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The mind is the tabernacle of the consciousness soul: A journey visiting the roles of consciousness, communication, education, and technology in human and curriculum development by integrating Dewey, Gebser, and Steiner: Past, present, future

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University of Northern Iowa

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THE MIND IS THE TABERNACLE OF THE CONSCIOUSNESS SOUL:

A JOURNEY VISITING THE ROLES OF CONSCIOUSNESS,

COMMUNICATION, EDUCATION, AND TECHNOLOGY

IN HUMAN AND CURRICULUM DEVELOPMENT BY

INTEGRATING DEWEY, GEBSER, AND STEINER—

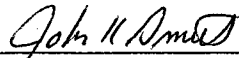PAST, PRESENT, FUTURE

A Dissertation

Submitted

in Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

Approved:

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Dr. John K. Smith, Co-Chair
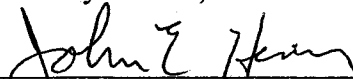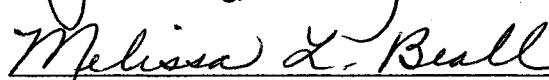
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Daniel Joseph Kazim Bardy

University of Northern Iowa

May 2005

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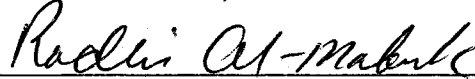An Abstract of a Dissertation

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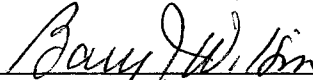of the Requirements for the Degree

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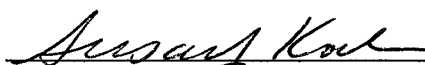
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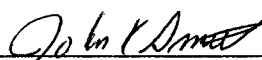Dr. Susan J. Koch
Dean of the Graduate College

Daniel Joseph Kazim Bardy

University of Northern Iowa

May 2005

ABSTRACT

This descriptive philosophical study examines 355+ question seeds of thought and discourse on consciousness, communication, education, and technology, much in the contexts of philosophical structures of human beings from 4,000,000 B.C. hominid man to the future of humankind and genetic enhancement. Curriculum and consciousness discussion of American John Dewey (1859-1952), Polish-born Jean Gebser (1905-1975), and Austrian-born Rudolf Steiner (1865-1920) is interwoven, finding commonalities of these philosophers and that of Daniel J. K. Bardy. Language being developed only 50,000 years ago is the defining point for *Homo sapiens* as the tool of linguistic communication, mutated forward much like the protrusion development of the jaw line of the species to accommodate for articulation and pronunciation development.

The first of four cornerstone movements in the dissertation includes finding that the truth of Rudolf Steiner's Waldorf curriculum is embedded in the magical and mythical consciousness underpinnings laid out by Jean Gebser. Cornerstone number two is philosopher and rhetorician John Dewey's synonymous use of education and communication and the constant battle of dualities of the current mental rational consciousness. Alison Biskup's and Helen Keller's mind matrixes and their connections to language learning and communication processes of hominid man are cornerstone number three. Cornerstone number four is the inter-informational level of communication and our own intrapersonal awareness that communication and education is the coming together of three layers: (a) the five stages of human

consciousness--archaic, magical mythical, mental rational, and arational/integral; (b) the eight levels of communication--intrapersonal, interpersonal, triad, small group, large group, one-to-many/many-to-one, global, and inter-informational; (c) the six variables of the communication process--sender, message, channel (through the six senses of taste, touch, hearing, vision, olfactory, intuit), receiver, feedback, and noise (physical/external, internal, semantic, and ethnocentric).

Branching from the fourth cornerstone is a discussion on technostress and human consciousness relating real-time events to mediated communication, which manipulates real time, thus tricking our consciousness into stress and anxiety periods while waiting for the magic of technology to solve the problem.

DEDICATION

The Mind Is the Tabernacle of the Consciousness Soul: A Journey Visiting the Roles of Consciousness, Communication, Education, and Technology in Human and Curriculum Development by Integrating Dewey, Gebser, and Steiner—Past, Present, Future is dedicated to Susan, Yogi, and Alison Biskup of LaGrange, Illinois, and Kazim Gündoğdu of Çayirli, Erzincan, Turkey, who are unique spirits of humankind. Meaning lies in people, not words.

<u>more...</u>

i long for being
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ACKNOWLEDGMENTS

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CHAPTER 1

THE MIND IS THE TABERNACLE

OF THE CONSCIOUSNESS SOUL

Introduction

Throughout the doctoral program in curriculum and instruction 1999-2005, we

have journeyed through the questions of how do we know what we know, what is

knowledge, what is individual, what is society, what is method, how do we teach, what is

democracy, what is learning, what is curriculum, what is the nature of teaching, what is

truth, what is consciousness, what is technology, what is education, and what is

communication. These fifteen underlying questions are visited through the Bardy and

Payne (1999) education mission statement, readings of John Dewey (1910, 1917),

knowledge of Jean Gebser (1986), research on Rudolf Steiner (1928, 1973, 1978) and

Waldorfian education, and visiting with Alison Claire Biskup (personal communication,

1986-2004) of La Grange, Illinois, for seventeen years; Alison was born with severe

microcephaly and this dissertation explores her evolutionary connection to early hominid

man and "super skull man", as termed by author Bardy. Did hominid man of 4,000,000

years ago have a consciousness soul?

Aim of the Study

In studying curriculum theory and philosophy of education, my aim has been to

synthesize connections of Dewey (1910, 1917), Gebser (1986), and Steiner (1928, 1973,

1978), among others, through their discussions of consciousness, knowledge, and

communication frameworks. One of the most scholarly points in my discovery is that

Waldorfian education founder Rudolf Steiner (1973) built his curriculum, unbeknownst to him no doubt, on the magical and mythical consciousness structures outlined by Polish philosopher Jean Gebser (1986). Can I claim the previous sentence as knowledge for me? Can anyone else in the world know what I am talking about? These questions are examined through this doctoral dissertation in addition to questions surrounding the discovery of the "Abnormal Spindle-Like Microcephaly Associated (ASPM) gene" (Keeley, 2004, p. 1) labeled by scientists in late 2003 making an evolutionary connective link from microcephalic individuals to that of hominid man. ASPM may be one of several gene combinations attributed to early hominid man mutating through natural selection to super skull man possessing the enlarged cerebral cortex of today characterized by higher order thinking, reasoning, and linguistic capabilities. When did consciousness arrive in human beings? This dissertation explores all types of curriculum, communication, technology, and education systems from special education to higher education and the role of consciousness in individual voice and in a collective societal voice: past, present, and future.

<div align="center">Chapter Summaries</div>

Chapter 1 lays the underpinning foundation philosophies of American-born John Dewey (1859-1952), Polish-born Jean Gebser (1905-1973), and Austrian-born Rudolf Steiner (1861-1925) who favor scaffolding knowledge and learning acquisition of individual over that of society. Chapter 2 continues with John Dewey (1910, 1917), Jean Gebser (1986), Rudolf Steiner (1928, 1973, 1978), author Bardy's personal relationship with Alison Biskup (personal communication, 1986 - 2004) and the Biskup family

(personal communication, 1978 – 2004), and their approaches to consciousness, communication, and education. Specific discussion about microcephaly and the connection of the ASPM gene with microcephalic children and hominid man is furthered: Is there such a thing as a bad seed? In Biblical times, was Cain a bad seed from the beginning? Chapter 3 explores philosophies and uses of such simple tools to complex tools as language, television images, and computers. In addition to the upside uses of technology, some backlash to human consciousness in the form of technostress has developed. Chapter 4 discusses multiculturalism in 2020, uses of computer technology, and neighborhood learning centers. The realities of educating genetically enhanced individuals and a fictionalized futuristic version of learning communities are approached. Chapter 5 reviews the major question seeds of the dissertation, and the author shares deep-rooted connections with his own language learning and spiritual connection to Rudolf Steiner by meeting up with author Bardy's *mind's eye and third ear* face to face. Final discussions of communication, education, and integral consciousness are offered by author Bardy and Professor Michele McMaster (1999a) on implementing much-needed change in our world of the *Interpersonal Communication Process* (ICP) and intrapersonal awareness. Are we human beings or human doings?

Working cooperatively with Erin Payne, my partner from Technology in Education class during fall 1999, and individually researching Rudolf Steiner (1928), having prior knowledge of Jean Gebser (1986), and reading John Dewey (1910, 1917), this dissertation *The Mind Is the Tabernacle of the Consciousness Soul: A Journey Visiting the Roles of Consciousness, Communication, Education, and Technology in*

Human and Curriculum Development by Integrating Dewey, Gebser, and Steiner—Past, Present, Future discusses the nature of teaching and attempts to answer the question, "How do we teach?" First, author Bardy shares the Bardy and Payne (1999) philosophy statement about the nature of teaching, learning, and technology inclusion.

<div align="center">Bardy and Payne Education Mission Statement</div>

The Bardy and Payne (1999) aim of education guides the learner through a series of strategies which build upon the individual's existing "construct" of knowledge, moving him or her toward the greatest potential to become self-discoverers, problem solvers, and self-actualized citizens, within an environment of cooperation and respect.

Uses of technology in our own educational formation have had formidable impacts on how we introduce software which illustrate, summarize, define, drill and practice, and corroborate knowledge and content transmission. In our systemic use of technology we apply pedagogy, which brings the abstract concepts of words to life for the learner, or at least add visual and auditory representation of the "oral" concepts being explained by an educator, at any level of the academic hierarchy, to the "aural" receiver of the learner. Our philosophy of technology in educational practice includes consistently monitoring audience/learner feedback about the *inter-informational* (Bardy, 1991) level of communication.

The inter-informational level occurs when an individual interfaces with a technology and the self-feedback mechanism to one's self or others around him or her. Much of the inter-informational level is a person's own intrapersonal self-talk consciousness – speaking, feeling, intuiting, problem solving – the entire time during the

interface with the technology. We continually ask, "How does this technology support our mission/philosophy statement?" and "How does this technology help us in assessment of learning and behavioral objectives?" We select technology pedagogy that compliments content-based information with learners' styles and strategies.

Our philosophy is a continually growing systemic "tree of consciousness" force within us, partially made up of ideas from noted educationalists such as Dewey (1910, 1917) and Thorndike (1920) who proposed students needed more than repetition and reinforcement. We engage in Gagne's (1965) suggestion that there are different types of learning, Mager's (1997) ideas on the design of objectives, Bloom's (1984) taxonomy and Maslow's (1962) hierarchy of needs. Our philosophy incorporates deep roots with Socrates (Seeskin, trans. 1986), who taught through questions, as we have students learn for themselves by continually questioning the existence of nearly everything.

Moreover, we are in agreement with Polish philosopher Jean Gebser (1986) who proposes an arational/integral aperspectival consciousness structure while communicating. Our approach is a fusion framework of accomplished educationalists and theorists mixed together with over one hundred practitioners we have been exposed to in our lives, and integrating all of them.

