CREATING ASYNCHRONOUS ONLINE LEARNING COMMUNITIES

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Abstract

This research project examined how to develop and sustain online, asynchronous learning communities in continuous intake, distance education environments for learners in grades 7 through 10. The study is an action research project that is based upon in-depth, qualitative data. Interviews were conducted with distance education teachers, administrators, and field experts. Open-ended questionnaires were administered to students. The focus of the research was upon teachers belonging to one of the nine provincial distance education schools. The study findings are summarized in the Study Recommendations. The results of the research are intended to support the development of online, asynchronous learning communities at the South Island Distance Education School (SIDES) for continuous entry learners.

Study Background

Learning is a social process that can often been seen in the interactions between students in today's face-to-face classrooms. Students who attend a local school have a classroom community of learners and a school-wide community. In a distance education environment, students also need to be part of a learning community. Palloff and Pratt (1999) argued that "in distance education, attention needs to be paid to the developing sense of community within the group of participants in order for the learning process to be successful" (p. 29).

Developing an online community is a challenging task in itself. It becomes even more daunting to facilitate the development of community when learners are at different places in their course or program. The purpose of my research, therefore, was to find ways in which a learning community can be created for learners in an online, asynchronous, continuous intake environment.

Definition of Terms

1. ADLC – The acronym for the Alberta Distance Learning Centre in Barrhead, AB

2. Asynchronous – Communication that can take place at any time with varied frequency and duration. For the purposes of this project, students communicating in this form will have one year to complete a course and can work as quickly or as slowly as they wish within the one-year time frame.

3. Cohort – A group of learners beginning a program at the same time, completing assignments according to a fixed schedule, and concluding the program at the same time.

4. Community – A group of people who come together because of shared goals and beliefs.

5. Consortium of Distance Education Schools of British Columbia – The association that includes the nine distance education schools started by the Ministry of Education.

6. Constructivism – A learning theory that focuses on student-centered learning. Constructivism encourages learners to choose their own learning goals, construct their own meaning, and participate in problem solving, collaboration, and reflection.

7. Continuous intake – The enrolment of new students into courses or programs throughout the whole year.

8. Desire2Learn – A web-based platform that allows students to work through their online courses asynchronously and provides options for students to participate in threaded discussions and other collaborative activities.

9. FVDES – The acronym for the Fraser Valley Distance Education School in Chilliwack, BC.

10. GVDES – The acronym for the Greater Vancouver Distance Education School in Vancouver, BC.

11. iLinc – Virtual classroom software.

12. NIDES – Acronym for the North Island Distance Education School in Courtenay, BC.

13. Open School BC – A government agency that provides most of the print-based materials and some electronic resources to distance education schools in BC.

14. SCIDES – The acronym for the South Central Interior Distance Education School in Merritt, BC.

15. SIDES – The acronym for the South Island Distance Education School in Victoria, BC.

16. Synchronous – Communication that occurs in real time; participants must be at the same place at the same time.

17. Virtual classroom – The online medium through which learners and instructors can meet in real time. Examples of virtual classroom software include iLinc and Elluminate.

The Research Opportunity

Problem Description

I teach at the South Island Distance Education School (SIDES), located in Victoria, on the southern tip of Vancouver Island, BC. SIDES is a K-12 public school within the Saanich School District. Students and their parents have the option of schooling through SIDES. Students may withdraw from their school and register at SIDES anytime throughout the year. Students entering late in the year have any credit from their previous school transferred to SIDES to allow them to complete the remainder of the course at SIDES. The learning programs at SIDES include both print-based modules and online courses. All course work is completed at home with the support of a parent or guardian. All students have regular contact with their teachers by phone, email, online discussions, live virtual classes, and marked work. SIDES teachers mark and assess students' work, including send-in assignments and tests.

I am specifically interested in supporting learners in grades 7 through 10, as I work with learners in this age range, and the literature indicated that these learners need unique support to meet their learning needs. Offord et al. (2000) noted that "Research shows that the environment of a school exerts a powerful influence on the academic and behavioural functioning of young people. Positive aspects of school environment have been linked to elevated levels of student classroom participation and academic achievement" (para. 3).

Through my experience at SIDES, I have come to understand that learning opportunities for students at SIDES are evolving rapidly. The educational programs we provide are shifting from the traditional, paper-based, correspondence model to online delivery using both asynchronous and synchronous systems. As these changes take place, we are examining the pedagogy surrounding the new systems for teaching and learning. New teaching strategies and models of instructional design are being implemented to provide more meaningful learning experiences for students. As we work through this process, I realize the importance of building learning communities for distance learners.

Building online, asynchronous learning communities becomes much more challenging when working with students who enroll at different times throughout the year. Students who come to SIDES late in the year often struggle and have difficulty fitting in with the cohort of students who start in September. Recognizing this challenge, I have been to professional development opportunities, and I have collaborated with colleagues on this topic. However, I have discovered little information on

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creating learning communities in a continuous entry, asynchronous environment. Therefore, this topic has challenged me to discover some strategies that will help me, along with my colleagues, create learning communities for our learners.

The Research Question
My research question asked: How can SIDES develop and sustain a learning community for grades 7 through 10 students in a continuous intake, asynchronous, online environment?

Sub-questions
1. From the perspective of teachers, administrators, field experts and students, what are some advantages and disadvantages of being part of an online, asynchronous learning community?
2. How do students benefit from and feel about being part of an online, asynchronous learning community?
3. From the perspective of teachers, administrators, field experts and students, how does participation in an online, asynchronous learning community help students construct meaning?
4. What are some strategies for creating community within an asynchronous environment, specifically for this project?

Personal Interest in the Problem
I became interested in online learning communities through working with my grade 7 students in our synchronous, virtual classroom. There, I have seen how students benefit from being part of a learning community. In the coming year, I will be moving some of my courses to an online, asynchronous environment to offer students more dynamic learning opportunities than those provided in the current paper-based program. As I make this transition, I am seeking ways in which I can develop a learning community for students who are at different places in their program.

