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CATHOLIC VIRTUAL SCHOOLS: REAL POSSIBILITIES OR OXYMORONIC DREAMS?

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Currently, four Catholic virtual schools exist in the province of Alberta. Such educational innovation raises many questions about the definition and context of Catholic schooling. The designers of electronic educational alternatives must be aware of the need to create virtual communities within their institutions. By using theories of community building, virtual architecture, and innovative course design, many opportunities for faith development can emerge. The rapid changes in the delivery of this form of education may become a rich source of research for those interested in applying the gifts of modern technology to the traditions of Catholic education.

Over the past five years virtual schools have become a reality in the province of Alberta. In fact, there are more virtual programs enrolling more students in Alberta than anywhere else in the world. At present, more than 20 virtual schools in Alberta serve more than 5,000 students (Muirhead, 2000). Clearly, there is a major change in the traditional education paradigm.

This development in K-12 schooling parallels the proliferation of distance education offerings in postsecondary education. The information technology revolution is starting to have a profound effect on all aspects of the traditional relationship between student, teacher, and content.

Such a proliferation of virtual schools in a short period of time raises a number of questions. These generally relate to areas of achievement and school effectiveness. Alberta's provincial government has allocated major funding for virtual education. Parents, the press, and the Alberta Teachers' Association (ATA) have all made inquiries into the many factors that might contribute to the evaluation of virtual schooling.

Much of the literature that has begun to emerge about virtual schooling

has been related to the academic effectiveness of such ventures, particularly since they involve children in the K-12 system. The debate that began with the publication of the ATA *Position Paper on Technology and Education* (Alberta Teachers' Association, 1999) will continue for a number of years. Given the current milieu's emphasis on quantifiable results, much of this debate will focus on a comparison of test scores and academic achievement indicators. While such data offer one perspective on the issues, they are not the only indicators of the effectiveness of virtual education (Barker, Murray, & Wendel, 1999).

Virtual schools involve real people: students, parents, teachers, administrators, and support staff. These individuals are part of educational institutions that have developed rapidly over the past few years. They are pioneers on an uncharted journey into an unexplored area of educational delivery. Research needs to look for ways that the pioneering experience can be enhanced through consciously deciding to build community into the goals of computer-mediated distance education.

The general perception about virtual schooling is that students simply learn through a machine. We have given technology such a god-like status in our society that some individuals assume that any student connected to a keyboard will get the assigned curricula delivered automatically through the fingertips (Stahl, 1999). Nothing could be further from the truth.

A wide variety of delivery methodologies characterizes most virtual schools. Generally, course materials are on the school web site or are sent through a weekly e-mail. Textbooks as well as the vast resources of the Internet are used. Communication with teachers is through e-mail, fax, telephone, and, occasionally, the postal system. Students learn at home under the supervision of a parent. Muirhead (2000) stresses the important role that parents play in this educational process, using terms such as *partners* and *key players*. The success of the virtual school experience is highly dependent on the strength of parent commitment.

An old African proverb says, "It takes a whole village to raise a child." This is also true in our present situation. It takes a whole community to educate a child. How can community be consciously built into a virtual school? This topic flies in the face of some current myths about virtual schooling and its participants. As noted above, some think that the computer does the teaching. Others believe that individuals who choose to learn at home are antisocial and wish to withdraw from community or create their own definition and practice of community (Moss, 1995). Still others maintain that the only types of community that can be built involve the physical presence of participants.

In this article the notions of consciously creating community within a virtual school are explored. In particular, the role of faith community building in a Catholic virtual school is discussed. Different ideas about community, the role of the faith community in Catholic schools, and theories about the

creation of on-line communities through virtual design and architecture are examined. The article concludes with a challenge to virtual schools (as well as brick-and-mortar schools) to build the necessary structures to ensure that all aspects of an individual's development are included as a part of their mandate. However, we must first examine some of the unique aspects of education in Alberta.

A PRIMER ON ALBERTA AND ITS SCHOOLS

Alberta is one of Canada's prairie provinces. Its three million people inhabit an area larger than the state of Texas. The two metropolitan areas of Edmonton and Calgary are inhabited by two-thirds of the province's residents. Within the province are a number of small towns and lots of wide-open spaces with sparse population density.

Catholic schools have existed in Alberta for over 135 years. They have always received full provincial support and operate as publicly funded religious school systems with democratically elected school boards. All teachers in publicly funded schools are members of the Alberta Teachers' Association.

