendix D: Twelve Conditions for Collaboration

Twelve Conditions for Collaboration

Bourget, L. and Ryan, K.

The Journal for Quality and Participation

Cincinnati

May/June 1999

- 1.) Clear and compelling purpose, mission, or goals, a meaningful reason to collaborate that yields visible results that make a difference.
- 2.) Agreement that collaboration is the best way to proceed, not just the assumed way, that diverse skills, viewpoints, and/or stakeholder input are essential.
- 3.) A commitment to a win-win approach, a conscious choice to collaborate, to shift from power over to power with people, rather than to compete or achieve only as individuals.
- 4.) Leadership support from upper management or a champion with power, integrity, and a whole-systems perspective to manage resources, rewards, and interdependencies.
- 5.) Involvement of and active partnering by all, across functions and levels, giving input and having a voice in the decision-making process for how input is used.
- 6.) Well-defined, systematic, open, honest inclusive communication processes, and clear ground rules to create trust and efficiency.
- 7.) Clear expectations for roles and responsibilities, decision making, and risk tolerance, which helps members to be productive and creative sooner.

8.) Group members committed to creating a positive working atmosphere, including processes that show the value of each individual's contribution.

9.) Commitment to ongoing learning; Creating answers together, tolerating ambiguity, rather than having to come with the answers already formed.

10.) An appreciation of diversity as a catalyst for creativity, including skills, experiences, thinking styles, cultural and ethnic backgrounds, and perspectives.

11.) A clear action planning process, including both strategic and operational variables.

12.) The group strengthens the individuals and the individuals strengthen the group: expanding comfort zones by combining safety and challenge, trust and risk, giving and asking for the best, committed to each others' success.

Appendix E: Adapted Survey

Major Project Collaborative Survey

January 26, 2000

Please choose and circle the most appropriate response that you feel best represents our collaborative journey to date.

- 1 Strongly Agree**
- 2 Agree**
- 3 Somewhat agree**
- 3 Disagree**
- 4 Strongly disagree**

1. We have a clear and compelling purpose, mission, or goal that provides us with a meaningful reason to collaborate.

1 2 3 4 5

2. We agree that collaboration is the best way to proceed, not just the assumed way, and that diverse skills and viewpoints are essential.

1 2 3 4 5

3. We have a commitment to a win-win approach with a conscious choice to collaborate, to shift from power over people to power with people, rather than to compete or achieve only as individuals.

1 2 3 4 5

4. Our leadership is shared with integrity and a whole-systems perspective to manage resources, rewards, and interdependencies.

1 2 3 4 5

5. We have well-defined, systematic, open, honest inclusive communication processes, and clear ground rules to create trust and efficiency.

1 2 3 4 5

6. We have clear expectations of roles and responsibilities, decision making, and risk tolerance, which helps members to be productive and creative sooner.

1 2 3 4 5

7. Our group members are committed to creating a positive working atmosphere, including processes that show the value of each individual's contribution.

1 2 3 4 5

8. We have a commitment to ongoing learning; creating answers together and tolerating ambiguity.

1 2 3 4 5

9. We demonstrate an appreciation of diversity as a catalyst for creativity, including skills, experiences, thinking styles, cultural and ethnic backgrounds, and perspectives.

1 2 3 4 5

10. The group strengthens the individuals and the individuals strengthen the group: expanding comfort zones by combining safety and challenge, trust and risk, giving and asking for the best, committed to each others' success.

1 2 3 4 5

Please return this survey to Debbie Payne by forwarding the email to debbiep@ola.bc.ca or fax to 431 3387. Thank you.

Adapted from Bourget, L. and Ryan, K. Twelve Conditions for Collaboration, The Journal for Quality and Participation. May/June 1999 Cincinnati

Appendix F: Action Research

The foundation of Action Research is Qualitative.

- Action research consists of a family of research methodologies, which pursue action and research outcomes at the same time. It therefore has some components that resemble consultancy or change agency, and some, which resemble field research.
- Action research is responsive. It has to be able to respond to the emerging needs of the situation. It must be flexible in a way that some research methods cannot be.
- The responsiveness of action research allows it to be used to develop hypotheses from the data, "on the run" as it were. It can therefore also be used as a research tool for investigative or pilot research, and generally for diagnosis or evaluation.