Creating community in an asynchronous environment requires a commitment from both me, as the instructor, and my students. "Learning is an active process in which both the instructor and the learners must participate if it is to be successful" (Palloff & Pratt, 1999, p. 6). I was in a good position to conduct this study as I have access to various stakeholder groups such as students, colleagues, field experts, and administration. My work on this project has revealed information that is useful to stakeholders who can apply this knowledge to help provide more meaningful learning experiences for students.

Significance of the Opportunity
Providing alternative learning opportunities is a competitive business. In recent years there have been an increasing number of public, private, and independent schools that provide new learning options for students. Therefore, if learners' needs are not being met at SIDES, they can find other options. One of the goals outlined in the growth plan for SIDES is to decrease the attrition rate and increase the completion rate for students taking courses at SIDES. To do this, SIDES has been making the transition to a constructivist-based learning model. Through offering students learning opportunities to construct their own meaning, we hope to offer students more meaningful learning opportunities.

Driscoll (2000) argued that "constructivist theory rests on the assumption that knowledge is constructed by learners as they attempt to make sense of their experiences" (p. 375). As part of the move toward constructivist learning includes moving paper-based courses online, there is also a need to find pedagogically sound ways of delivering online courses. Essential to this new model is creating a learning community for learners in the online, asynchronous environment. Success for distance education students strongly depends on contact from SIDES teachers and communication within a learning community of peers. These two conditions are supported by Palloff and Pratt (1999) who asserted that "key to the learning process are the interactions among students themselves, the interactions between faculty and students, and the collaboration in learning that results from these interactions" (p. 5). Regardless of how appealing the courses, students need to feel that they are part of a learning community rather than isolated. I believe, therefore, to maintain student enrollment at SIDES it is essential that courses offer learners a supportive learning community that empowers students to be successful learners.

Examination of completion rates at the middle- and high-school level at SIDES indicate that many students are not successfully completing their courses. This project offered me the opportunity to find

strategies that will significantly benefit students. I have been very concerned with the students who enter my class late and struggle with their program, particularly since many of the students who come late in the year often have learning, social, or behavioural challenges. I believe that these learners will have much greater success if they are part of a flexible, supportive, online, asynchronous learning community. If the need for cohesive learning communities is ignored, I think that many late entry learners will continue to be unsuccessful, as teachers continue to use paper-based modules that do not support the building of a learning community.

Key Participants
This study focused primarily on distance education teachers from within the nine B.C. distance education schools including teachers from the North Island Distance Education School (NIDES), South Central Interior Distance Education School (SCIDES), Greater Vancouver Distance Education School (GVDES), Fraser Valley Distance Education School (FVDES), and SIDES. The teachers who participated have some experience or knowledge of building community in an online, asynchronous, continuous intake environment.

One SIDES student from each grade from 7 through 10 completed a student questionnaire. Students were selected based upon their experience learning online through asynchronous and synchronous delivery models.

Interviews and follow-up questionnaires were conducted with six distance education teachers, one administrator from SIDES, and one administrator from the Alberta Distance Learning Centre (ADLC). Two field experts were interviewed and completed follow-up questionnaires. One field expert is a university professor in Toronto. The other field expert is an author and consultant in California.

Conduct of Research Study

This section outlines the research methodology that was used to guide the research. Gough (2002) stated that research methodology "refers to a theory of producing knowledge through research and provides a rationale for the way a researcher proceeds" (p. 5).

Research Paradigm
In her summary of Firestone (1987), Glense (1999) noted that "research paradigms determine not only the approach or research methods used, but also the purpose of the research and the roles of the researcher" (p. 5). Action research was used as the research paradigm for this research project.

Stringer (1999) provided the following definition for action research: "Community-based action research is a collaborative approach to inquiry or investigation that provides people with the means to take systematic action to resolve specific problems" (p. 17). Action research is beneficial to participants as it allows for stakeholders to provide input and direction into a solution to a problem that affects them. From an educator's perspective, Glanz (1998) argued that "action research, a type of applied research, is a form of research that is conducted by practitioners to improve practices in educational settings" (p. 20).

Action research emphasizes collaboration and doing research that is practical. As Stringer noted:

> Community-based action research seeks to change the social and personal dynamics of the research situation so that it is noncompetitive and nonexploitative and enhances the lives of all those who participate. This collaborative approach to inquiry seeks to build positive working relationships and productive interactional and communicative styles. Its intent is to provide a climate that enables disparate groups of people to work harmoniously and productively to achieve their various goals. (Stringer, 1999, p. 21)

One goal of the research was to provide data on how to better meet the needs of online learners at SIDES; thus allowing SIDES' educators the opportunity to move forward with a plan that will provide better learning opportunities for continuous entry, asynchronous, online learners.

The results of the research provided data that, through extraction of themes and development of recommendations, supports implementation of best practices for developing and sustaining

asynchronous learning communities. The best practices and the plan for developing online learning communities will continue to evolve during the process of implementing the study's recommendations. It will be a continuous process of plan, act, evaluate, and revise (Stringer, 1999). "Action research is cyclical. The process doesn't necessarily have to stop at any particular point. Information gained from previous research may open new avenues of research" (Glanz, 1998, p. 26).

Inquiry Approach

A naturalistic or qualitative research approach was used for the research project. As Erlandson, Harris, Skipper, and Allen (1993) noted:

> For the naturalistic researcher, the ability to get inside the social context, to share constructed realities with the stakeholders in that context, and to construct new realities that enhance both the knowledge of the researcher and the knowledge and efficacy of the stakeholders is the essence of research (p. 68).

Using naturalistic research, a small number of cases were looked at in depth. "In qualitative research one is looking more for quality than quantity, more for information richness than information volume" (Erlandson, Harris, Skipper, & Allen, 1993, p. 84). The in-depth examination of a small number of cases strengthened the credibility of the research, as the data can be connected to specific examples. "By using the directed power of a small purposive sample, and by not attempting to overgeneralize from it, the researcher can do much to ally fears about inadequate sample size" (Erlandson, Harris, Skipper, & Allen, 1993, p. 84.)