Socrates – without the use of much technology – had students continually ask and answer questions that he would pose or have the students pose. Answering a question with another question often opens up new discoveries of knowledge, peeling away layers of information and inducing new seeds of inquiry. Ah, the fruit-plant analogy surfaces.

Our philosophy encompasses a multi-disciplinary communication and educational approach to learning, from special education to higher education. Based on addressing individual human consciousness factors comprised of emotions, intuition, verbal and non-verbal forms of communication, the educator is the channel to convey messages of learning. As educators we encompass and promote the driving force of the role of consciousness to help individuals build upon their constructs of knowledge of already gathered perception data. We do so by constructing and conducting lessons within the communication variables framework of sender, message, channel, receiver, feedback, and noise, all the while monitoring the eight levels of communication: intrapersonal, interpersonal, dyad, triad, small group, large group, one to many/many to one, global, and inter-informational to reduce noise and clarify meaning.

<div align="center">Curriculum History: Individual as Learner</div>

The beginnings of *individual as learner*, as termed here by author Bardy, began to emerge in the late 1800s, as the Committee of Ten in 1893 opened the door proposing four parallel programs of academic study (Marsh & Willis, 1999, p. 60). Prior to this time period, Benjamin Franklin seemed to be the only voice advocating the needs of the learner to determine his or her own course of study for both formal education and life in general (Marsh & Willis, 1999, p. 54). The force and voice of "individual" joined then the social, political and cultural forces and voices for the direction of schools and curriculum. What knowledge is of most worth? Can the curriculum accommodate knowledge that reflects both the unchanging character of truth and also reflects the changing character of society? How much of the curriculum should be devoted to what

kind of knowledge? What principles guide the selection of the contents of a curriculum? How can subject matter be presented to students who could relate it to what they already knew?

From the late 1880s until today in 2005, natural intelligence of an individual, economic conditions in urban and rural settings, financing of education, time, teacher training, the invention of the light bulb, mental/rational consciousness, race and gender, continued religious beliefs, population explosion, shifts in population centers, World War II, the Cold War, the ending of the Cold War, the space race, technology use, mediated communication, standards and benchmarks, the federal government, and family attitudes became contributing voices and forces in school and curriculum development.

The primary influences of European traditions on early Colonial American time stemmed from teaching classical studies and the idea that education was "reserved for the very few, such as the clergy or the nobility, who might need to know how to read or to rule" (Marsh & Willis, 1999, p. 53). Later on, practical survival activities were needed, particularly an education that would help in dealing with mercantile trade.

"By the end of the [19th] century, most Americans probably believed that democracy required broad political participation and thus everyone needed some formal education, not necessarily to be leaders themselves but to be able to choose leaders wisely" (Marsh & Willis, 1999, p. 56). The right to vote was being exercised by individuals (men) who had an impact on democracy. America was noted as the land of opportunity and freedom, which brought immigrants to work in the factories being built. Thus, children of the masses needed to be educated.

The invention and use of electricity transformed industrialization; yet, industry did not necessarily need an educated labor force. Jobs were formed in factories and plants usually located by major transportation cities that had lines of shipping both by sea and later rail. These can be seen as tools of communication as well.

The emergence of the United States as a world power came with the world wars, particularly World War II. Unfortunately, as Marsh and Willis (1999) point out, the arrival of World War II came about just as the Eight-Year Study concluded.

> The Eight-Year Study seemed to demonstrate that individual-centered curricula were at least as good a preparation for college as was the traditional subject-centered curriculum and an even better preparation for life in general. In fact, the more experimental and individually oriented the secondary curriculum was, the better off students seemed to be. (p. 77)

With the United States entrenched in a four-front war, Europe, Japan, North Africa, and at home, individualism, lauded by the five-volume Eight-Year Study, landed on deaf ears shut out due to the loudness of the industrial machines of management gearing up factories to produce goods for a successful outcome of our societies' war, everyone in a row, welding their minds to the tasks at hand to ensure victory at home and on the war fronts. Schools followed suit, justifying a model which best benefited and defended the American democracy of the time. Marsh and Willis (1999) continue,

> Preoccupied with war and later with recovery from war, the nation as a whole was little influenced by the report, which remained largely unknown and unacclaimed except among a relatively small circle of curriculum specialists and progressive educators. Although the Eight-Year Study led to no immediate transformation of the curricula in use in American schools, it nonetheless demonstrated the workability and benefits of progressive curriculum practices more or less consistent with Dewey's ideas about individual students. (p. 77)

Although there seemed to be short-lived and sporadic attempts at individualism and societal aspects of education curricula throughout American education history, subject matter curriculum has historically been the most advanced and most advocated. Why? Subject matter curriculum can be tested with the most amount of ease and has accountability tie-ins, particularly rewards by teacher retention and school doors remaining open for passing scores or punishment by teacher and school probation and closing doors for less than passing scores. We only need to look at the current voice and force of *No Child Left Behind* NCLB (U. S. Department of Education, 2001) to see how subject matter curriculum remains the vanguard. Also, because "it is the established paradigm" of how things are done, which reflects pure mental rational consciousness structure, or, as Bruner says, "...everyone thinks in similar ways; therefore, a curriculum could be intellectual, academic, and much the same for everyone" (as cited in Marsh and Willis, 1999, p. 79).

This educator's thought on the above is vastly different from Bruner and from mental rationalism. Every learner is unique and each person has the potential to be arational/integral in his or her approach to life and learning. Unfortunately, Schneider (2002) points out that in the late 1990s and early 2000s, "High expectations for all students through a standards-based curriculum, became the educational priority for the nation" (p. 25). Schneider (2002) further states, "Forty-nine states had developed content standards in reading and mathematics (Goertz, 2001), and 48 had or were developing statewide assessments in these subjects" (p. 25). Illinois, Nebraska, and California have established speaking and listening competencies. The National Communication

Association (NCA) has standards and competencies for speaking, listening, and media literacy for K-12.

Curriculum Defined: Individual as Learner

"Curriculum is a combination of fostering the development of intellectual knowledge about subject material and the development of individual talents in developing methods of inquiry in both formal and informal settings" (Bardy & Chin, 2000, p. 1). This working definition proposed by Ya-Chin Chin and Daniel J. K. Bardy (2000) includes formal and informal settings which take into account all of the learning environments that exist outside of a classroom. Personal preference suggests that in the classroom, connections are made between the theoretical and organizational content of communication to everyday life. Educators and learners need to draw upon the learning environments outside of the classroom, soliciting and bringing forth those real-life examples from students in order for them to understand that communication is not just a subject matter but also a moment-by-moment experience where our minds are engaged with others, most often to solve problems.

In a classroom setting, curriculum to me simply refers to the subject content material and teaching methodologies to convey the content. In an even simpler sense the definition from Webster (1996) says, "the aggregate of courses of study given in a school, college, university. The regular or a particular course of study in a school, college, etc.," (p. 492). The derivation of the word comes from "Latin [1625-35] action of running, course of action, race, chariot, equiv. To *curr(ere)* to run" (p. 492).

Educators have talked about curriculum as a means to an end. If we follow the planned curriculum, the activities usually find us at the end with little wiggle room along the way to discover non-planned curriculum ideas. Educators' collective discussions have implied that curriculum can be learner focused, flexible, an ongoing dialogue, an integration of knowledge, content and experiences, planned both conscious and hidden. Personal beliefs feel the everyday management of the classroom unfolds curriculum at all three levels: planned, enacted, and the experienced (Marsh & Willis, 1999, p. 4).

Marsh and Willis propose five definitions of curriculum. Here are two:

Curriculum is all the experiences learners have under the guidance of the school.
To educators such as Dewey (1959), the curriculum is the sum of the meanings students experience as they engage in the activities of the school. Inevitably, it includes both planned experiences and unplanned ones. What is known as the 'hidden curriculum' is the unplanned experiencing of things such as the taken-for-granted rules, rituals, and regulations of the school. (p. 9)

Curriculum is all the experiences that learners have in the course of living.
This definition places emphasis on the personal and social character of curriculum....Schubert (1986) suggests that this approach emphasizes the individual's own capacity to direct his or her life; Graham (1992) attributes that it takes into account how the individual is personally situated within society. (as cited in Marsh & Willis, 1999, p. 9)

John Dewey (1859-1952), a Brief Biography

John Dewey was born October 20, 1859, in Burlington Vermont. His father was a middle-class cigar and tobacco shop owner. His mother carried out philanthropic work with poor families living in the industrial section of Burlington. Dewey joined the First Congregational Church at age eleven but later sought more liberal religious perspectives. Dewey attended public school in Burlington and completed grade school at the age of 12. He completed a college preparation track and graduated in three years. In 1875 at 16 he

attended the University of Vermont where he emphasized Greek and Latin, English

literature, math, and rhetoric (Ecker, 1997, p. 1). The faculty, "...encouraged their

students to be themselves and to think their own thoughts" (Dykhuizen, 1973, p. 10).

Dewey graduated in 1879 with emersion in political studies, social, and moral

philosophy. He began teaching high school in Oil City, Pennsylvania, one of a three-

member faculty (Ecker, 1997, p. 1).

In September, 1882, Dewey entered The Johns Hopkins University to begin

graduate studies in philosophy with minors in history and political science. Dewey's

dissertation *The Psychology of Kant*, completed in 1884, was never published and no

copy of it exists. He began teaching at the University of Michigan, which emphasized

studies of British and German philosophy, particularly neo-Hegelian German idealism.

Dewey's first book *Psychology* was published in 1887, making connections between the

scientific study of psychology and German idealist philosophy. In 1888 he joined the

University of Minnesota, returning to the University of Michigan after one year and

staying there until 1894 (Ecker, 1997, p. 1-2).

Dewey joined the University of Chicago in 1894, bringing together the

departments of philosophy, psychology, and the study of pedagogy, which focused on

relationships between elementary and secondary school teachers and university

educators. Dewey argued that pedagogy should be a separate department, which would

train its students to be specialists in education. In 1896, the University of Chicago

opened its experimental Elementary School; and by 1900, 23 different education courses

were available (Ecker, 1997, pp. 2-3). By the early 1900s, the University of Chicago

program was considered, "the most rounded and comprehensive in the country" (Dykhuizen, 1973, p. 91).

Dewey resigned his position at the University of Chicago in 1904 as a result of various political issues within the now Department of Education. He joined Columbia University with appointments in Philosophy and the Teacher's College and stayed affiliated with Columbia until 1939. Dewey continued to write and speak about intellectual and social issues until his death on June 1, 1952 (Ecker, 1997, p. 3).

Researcher Bardy notes for the reader that John Dewey (1859-1952) and Rudolf Steiner (1861-1925), who will be discussed later in this chapter, have connective philosophical links to both Kant and Hegel.