Action research tends to be...

- cyclic -- similar steps tend to recur, in a similar sequence;
- participative -- the clients and informants are involved as partners, or at least active participants, in the research process;
- qualitative -- it deals more often with language than with numbers; and
- reflective -- critical reflection upon the process and outcomes are important parts of each cycle.

The cycle best known is from Australia, that of Stephen Kemmis and his colleagues at Deakin University. The steps are:

plan --> act --> observe --> reflect (and then --> plan etc.)

Qualitative Research

CT: Central tendencies R: Ranges

- CT: Qualitative research is synonymous with ethnographic and participant observation methods.
Research traditions from education, sociology, and anthropology.

- R: Qualitative research has multiple meanings when it comes to method. Qualitative research can also include methods from fields like communication (e.g., discourse analysis or conversation analysis),
- CT: Qualitative research is conducted from a scientific perspective. Much of qualitative research is practiced from a scientific viewpoint. It is legitimized by its resemblance with quantitative approaches
- R: Qualitative research can be conducted from a number of contexts. There is artistic or literary qualitative research, which is based upon an artist's way of practice and knowledge production.
- CT: The end product of qualitative research project resembles the style of a classic or traditional research report. For the most part, qualitative researchers' reports of their work approximate the shapes of a traditional research report: problem, literature review, hypothesis(es) and/or research questions, method, analysis(es), discussion, and conclusion(s).
- R: Qualitative research may produce a variety of final products, which include poems, collages, pictorials, videos, and clinical pieces. Qualitative researchers may also choose literary or artistic modes of re-presentation for their work.

Resources:

Dan MacIsaac, "An Introduction to Action Research," 1995,
<http://www.phy.nau.edu/~danmac/actionrsch.html>

O'Brien, Rory, An overview of the Methodological Approach of Action Research
<http://www.web.net/~robrien/papers/arfinal.html>

Howell Faith, Action Learning and Action Research in Management Education and Development
<http://www.imc.org.uk/imc/news/occpaper/alarmed.htm>

Bunning Cliff, Professional Development using Action Research
<http://www.mcb.co.uk/services/conferen/nov95/ifal/paper1.htm>

Lord, James, Appreciative Inquiry

<http://appreciative-inquiry.org/index.htm>

Kerlin

Bobbi, Qualitative Research Page, this is an amazing research page, probably the only one you will need, it includes qualitative research paradigms, genres, and methods.

<http://www.oit.pdx.edu/~kerlinb/qualresearch/>

Appendix G: Interview Approach and Questions

Introduction

The purpose of this interview is to explore together some of our thoughts, feelings and experiences about working together in a collaborative team environment. It is not often people make time to sit and explore the meaning of relationships or to try and get to the source of why things work or why they do not. This interview will be a dialogue between us as we try to explore the meaning of collaboration together. One focus will be on the impact of working through technology- the limitations and advantages. We will also examine the inter-organizational issues such as difference in culture, mandate or philosophy. The interview is not a formal structured interview, but one in which these questions will guide us in meaningful dialogue. We may not get through all the questions or there may be other related ones we want to explore. The interview will take approximately 90 minutes.

Questions

1. We are collaborating over distance for some of our work and trying to use technology. We have used fax, email, phone, conferencing, mail and attempting to set up an electronic conference.

Lets chat about your personal preferences, what works for you- what are the limitations, barriers, successes, learnings, frequency of communication. What are your thoughts and feelings on this?

2. Some people feel that collaboration is really about creating shared meaning and understanding through the use of shared space. Others feel that collaboration is a feeling, still others feel that it is more tangible, for example that the product is collaborative if ownership is felt by the parties involved.

What do you feel collaboration is all about? Are we working in a collaborative environment? How do you feel about a product that is produced collaboratively?

What do and dont you like about collaboration? What limitations do you see? How would you describe what our group is experiencing?

What does collaboration actually feel like?

3. In your experience, is working with interorganizational collaborators different than working with people in collaboration within the same organization?

Consider culture, philosophy, competition, trust.

4. What learning has occurred for you to date as a result of this collaboration? Considering the process of how we work together, how well is it working and why?

What learning do you think has occurred for the group?

5. Do you believe that gender influences or contributes to the working environment? In what way?

This particular project has 10 members- how does the number of people influence the way we work together?