Glanz noted that qualitative approaches are generally used for action research (1998). Palys (2003) defined qualitative approaches as

> research methods characterized by an inductive perspective, a belief that theory should be grounded in the day-to-day realities of the people being studied and a preference for applying phenomenology to the attempt to understand the many 'truths of reality.' Such approaches tend to be constructionist. (p. 434)

A variety of stakeholder groups were involved to provide a range of views on the research question. "To understand the nature of constructed realities, qualitative researchers interact and talk with participants about their perceptions. The researchers seek out the variety of perspectives; they do not try to reduce the multiple interpretations to a norm" (Glense, 1999, p. 5).

Data Gathering Tools

The data gathering tools used for this project were chosen based upon the work of Palys (2003) and Erlandson et al. (1993). The data gathering tools were primarily based upon two of the three qualitative interactive techniques as described by Palys (2003). Interactive techniques involve communication between the researcher and the subject, including interviews, surveys, and oral history methods (Palys, 2003). Interactive methods were chosen because "few processes are as fundamental to social science research as the person-to-person exchange of information" (Palys, 2003, p. 149).

The choice of data gathering tools was also influenced and reinforced by the work of Erlandson et al. (1993). In their discussion of gathering data for naturalistic inquiry, they noted that there are "four general sources that the researcher utilizes in naturalistic research: interviews, observations, documents, and artifacts" (p. 85).

Key ideas from both the works of Palys (2003) and Erlandson et al. (1993) were used to determine the following data gathering tools for the research: interviews, questionnaires, and observations. The implementation of the data gathering tools is discussed in detail in the following section.

Interviews

In-depth interviews were the primary data collection instruments. It was important to include interviews because the participation rate is much higher than for questionnaires, and interviews provide data with more context and depth (Palys, 2003). "The interaction of interviewer and respondent also offers benefits that can enhance the quality of the data gathered" (Palys, 2003, p. 159). The subjects were asked between nine and eleven questions that were of an open-ended nature

to provide context and deeper meaning to the topics. Copies of the interview questions can be located in Appendix A.

Interviews were conducted with six distance education teachers from GVDES, NIDES, FVDES, SCIDES, and SIDES. Two administrators, one from SIDES and one from the Alberta Distances Learning Centre (ADLC), were also interviewed. Finally, two field experts were interviewed, a professor at Wilfrid Laurier University in Waterloo, Ontario, and an author consultant in California. Each of the subjects interviewed had some knowledge or experience working with learners in a continuous intake, online, asynchronous environment.

Where possible, interviews were conducted face-to-face. "Face-to-face contact typically provides two things: higher response rates and the chance to both clarify ambiguities or misunderstandings and monitor the conditions of completion" (Palys, 2003, p. 151). However, for subjects who were not local, the option was given to complete the interviews either through the use of virtual classroom software or over the telephone. With the permission of subjects, face-to-face and telephone interviews were recorded using a hand-held tape recorder; interviews that were conducted in the virtual classroom were recorded using the software. The interviews were then transcribed into MS Word documents verbatim, with the exception of repetitions or off-topic comments.

Questionnaires
Questionnaires were used with four students from SIDES who had previous online learning experience. One student from each grade between 7 and 10 was asked to participate. SIDES' teachers identified students with experience in asynchronous online learning. The list of students for each grade was compiled randomly. The student at the top of the list for each grade was contacted by the researcher to request participation. Students who declined were removed from the list and the next student on the list for the grade was approached. This process was repeated until one student from each grade between 7 and 10 agreed to participate in the research. The student questionnaires were of an open-ended design to gather more in-depth, qualitative data. Students completed and returned the questionnaires within two weeks.

Questionnaires were also administered to collect secondary data from teachers, administrators, and field experts who participate in the interviews. The questionnaires included the same questions as those asked in the interview. Subjects were provided a copy of the questionnaire after the completion of the interview and were asked to return the questionnaire within one or two weeks. The questionnaires provided participants with an opportunity to add additional or reflective thoughts on building online learning communities. Copies of the interview questions can be located in Appendix A.

Observations
Researcher observations were included during some interviews, as a few teachers chose to show how they were working with students in their asynchronous model. Observations were recorded in a field notebook.

Data Analysis
Erlandson, Harris, Skipper, and Allen (1993) described analyzing qualitative data as a "progression, not a stage; an ongoing process, not a one-time event" (p. 111). During the data collection, some general categories emerged to guide the initial data analysis.

The transcribed interviews and questionnaires were put into electronic documents. Each piece of data was examined and put into stand-alone units. Erlandson et al. (1993) defined unitizing data as "disaggregating data into the smallest pieces of information that may stand alone as independent thoughts in the absence of additional information other than a broad understanding of the context"(p. 117). The unitized data was printed in hard copy and labeled to be traceable to the respondent and the specific question that elicited the data. Each unit of data was then detached and put into one large pile.

The categorization of data followed the process outlined by Erlandson et al. (1993) who stated "emergent category designation involves taking all of the units of data and sorting them into categories of ideas" (p. 118). The first unit of data was read and formed the first unit of data in the first category. The second unit of data was read, and if it was similar to the first unit of data, it was

placed in the same category. If the second unit of data was different from the first, the data was put into a new pile, creating a new category. This process was continued until each unit of data had been placed into a category. Each category was examined, and descriptors were assigned to each category. The process was repeated to refine and further define the categories.