> Immanuel Kant (1724-1804) was a Prussian philosopher. Kant is most famous for his view – called transcendental idealism – that we bring innate forms and concepts to the raw experience of the world, which otherwise would be completely unknowable....Kant is also well-known and very influential for his moral philosophy. Kant also proposed the first modern theory of solar system formation, known as the Kant-Laplace hypothesis. (Kant, Wikipedia, 2004, p. 1)

Kant, "...developed critical philosophy determining nature and limits of knowledge, categories of consciousness and their ethical and aesthetic consequences" (Kant, Merriam-Webster Online, 2004, p. 1).

"Hegel, Georg Wilhelm Friedrich 1770-1831 held that every existent idea or fact belongs to an all embracing mind in which each idea or situation (thesis) evokes its opposite (antithesis) and these two result in a unified whole (synthesis), which in turn becomes a new thesis" (Guralnik, 1974, p. 649). Jean Gebser (1905-1973), like Immanuel Kant, was also Prussian born.

Fructifying Curriculum for the Mind

Not only did John Dewey have a profound impact on the field of education, he

was also a noted scholar in the early years of the speech communication discipline, often

using communication and education synonymously. With this connective link between

the emerging education field and the speech communication discipline, the teacher can be

seen as the ultimate "discourse traffic cop" who elicits ideas of the students and carefully

manages those ideas of the students into the lesson of the day. Asen and Brouwer (2003)

write,

> Assessments of John Dewey's influence in the communication discipline have
> paralleled, in some respects, assessments of the vitality of the public sphere—one
> can tell a story of rise and fall. During the formative years of the discipline,
> Dewey's scholarship exerted a strong influence. In his history of the speech
> discipline, Herman Cohen concludes that 'the dominant influence of John Dewey,
> and particularly of his *How We Think* of 1910, became evident very early and
> continued throughout the 20s, 30s and 40s.' In particular, his writings on
> reflective thinking informed emerging inquiries into processes of group
> discussion. (p. 157)

One staple of educational methodology is indeed class discussion. Burks (1968)

claims that "perhaps no philosopher since Aristotle has more to offer the rhetorician than

John Dewey" (p. 126). Turning now to connecting more fully John Dewey (1910) to the

discussion of curriculum and individual thinking, consciousness, communication and the

role of education, Dewey writes in *How We Think,*

> While it is not the business of education to prove every statement made, any more
> than to teach every possible item of information, it is its business to cultivate
> deep-seated and effective habits of discriminating tested beliefs from mere
> assertions, guesses, and opinions; to develop a lively, sincere, and open-minded
> preference for conclusions that are properly grounded, and to ingrain into the
> individual's working habits methods of inquiry and reasoning appropriate to the
> various problems that present themselves. No matter how much an individual
> knows as a matter of hearsay and information, if he has not attitudes and habits of

this sort, he is not intellectually educated....the main office of education is to supply conditions that make for their cultivation. The formation of these habits is the Training of Mind. (pp. 27-28)

In much of Dewey's writing, he defines education as communication. Education needs to establish shared meaningful experiences for both sender and receiver, teacher and student. Building a body of knowledge is at the forefront of discussions with educationalists. How do students and teachers build knowledge? Dewey (1917) explains in *Democracy and Education*,

> For one has only to call to mind what is sometimes treated in schools as acquisition of knowledge to realize how lacking it is in any fruitful connection with the ongoing experience of the students – how largely it seems to be believed that the mere appropriation of subject matter which happens to be stored in books constitutes knowledge. No matter how true what is learned to those who found it out and in whose experience it functioned, there is nothing which makes it knowledge to the pupils. It might as well be something about Mars or about some fanciful country unless it fructifies in the individual's own life. (p. 398)

Fructifies. Stop for a moment and look this word up in *Webster's New Universal Unabridged Dictionary*, (1996), "to bear fruit; become fruitful: *With careful tending the plant will fructify*. 2. to make fruitful or productive" (p. 772). The analogy of human beings as plant organisms, especially fruit, is often a part of the clarification process which philosophers engage in while discussing theoretical concepts of knowledge and being.

Dewey and Individual as Learner

Dewey (1910) articulates very strongly that thinking and individual are specific to each person and the education needs are also individual. "Thinking is specific, in that different things suggest their own appropriate meanings, tell their own unique stories, and in that they do this in very different ways with different persons" (p. 39). Because

current ideologies of educational methods are linked to external forms of knowledge acquisition and reward/punishment cycles, learner as individual becomes secondary to testing and quantifying results of instruction as a measurement of a quality education. Education is a product, nothing more. Dewey (1910) points out the shortcomings of such a system.

"In instruction, the external standard manifests itself in the importance attached to the 'correct answer.' No one thing, probably, works so fatally against focusing the attention of teachers upon the training of mind as the domination of *their* minds by the idea that the chief thing is to get pupils to recite their lessons correctly" (p. 53). *What makes learning alive for the learner?* is a question Dewey and many educators ask themselves. "Too often the textbook or teacher is contented with a series of somewhat perfunctory examples and illustrations, and the student is not forced to carry the principle that he has formulated over into further cases of his own experience. In so far, the principle is inert and dead" (Dewey, 1910, p. 99).

From personal teaching experience this is where and when students are pushed to contribute their ideas and examples of communication processes and speech topics. How does the speech topic you choose have an impact in your own backyard? What are the social implications for your claim and assertion on a controversial issue in society? What is the W.I.I.F.M. (What's in it for me?) statement for the listening audience? How and why is intrapersonal communication the key to success in your own learning? How does your consciousness construct and scaffold knowledge? When does schoolwork become schoolplay and vice versa?

The seeking of truths and the attainment of knowledge are universal questions for educational theorists: What is done and how is it done? What content is to be covered and how will the methodology uncover the truths of the content? How do we incorporate a curriculum which vibrates through the sentience and right mindfulness of the human spirit?

Schoolwork and Schoolplay

Dewey (1910) speaks of a child, "He selects some of the means he observes, tries them on, finds them successful or unsuccessful, is confirmed or weakened in his belief in their value, and so continues selecting, arranging, adapting, testing, till he can accomplish what he wishes" (p. 160). Is this not what much of education is about? All of these terms -- selecting, arranging, adapting -- are objectives of most speech communication syllabi.

Dewey (1910) continues, "There is, then, nothing mysterious or mystical in the discovery made by Plato and remade by Froebel that play is the chief, almost the only, mode of education for the child in the years of later infancy" (p. 162). Dewey (1910) discusses differentiating between playfulness and play. Keeping the state of mind of playfulness is a more important consideration than play. The mind of playfulness during play is totally immersed in the magical structural consciousness where and when time is not fixed in the mental rational consciousness; rather, time is suspended and in the moment of being, in the tabernacle of imagination. As educators, how do we keep playfulness in our minds and how do we, or can we, teach subject matter in play formats? In doctoral education classroom discussions through the past five years, some consensus

has established that by sixth grade, educators have pretty much killed off the sense of playfulness for students. Sometime during the fifth grade, student and teacher play turns into work product. Dewey (1910) comments, "…it is necessary that the play attitude should gradually pass into a work attitude" (p. 162).

Dewey (1910) clearly distinguishes the dualities of play and work when he writes, "In play activity, it is said, the interest is in the activity for its own sake; in work, it is in the product or result in which the activity terminates" (p. 164).

However, at the time of early Dewey (1910, 1917), for what types of occupations were teachers preparing students? Were we preparing students for jobs or giving them a well-rounded view of life and the world? Were the pressures of life in Dewey's time more or less than they are today? Do children "play" at keyboarding these days? How did people handle technostress a century ago?

Interesting enough that much of mass education today has traditionally followed a work format regimen particularly with the onset of Taylorism (Taylor, 1911), at the turn of the twentieth century, rather than an engaged play format. Play is acceptable in kindergarten but is "rendered unduly symbolic, fanciful, sentimental, and arbitrary; while under the antithetical caption of work the latter [grades] contains many *tasks externally assigned*. Kindergarten has no end and the grades an end so remote that only the educator, not the child, is aware that it is an end" (Dewey, 1910, p. 165).

For many years and still existing today is the duality of work and play. How often do we hear teachers say, "Well it's time to stop playing and time to get back to work." Dewey (1910) discusses work, play, and labor and concludes, "Not the thing

done but the quality of mind that goes into the doing settles what is utilitarian and what is unconstrained and educative" (p. 167).

<center>Forming Language and Literacy as Intellectual Habits</center>

What continues to be universal even today is what Dewey articulates in 1910. "Perhaps the most pressing problem of education at the present moment is to organize and relate these subjects so that they will become instruments for forming alert, persistent, and fruitful intellectual habits" (p. 168). Fruitful intellectual habits are largely built upon the mental rational consciousness structures of literacy and language acquisition skills with all the grammar, syntax, and spelling rules in place.

> The chief intellectual classifications that constitute the working capital of thought have been built up for us by our mother tongue. Our very lack of explicit consciousness in using language that we are employing the intellectual systematizations of the race shows how thoroughly accustomed we have become to its logical distinctions and groupings. (Dewey, 1910, p. 175)

Intellectual capacity and reflection upon one's intelligence standing in society is often connected to and with both written and oral language skills. In classroom situations educators often become the language police and rule too quickly when students are communicating their own ideas, thoughts, and imaginings. Dewey (1910) writes on this issue.

> Children who begin with something to say and with intellectual eagerness to say it are sometimes made so conscious of minor errors in substance and form that the energy that should go into constructive thinking is diverted into anxiety not to make mistakes, and even, in extreme cases, into passive quiescence as the best method of minimizing error. (p. 186)

How true this statement is for foreign language learners as well. Learning Arabic while in Saudi Arabia (1982 – 1988), I was eager, at first, to practice my new vocabulary

words in conversation with my fellow colleagues who were from Egypt. Yet with nearly

every word I was corrected to pronounce the word with an Egyptian dialect rather than

the Urban Hijazi dialect I was studying. After two weeks, I gave up talking with my

Egyptian colleagues because all the fun had been taken out of practicing the language.

"You say 'teleta'; I say 'thelatha'."

Questions arise about language, about language and thought, about consciousness,

thought, and language. When did language begin? Who started it? Why was it started?

How long did we exist without language? What problem solving, critical thinking event

took place for the need to create language? Dewey (1910) notes, "No wonder that oral

speech has been selected as the main stuff of intentional intellectual signs" (p. 172). I

wonder if Dewey contemplated the ideas of telepathic thought, clairvoyance, or group

consciousness thought.

<div align="center">

Communication as Education
</div>

Individual as learner continues and expands in Dewey's (1917) *Democracy and*

Education by looking more deeply into individual, literacy, community, communication

as education, and consciousness.

> Society not only continues to exist *by* transmission, *by* communication, but it may
> fairly be said to exist *in* transmission, *in* communication. There is more than a
> verbal tie between the words common, community, and communication. Men
> live in a community in virtue of the things which they have in common; and
> communication is the way in which they come to possess things in common.
> What they must have in common in order to form a community or society are
> aims, beliefs, aspirations, knowledge – a common understanding – like-
> mindedness as the sociologists say. (p. 5)

Dewey (1917) further explains and underscores the synonymous nature of

communication and education when he writes, "Not only is social life identical with

communication, but all communication (and hence all genuine social life) is educative. To be a recipient of a communication is to have an enlarged and changed experience" (p. 6). One of the simpler definitions of education is "changed behavior."