6. If you had an opportunity yourself to set up and lead this project again with the same team of people what would you do the same in the process? What would you do differently? Why?

What if the team members had not worked together before- what would you do to encourage collaboration?

Appendix H: September 1999 Workshop Evaluation

Curriculum Guide Workshop Evaluation

September 23 and 24, 1999

Please do not put your name on this document.

Eight people attended the full two days of workshops, one person attended 1.5 days. Eight people completed the survey at the end of the workshop.

1. **To what extent did this workshop meet your *personal expectations*?**

Not at all

Totally

1

2

3

4

4.6

5

Comments:

- I needed to meet with the participants and build a new understanding
- Good to see tangible material produced in this workshop. Glad to see people "new and already been there" come together and still wanting to go forward!
- I got a better understanding of the direction in which we are going
- Bit more productive than I thought but your frameworks were critical to our movement
- My expectations were non-existent

2. To what extent did this workshop meet its expected results?

Not at all

Totally

1 2 3 5

Comments:

- We were very close
- Too much time on process the first day
- Thought we did really well
- 10/11 items (expected results) discussed and worked on
- Well managed. Thank you Debbie for scribing some thoughts in this area prior to the workshop
- Well orchestrated

3. To what extent to you feel that distance collaboration for this project will work?

Not at all

Totally

1 2 3 4 5

Comments:

- We'll do our best but life happens
- I think it is doable
- I think we've built a strong foundation
- I feel we are all on board now and as long as we maintain regular contact I feel we should be able to stay focused for this year
- I think people will try very hard to keep working collaboratively, more trust is established
- some hesitation about it

- feel that with today's technology we can accomplish the bulk of the work off-site so to speak. Perhaps one more face-to-face to review a draft revision of the document.

4. The most valuable aspect of this workshop for me was

- working on knowledge clusters **because** of the items that came up for discussion and listening to other people's rationale
- your fairly clear vision about it to help guide us **because** we had been without a leader before and you have done very well in helping us to focus both with process and tasks.
- gaining an understanding and clearer image of the overall concept
- the openness of the group **because** everyone's thoughts were truly valued
- seeing the grid and framework produced to depict the use of learning outcomes **because** I didn't know how to apply the learning outcomes into the curriculum prior to this session
- doing expected results and what was brought up in it
- making significant progress (eg curriculum mapping, beginning the marriage process of competencies and skill sets **because** this was our goal
- the opportunity to listen and reflect on the project's progress **because** I had missed the early development of the curriculum project for the year 2000 project.

5. I would have liked to spend more time on

- seemed to meet need- not able to respond to this
- finish up clusters and review in large group
- task but appreciated the validation process because of the new people at the table and because of the new direction of the project
- I think we accomplished a lot in the time we had
- tasks to help us move forward-possibly a small model to take back to home faculty
- tasks- I think the need to allow everyone to be okay with emotions often interferes with getting on with business, but I also recognize the value- A FINE BALANCE
- tasks- but that's my personal preference

6. For me, the key factors to pay attention to in order to be successful are

- communication (effective) with one another
- remembering yourself and reminding others this is your project
- communication with the group
- communication, staying focused, seeing proofs(drafts)
- not to get bogged down in detail, keep moving on big picture, clearly know whats expected as I can provide assistance/not get side-tracked
- keep the momentum, communicate effectively with all team members, stay focused, work collaboratively
- communicating effectively with members in this project and be a conduit to faculty and admin in our colleges, meeting deadlines, maintaining continuity

7. The workshop would have been better if the facilitator had

- not had to wear so many hats!
- at times moved things along a bit faster
- good use of time
- not applicable
- was very well facilitated
- you did a great job- thanks

8. I also wanted to say

- I'm excited about this Project and look forward to talking about it with our team. Felt welcomed into a small group that has been together for a long time on this project.
- I think you are a remarkable intelligent, mindful, professional leader. Thanks for a productive two days. It is all coming together and going somewhere. YES!
- all was said
- Thank you Debbie. I'm looking forward to working on this and seeing this project to closure.
- Thanks!
- Thank you so much, Debbie. You are the vital link to keeping this project alive, I so look forward to utilizing the Curriculum Guide for CDA's 2000" Thanks for all the extras-mints, play-dough etc. Your creativity enhanced the effectiveness of the workshop.