Over the past decade, the provincial Ministry of Learning has encouraged the introduction of a variety of alternative educational programs, and a number of private Christian schools have been allowed to become members of public school divisions. The Ministry has encouraged the establishment of storefront schools to enable students who have left school to finish their programs. Along with these developments came the birth of virtual schools.

Smith (2000) notes that virtual schools transcend many of the commonly held assumptions about what a school is. In the virtual schools operating in Alberta there are a number of alternative structures and formats. Some of the arrangements operate only within a local school district to give alternatives to local students; others rely on a clientele that is primarily composed of traditional homeschooled families; still others work with a province-wide student population.

The common denominator for these schools is that they have certified teachers who use the provincially approved curriculum and materials to provide distance instruction to students. This method of educational delivery has been available since 1995 and has shown significant growth each school year.

Within Catholic schools in Alberta, the first virtual offerings came from what is now known as St. Gabriel's Cyber School (www.stgabe.com). The small junior high program begun in September 1995 has now blossomed into a school that incorporates students from grades 5 to 12. Three other Catholic schools soon joined the initial offering: School of Hope (www.schoolofhope.org), Holy Family Cyber School (www.holyfamilycyberhigh.ca), and St. Paul's Academy (www.redeemer.ab.ca/spa). The total enrollment in these schools is nearly 3,500 students.

The four Catholic virtual schools have their own operating philosophies, ranging from heavily structured to self-paced. Each school, like its traditional counterpart, has strengths, weaknesses, identity, and spirit. Each engages students from a perspective of faith. Religious education courses are a part of the curriculum; the Gospel message permeates other subjects; and the web sites and course sites show the Catholic nature of the enterprise. However, none of the schools gathers its students in one large building for 1,000 hours of instruction spaced over 190 days in a year. The paradigm shift is enormous and opens itself to interesting discussion.

THE NEED TO BELONG

For decades, psychology has speculated on the importance of belonging for human beings. In a major review of previous studies, Baumeister and Leary (1995) conclude that a primary human need is to fit in, to belong to a group. Their study shows that humans who belong have a greater sense of all the positive attributes necessary to succeed in life. They contend, "a need to form and maintain at least a minimum quantity of interpersonal relationships is innately universal among human beings" (p. 497).

To have a healthy sense of life, people need frequent personal contact or interactions with others. Individuals need to feel that there is an interpersonal bond or relationship marked by stability, concern, and time. Further, belonging is a natural motive for human behavior and a powerful factor in shaping human thought. Belonging is linked to human emotions. It is a basic human need rather than just a want. In fact, the authors point out that a lack of belonging can be a cause for mental and physical illness as well as a range of behavioral problems.

Given the current state of alienation felt by many youth, it would seem that belonging to a school might ease some of their pain. Therefore, a major strategy to alleviate student problems that are brought to school from society might be to concentrate on the aspects of school as a community.

COMMUNITY TRAITS

The breakdown of our contemporary society has resulted in the erosion of community as a major force within our lives. Benne (1990) uses the term *eclipse* to describe what has happened to community support systems. Since the Industrial Revolution, the usual buttresses of a society—family, school, religious, and work organizations—have become increasingly marginal to the existence of many people. This assertion flies in the face of our human need to belong. If we are communal creatures who need to fit in, then many aspects of our present society are seriously eroding our humanity.

This is particularly easy to see in traditional school settings. After all,

schools are designed as communal organizations where students interact with the assigned curriculum, the structures of the education system, their teachers, and their peer group. Benne (1990) sees the re-enculturation of society as a primary need that can be accomplished through the intervention of schools.

When schools are organized as functional communities, many interesting results can occur (L. Moore, 2000). High expectations for students result in high student achievement. In functional communities service to others flows naturally from beliefs about community membership. Elevated levels of collegiality and collaboration are observed in functional communities. Members share a common sense of vision and mission as well as appreciation for the unique gifts and talents of individuals. In a successful learning community, teachers and students are able to communicate their goals and understand how the larger society influences them.

Belonging is a basic human need that can be met by the initiative of communities. One major institution of community building that exists in our society is our school system. While all schools are called to move toward this goal, some may have a stronger impetus than others.

CATHOLIC SCHOOL AS A COMMUNITY

Catholic schools are critical areas for both education and faith formation. The most recent Vatican declaration on Catholic education states, "the Catholic school is a place of ecclesial experience, which is molded in the Christian community" (Congregation for Catholic Education, 1997, Art. 12). L. Moore (2000) echoes this point by maintaining that a unique relationship exists because Catholic schools provide a religious community within an educational community. The essential attributes that flow from a Catholic philosophy of education, particularly the education of the total person, directly influence the communal nature of the school organization.