The subject of learning, literacy, and language is again brought into the discussion of how we learn. "The importance of language in gaining knowledge is doubtless the chief cause of the common notion that knowledge may be passed directly from one to another....language tends to become the chief instrument of learning about many things" (Dewey, 1917, p. 17). Yet language is not the sole (soul) communication carrier. In order to have fruitful communication, individuals must have shared meaning. Grice and Skinner (2004) point out that, *"Words and other symbols have no inherent meaning. People have meaning; words do not"* (p. 6). In short, meaning lies in people, not words.

As an example, the majority of people in the United States only need to hear the words "Islamic Jihad" and minds go reeling off into terrorist camps. So strong is the imprint of Jihad on our collective consciousness that at the 2002 Harvard graduation ceremonies senior student speaker Zayed Yasin received a death threat and was forced to change the title of his speech from "The American Jihad" to "Of Faith and Citizenship" (Khan, 2002). "But Yasin's planned use of the term *jihad* – one of the most controversial words in any language – has triggered a dispute over the limits of free speech even within a bastion of intellectual freedom....And students are circulating a petition calling on Harvard officials to let them review Yasin's speech before he delivers it on June 6" (Healy, 2002).

Dewey (1917) concurs, "The bare fact that language consists of sounds which are *mutually intelligible* is enough of itself to show that its meaning depends upon connection with a shared experience" (p. 18). Dewey (1917) concludes, "We conclude, accordingly, that the use of language to convey and acquire ideas is an extension and refinement of the principle that things gain meaning by being used in a shared experience or joint action" (p. 19). The discussion of language, communication, and meaning is more fully developed later on in Chapter 2 with discourse on Helen Keller (1954) and Alison Biskup (personal communication, 1986-2004), a person born with a microcephalic cranial condition.

<u>John Dewey, Rudolf Steiner, and Daniel J. K. Bardy Connect</u>

The core to Dewey (1910, 1917) – making fruitful messages for shared meaning – also comprises this philosopher, writer, educator, and artist's view. Through visiting a Waldorfian School in Deventer, Holland, in 2000, 2001, and 2003, and studying the educational philosophy of Austrian founder Rudolf Steiner (1928), the elements of the imaginative spirit are brought into the discussion of the nature of teaching and how we teach. Although Steiner (1861-1925) and Dewey (1859-1952) never met, connections between Dewey's (1910, 1917) views of play and consciousness and Rudolf Steiner's (1973) Waldorfian education, particularly early childhood curriculum underpinnings, can be seen. Ensign (1996) writes, "Although John Dewey and Rudolf were born only three years apart and both published extensively on philosophy and education, there is no evidence that they ever met" (p. 175).

"Both believed in evolution. Steiner was of the Hegelian camp which believed that spirit, Absolute Reason, was behind all evolution.....Dewey took the pragmatist view, a middle-ground between religion and science which retained mind" (Ensign, 1996, pp. 175-176). Despite these differences in approaches and language, at a deeper level both Dewey and Steiner strove for an integrated view of education that recognized the whole child.

<u>Rudolf Steiner (1861-1925), a Brief Biography</u>

Rudolfus Josephus Laurentius Steiner was born in the Austrian countryside village of Kraljevic, now a part of Croatia, on February 27,1861 (Windsor Castle, n.d.). His father was employed as a telegraphist and signalman for the newly opened Austrian Southern Railway. Father Steiner became a stationmaster for several small stations south of Vienna. Young Rudolf attended good schools and in 1879 matriculated to the Technical University of Vienna, one of the most advanced scientific institutions of the world at the time. In 1886 he published *An Epistemology of Goethe's World Conception*. In 1891 his small concentrated thesis on *Truth and Science* earned him his Ph.D. (Windsor Castle, n.d. p. 1-2).

Rudolf Steiner became a scientist, philosopher, writer, artist, and educator. At the age of eight, Steiner was aware of beings that are not seen as well as those that are. Steiner writes, "...the reality of the spiritual world was as certain to me as that of the physical. I felt the need, however, for a sort of justification for this assumption" (Clent, 1964, p. 1). "Rudolf Steiner was, among other things, an editor and founder of a movement based on the notion that there is a spiritual world. He taught that perception of

spiritual things was served by training of the human consciousness" (Windsor Castle, n.d., p. 1).

In his fifteenth (1876) year, Steiner rejected Kant's theory of the nature of human knowledge. Several years later, after editing one volume of Goethe's scientific writings, Steiner began to lay foundations deep in the human spirit for all his own creative thinking during the remaining years of his life (Steiner, 1978, p. ix). Shockingly, so does philosopher Bardy.

"...in 1897 Steiner moved to Berlin to serve as editor of the weekly, *Das Magazin fur Litteratur*....This assignment brought Steiner into contact with the intellectual and artistic elite of Berlin at the time..." (Windsor Castle, n.d., p. 3). During his four years in Berlin, Steiner personally became attracted to Ernst Haeckel's philosophy. Steiner refers to this experience as, "... a 'Soul Probation' that he had to undergo. At the end of those four years Steiner had come to an experience of Christ and His active presence" (Windsor Castle, n.d., p. 3). From 1899-1904 he also was employed as an instructor at the Berlin "Workers' School of Education" (Arbeiter-Bildungsschule) (Windsor Castle, n.d., p. 5).

> In Rudolf Steiner, spiritual wisdom assumed a new shape. He began to operate from pure thought, and detected living thoughts filling the universe. As a result of his discoveries, Steiner was bent on putting force and life into thinking, through thinking, within thinking. His basic philosophic works, especially the Philosophy of Spiritual Activity, and many exercises he devised, are directed to this end, to strengthen the thinking faculties in man till thinking works itself on and up and gets free from the brain system. [!] This is called a most disturbing experience. Its consequence is a condition which Steiner describes thus: "Thinking itself becomes a body which draws into itself as its soul the Spirit of the Universe."
> (Windsor Castle, n.d., p. 3)

After reaching this stage of independent thinking, Steiner discovered that this phenomenon of independent thinking could awaken parts of him from "above." From

about 1900 Steiner began to pursue this new path with determination, and gradually came to discern three forms of higher knowledge, "1. Imagination: *a higher seeing* of the spiritual world in revealing images; 2. Inspiration: *a higher hearing* of the spiritual world, through which it reveals its creative forces and its creative order; 3. Intuition: the stage at which an *intuitive penetration* into the sphere of Spiritual Beings becomes possible" (Windsor Castle, n.d., p. 3). Connection here with philosopher Bardy's "mind's eye and third ear" is a phenomenal find and an energetic, synergetic understanding of individual mission.

"Equipped with his new found imagination, inspiration, and intuition, Steiner developed a substantial body of spiritual and practical knowledge up to his death in Dornach, Switzerland, on March 30, 1925. He gave this body of knowledge the name 'Anthroposophy'" (Windsor Castle, n.d., p. 3). Anthroposophy, defined by Webster is, "a philosophy based on the teachings of Rudolf Steiner (1861-1925) which maintains that by virtue of a prescribed method of self-discipline, cognitional experience of the spiritual world can be achieved" (Webster's, 1996, p. 8). "Anthroposophy literally means wisdom of man or the wisdom about man. In his later years, however, Steiner also interpreted it on occasion as 'an adequate consciousness of being human'" (Windsor Castle, n.d., p. 3).

In 1919, Steiner gave a series of lecture to the workers of the Waldorf-Astoria cigarette factory in Stuttgart, Germany. The owner of the factory, Emil Molt, asked Steiner to establish and lead a school for the children of the factory's employees. Steiner agreed on four conditions.

> ...the school should be open to all children; it should be co-educational; it should be a unified twelve-year school; and that the teachers, those who would be

working directly with the children, should take the leading role in the running of the school, with a minimum of interference from governmental or economic concerns. Molt agreed to the conditions and, after a training period for the prospective teachers, die Freie Waldorfschule (the Free Waldorf School) was opened September 7, 1919. (Agostinelli, J., Bischof, B., Bloom, J., Chang, E., Darsie, R. Helmick, J., et al., n.d., p. 4)

Rudolf Steiner's monumental works consist of some 170 books and published transcripts of nearly 6,000 lectures (Windsor Castle, n.d., pp. 3-4). Rudolf Steiner's poetic verse is quoted on the homepage of *The Anthroposophy Network* (2000),

> The light from world-wide spaces
> Lives powerfully on within.
> It turns to light of soul
> And shines into the Spirit depths
> The fruits to liberate, which let
> The Self of man from
> Self of worlds
> Mature in time's continuing flow. (p. 1)

<u>Waldorf Education</u>

We ponder now those very words while analyzing "The Philosophy of Waldorf Education" written in the Willow Wood Parents Handbook, (1999): "The three-fold concept of man as a whole person, fully developed in willing (doing), feeling, and thinking is maintained throughout the curriculum of Waldorf education, where everything is done 'from truth, through beauty, for the good'" (p. 1).

Many of Steiner's (1973) and Dewey's (1910, 1917) ideas, like Gebser's (1986), are consciousness based. Although Dewey professed he was an agnostic, he makes remarks about the spiritual consciousness of kindness for the good of the whole community in his 1917 writings in *Democracy and Education*. Waldorfian education builds on these principles from a very early age. Barnes (1999) writes in "Waldorf

education...An introduction," from the Web site of the *Association of Waldorf Schools of North America.*

"When children relate what they learn to their own experience, they are interested and alive, and what they learn becomes their own. Waldorf schools are designed to foster this kind of learning" (p. 1). During the elementary school years, the educator's task is to transform all that the child needs to know about the world into the language of the imagination, a language that is as accurate and as responsible to reality as intellectual analysis is in the adult (Barnes, 1999, p. 4). The constructs laid out in prekindergarten and kindergarten lay out a curriculum of imagination.

> In the nursery-kindergarten children play at cooking, they dress up and become mothers and fathers, kings and magicians; they sing, paint and color. Through songs and poems they learn to enjoy language; they learn to play together; hear stories, see puppet shows, bake bread, make soup, model beeswax, build houses out of boxes, sheets and boards. To become fully engaged in such work is the child's best preparation for life. It builds powers of concentration, interest, and a lifelong love of learning. (Barnes, 1999, p. 3)

Waldorfian early educational communications strongly advocate and support a very active imagination which connects with this philosopher. The communication of the imagination has its roots in the magical and mythical periods of consciousness as outlined by Gebser (1986). Steiner educators base and foster their underpinning curriculum constructs on these two very deep-rooted consciousness frameworks. The magical period of time, which had no spoken forms, eventually gives way (mutates) to the mythical period which developed verbal coding.