- I'm pleased to see the continuance of our Articulation Committee 1996 goal for a curriculum guide that serves as a visionary yet specific/realistic overview of what currently is practices is the education of CDAs in BC and is functional for the purposes of PLA, transfer credit, standardization of assessment etc. I understand that the Curriculum Guide for CDA Programs in BC and the Curriculum Guide- Year 2000 are 2 separate projects that support each other. Thanks!

Key Points to remember:

- We are responsible for creating a product that we can use
- We want the Guide to be user friendly and flexible. We feel we have established a clear direction and foundation for this to be possible.

Appendix I: Letter and reflective evaluation tool

October 8, 1999

Dear

I sincerely thank you for agreeing to participate in my Master's Project, "Bridges to Meaning" which will explore the viability of collaboration through distance technology. As you are aware the project research will be conducted in the context of developing the Curriculum Guide 2000.

The research I am conducting involves you as a research participant. As this is an action research, qualitative study your opinions as well as the dialogue we share all contribute to the research data. I will be contacting you in the near future to find a mutually agreeable time for an interview discussion. We will need about 90 minutes of uninterrupted time. The interview is not a formal, structured interview but rather will be a more relaxed, guided discussion with the intent to uncover attitudes, feelings, expectations, barriers, experiences and learning about interorganizational collaboration at a distance.

I encourage you to jot down any notes or feelings you have around the collaborative process as we are working through it and to share these with me if you like. This is certainly not required in any way, but is only suggested to you as an option.

Enclosed please find a copy of the signed release form for your own file. I have also enclosed a short article entitled "New Ways of Working Together Part II" which you may find of interest as we explore this journey together. The article was recently written by Jim Taggart, an employee of HRDC in New Brunswick who is also one my classmates at Royal Roads.

I look forward to speaking with you soon.

Sincerely,

Debbie Payne

Reflective Evaluation of the X-Team (as of October 8, 1999)

1. Please take a few moments of your time and complete this evaluation form as it relates to the Sept 23/24 1999 workshop for the Curriculum Guide 2000 and our continued work by distance. The information will be used to improve our communication and may contribute to the Major Project research.

Rate the X-Team's effectiveness in each of the items below, using the following four-point scale. In other words, how well do you think we are doing as a team?

- 4 Outstanding: A consistent strength of the team
 3 Competent: our team is usually effective in this area
 2 Developing: we had some problems in this area, but we're improving
 1 We had problems we were unable to solve

- ___ 1. All members share their ideas freely.
- ___ 2. The team collaborated effectively at the workshop.
- ___ 3. We offer support and encouragement to each other.
- ___ 4. Our laughter, energy and enthusiasm is evident.
- ___ 5. We listen well to each other.
- ___ 6. We trust each other to work towards the common goals we set.
- ___ 7. We explore alternate ideas.
- ___ 8. We share workload fairly.
- ___ 9. We are satisfied with the product produced to date.
- ___ 10. We question and criticize ideas in a respectful manner.
- ___ 11. We are working collaboratively by distance.

To improve our team and the work we will do together we need to _____

Thank you. Please return to Debbie Payne.

Appendix J: December Workshop Summary and Action

Curriculum Guide 2000

Workshop Summary and Action

December 13, 1999

Douglas College

Present:

College of the Rockies
Okanagan University College
College of New Caledonia
Malaspina University College
Douglas College
U.C. of the Fraser Valley
Camosun College
Open College

Debbie Payne

Regrets:

Vancouver Community College
Center for Curriculum, Transfer and Technology

Purpose

We agreed that our primary purpose for this day was to use the 1989 Competencies as a base from which to build our clusters. The assumptions we made were;

- that every program was developed based on these competencies and that gives us common ground
- that sorting the competencies together provided us with ownership and understanding around decision making

Activity

- We agreed to work in a large group format.
- We sorted the competencies under each of the six domains, refining the preliminary sort done in September and completed by Malaspina. This took us until lunch time.
- After lunch we had a lengthy discussion to try and come to terms with what to do next and how to approach clustering. UCFV presented another type of table that could be used or adapted. We considered several approaches- whether to focus on detailed content knowledge, try visiting the learning outcomes, develop a template for the clusters, or try grouping like competencies together into clusters. We settled on the latter.
- We sorted the competencies under each domain into topic clusters.
- We revisited the administrative domain and came up with a workable solution as noted in the decision below.