In Catholic schools there is a strong relationship between the intellectual exercise of the school and the moral formation that occurs in the school community (Heft, 2000; Nuzzi, 2000). In fact, there is a relationship between the community and the tradition of leadership and direction that Jesus gave to the Church.

In analyzing the activities of Catholic schools in the United States, Bryk (1996) concludes that the communal orientation of Catholic schools has a dramatic effect on their operation and academic success. He holds that there are structures that enable community to grow and flourish in these schools. The communal formations also lead to better behavior, stronger concern for issues in society, and higher staff morale. These positive effects come about through a set of shared beliefs on what students should learn, methods of instruction, and how to relate to fellow humans.

Catholic schools organized in this way become voluntary communities.

Such communities rely on the individual pledge of membership from each person. They are united in their goals, strong in their philosophical underpinnings, and eager to interact with contemporary society. As voluntary communities, people are welcomed to belong and to work together to build up not only the small community itself, but also the larger one just outside the school doors.

GROOME'S SCHEMA

Groome (1998) points out that it is possible to develop a plan for building a community within a school by adopting five descriptors used by the early Christian groups. These five concepts (*kononia*, *kerygma*, *diakonia*, *leiturgia*, and *marturia*) are strong, viable images that any school can use proactively to construct a plan for community building.

Kononia builds a community that is welcoming and embracing. This type of community is an all-inclusive gathering of faith, hope, and love that invites each member to share his or her gifts with others in the group. This aspect of community invites people to be partners again and again. Schools need to concentrate on *kononia* in order to make sure that the welcome mat is always out, for anybody from anywhere. To be authentically welcoming is a gift that must be cultivated in all of us. True hospitality makes individuals feel that they belong.

Kerygma is a word community, relying on the word of God through Scripture and tradition. This aspect of community preaches, evangelizes, and, most importantly, teaches. *Kerygma*, when applied to a school situation, seeks to insure that language will help individuals to become more human. In a school that embraces *kerygma*, language is used to build up individuals, not to put them down.

Diakonia describes a community that works for the welfare of all of its members as well as helping to build the Reign of God throughout the world. In a school situation, *diakonia* makes students, staff, and parents aware of the need that all individuals have to care for others and be cared for themselves. This type of community realizes that we are not isolated and alone. We are all a part of the world. We are our brothers' and sisters' keepers.

Leiturgia involves the construction of a worshipping community. For many students, the only chance they get to become involved in formal worship is through the events that happen at school. Assemblies, celebrations, and special school events are the mortar that cements people together in a society. While Catholic schools would be expected to be visibly religious in this regard, secular schools also are involved as worshipping communities. Schools are rich in symbol and ritual. *Leiturgia* contributes to making sure that the symbols and rituals have meaning and the meaning is passed on to students.

Marturia refers to a community of witnessing. This aspect encourages the school to devise methods to give witness to its internal actions through the public activity of its students and staff. Marturia involves being a living sign of what happens within the walls of the school. It means that you must walk the walk and talk the talk.

Each of these aspects of community formation can be applied to any school. Catholic schools, however, must carefully articulate their communal vision within a faith framework. This involves, according to Groome, "nurturing learners in ecclesial identity—in a sense of belonging to and being responsible for the life of the church" (1998, p. 194). Further, it requires participants to engage in a conversation about building a community for life despite the negative influences that may exist in society. This community must stress its countercultural message as a means of being an inclusive group where all can belong.

As part of formation of a community for life using Groome's models, a school must proactively plan to meet its own goals. A wide variety of activities can emerge through a simple brainstorming session. Given the stress that burdens all individuals involved in schools, such planning should begin with the idea that no more work or pressure will be brought about by being proactive. Creative facilitation is necessary to appease every teacher's greatest fear: This project is going to take even more time away from teaching.

THE POSSIBILITIES OF VIRTUAL COMMUNITIES

The preceding points lead to a discussion of the role of community in a virtual school situation. As educators, we have all experienced face-to-face education in its many forms. But recent changes in technology have enabled us to conceptualize the idea of school in a new context. The relationship of the learner and the teacher will still occur in virtual settings, but what about the relationship with other students that is such an instrumental part of education?

When examining the idea of virtual communities, how can something so new and revolutionary be defined? How will we integrate findings into a comprehensive body of literature?