> Whatever speaks to the imagination and is truly felt stirs and activates the feelings and is remembered and learned. The elementary years are the time for educating the "feeling intelligence." It is only after the physiological changes at puberty, which mark the virtual completion of the second great developmental phase, that

imaginative learning undergoes a metamorphosis to emerge as the rational, abstract power of the intellect. (Barnes, 1999, p. 4)

Here in middle school years, Waldorfian education puts in place the mental rational structures of consciousness building on top of the underpinning foundations of mythical consciousness and magical imagination. Through adolescence the person is quietly maturing. Eventually, the individual will emerge (Barnes, 1999, p. 5). Individuals foster their own learning of truth throughout their lives, keeping intact the imaginative exchanges of being, thinking, and doing.

Dualities Are Broken

"In Steiner's view, this essential being is neither the product of inheritance nor the environment; it is a manifestation of the spirit. The ground on which it walks and into which it sinks its roots is the intelligence that has ripened out of the matrix of will and feeling into clear, experienced thought" (Barnes, 1999, p. 5). Inheritance vs. the environment or nature vs. nurture duality is broken under Steiner, for he makes reasoned arguments for the manifestation of the spirit to be a guiding force in one's own development. Steiner (1973) writes, "The great aim at the Waldorf School is to bring up free human beings who know how to direct their own lives" (p. 201). Being a free human being is important but this comes about as a result of the group consciousness in the classroom. When free beings take their unique place in the universe, they are then free to serve humanity, to be a part of society. The aim of the Waldorf curriculum is to protect and enhance the free spirit of each child so that he or she sees his or her interdependence with all people and the earth (Ensign, 1996, p. 177).

Because of Steiner believed in reincarnation, he felt that deep unconscious forces are within each person and these forces guide the choices made based upon consequences from previous lives. Answering the question, *What is education?* Steiner sees "...education as helping a child to develop his latent inner capabilities so that he is free to bring these talents to society, thus helping to create a new society rather than having to conform to a fixed social organization" (Ensign, 1996, p. 177). Dewey (1917) answers the question, *What is education?* "It is the reconstruction or reorganization of experience which adds to the meaning of experience, and which increases ability to direct the course of subsequent experience" (p. 76).

If we look once again now at both Dewey and Steiner, we see the metaphor that humans are plant-like fruits that ripen through the interconnected web roots of their consciousness encounters. The method of teaching and how we teach are channel nutrients for the complete being. Steiner (1973) says, "The pupils are our great hope, our goal, for our constant thought in every measure adopted is that they shall bear its fruits into life in the right way" (p. 211).

The Mind Is the Tabernacle of the Consciousness Soul

Steiner and Waldorfian educators believe that the human being is not just a brain but also a being with heart and limbs. The importance of a being of will and feeling is a complete education for a complete self-actualized citizen.

To ensure that education does not produce one-sided individuals, crippled in emotional health and volition, these less conscious aspects of our human nature must constantly be exercised, nourished, and guided. Here the arts and practical skills make

their essential contribution, educating not only heart and hand but, in very real ways, the brain itself (Barnes, 1999, p. 9).

As philosopher educators, we should go even further by saying, "the mind itself" because the mind is the tabernacle of the consciousness soul. And it is through our consciousness soul, we communicate and educate. When the Waldorf curriculum and individual as learner concepts are carried through successfully, the whole human being – head, heart, and hands – has truly been educated.

Steiner always came back to the problem of knowledge itself. Steiner and Bardy connect when Steiner asks the question "How far is it possible to prove that in human thinking real spirit is the agent?" (Clent, 1964, p. 1). Bardy extends that to communicating and educating as well: The real spirit of consciousness is the agent for the verbal and non-verbal forms to be formed to achieve shared meaning.

Steiner was led to develop a theory of knowledge out of his own striving about truth, one which took its start from a direct experience of the spiritual nature of thinking. Steiner's (1928) own thinking excelled with translations of Goethe's scientific work. Steiner developed his theory by recognizing how Goethe perceived the spiritual in nature, even though he had not carried this as far as a direct perception of the spirit (Clent, 1964, p. 1).

Steiner's later years were devoted to building a complete science of the spirit, to which he gave the name "Anthroposophy." Foremost amongst his discoveries was his direct experience of the reality of the Christ, which soon took a central place in his whole teaching. From 1911 until his death in 1925, he turned also to the arts – drama, painting,

architecture, eurhythmy – showing the creative forming powers that can be drawn from spiritual vision.

Education, Experience, Society, and Habits

Moving from the discussion of meaning and learning for an individual, the discussion of formal education and the individual in society continues. Dewey (1917) writes,

> There is the standing danger that the material of formal instruction will be merely the subject matter of the schools, isolated from the subject matter of life-experience. The permanent social interests are likely to be lost from view. Those which have not been carried over into the structure of social life, but which remain largely matters of technical information expressed in symbols, are made conspicuous in schools. Thus we reach the ordinary notion of education: the notion which ignores its social necessity and its identity with all human association that affects conscious life, and which identifies it with imparting information about remote matters and the conveying of learning through verbal signs: the acquisition of literacy. (p. 10)

Does it (education) boil down to the "acquisition of literacy?" Probably not. It involves much more than building a vocabulary and ruled, ordered linguistic forms. Communication and interaction with other students, teachers, parents, environments, the community and personal experiences are contributing factors. Education can be learned and felt through the five senses as well as tapping into the intuit voice sense.

> Experience can be on a precognitive aesthetic level, what is felt and sensed. Everything that is experienced, either directly in physical terms or indirectly such as interacting with stories from history, must therefore be put into the child's own words by the child. The child is bringing those experiences from history and his own experiences into the present situation, thereby gaining tools for use in the present and in anticipating and affecting the future. (Ensign, 1996, p. 177)

Dewey (1917) recognizes that experience may be on a precognitive level, full of feeling and in a pragmatic way emphasizes how an experience is used. Steiner (1973) sees experience more in stages. Steiner wants a young child to experience on an intuitive, feeling level, and allow that experience to work on the child's inner powers. Then, when the child is older, all those experiences will be part of him or her and will be subconsciously involved in the flowering of the person, all of which is ultimately for a spiritually enhanced world.

In many cases education is the application and utilization of literacy upon objects, concepts, ideas, and the acquisition of habits. Thirty-two years ago while a forensics competitor, I played around with an idea for an after dinner speech on habits...do we control ourselves by habits or do habits end up controlling us? Now, in 2004, I read that Dewey (1917) discussed this same idea. "Plasticity or the power to learn from experience means the formation of habits. Habits give control over the environment, power to utilize it for human purposes. Habits take the form both of habituation, or a general and persistent balance of organic activities with the surroundings, and active capacities to readjust activity to meet new conditions" (p. 62).

So the question still remains, "Do we control ourselves by habits or do habits end up controlling us?" Mental rational consciousness dwellers most likely end up having habits controlling them. Arational/Integral consciousness dwellers continue a multiperspectival framework to recognize the healthiness of change, "readjust" accordingly and move from the past, stopping infinitesimally in the present and continue to have a forward consciousness as the beacon before the conceptualized thought

coagulates in rule-ordered linguistic language code in the brain. The intuition and energy of self life force need to be very much part of that beacon of intangibility. *So What would or do we call it*? may be another question.

"Active habits involve thought, invention, and initiative in applying capacities to new aims" (Dewey, 1917, p. 62). This sounds like integral consciousness. Now strategy just comes to mind. However, that is a whole new bag of begging the questions. What is strategy? What is thinking? Do we teach thinking? Is the main point of teaching actually teaching "critical thinking" which is always being processed within an environment and within our own truths, beliefs, values, realities, and consciousness structures?

The Strategy of Play

"Children proverbially live in the present; that is not only a fact not to be evaded, but it is excellence" (Dewey, 1917, p. 63). Much of the time children are in the present, often wrapped in their magical playfulness consciousness structure, again where and when time is of the moment and not measured in increments of fixedness but with flexible fluidity.

"The criterion of the value of school education is the extent in which it creates a desire for continued growth and supplies means for making the desire effective in fact" (Dewey, 1917, p. 62). What does this mean? Self-motivation is a personal empowerment structure to succeed in education? Do self-motivation and personal empowerment live in the tabernacle land and time structure of magical playfulness?

"Children, if they could express themselves articulately and sincerely, would tell a different tale; and there is excellent adult authority for the conviction that for certain moral and intellectual purposes adults must become as little children" (Dewey, 1917, p. 50). Here Dewey talks of children and now reflects upon his discourse in *How We Think* (1910) about the sense of play, actual play, and the art of "being" as playfulness. A sense of wide-eyed openness of the being of youth needs to be stored by adults and utilized throughout the stages of time in life. Do people lose it? Parents in particular? Dewey (1917) writes, "Few grown-up persons retain all of the flexible and sensitive ability of children to vibrate sympathetically with the attitude and doings of those about them" (p. 51). Does he mean adult to adult? Or does he mean adult to child? Is that where the 1970s communication strategy was based on "Adult, Teacher, Child?", which seemed a viable communication framework and teaching strategy of the time?

Most mental/rational adult communication is ego centered and Dewey (1917) examines a child's vs. an adult's ego world. "Most of the remainder of children's alleged native egoism is simply an egoism which runs counter to an adult's egoism. To a grown-up person who is too absorbed in his own affairs to take an interest in children's affairs, children doubtless seem unreasonably engrossed in *their* own affairs" (p. 52). In an arational/integral consciousness, the communication framework is "egolessness" or "transegoic" in nature. Dewey (1917) helps to answer or frame more simply my earlier attempt at explaining the propulsion of learning, "Still more important is the fact that the human being acquires a habit of learning. He learns to learn" (p. 54).

Reflecting back on the discussion on habits, Dewey (1917) says,

> The significance of habit is not exhausted, however, in its executive and motor
> phase. It means formation of intellectual and emotional disposition as well as an
> increase in ease, economy, and efficiency of action. Any habit marks an
> *inclination* – an active preference and choice for the conditions involved in its
> exercise. A habit does not wait, Micawberlike, for a stimulus to turn up so that it
> may get busy; it actively seeks for occasions to pass into full operation. (p. 57)

Habits, Growth, Instincts, and Intuition

It can be seen how the industrialization of the nation had an impact on Dewey's

(1917) words, "The short-sighted method which falls back on mechanical routine and

repetition to secure external efficiency of habit, motor skill without accompanying

thought, marks a deliberate closing in of surroundings upon growth" (pp. 58-59). Dewey

(1917) summarizes himself well on habit and growth and also brings into discussion

instincts.