As a result of our work with these we came to several decisions:

- The administrative domain was not workable. We decided to delete this as a domain and integrate the administrative competencies into the foundational domain. This left us with 5 domains- foundational (consider changing this to fundamental?), assessment, preventive, operative, professional.
- When we looked at the learning outcomes again we came to the conclusion that adding business to the 4th one was not representative and seemed to be confusing. Instead we created a 5th learning outcome called " technologies for communication" which will address the use of fax, email, writing, phone or other technologies used to communicate with patients such as computer software for patient education or case study presentation. We then had 5 learning outcomes and 5 domains which leads us to feel more balanced. Details under this 5th domain have yet t be determined.

Action

- Debbie will type up a group summary and email it to the participants for confirmation.

- Debbie will type up the clusters under each name. She will choose preliminary topic names that can then be refined by the group.
- CNC, UCFV and Debbie will work on a template for the clusters.
- Our remaining work includes finalizing learning outcomes, agreeing to a template for the clusters, finalizing the clusters, rewriting the description of the domains, choosing the learning outcomes that best fit each cluster, and doing the assessment work. Once all of this is done we will then need to complete the rest of Section 2 which provides us with delivery strategies, ideas and options. For January 13/14 we will need to be focused and clear on what we can accomplish in two days.

Appendix K: January 2000 Workshop Summary

Summary January 13 and 14, 2000

Curriculum Guide 2000 Workshop Vancouver Community College

Present: VCC
Malaspina
Camosun
CNC
Douglas
UCFV
C2T2
Debbie Payne, OLA

Regrets: COR
OUC

Goals: To continue working on the clustering of competencies and begin some preliminary work on assessment.

We met, reviewed the agenda and agreed to move ahead. We started by looking at the clusters that we worked on in December, reviewed the proposed names and spent a considerable amount of time choosing more appropriate names for each cluster. While we did this we chatted about the meaning of the cluster and what it might also contain.

Debbie provided an outline of what is covered in the domains of the NDAEB so that we could ensure that we were being inclusive and cognizant of the national approach. We also compared our clusters to the NDAEB and we felt good that everything was addressed.

We did not address the new duties, ideas for other inclusion or our "discard" competencies.

We spent quite a bit of time on process, trying to come to grips with context and what we are attempting to do. Work was shared with us about some work being done by another educator that may help us with a model and representing our work.

Discussion occurred on whether we are going to actually revise all the competency information or assume the content knowledge has been revised in programs and refer back if necessary. Much of the dialogue and debate also centered on the format/table for the clusters. We tried entering some content in the revised table that Debbie, CNC and UCFV worked on but seemed to be hung up on the format and also what we were actually going to include in each cluster. We did seem to agree that we wanted to include the following information for each cluster; though we did not agree on the order, titles or format for presentation.

- name of the domain
- name and brief description of the cluster
- specific learning outcomes
- assessment statement
- some level of related knowledge (prerequisite knowledge was raised as well)

Some members continued working on the clusters in the evening with the perception outcome that the format was not workable.

On Friday, after a discussion on assessment and what we wanted to do we worked in small groups to develop what we called "assessment statements". We did these for all clusters in three of the domains- preventive, operative and assessment.

We managed to do an exercise of mapping the learning outcomes on the curriculum map for all clusters in three of the domains. This helped us see the larger picture and seemed to reassure us that the learning outcomes are workable but do need more refining.

Although the energy of the workshop was mixed, we moved our thinking ahead and produced a reasonable amount of work. Our collaborative approach at times is painful, yet we seem to be extremely committed to the process.

Action: Debbie will write up a summary and is developing a full, new binder for each member that will include a clean updated copy of all work to date. This will help us in seeing the whole project in its entirety. After the colleges receive the binder, can read it and reflect on the work to date, we will communicate to determine the next step. This may be done by conference call. The areas we need to still work on will be identified in the binder when you receive it.

Another workshop date was not set. Debbie needs to review the budget. Suggestions were made of possibly tying into the Pacific Dental Conference and/or an extra day at

Articulation. Once expenses are received from this workshop then Debbie will make a suggestion for meeting.