Research Study Results

The focus of this action research project was to discover how to develop and sustain a learning community for grades 7 through 10 students in a continuous intake, asynchronous, online environment. The data collected included the perceptions, opinions, and current practices of distance education teachers, administrators, field experts, and SIDES' distance education students. Through the data collection and analysis, three broad themes emerged:

1. Stakeholder perceptions of using learning communities in continuous intake, online, asynchronous environments

2. Strategies and best practices for building community in continuous intake, online, asynchronous environments

3. Barriers to overcome in building community in continuous intake, online, asynchronous environments

Within each of the broad themes, a number of smaller categories and subcategories became evident through the analysis of the data. Due to the extensive length of the Research Study Results discussed in the original thesis, the Study Findings are not included in detail in this section. However, the Study Findings are summarized in the following section entitled Research Implications.

Research Implications

Study Recommendations

The study findings revealed that community can be developed and sustained for grades 7 through 10 learners in continuous intake, online, asynchronous environments. Based on the research findings, several recommendations were identified to help educators develop online learning communities in such an environment. The recommendations include the following:

1. Understand the benefits of online learning communities

2. Provide training for educators

3. Ensure educators have a manageable workload and class size

4. Use effective instructional design

5. Implement teaching strategies that promote and support the development of online learning communities

6. Support learners in the learning community

The recommendations presented are intended to provide an introductory framework for guiding the development of online learning communities in continuous intake, asynchronous environments.

Understand the Benefits of Online Learning Communities

The study findings revealed that there was significant support for developing and sustaining online learning communities for grades 7 through 10 students in continuous intake, online, asynchronous environments. Subjects who expressed support and praise of learning communities had a clear understanding of many of the benefits associated with using learning communities. One field expert commented, "I'm a big believer in it [learning communities]. I feel like it completely enhances the learning process."

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It is recommended that educators inform themselves on how online learning communities can improve the learning process for students. Knowledge of the benefits can motivate educators to become active in the development of learning communities. Although there are likely many benefits of using learning communities, the benefits outlined in the study findings include opportunities for interaction and socialization, increased support from teacher and peers, increased student motivation, and increased student achievement. Awareness of these benefits lays the foundation for understanding the importance of developing and sustaining online learning communities in continuous intake, online, asynchronous environments.

Provide Training for Educators

One of the potential barriers that surfaced in the study findings was a concern over the lack of educator training. A field expert commented, "One of the barriers may be an instructor who is not really paying attention or who is not well trained in dealing with integrating [new students]."

To successfully develop and sustain learning communities in continuous intake, online, asynchronous environments, educators require training on how to work in online environments. Educators should understand the significance of building community and be capable of implementing best practices and strategies that will support the development of learning communities. "Any significant initiative aimed at changing teaching methods or the introduction of technology into teaching and learning should include effective e-moderator support and training" (Salmon, 2003, p. 80). Therefore, it is recommended that educators have opportunities for training that will teach them how to develop and sustain online learning communities for the students they work with.

Ensure Educators Have a Manageable Workload and Class Size

Workload was identified in the study findings as a barrier to building online learning communities. Although research participants supported building online learning communities, there were concerns about workload. One teacher commented, "The challenge is to find ways to maintain this activity [community building] and maintain it so that it doesn't kill the teacher." Another teacher reflected, "I think it takes a lot of time and energy to go in and develop the sense of community." Various demands, including marking, affect teachers' ability to provide consistent support to the learning community. A teacher suggested, "Reduce our marking load so that we can do more of the online social side." Instructors struggle with finding enough time to respond to all learners and support the learning community (Palloff & Pratt, 2003). The use of learning communities should not be an addition to the current workload of teachers. Rather, time for developing and sustaining online learning communities should be part of educators' expected duties.

Closely related to workload, class size is important to successfully build online learning communities. Instructors struggle with finding enough time to respond to all learners and support the learning community (Palloff & Pratt, 2003). Even with a skilled facilitator, 20 or more students can have a successful learning experience (Palloff & Pratt, 1999). Therefore, it is recommended that educators have a manageable workload and class size to ensure there is time to dedicate to developing and sustaining learning communities for learners in continuous entry, online, asynchronous environments.

Use Effective Instructional Design

In the study findings, instructional design was defined as a "system of procedures for developing education and training programs in a consistent and reliable fashion" (Gustafson & Branch, 2002, p. 17). It is recommended that educators use an instructional design model that is learner-centered. The needs of the learner should be the driving force in the design of online courses. "Learner-centered instruction means that the learner and his or her performance are the focal point of all instruction" (Gustafson & Branch, 2002, p. 21). Learner-centered instructional design includes the use of clear expectations, meaningful instructional activities, and effective technology.

Have Clear Participation Expectations

Clear participation expectations are essential to ensure participation in the learning community. A field expert noted, "It [student interaction] needs to be planned, and you need to create that within your curriculum." An administrator stressed the importance of assessing student participation within the curriculum: "It [student participation] has to be an integral part of what you are assessing. You have to make the curriculum work in such a way that this is the curriculum and not an add on." Therefore,

it is recommended that participation expectations be included in the design of online courses to promote participation in the learning community.

Choose Meaningful Instructional Activities

Educators should choose activities and discussion topics that are meaningful to students. One teacher noted, "I choose topics (both curricular and non-curricular) that are engaging, fun (where possible), and most importantly, relevant to them [students]." Teachers should be willing to allow the emergence of discussion that is engaging and meaningful to students (Salmon, 2003, p. 164). Palloff and Pratt (1999) supported the use of relevant instructional activities in the course design:

> The process of connecting the learning gained from everyday life to the learning of the course not only creates a deeper sense of meaning for the participants but it validates them as people who possess knowledge and who can apply what they know in other contexts. (p. 116)

Considering new students coming into a learning community, a field expert commented, "Really focus on what it takes to engage students online. Be creative in the kinds of activities so that new students coming in can jump in and don't need a lot of orientation to get up to speed." Therefore, it is recommended that educators use relevant and meaningful activities and discussion topics that will engage learners to participate in the learning community.

Use Effective Technology

Because technology was highlighted as one of the barriers to building community, it is recommended that educators choose technology that is as transparent as possible to learners. "The software should be in the background, acting only as a vehicle for course delivery" (Palloff & Pratt, 1999, p. 64). Learners should not notice the technology; rather, the technology is just the medium through which learning opportunities are offered.