> Three ideas which have been criticized, namely, the merely privative nature of
> immaturity, static adjustment to a fixed environment, and rigidity of habit, are all
> connected with a false idea of growth and development, -- that it is a movement
> toward a fixed goal. Growth is regarded as *having* an end, instead of *being* an
> end. The educational counterparts of the three fallacious ideas are first, failure to
> take account of the instinctive or native powers of the young; secondly, failure to
> develop initiative in coping with novel situations; thirdly, an undue emphasis
> upon drill and other devices which secure automatic skill at the expense of
> personal perception. In all cases, the adult environment is accepted as a standard
> for the child. He is to be brought up *to* it. (p. 60)

Dewey hooks into the earlier concept of this writer about the role of intuition

when he uses "instincts." Dewey (1917) says, "Natural instincts are either disregarded or

treated as nuisances – as obnoxious traits to be suppressed, or at all events to be brought

into conformity with external standards" (p. 60). The scientific community of mental

rationalism dismisses intuition. Returning once more to Rudolf Steiner on the topic of

intuition, "I use clairvoyant consciousness to gain insights. All people have this capacity but often are unaware of it. I urge my teachers to grow in their abilities of awareness and perception" (Ensign, 1996, p. 183). Yes, this educator adamantly says and teaches that we must pay closer attention to instincts as well as foster intuition in our lives. Nurture both instinct and intuition to the point where they become our *third ear*. From personal experience, without them and the voice they have brought into my world, I would be dead or in a vegetable state at this point in my life. This individual as learner has learned the importance and significance of the intuit voice, which is in the tabernacle core of human consciousness.

Through personal daily actualizations of Jean Gebser's (1986) consciousness structures, John Dewey's (1910, 1917) ideas of how we think, how we educate, and democracy in education synthesized with researching Rudolf Steiner (1928, 1973) and the experiential framework of visiting a Waldorfian (2000, 2001, 2003) school in Deventer, Holland, this philosopher, researcher, writer, artist, educator, and storyteller has threaded and reinforced the idea of consciousness as being the conduit of learning, teaching, and communicating through spirit, soul, and body, from truth through beauty for the good.

CHAPTER 2

LISTENING FOR THE SHIFT:

VOICES FROM THE TABERNACLE

<u>Aim of the Chapter</u>

The aim of Chapter 2 is to continue discussion on the threads of intuition,

spirituality, hegemony, American democracy, communication and education as control of

citizenry, background and expansion of Jean Gebser (1986) and the frameworks of

human consciousness mutations and the five (archaic, magical, mythical, mental rational,

arational/integral) modality stages purported by Gebser. Additionally, Chapter 2,

"Listening for the Shift: Voices From the Tabernacle–constructing, communicating, and

educating through arational/integral self awareness in a collective humankind structural

consciousness" focuses in on questions of hominid man and super skull man and the

recent link discovered by scientists, specifically looking to Alison Biskup (personal

communication, 1986-2004) for long-awaited answers. How is an individual formed?

What are the components which make up each sentient being? When did human

consciousness find both its individual and collective voices? How does each

communicate? How do we educate the individual: for true self-actualization or to be a

worker bee in the various hives of society? Are there innate forces in each being which

have predetermined forces of good?, which begs the question, are all beings created

"good?" Is there such a thing as "the bad seed?" Did hominid man of 4,000,000 years

ago have an innate consciousness soul of goodness?

Individual Spirit Mission

McDermott (2003) writes in "The Spiritual Mission of America" some answers to some of these questions in his discussion of Emerson from the 1850s. "Emerson's great task, and insight, had to do with the relationship between personality and the transcendent self, which is universal and infinite" (p. 9).

McDermott (2003) has come the closest in answering the philosophical duality question, "Is a person born good or evil?" The answer is embedded in the summation McDermott (2003) has of Emerson: "Emerson is thoroughly transpersonalist in that he, too, talks about a kind of altered state, not one suddenly induced, but one that is nevertheless significantly different from our ordinary thinking. According to Emerson's epistemology, we think in harmony with, from and by means of a deep soul or spirit, a universal life" (p. 9).

The words "harmony with" stick out in my mind when contemplating the mind is the tabernacle of the consciousness soul. Bardy could interpret "harmony with" as each person is indeed born good. *The spirit of life force*, as Bardy simply defines consciousness, has goodness as its seed and core. Can the seed ever be bad from the beginning? Is the spirit of life force evil at times? Is a bad seed consciousness present from conception? And what of the Biblical Cain and younger brother Abel? Was Cain always a bad boy? Or did he just lose control in a jealous rage? Is it a jump to link human warfare to bad seeds and the conflict, conquest, competition for and domination of others as a result of bad-seed-consciousness souls?

> Every expansive era in the history of mankind has coincided with the operation of factors which have tended to eliminate distance between peoples and classes

previously hemmed off from one another. Even the alleged benefits of war, so far as more than alleged, spring from the fact that conflict of peoples at least enforces intercourse between them and thus accidentally enables them to learn from one another, and thereby to expand their horizons. (Dewey, 1917, p. 100)

Societal Mission

Ideally speaking, social intercourse can benefit the societies who are engaged in the dialogue. However, many societies have been built and some are still built on the conquering and annihilation of others. There are reasons why certain groups of people do not want dialogue or influences from the outside. The grip of hegemony comes to mind. People have been trampled to death by opening up to other social groups. In the history of modern mankind, 50,000 years ago to present, if we were to weigh the positive outcomes of opening up to others vs. the "taking over" of others, which would tip the scales? How are individuals and societies locked into annihilation mental rational consciousness? Look only to the reflections in mediated communication today. Scores of films portray Nazi concentration camp life, treatment of black slaves in the new world, or equally gruesome atrocities such as the 2002 film *Ararat* (Lantos), portraying the Turkish government's 1915 systematic house by house purging and ethnic cleansing of Christian Armenian and Kurdish families, villages, and communities from Turkish society to have an ethnically clean landscape of people. These images and consciousness formation of historical events line the shelves of Blockbuster Video stores nationwide. Has it always been like that, people killing people?

No, not at all. Hominid man can be traced to 4,000,000–1,000,000 years ago because there is an abundance of fossil evidence which supports that 4,000,000 year mark (B. G. Bardy, personal communication, April 26, 2004). Archaic and magical

consciousness stretches that far back, and during these two modalities, linguistic communication had not been formed. Theoretical evidence supports that to survive, hominids communed via collective consciousness cooperative communication. In essence, the seeds were good.

Anthropologist B. G. Bardy (personal communication, April 26, 2004) explains, "Language only dates back 50,000 years and reflects cooperation of others to achieve shared interest and collectively solve problems for continued survival of the clans." Hoffecker (2002) writes,

> The most important event in human evolution occurred not two or three million years in the past, but only about 50,000 years ago. At this time hominids--anatomically modern humans--rather suddenly began to leave traces of the use of symbols in the archaeological record. Many anthropologists believe that this marks the birth of fully modern human languages, for which there is some supporting anatomical evidence. The appearance of symbols coincides with a transformation in technological skills--a quantum jump in human ability to manipulate the natural environment. (p. 1)

"Morphologically Neanderthal man died out 50,000 years ago and *Homo sapiens* survived because man and the clans were moving from equator-based survival and expanding northward. In order to survive in colder environments, language was a tool which had sprung cooperatively forth as did the jaw line protrusions of the species" (B. G. Bardy, personal communication, April 26, 2004).

We need to bring into discussion consciousness, soul, and spirituality. Are souls predetermined by their birth to the type of consciousness chemistry and self-will and the matrix of communication? Where is anyone's soul at any given moment in time? Who can help with the answer? Or some ide(a)ology? Is their duality built into the structures of consciousness? Looking at the current war on terror and conflict takeover of Iraq,

what do the consciousnesses of Saddam Hussein, George W. Bush, Osama Bin Laden,

John Kerry, Colin Powell, Condileza Rice, or Donald Rumsfeld look like? To what

effect does mass communication control each person's shape of human communication,

education, discernment of self-actualization, and discernment of truth?

Shaping Emotional Outlooks

Fear and happiness are the two emotions fighting it out each day within our

intrapersonal communication. Education is much the same. Communication as well.

Dewey, Gebser, Steiner, and Bardy agree the current tone of fear in American Society

today is much the same as when the Cuban missile crisis was being played out in October

1962. My consciousness soul was collectively sitting on the floor of the school hallway

outside of the classroom with my face towards the wall and my hands behind the back of

my neck, the assumed position for nuclear holocaust. Bardy finds this fear was the

beginning of a long line of fears we were and are bombarded with each day...Kennedy,

King, Kennedy assassinations, The Vietnam War, race riots and demonstrations, the price

of gas each day, east-west relations, Middle eastern nations, religions, and safety at home,

at school, at work, on the street, in our stores, movie houses, airports, terminals, and in

our cars.

My brother, SFC Kevin G. Bardy, (personal communication, March 28, 2003) the

sergeant major, assumed a similar sitting position while on duty in Kuwait from January

to July 2003. He was sitting cross-legged style under his desk with full gas mask and

other war-related accoutrement, emailing his brother Dan while Brother Dan lectured in

the public speaking and group communication class. The scenario certainly brought out

the dualities of fear and happiness: Loras College students in a free happy environment, brother Kevin and, vicariously, Professor Bardy living in fear, being controlled, and contemplating a horrible death.

<div align="center">Organizing Democratic Society via Plato and Dewey</div>

Turning to Dewey (1917), the education discussion continues along the lines of classes of people. "Obviously a society to which stratification into separate classes would be fatal, must see to it that intellectual opportunities are accessible to all on equable and easy terms" (p. 102). As the world's largest, no longer leading, democracy, does America have equable and easy terms on any level? The phrase "the have and the have-nots" is used frequently in educational and economic discussions relating to the masses.

"Plato's starting point is that the organization of society depends ultimately upon knowledge and the end of existence" (Dewey, 1917, p. 102). What does Plato mean here? Does this mean the end of an individual's existence, a society's end, the end of the whole world? "If we do not know its end, we shall be at the mercy of accident and caprice. Unless we know the end, the good, we shall have no criterion for rationally deciding what the possibilities are which should be promoted, nor how social arrangements are to be ordered" (Dewey, 1917, pp. 103-104).

"But how is the knowledge of the final and permanent good to be achieved? In dealing with this question we come upon the seemingly insuperable obstacle that such knowledge is not possible save in a just and harmonious social order. Everywhere else the mind is distracted and misled by false valuations and false perspectives" (Dewey,

1917, p. 103). We turn to Dewey (1917) about democracy and dualities of a democratic

system.

> The Democratic Ideal. – The two elements in our criterion both point to
> democracy. The first signifies not only more numerous and more varied points of
> shared common interest, but greater reliance upon the recognition of mutual
> interests as a factor in social control. The second means not only freer interaction
> between social groups (once isolated so far as intention could keep up a
> separation) but change in social habit–its continuous readjustment through
> meeting the new situations produced by varied intercourse. And these two traits
> are precisely what characterize the democratically constituted society. (p. 100)

One person. One human being. Communicating and educating one human being

in America today. Communicating, educating, and constructing knowledge for one

sentient human being in America today. "An education could be given which would sift

individuals, discovering what they were good for, and supplying a method of assigning

each to work in life for which his nature fits him. Each doing his own part, and never

transgressing, the order and unity of the whole would be maintained" (Dewey, 1917, p.

103).