Communities are defined as social entities. Virtual communities are no different. However, they are unique in the lack of physical proximity experienced in such a community. The following definition comes forward: "A virtual community is a group of people trying to achieve something as a group of people that are using new information technology as a mean" (Stolterman, Agren, & Croon, 1998, p. 1).

Rheingold's (1993) description of human encounters in the virtual community called the WELL shows how the reality of computer communication can have a profound impact on the lived experiences of any one of us. Within

the WELL there were births, deaths, marriages, divorces, and a whole host of other human events that became the shared experiences of individuals living in all parts of the world.

The voluntary association of people participating in a chat line is one type of virtual experience, but what about the issues of virtual education? Palloff and Pratt (1999) state that very little is known about virtual education. The field is so new and revolutionary that a solid research base on its effectiveness has yet to be developed. The authors maintain that there are four specific issues in virtual classroom communication. They are:

- virtual versus human contact
- connectedness and coalescence, shared responsibility, rules, roles, norms, and participation
- psychological and spiritual issues
- issues of vulnerability, privacy, and ethics

The authors assert that "direct attention to community building on-line can break down these barriers, allowing for a new sense of intimacy and connection" (Palloff & Pratt, 1999, p. 34). Note that they state "direct" attention. Community building on-line does not happen by accident; it requires the care and nurturing of the teacher. This comes through the involvement of the instructor with the course design and computer conferencing.

Cicognani's (1998, in press) works give a detailed account of the issues involved in constructing a theory about the interactions of people in cyberspace. She maintains that cyberspace cannot be separated from the elements that constitute physical, mental, and social space. When we accept the premise that there can be no separation, then we can conceptualize cyberspace as a place to dwell and to develop community. Once communities can be accepted as a function of the use of communication in cyberspace, then, through the use of language, individuals can have identity as autonomous members of virtual communities. Cicognani's writings are particularly valuable in pointing out that some technological developments can be structured to increase human interaction and to help develop human potential through sharing lived experiences.

Cicognani holds that virtual architecture is possible in the on-line world. Beyond its possibility is its desirability. When space is constructed it must have professionals who can make the space work positively for those who will use it. She states that "the success and thriving of on-line environments depends on their design as much as on their content" (1998, p. 26).

The arrangement of content, the coherence of the structure, the speed of modification, and the control of design facilitate the development of on-line environments. When specifically related to learning on-line, a major determiner in the success of the venture is mapping. A well-designed information

map enables users to access areas of the site easily and intelligently. Thus, virtual architecture makes space for education that is "functional to the communication and the formation of community" (Cicognani, 1998, p. 25).

When attached to schooling using computer-mediated communication, the possibilities for virtual architecture abound. From easily navigable web sites to such developments as learning contracts and constructivist course design (Murphy, Mahoney, & Harvell, 2000), there are unique opportunities to make interaction a prime factor in the learning equation.

As Reeves (1998) contends, "it is pedagogy that is most influential on learning, not media or technology" (p. 5). Pedagogy is based on human choice and design. If it is the most influential aspect of learning, we can design what is presented. If we choose to design activities and approaches that are calculated to build up a faith community in a virtual school, then it is the design that will succeed, not just the technology.

This does not mean that virtual education needs to throw out all face-to-face contact as useless and nonessential. Some authors (Etzioni & Etzioni, 1997; Shapiro & Levine, 1999) talk of the need for a hybrid model of community that has opportunities for different kinds of interaction, stressing that both virtual and face-to-face communities have unique advantages. Most virtual schools in Alberta provide opportunities for students and families to meet and interact with staff in a variety of formats throughout the school year. These types of interactions, along with good virtual architecture, can contribute to the development of community within the school.

VISIONS OF COMMUNITY IN CATHOLIC VIRTUAL SCHOOLS

Catholic schools must re-vision their structure and activity in the information age. Fox (1994) challenges people to reclaim their souls through doing the necessary inner work to find out who we really are and what we are called to become. This can be part of the "courageous renewal" called for in the latest Vatican document on education (Congregation for Catholic Education, 1997, Art. 3).

We must proclaim an alternative vision of the role of technology in our lives. This can best be done in the traditional Catholic way of appropriating what is good from society and claiming it as ours. From within a system of virtual schooling we can inquire about the unhealthy and soul-destroying activities that can come about by overemphasis on technology at the expense of humanity. T. Moore reminds us that, "Once upon a time, computing and other forms of technology made life more sacred, not less" (1996, p. 118). This is a significant challenge for anyone involved with both faith and computers. We need to be sure that what is developed in the area of virtual Catholic education is a system that brings students, parents, and teachers into

a community with a humane, faith-filled vision. In our age of individualism and self-reliance it is easy to forget that faith is not solely an individual matter, but is "a communal sensibility, that time-confounding solidarity our biblical ancestors presupposed" (Luti, 1998, p. 897).