Implement Teaching Strategies that Promote and Support the Development of Online Asynchronous Learning Communities in Continuous Intake Environments

The research findings revealed that there are several teaching strategies that can be used to promote and support the development of online learning communities. These strategies include using introductions, encouraging student ownership, using exemplars and showcasing student work, providing opportunities for student collaboration, using discussions, providing a social space for students, using peer mentors, and using the synchronous virtual classroom. It is recommended that educators incorporate these strategies into online classrooms to help build a learning community for online learners. Each strategy is reviewed in the following sections.

Use Introductions

It is recommended that educators begin the school year or new courses with introductions. Introductions should also be used to introduce new students to the learning community. "It is important to begin the course with introductions. Students should be able to introduce themselves and begin to get to know each other" (Palloff & Pratt, 1999, p. 112). Reflecting on personal experience, one teacher commented, "One of the first things I have them [students] do is to introduce themselves to the online community . . . A lot of the kids have built substantial friendships based on this." Introductions begin the community building process in a non-threatening manner and teach learners how to respond to, and support, their peers in an online environment.

Encourage Student Ownership

It is recommended that student ownership be encouraged in online courses because it is an important consideration in building community. One teacher suggested, "Allow them [students] to lead and take charge of the learning for others and themselves." Students can be encouraged to provide input into their assessments, discussion topics, and collaborative activities that they would like to participate in. Palloff and Pratt (1999) supported student ownership in learning. "Because an active learning process is a desired outcome of distance learning, one way to ensure active participation is to share the responsibility for facilitation with the participants" (p. 120). Student ownership increases student interest and investment in the learning community, often leading to increased participation.

Use Exemplars and Showcase Student Work

It is recommended that students be provided with exemplars and opportunities to share their work; these factors are important in supporting student success and the development of learning communities. A teacher described the importance of using exemplars: "There must be a place for new students to see the quality of work expected." Although teachers may describe expectations and provide students with criteria, exemplars provide a visual medium through which students gain understanding of expectations. A teacher summarized, "Without these exemplars, the kids are really stuck. It is really important to have a place for kids to show off their work."

In any course, it is important for students to have a place to share their work and accomplishments. One teacher suggested, "You can showcase completed projects to help other students see what is possible." Through the posting of student work, an administrator observed, "One of the values of developing an asynchronous learning community is that you celebrate what kids can already do." A teacher reflected on students' feelings about sharing their work: "The kids are so thrilled to have their work posted. I use this to give kids an idea of what is expected in the course." Therefore, it is recommended that students have a place where they can share their work and accomplishments with the learning community.

Provide Opportunities for Student Collaboration

It is recommended that educators provide opportunities for students to participate in collaborative activities because collaboration and the sharing of ideas can substantially enrich the learning experience for students. A teacher suggested that through collaboration, students "get to participate, ask questions, and share what they know from students and the teacher." Collaboration among students supports student success in their course or program. "The likelihood of successful achievement of learning objectives and achieving course competencies increases through collaborative engagement" (Palloff & Pratt, 2005, p. 8). Therefore, students depend on the members of their learning community in order to be more successful learners in an online environment.

Use Online Discussions

It is recommended that educators use online discussions because discussions are a useful way to connect students and build community. An administrator commented that students should have opportunities to participate in threaded discussions. "A site where they [students] can go, that isn't too structured, and learners can bring in topics of interest for themselves." A teacher provided a personal perspective on using discussions. "Like in the regular classroom, I get to know my online students, find out what their interests are, and try to choose discussion topics or create conferences that will engage them."

For new students coming in, it is recommended that they have access to archived discussions. A teacher suggested using "archived discussions so new students can read or view what has been going on if they choose to." One field expert also encouraged the use of an "ongoing archive of discussions so that students who are coming in late can look and see what has gone on before they arrived. However, not with the expectation that they are going to get all caught up on that."

It is recommended that online courses have a question and answer forum for students to post and answer questions. Question and answer forums offer a venue through which students can post a question and receive answers from either peers or the teacher. One teacher noted, "I have had student conferences where they ask and answer questions amongst themselves." Students can contribute to the community by answering the questions of their peers.

Provide a Social Space for Students

Because socializing is a motivating factor for students in the learning community, it is recommended that online courses have a social discussion area for non-curricular related topics. A teacher commented, "It is important to have areas outside the classroom where kids can meet with other students." One teacher argued that it is essential that students have a

> connection to a Student Café where students can kick back, share their daily experiences, even if they are not taking the same courses. They build community based on the exceptional nature of their education and individual experiences. Thus, the goal is to build a 'whole school' experience.

Opportunities for student socialization contribute to the unity of the learning community as students share personal information. "The sharing of our lives, including our travels, our observations, our emotions, and who we are as people is deliberately brought into the classroom in an effort to promote group cohesion and connection" (Palloff & Pratt, 1999, p. 78).

Use Peer Mentors

For new students entering the community, it is recommended that educators organize peer mentors to ease the transition of new learners into the learning community. A teacher commented, "The people [students] who have been there a long time serve as great mentors for people who have never taken an online course." Peer mentors can provide new students with a connection to the community and can assist them in becoming familiar with the tools and expectations in the course. A field expert noted,

> The students who are farther along in the process could act as a buddy to someone coming in so that they don't feel like they are way behind the eight ball. Someone could bring them [new student] up to speed with where the learning community is and act as their liaison to the rest of the group.

Mentoring could minimize the disruption in the learning community and ease the challenges that new learners face coming into an already established community.