To what extent do our schools reflect Plato's approach? Is our approach to

cultivate the individual's interest in order to prepare him or her best for society? Or are

we looking at the needs of society and training individuals to fit into society so that the

whole would be maintained? I think Dewey (1917) contends the following about Plato,

"His doctrine of limited powers and classes came in net effect to the idea of the

subordination of individuality" (p. 105). And what happens to the individual when there

are too many candlestick makers? As Dewey (1917) moves into the individualistic ideal

of the eighteenth century, he writes, "Education in accord with nature furnishes the goal

and the method of instruction and discipline" (p. 106). What does he mean by this, especially "in accord with nature?" Dewey (1917) continues:

> Inquiry freed from prejudice and artificial restraints of church and state had revealed that the world is a scene of law. The Newtonian solar system, which expressed the reign of natural law, was a scene of wonderful harmony, where every force balanced with every other. Natural law would accomplish the same result in human relations, if men would only get rid of the artificial man-imposed coercive restrictions. (p. 107)

What does Dewey mean by this statement? Does he mean that man when engaged in social intercourse is coercive in his communication, persuading the "other" to conform to his way of thinking and doing?

It appears that Newtonian Law reflects Gebser's aperspectival being and thinking and doing, a much more social cooperation of doing things. The rule which sits in our consciousness structure right now is more of competition which runs rampant in communication and education. The immigration migration to the United States reflects how each subsequent nationality arriving meant "way too many more candlestick makers" and way too much competition for jobs and money and success.

Reviewing Other Nations' Frameworks

Looking at other societies, similar mythical and mental rationalism competition modalities work throughout the world today. With the collapse of the U.S.S.R. and the re-nationalization of former east bloc countries, some went into anarchy and war chaos and needed outside assistance in controlling borders and ide(a)ologies. Some east bloc countries separated magically and cooperatively such as the Czech Republic and the Slovak Republic (Slovakia).

The former Yugoslavia splintered into five nations: Croatia, Macedonia, Serbia & Montenegro, Slovenia, Bosnia & Herzegovina. How were/are their transformations going? How long did some of these "new world order" countries take before faltering back to mythical and mental rationalist ide(a)ologies feudalism? Ljunggren (1996) writes:

> We are all aware of the tragedy of the former Yugoslavia, where community seems to be well out of reach at the moment – and to have been complicated throughout history. Despite this, Sarajevo was known as a metropolis where ethnic communities lived close with each other in comparative peace and harmony. To quote Bernard-Henry Levy on the shooting and killing in Sarajevo – the question is whether this is not a specific idea about a certain kind of human being that is dying before our very eyes?
>
> If we are to believe numerous, serious scholars, the strident US and growing European individualism are, by denying community and history, disabling people for citizenship in an interdependent world. On the other hand, if we are to believe most of those who call themselves postmodernists, this is an inevitable situation, given that the public is reduced to being just a silent majority....Education is the fundamental sign of modern society, rooted in the heritage of the Enlightenment. In this view, education means social integration. (pp. 73-74)

June 28, 2004, experienced a watershed moment as the state of Iraq realized a newly formed democratic government with a president and 24 cabinet posts. As the guardian of that day, the United States is on trial as well. Are the American ideals and value system of a democratic society really a haven of existence? How will the ultimate use of persuasive communication and education restore order and create a harmonious nature where individuals work in a collective aperspectival society, where the have nots, have? Why or why not?

Looking to Iraq's neighbor, the Kingdom of Saudi Arabia, King Abdulaziz bin Abdelrahman Al-Saud united the 130 plus tribes of the greater Saudi Arabian peninsula

and established law and order. "By 1926 Abd al Aziz had brought most of the peninsula under his hegemony, and in 1932 he proclaimed the establishment of the Kingdom of Saudi Arabia" (*Saudi Arabia: A Country Study,* 1984, p. 12). While an expatriate worker in the Kingdom from 1982–1988 and again in 1993, there was quite an external order of wealth established; there were very few have nots, although they existed, particularly during the later days of Ramadan. The disfigured, the deformed, the urchined magically appeared in all of the souks and on the street, with their hand out, shabbily dressed. After Ramadan, the indigent disappeared for another year.

Could Iraq reflect their neighbor of the 1980s in the year 2020, having internal and external order? And will Saudi Arabia, for that matter, reflect their own 1980s in 2020, publicly showing haves and not have-nots? Osama bin Laden has done much to crack and bring divisiveness in his native Arabia, promising to bring down the House of Saud. This, too, simply may be a feud, a family feud. Osama bin Laden perhaps is "acting out" his family frustration that his line of the family tree will not ascend to the throne of the Kingdom of Saudi Arabia. The have nots of young men in 2004 see a system that has passed them by, one not offering nearly as many "brass rings" for them in the form of a good career and financial rewards. Their uncles and much older siblings and cousins garnered the limited favors.

<u>Returning to the American Democratic Mission</u>

Garrison (1996) writes in, "A Deweyan Theory of Democratic Listening" the following, "Oppressive societies eliminate diverse interests in favor of the special interests of the powerful few" (p. 1). Dewey (1917) maintains, "The first step in freeing

men from external chains was to emancipate them from the internal chains of false beliefs and ideals" (p. 107). Is this connected to the idea of "How do we know what we know?" Mankind has ideas that internally chain him so that our own internal "inner/intra" police blocks new information from the external?

Finally, is Dewey's (1917) statement concerning the ideal of a democratic conception of education true, "The ideal may seem remote of execution, but the democratic ideal of education is a farcical yet tragic delusion except as the ideal more and more dominates our public system of education" (p. 114).

McDermott (2003) says, "There is overwhelming evidence that America—by which I mean the United States—is greatly lacking in wisdom, out of balance, and approaching self-destruction concerning the ecosystem, gender, generations, health, education, and its sense of justice" (p. 1). In the lecture/essay "The Spiritual Mission of America", McDermott (2003) outlines competing interpretations of the course of Western thought and culture.

> One dominant story is that the West continues on an ascent, on the well-established curve of progress made possible by rationality and scientific thinking. The more recent story is the West is a tragedy brought on by the myth of progress and the disastrous effects of alienation, technology, and gender imbalance. Transpersonalism will be needed increasingly if we are to understand and redirect a culture that has much more power than wisdom. (p. 1)

> To understand America in this context, we need to penetrate its exterior, its surface, to its inner life, its psyche and spiritual mission. We need to move past its limited sight to its vision. To do this, we ourselves will need to exercise vision as well as sight. From the start of this culture with the arrival of European settlers on the east coast in the early seventeenth century and their genocidal impact on indigenous peoples, this vision has been in jeopardy....this ideal of the individual nevertheless remains America's sacred task and the essential contribution that it is attempting to make to the evolution of human consciousness. (p. 2)

Jean Gebser (1905-1973), a Brief Biography

Jean Gebser (1986) was born Hans Karl Rudolf Hermann on August 20, 1905, in Posen, Prussian-Poland, now Poznań, Poland. His father was a Royal Prussian Counsellor of Justice. Young Gebser attended a humanistic school in 1915, a former mastery school in 1918, and a high school in Berlin. His father died in November 1922, and Gebser quit high school and became a trainee at Deutsche Bank Berlin (Wehr, 1996, pp. 1-3). He studied and worked in Germany until the rise of the Nazi party in 1931. From Germany he fled to Spain until 1936 when he fled to Paris, associating with the circle of artists surrounding Picasso and Malraux. In 1939 he fled again to Switzerland where he became a citizen in 1951. In 1967 he assumed the chair for the Study of Comparative Civilizations at the University of Salzburg (Jean Gebser Society, n.d., p. 2). Gebser died in Wabern, Switzerland, on May 14, 1973 and is buried there. (Wehr, 1996, p. 3).

It was in Switzerland that Gebser completed his monumental work on the comparative study of civilizations "Ursprung und Gegewart (1949/53)." The English translation was undertaken by Noel Barstad with Algis Mickunas and published as *The Ever-Present Origin* in 1985 by Ohio University Press (Jean Gebser Society, n.d., p. 2). Taken from the Jean Gebser Society Web site, Feuerstein (n.d.) writes: "From a vast collection of work covering many fields, historical and contemporary, Gebser described the modalities of consciousness of historical cultures, as well as the extent and openness of human consciousness in general. His work is penetrating and offers an understanding useful to scholars from many fields of study" (p. 1).

<u>Laying Out Gebser</u>

The evolution of human consciousness presents a segue to another aim of this chapter and overall study of consciousness, communication, education, and technology: furthering the discussion of Polish-born (1905, Poznan) philosopher Jean Gebser (1986) and his structural consciousness theory as it relates to both individual intrapersonal communication voice and the greater collective consciousness of societal voice, especially in perspective of educational means and delivery systems.

Gebser (1986) believes that an arational/integral consciousness is slowly emerging but will take perhaps another millennium to have successfully mutated ahead. Currently, the box of mental rationalism consciousness is our arena, still being manipulated by the mythical gods above who move us around the stages of their coliseums. Most communication in that arena is a function to control the citizenry. Hence, education is controlled.

<u>The Structures of Consciousness</u>

<u>The Archaic Structure</u>

Turning to Allan Combs, Ph.D., consciousness researcher, neuropsychologist and systems theorist at the University of North Carolina at Asheville, his document, "Jean Gebser and the Spirit of Cooperation" clearly and succinctly summarizes Gebser's (1986) five stages of human consciousness.

On a historical scale, this structure is essentially prehuman. "It is a form of consciousness which, it knows it or not, experiences a primal unity with the light of the *origin* itself. According to Gebser, this structure is the historical analog of the

mythological state of purity at the beginning of history, like in the Garden of Eden before the fall. It represents a time when our hominid ancestors were entirely at home in the world of nature" (Combs, n.d., p. 2).

Since there are no detailed records of life in this era, observing the natural state of nonhuman primates may give us an appraisal. Primates tend to live in small groups and exhibit complex patterns of interaction, including cooperative behavior in defending the group, foraging for food, and establishing social hierarchies. Aggression is not uncommon within these groups, but it is often followed by reconciliatory efforts, so that there seems to be a natural counterpoint among primates between conflict and peacekeeping. "When fighting breaks out among nonhuman primates, it is in response to present causes such as territorial pressures or imbalances in the social structure within the group, and does not escalate into sustained conflicts such as are typical in human society. We might suspect that life was similar among archaic humankind" (Combs, n.d., p.2-3).

The Magical Structure

No pure example of a solitary structure of consciousness exists because, similar to the functional systems of the human brain, each new structure emerges and forms a governing system over the older ones, which, in turn, continue to function at their own level. From the perspective of modern humans, Gebser's structures are ontogenic, seedling philosophical branches stemming forth a spiritual foundation of the origins of man, rather than phyletic, the philosophical branch rhetorizing man's evolutionary beginnings; each forms part of the deep structure of the modern psyche. "Historically, as each new structure merges, it becomes dominant over the older ones, until it becomes

secondary to another emergent structure" (Combs, n.d., p 3). Examples of magically structured consciousness peoples today include Australian Aboriginal cultures, African bushmen, tropical rainforest dwellers of South America, and Tihama tribal people of the Saudi Arabian Asir. Such cultural outlanders of the modern world exhibit a greater awareness of magical possibilities than is characteristic of industrialized cultures.