Because the need for community is human, it is also spiritual. Palloff and Pratt (1999) state, "The connection between people, however that may happen, touches the spiritual core. So regardless of its faults, the electronic community is a spiritual community" (p. 42). This means we must be sensitive to the types of communication that can occur on-line. Spirituality is a natural outgrowth of the intimacy that many participants begin to feel within an electronic community.

Any move away from the traditional arrangements of schooling brings a wide variety of issues with it. The most crucial ones seem to encompass the need for a renewed understanding of the vocation of parenthood. Over the last 200 years Catholic schools have tended to act "in loco parentis," assuming an increased burden of activities that traditionally belonged to the family. Most recently, we have seen religious education and sacramental life move from the domain of many Catholic families into the job description of the school. Virtual schooling, like homeschooling, radically reverses that trend. Parents must take up their role as the primary faith educators in this new relationship. For some, this is an exciting challenge; for others, it causes great concern.

This most challenging aspect of virtual Catholic schools calls us to build community that Vanoosting (1997) says is literally "universal, worldwide, spanning time and shrinking space" (p. 19). He challenges the Church to make technology incarnational, making flesh become word, stressing the possibility of God being involved in all of the links between persons, both physical and electronic.

With virtual architecture as the keystone to building a strong electronic community within the school setting, it is natural to wonder how this setting will work to develop the deep communion for which those of us involved in Catholic education strive. We hope for a school that creates a feeling that is described as, "organic, evanescent, and unpredictable" (Michalski, 1995, p. 44). What could this vision be like in a Catholic virtual school?

WHERE TO NEXT?

Like many new ventures, the move to create on-line learning opportunities in Catholic schools in Alberta did not include a blueprint. In the early days, little thought was given to creating schools that were virtual communities of faith. Much of the primary impetus was simply to deliver the courses in a radically different way.

We are now beginning to ask what a Catholic virtual school should do. This is the focus of a yearlong research and development project with nine of

my teaching colleagues at School of Hope. During this time, each member of this volunteer teacher cohort will plan specific activities that use Groome's five descriptors for building community and integrate them into their teaching. The group will meet four times during the school year, swap ideas and e-mails regularly, and construct a web site that will contain their ideas on building on-line faith communities within a Catholic virtual high school. I hope to present the results of our efforts in a follow-up article at the conclusion of the 2001-2002 school year.

FURTHER CONSIDERATIONS

I am writing in an area where few have traveled before. Virtual schools are a recent addition to the educational equation. A body of scholarly research is just now developing. Because of this, information often has to be extrapolated from other sources and applied to a K-12 virtual school model. This is particularly true with the large body of material that has been developed for distance education at the postsecondary level. While there are certain obvious similarities—the physical separation of teacher and learner, for example—there are also differences. What types of support systems are necessary for students who learn at home? Are virtual schools the equivalent of the many facets of homeschooling? Will virtual students become more involved in their church community because of the freedom from a traditional school schedule, or will they become reclusive? The list of potential questions is extensive.

It also is the case that any research on areas of technology and contemporary culture is bound to change quickly. As the technology advances rapidly, researchers are running just to stay a bit behind the latest trends.

Whenever academics talk about the large-scale change that is about to occur in our society because of the move toward digitalization, one has to wonder about what will happen in schools. While virtual schools are in the forefront of educational innovation, they only serve a minority of the total school population. The introduction of new information technology into schools may transform instructional methods, but will not totally restructure the undergirding principles of teaching and learning.

This poses an interesting problem for the building of faith communities within a virtual Catholic school. The goals of such a program must be clearly articulated and the staff of the school must be strongly supportive of any change. While virtual teachers are on the cutting edge of education, they, like their colleagues in traditional settings, have philosophical limitations that can only be stretched so far.

In the fractured, upside-down world that has entered the third millennium, educational change will be resisted in many quarters (Turbowitz, 2000). It is of crucial importance for all of us to make the institution of school rele-

vant for the children in our schools, be they in traditional brick-and-mortar buildings or in cyberspace. Most acutely, all who work in the field of Catholic education need to find ways to build an innovative, responsive community of faith for the families we serve.

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