Use the Synchronous Virtual Classroom

It is recommended that educators make occasional use of the synchronous virtual classroom to support collaboration and community building. An administrator argued, "Even though we talk about students being in an asynchronous program, it does not mean we can't program a synchronous session… We schedule synchronous sessions where students can get together and talk about common areas." A field expert also suggested using a virtual classroom for building community. "I would occasionally have a get-together for the whole group. It would be optional but highly recommended because there are important things that can happen there." Palloff & Pratt (2001) suggested that synchronous technology is "best used to enhance collaborative learning experiences and enable teamwork" (p. 27). The virtual classroom can provide an alternative venue for learners to interact, collaborate and socialize, thus, providing further opportunities for community building.

Support Learners in the Learning Community

In the study findings, learner support was defined as "all those elements capable of responding to a known learner or group of learners, before, during, and after the learning process" (Thorpe, 2003, p. 201). Online learners need easy access to a wide range of support, including educators and technical support. One administrator commented that it is important to "ensure that students have a lot of support around them. I call it the circle of support, whether it is teachers or technicians." The availability and presence of student support in the learning community helps keep students engaged. A teacher highlighted the significance of students feeling that they are supported: "They [students] need to feel respected and trust that I am there to support and help them achieve the best results in the course." Therefore, it is recommended that students be provided with adequate support from teachers, technicians, and peers to ensure that learners get the most out of their participation in the learning community.

Teacher Support

The online teacher plays a key role in supporting students. The teacher is responsible for maintaining regular contact with students, engaging new students, and modeling and guiding desired participation in the online classroom.

It is recommended that teachers maintain regular contact with students. Students should have many occasions for communicating with the instructor and peers throughout the course (Hill, Han, & Raven, 2001). In a discussion about building an online learning community, one teacher reflected, "I am persistent with building the community. I make a point of getting in there every single day and respond thoughtfully to every post in the classroom. It's that important. Bottom line." A field expert described the role of the course instructor: "The instructor needs to be checking the course very

frequently, making sure everyone is engaged, reaching out when it looks like someone might be drifting away or isn't getting fully engaged."

The online teacher is responsible for supporting and integrating new students into the learning community. The teacher needs to find ways to engage new students and bring them into the community. For students who start late in the year, one field expert noted, "I would spend some time with the late starting student telling them where the rest of the group is."

To encourage good participation and communication, it is recommended that the instructor model the kind of participation expected from students. Use of humor, positive and constructive feedback, detailed criteria outlining participation guidelines, and shared goals enhance students' participation (Palloff & Pratt, 1999). A teacher discussed the use of teacher modeling: "I model the expectations for responses that I would expect from a group of my students." Palloff and Pratt (2001) also emphasized the importance of teacher modeling. "As the instructor, be a model of good participation by logging on frequently and contributing to the discussion" (p. 30).

Technical Support
In the study findings, one of the barriers to building community was technical difficulties. One teacher commented, "The biggest barrier is when the kids don't have enough technical support and things don't work for them." A student noted a disadvantage of learning online: "It [learning online] has its problems, such as computer malfunctions. "The instructor should provide the learners with technical training and ensure that adequate technical support is available so that technical difficulties do not interfere with successful collaboration" (Palloff & Pratt, 2005, p. 39). Therefore, students must have prompt access to technical assistance to minimize the disruption in student participation in the learning community.

It is hoped that the recommendations outlined in this section will serve as a framework to guide future research and the initial development of learning communities for learners in continuous intake, online, asynchronous environments. The following sections outline how the research recommendations could be implemented at SIDES and future research possibilities.

Organization Implementation
Essential to an action research project is to have a plan for implementing the study recommendations. "It is imperative that action research processes include clearly articulated processes for developing action related routines and practices that are part of participants' everyday work or social lives"(Stringer, 1999, p. 116). This section outlines some suggestions, based upon the study recommendations, to consider for developing and implementing a plan with stakeholders.

The study findings revealed that educators should be aware of the importance of using online learning communities. Given this, it is advisable that the first step in the planning process is for SIDES' administration to understand the significance of learning communities in enhancing learning for students. It is crucial that administration realizes the importance of learning communities and supports the development of learning communities at SIDES. Without support from administration, a plan would be difficult to implement among most staff members.

To ensure that teachers have time to dedicate to learning about the importance and development of learning communities, administrators should guide teachers in maintaining a reasonable workload. Administration should consider providing educators with the necessary training to learn about incorporating learning communities into their classrooms. As teachers begin implementing new strategies, they should have access to required technology and technical support staff.

Successful implementation requires the support of the teachers who will develop and sustain the learning communities. Teachers must be willing to take time to see the benefits of using learning communities in continuous intake, online, asynchronous environments. From there, teachers should participate in training to learn how to develop and sustain learning communities for their students. The training would include the three main recommendation categories that were previously discussed in the Study Recommendations section: using effective instructional design, implementing teaching strategies that promote and support the development of online learning communities, and supporting learners.

The implementation of the study recommendations has several potential benefits to SIDES. As noted earlier in this project, SIDES is undergoing significant change as the quest for more learner-centered distance education continues. Because part of the move toward learner-centered instruction includes offering more online opportunities, there is also a need to find pedagogically sound ways of delivering online courses. Essential to this new model is creating learning communities for learners in online, asynchronous courses. Success for distance education students strongly depends on contact from SIDES teachers and communication with peers in a learning community. These two conditions are supported by Palloff and Pratt (1999) who asserted that "key to the learning process are the interactions among students themselves, the interactions between faculty and students, and the collaboration in learning that results from these interactions" (p. 5). Regardless of how appealing the courses, students in continuous intake environments need to feel that they are part of a learning community rather than isolated.

As previously noted, the completion rates at the middle- and high-school level at SIDES indicate that many students are not successfully completing their courses. There seems to be even less success for students who enter late in the year. These students often struggle because, in addition to starting late, they often have learning, social, or behavioural challenges. It is likely that these learners would have much greater success if they were part of a flexible, supportive, online, asynchronous, learning community. If the need for cohesive learning communities is ignored, it is possible that many late-entry learners will continue to be unsuccessful, because teachers continue to use paper-based modules and have learners working in isolation. Therefore, it would seem that to increase student achievement and satisfaction, it is essential that courses offer learners a cohesive learning community that support the success of SIDES' students.