Prepared by Debbie Payne, Jan 18, 2000

Appendix L: January 2000 Collaboration Survey and Results

Results of Collaboration Survey January 2000

Eight surveys were emailed to research participants on January 26, 2000. Four responses were returned promptly, three required a second request. In total, 7 responses were received which is an 87.5 % return.

Rating scale: 1 strongly agree
 2 agree
 3 somewhat agree
 4 disagree
 5 strongly disagree

All responses to this survey are in the 1-3 range, strongly agree to somewhat agree. There were no disagree or strongly disagree responses.

It appears that conditions for collaboration exist in this group. Responses to questions #1, #2, #3, #4 and #7 are the ones most in agreement, ranging from 1.5 to 1.8. These illustrate the desire to collaborate and demonstrate the commitment to collaboration.

Responses to the questions #5, #6, #8, #9, #10 are more about how well the collaboration and communication is working and the structure set up for communication. These responses range from strongly agree to somewhat agree on the scale (2.1-2.7).

Averages were as follows:

1. We have a clear and compelling purpose, mission, or goal that provides us with a meaningful reason to collaborate.

1 1.8 2 3 4 5

2. We agree that collaboration is the best way to proceed, not just the assumed way, and that diverse skills and viewpoints are essential.

1 2 3 4 5

3. We have a commitment to a win-win approach with a conscious choice to collaborate, to shift from power over people to power with people, rather than to compete or achieve only as individuals.

1 2 3 4 5

4. Our leadership is shared with integrity and a whole-systems perspective to manage resources, rewards, and interdependencies.

1 3 4 5

5. We have well-defined, systematic, open, honest inclusive communication processes, and clear ground rules to create trust and efficiency.

1 2 3 4 5

6. We have clear expectations of roles and responsibilities, decision making, and risk tolerance, which helps members to be productive and creative sooner.

1 2 3 4 5

7. Our group members are committed to creating a positive working atmosphere, including processes that show the value of each individual's contribution.

1 2 3 4 5

8. We have a commitment to ongoing learning; creating answers together and tolerating ambiguity.

1 2 3 4 5

9. We demonstrate an appreciation of diversity as a catalyst for creativity, including

skills, experiences, thinking styles, cultural and ethnic backgrounds, and perspectives.

1 2 **2.3** 3 4 5

10. The group strengthens the individuals and the individuals strengthen the group: expanding comfort zones by combining safety and challenge, trust and risk. giving and asking for the best, committed to each other's success.

1 2 **2.3** 3 4 5

Comments:

- I think that our collaborative journey has been amazingly successful. The process has been invaluable. Even if the product does not end up being exactly what we may have thought it has still been a very worthwhile learning experience for everyone.
- There is an appreciation of diversity but not always an understanding
- Not all group members are tolerant of ambiguity
- During working sessions expectations are clear, but due to length of project and competing priorities it makes it hard to achieve on consistent ongoing basis.
- I am feeling rather neutral in my responses at this time

Appendix M: Silent Reflection Tool

Silent Reflection

Whenever we are faced with decisions, start to explore an issue, or are asked to change or create something there is internal dialogue that starts up inside of us. Parts of ourselves feel and think one way, and parts think and feel another way. We also become aware of other people in our lives that are influential reactors to our ideas and actions.

As you think about your position on the Curriculum Guide direction and process it will be helpful to perform two internal inquiries for a few minutes at various points throughout the workshop.

This will help you clarify your own thoughts that you can then share articulately with others. The following two generic questions can be used for self-inquiry whenever complex dialogue, confusion, debate, assessment, or intense concentration occurs.

Please feel free as a member of this team, at any time during the workshop, to call for a "Silent Reflection" time whenever you feel the need. We will break into silence at that time for people to reflect on the issues at hand.

INTERNAL DIALOGUE	EXTERNAL INVISIBLE REACTIONS
<p>What do the various voices inside you say about your position, pro and con?</p> <p>This helps with clarifying your own personal thoughts.</p>	<p>Who are the people and or groups you can visualize as supporting, questioning, or rejecting your position? What are they saying?</p> <p>This helps in confirming how your faculty would respond to or confirm your position</p>

Adapted from Mining Group Gold, 1985 Xerox Corporation.