Research Project Lessons Learned

The intent of this research project was to determine how community could be developed and sustained for grades 7 through 10 learners in online, asynchronous continuous intake environments. The study used key ideas from naturalistic research that included the use of in depth interviews, questionnaires, and observations. A range of stakeholders were involved in the research including distance education teachers, administrators, field experts, and SIDES students. The data collected was used to develop a compilation of best practices and teaching strategies to create and maintain online, asynchronous learning communities in continuous intake environments.

Review of Research Implications

The action research project concluded with a description of how the study recommendations could be implemented at SIDES. This included considerations for implementation and the potential benefits of putting the study recommendations into action at SIDES. Future research considerations that could extend the research were also outlined in this section.

Time and resources played key roles in limiting the study to a small number of distance education teachers, administration, field experts, and students in grades 7 through 10. It would be beneficial to examine a wider range of subjects and to include the views of parents, learners with special needs, instructional designers, technicians, and government representatives. A further consideration for research would be to include some research subjects who would provide a critical voice and may not support learning online, such as teachers in face-to-face schools. Furthermore, the age range of learners could also be expanded to include students in kindergarten through grade 12 and adult learners.

Researcher Reflection

This research was deeply significant to me because I have personally struggled with how to engage learners in the continuous intake model that we use at SIDES. Learners who enter SIDES late in the year are more vulnerable to being unsuccessful because they often come with behavioural, social, or academic issues. Analysis of the data provided me with new insight on how to accommodate and support learners in online, asynchronous continuous intake environments. I have a greater appreciation and understanding of the importance of developing and sustaining learning communities to help students be more engaged, satisfied, and successful. I have grown personally and

professionally as an educator because I feel more competent in providing the best learning opportunities for my students.

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APPENDIX A: INTERVIEW INSTRUMENTS

The following pages provide samples of the instruments that were used to collect data from distance education teachers, administrators, field experts and students.

Teacher Interview Questions

Thank you for taking time to help me find discover the possibilities for creating community in an online, asynchronous, continuous intake environment.

At any time during the interview, please feel free to include any comments or show items that you feel are relevant to the development of online, asynchronous learning communities for continuous entry learners.

1. Describe how you work with students in an online, asynchronous environment.

2. How would you engage students who begin online, asynchronous courses late in the year?

3. How would you build a learning community for your online, asynchronous learners?

4. In what ways do you see students' participation in a learning community impacting upon student achievement in an online, asynchronous course?

5. What advantages do you see in students participating in online, asynchronous learning communities?

6. What strategies or activities do you use, or can recommend, for creating community in an online, asynchronous environment when learners are beginning and ending their course or program at different times?

7. What observations can you make regarding student satisfaction with online, asynchronous learning as a result of students' participation in learning communities?

8. What do you perceive as barriers to creating online learning communities in continuous intake, online, asynchronous environments?

9. Describe any specific community building strategies that you found to be unsuccessful.

10. Is there anything else you would like to add about creating community within a continuous intake, online, asynchronous environment?

Teacher Questionnaire

Thank you for taking time to help me find discover the possibilities for creating community in an online, asynchronous, continuous intake environment.

This questionnaire is intended to gather more in-depth comments on the questions covered in the interview. As you complete the questionnaire, please feel free to include any comments or items that you feel are relevant in the development of online, asynchronous learning communities for continuous entry learners. When you have completed the questionnaire, please return it to me.

1. Describe how you work with students in an online, asynchronous environment.

2. How would you engage students who begin online, asynchronous courses late in the year?

3. How would you build a learning community for your online, asynchronous learners?

4. In what ways do you see students' participation in a learning community impacting upon student achievement in an online, asynchronous course?

5. What advantages do you see in students participating in online, asynchronous learning communities?

6. What strategies or activities do you use, or can recommend, for creating community in an online, asynchronous environment when learners are beginning and ending their course or program at different times?

7. What observations can you make regarding student satisfaction with online, asynchronous learning as a result of students' participation in learning communities?

8. What do you perceive as barriers to creating online learning communities in continuous intake, online, asynchronous environments?

9. Describe any specific community building strategies that you found to be unsuccessful.

10. Is there anything else you would like to add about creating community within a continuous intake, online, asynchronous environment?

Administrator Interview Questions

Many thanks for taking the time to answer these questions. The purpose of this research is to determine the impact of developing learning communities for students in an online, asynchronous, continuous intake environment. The intent is to determine a model of best practice for developing and sustaining online learning communities when students are beginning and ending at different times. Your leadership input is an important view that needs to be included.

At any time during the interview, please feel free to include any comments or show items that you feel are relevant to the development of online, asynchronous learning communities for continuous entry learners.

1. How long has your school been using an online, asynchronous course or program delivery?

2. Describe how your school supports learners in an online, asynchronous environment.

3. How do you see online learning communities as a factor in your delivery of asynchronous courses?

4. Describe how your school is working at developing and sustaining online, asynchronous, learning communities.

5. What changes have you noticed, or anticipate, in student satisfaction with students' participation in online learning communities?

6. What changes have you noticed, or anticipate, in student achievement as a result of students' participation in online learning communities?

7. How would you engage students who begin online, asynchronous courses late in the year?

8. What strategies or activities do you use, or can recommend, for creating community in an online, asynchronous environment where learners are beginning and ending their course or program at different times?

9. To develop a model of best practice, what insights do you have for developing and sustaining online, asynchronous learning communities for learners in continuous intake environments?

10. What barriers do you perceive in developing and supporting online, asynchronous learning communities when there is continuous intake from learners?

11. Is there anything else you would like to add about developing and supporting online, asynchronous learning communities?

Administrator Questionnaire

Many thanks for taking the time to answer these questions.

The purpose of this research is to determine the impact of developing learning communities for students in an online, asynchronous, continuous intake environment. The intent is to determine a model of best practice for developing and sustaining online learning communities when students are beginning and ending at different times. Your leadership input is an important view that needs to be included.

This questionnaire is intended to gather more in-depth comments on the questions covered in the interview. As you complete the questionnaire, please feel free to include any comments or items that you feel are relevant to the development of online, asynchronous learning communities for continuous entry learners. When you have completed the questionnaire, please return it to me.

1. How long has your school been using an online, asynchronous course or program delivery?

2. Describe how your school supports learners in an online, asynchronous environment.

3. How do you see online learning communities as a factor in your delivery of asynchronous courses?

4. Describe how your school is working at developing and sustaining online, asynchronous, learning communities.

5. What changes have you noticed, or anticipate, in student satisfaction with students' participation in online learning communities?

6. What changes have you noticed, or anticipate, in student achievement as a result of students' participation in online learning communities?

7. How would you engage students who begin online, asynchronous courses late in the year?

8. What strategies or activities do you use, or can recommend, for creating community in an online, asynchronous environment where learners are beginning and ending their course or program at different times?

9. To develop a model of best practice, what insights do you have for developing and sustaining online, asynchronous learning communities for learners in continuous intake environments?

10. What barriers do you perceive in developing and supporting online, asynchronous learning communities when there is continuous intake from learners?

11. Is there anything else you would like to add about developing and supporting online, asynchronous learning communities?

Field Expert Interview Questions

Many thanks for taking the time to answer these questions. The purpose of this research is to determine the impact of developing learning communities for students in an online, asynchronous, continuous intake environment.

The intent of the research is to determine a model of best practice for developing and sustaining online learning communities when students are beginning and ending courses or programs at different times. Your expertise in the field of developing online learning communities is a valuable view that needs to be included.

At any time during the interview, please feel free to include any comments or show items that you feel are relevant to the development of online, asynchronous learning communities for continuous entry learners.

1. Describe your experience with developing online, asynchronous learning communities.

2. What value do you see in developing and fostering asynchronous, online communities?

3. What changes have you noticed, or anticipate, in student satisfaction through students' participation in online learning communities?

4. What changes have you noticed, or anticipate, in student achievement as a result of students' participation in online learning communities?

5. How would you engage students who begin online, asynchronous courses late in the year, or who are at different places in their courses?

6. What strategies or activities do you use, or can recommend, for creating community in an online, asynchronous environment where learners are beginning and ending their course or program at different times?

7. To develop a model of best practice, what insights do you have for developing and sustaining online, asynchronous learning communities for learners in continuous intake environments?

8. What barriers do you perceive in developing and supporting online, asynchronous learning communities when there is continuous intake from learners?

9. Is there anything else you would like to add about developing and supporting online, asynchronous learning communities?

Field Expert Questionnaire

Many thanks for taking the time to answer these questions. The purpose of this research is to determine the impact of developing learning communities for students in an online, asynchronous, continuous intake environment.

The intent of the research is to determine a model of best practice for developing and sustaining online learning communities when students are beginning and ending courses or programs at different times. Your expertise in the field of developing online learning communities is a valuable view that needs to be included.

This questionnaire is intended to gather more in-depth comments on the questions covered in the interview. As you complete the questionnaire, please feel free to include any comments or items that you feel are relevant in the development of online, asynchronous learning communities for continuous entry learners. When you have completed the questionnaire, please return it to me.

1. Describe your experience with developing online, asynchronous learning communities.

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2. What value do you see in developing and fostering asynchronous, online communities?

3. What changes have you noticed, or anticipate, in student satisfaction through students' participation in online learning communities?

4. What changes have you noticed, or anticipate, in student achievement as a result of students' participation in online learning communities?

5. How would you engage students who begin online, asynchronous courses late in the year, or who are at different places in their courses?

6. What strategies or activities do you use, or can recommend, for creating community in an online, asynchronous environment where learners are beginning and ending their course or program at different times?

7. To develop a model of best practice, what insights do you have for developing and sustaining online, asynchronous learning communities for learners in continuous intake environments?

8. What barriers do you perceive in developing and supporting online, asynchronous learning communities when there is continuous intake from learners?

9. Is there anything else you would like to add about developing and supporting online, asynchronous learning communities?

Student Questionnaire

Thank you for taking the time to help us improve the way we deliver online coursework.

This questionnaire is not a test in any way. You will notice that no student names are attached to the questionnaire. I guarantee that all responses will be kept confidential and will have no bearing on your grades. Please keep in mind that there are no "right" answers here. When you have completed the questionnaire, please ask your parent or guardian to return it to me.

I encourage you to feel free to be critical or suggest improvements in any of your answers. If you need more room for writing, please attach another sheet and indicate the question number.

I really appreciate you responding so we can make our courses more interesting and satisfying for our students. Thank you!

1. What are two of your most memorable learning experiences?

2. Describe how you feel about learning online.

3. What helps you be successful with your online coursework?

4. How is your online schoolwork different from your other distance education work?

5. How do you feel about interacting with other students online?

6. What advantages do you see in interacting and working with other students in online courses?

7. What disadvantages do you see in interacting and working with other students in online courses?

8. How do you think online discussions and working with other students online might help you with your learning or schoolwork?

9. Is there anything else you would like to say about learning and interacting with other students online?

Biographical Note:

Crystal Kerr is a practicing teacher in the Saanich School District, on the Southern tip of Vancouver Island in British Columbia. She has taught a variety of grades in elementary and middle school. Currently, Crystal is teaching grade 8 at the South Island Distance Education School in Victoria where she teaches and develops a variety of online courses. For her own education, Crystal has completed a Bachelor of Arts majoring in English and a Bachelor of Education from the University of Victoria. Recently, she completed her Master of Arts Degree in Distributed Learning at Royal Roads University. Crystal can be reached through the Saanich School Board Office at 2125 Keating Cross Rd., Victoria, B.C., V8M 2A5.