Cooperation is dominant in magical structure expressed in tribal or group identity. "Cooperation in the dominantly magical human was an immersion in the ethos of the group or tribe. Strong relationships between individuals, pair bonding, may well have existed but were secondary to psychological absorption in the collective" (Combs, n.d., p. 4). Magical consciousness also implies a first awakening to a sense of separation from nature, and, thus, the beginning of the drive for power and control. "If conflict within and especially between tribal collective units existed, most likely magic played some role in it, possibly in the form of spell casting or witchcraft. Large scale and sustained conflict would have been unlikely in the absence of a mental rational structure to organize and carry the conflict over long periods of time" (Combs, n.d., p. 4).

The Mythical Structure

The mythic consciousness is characterized by storytelling. In it the imagination is projected outward as imagery, and then transformed into narrative. Imagination expressed through myth, in Gebser's (1986) words, "...renders the soul visible so that it may be visualized, represented, heard, and made audible" (p. 67). Language becomes the spotlight during the emergence of the mythical structure. While Gebser tended to focus on the centrality of imagination in his discussions of mythic structure, the advent of

articulate language played an important historical role. "Great societies of the mythic epoch relied heavily on social cooperation: Neolithic society of Old Europe (Gimbutas, 1982) as well as ancient civilizations of Mesopotamia, Egypt, Greece, Crete, the Indus Valley, and the Yellow River in China" (Combs, n.d., p. 4).

Combs (n.d.) continues, "Cerebral asymmetries in the skull casts of *Homo habilis* suggest that the beginnings of human language may date as far back as four million years. The elaboration of language into an exquisite and powerful vehicle of social control and coherence probably did not come about until fifty thousand to perhaps ten thousand years ago" (p. 4). This time frame corresponds to the development of the mythic imagination. Flourishing of the imagination was expressed in the paintings of the great cave sanctuaries of southern Europe, rock carvings in the Asir Mountains of Saudi Arabia, as well as the widely held mythology of the goddess beginning about 20,000 to 18,000 B.C.

The full mutation of mythic imagination did not break free of the previous structures until the advent of the Neolithic farming revolution around 8,000 to 9,000 B.C. During the ensuing millennia, the entire Old European civilization based on farming developed in regions now largely in Eastern Europe and the Near East, bringing with it artistry, commerce, copper metallurgy, and even what appears to be a rudimentary script (Combs, n.d., pp. 4-5).

The proliferation of rich visual imagery characteristic of the mythic structure of consciousness sprang forth from tincture thoughts of the internal combustion engine which began the rapid acceleration of technology that was characteristic of the first millennia of the Neolithic era. *Homo erectus* had lived for over one million years making

no technological statement beyond a few modestly well-crafted tools. With Cro-Magnon man, technological aspects began to gain speed, and with the full fruition of mythic consciousness came exponentially accelerated artistic and technological development (Combs, n.d., p 5).

In terms of human conflict during the mythical structure two discussions have emerged. The first is with Old European civilizations with Combs (n.d.) pointing out that according to Eisler (1987) in his book *The Chalice and the Blade: Our History, Our Future*, "...for which virtually no evidence of violent conflict has yet been found" (p. 5). The second discussion moves to more recent ancient civilizations in Mesopotamia, Greece, and China where violent conflict can be traced. Combs (n.d.) writes, "It would seem, in fact, that war as we know it today was virtually invented in Sumer around the third millennium B.C." (p. 5). Sumer being an "ancient region in the lower valley of the Euphrates River" (Guralnik, 1974, p. 1425). Ironically, today, the lower valley of the Euphrates River exists in modern Iraq.

> Campbell (1976) writes in *The Masks of God: Vol. 2: Oriental Mythology*,
>
> Sargon, King of Agade...the city of Uruk he smote and its wall he destroyed. With the people of Uruk he battled and he routed them. With Lugal-zaggisi, King of Uruk, he battled and he captured him and in fetters he led him through the gate of Enlil. Sargon of Agade battled with the man of Ur and vanquished him; his city he smote and its wall he destroyed. E-Ninmar he smote and its wall he destroyed, and its entire territory, from Lagash to the sea, he smote. And he washed his weapons in the sea.... (p. 139)

What could motivate such destruction? Social or economic reasons are offered as part of the answer. The other part of the answer lies in the appearance of rulers such as Sargon, "who were intoxicated with egotism" (Combs, n.d., p. 5). The historical epoch

presented here is still characterized by domination of the mythical structure of

consciousness. However, the birthing of the mental rational structure is emerging,

reflected with the surfacing of the ego with a vengeance (Combs, n.d., p. 5). What can be

seen in Sargon is the play of the ego as a modulating influence on the tendency of the

mythic consciousness to create great issues, that is, to polarize differences in perspective

and magnify them into "mythic proportions." In Sargon's case, and many to follow him

(Bardy adds George W. Bush, Donald Rumsfeld, Dick Cheney) this is accompanied by

an inflation of the ego to the point that it sees itself as vastly larger than life. Sargon was

a megalomaniac (Combs, n.d., p. 6). Combs (n.d.) concludes the mythical structure with

the following paragraph.

> This mixture of the mental and the mythical structures, by which the mental
> makes distinction – "I am important and you are not," "capitalism is good
> communism is bad," "Christianity is right, Islam is wrong," etc. – and the mythic
> polarizes them into gigantic proportions, can readily ignite into uncontrolled
> hostility and war. The enemy may then be projected as a demonic *other*,
> deserving of less than human consideration. Combine this with the still extant
> tendency of the magical structure to be drawn into collective social movements
> such as the Nazi party or the Moral Majority and we have the full prescription for
> relentless and heartless aggression. All this is to say that already in the third
> millennium B.C. we see the basic pattern for war even as it comes to us today,
> involving a unique interaction of the magic, mythic, and mental structures of
> consciousness. (p. 5).

The Mental Rational Structure

Two discussions emerge on the timeline of the actual full mutation of the mental

rationalism structure of consciousness. Combs (n.d.) believes the structure became the

dominant way of incorporating reality during the final centuries before the birth of Christ,

and mental rationalism remains dominant today. He points to Gebser (1986) who writes

that mental rationalism came to its full expression in classical antiquity when

Parmenides, in 480 B.C. could say *"to gar auto noein estin to kai einai,* 'for thinking and

being is one and the same'" (p. 77). Plato, in the *Phaedo,* attributes a similar attitude to

Socrates, who seems to equate the soul and the afterlife with pure thought. The

identification of being with thinking would be expressed again in modern times by Rene

Descartes. Feuerstein (1987) estimates that the roots of mental rationalism may go back

many millennia before Christ because the emergence of the ego in certain individuals is

well established before Greek classical antiquity. Author Bardy agrees with Feuerstein

that the "roots" of mental rationalism go further back than Combs may be willing to

articulate; however, the dominance of the mental rationalism structure may not have

come to full fruition until 500 B.C.

As with the archaic, magical, and mythical structures of consciousness, there is an

efficient and a deficient form of mental rational consciousness (Combs, n.d., p. 6). The

efficient is represented by directive, discursive thought as seen in the dialogues of Plato

and Socratic teachings. Such discursive thought carried the potential for the first time of

cooperative interactions between relatively large numbers of individuals, interactions

based on a mutual exchange of ideas. Indeed, this is precisely what we find in classical

Athenian democracy and in brainstorming sessions in communication and education

classrooms in American democratic education systems. Unfortunately, the great

Athenian experiment only lasted a brief time

The reasons for the Athenian failure are complex, yet clearly involved a loss of

mental balance in favor of the greed and heady egotism that led the Athenians of the late

fifth century into the disastrous naval campaign against Syracuse. While the new

democracy was able to triumph over the deep collective tendencies of magical consciousness and the polarities of mythical consciousness, it was not able to stand against the catalytic power of the emergent perspectival egoic structure of mental rationalism. One experiment of thoughtful cooperation offered by the mental rational structure is reflected in the Roman Empire. Despite its many political turmoils and its final decadence, it gave the world its first great system of international government, founded upon an effective system of reasonably equitable international law that was unprecedented in history (Combs, n.d., p. 6).

The deficient form of mental rationalism is perspectival consciousness, associated with ego being focally located in the head. Perspectival posture did not move into the foreground of consciousness until the mid-sixteenth century A.D. and the Italian Renaissance, noting its early roots dating back to the ancient world. Perspectival consciousness is associated with rational thought, or *ratio*, characterized by divisive, immoderate and hair-splitting reasoning. Gebser (1986) writes,

> *Ratio* must not be interpreted…as "understanding" or "common sense"; *ratio* implies calculation and, in particular, division, an aspect expressed by the concept of "rational numbers" which is used to designate fractions and decimals, i.e., divided whole numbers or parts of a whole. *This dividing aspect inherent in ratio and Rationalism – an aspect which has come to be the only valid one – is consistently overlooked, although it is of decisive importance to an assessment of our epoch.* (p. 95)

Our own age is beset by the faults and problems brought on by the ruling ego such as the tendency to adopt isolated and self-centered viewpoints, accompanied by wrangling and hair-splitting over trivial differences in opinion, and with the help of the mythical and magical strata of the psyche, magnify these trivial differences into

monumental proportions and emotionally act them out in blind collectives. The result

being the holy crusades; the Holocaust; the genocide of Kurds; and separate water

fountains, restaurants, entrances to buildings, segregated schools, among other inequities

for Black Americans from the end of the U. S. Civil War in 1865 until even today in

2005. It has only been 50 years since the Supreme Court in *Brown v. Board of Education

of Topeka* struck down segregation of public elementary schools which existed in 17

states.

With all this said, the perspectival consciousness holds the seeds of a new form of

cooperation, one that will reach completion only with the awakening of the aperspectival

or arational/integral structure. Having this aperspectival perspective enables individuals

to enter into cooperative exchanges with others while retaining a complete sense of one's

own identity and individuality. In relationships founded on such exchanges each party

can pursue his or her own individualism while at the same time contributing to the goals

held in common (Combs, n.d., p. 7). Such relationships may involve a dyad, as in the

marriage relationship, a group of scholars with certain broad interests shared in common,

like approving this dissertation, or an economic community of separate nation states such

as the newly emerging European Union.

Understanding such engagements and exchanges benefit both individual goals and

mutual interests, as *synergistic* communities. Maslow and Honigmann (1970) write in

"Synergy: Some notes of Ruth Benedict," the following definition of synergy as a

situation in which "…any act or skill that advantages the individual at the same time

advantages the group" (p. 320). Benedict contrasted it with the opposite social situation in which, "Every act that advantages the individual is at the expense of others" (p. 320).

Riane Eisler (1987) has developed a *partnership model* of cooperative interactions between individuals, "...in which social relations are primarily based on the principle of linking rather than ranking" (p. xvii). Combs (n.d.) explains more fully something known as *attractor basins*.

The essential notion here is that human relationships, individual, political, or otherwise, have historically tended to fall into one of two attractor basins, to use the terminology of dynamical systems theory. One of these she terms the partnership model, described earlier, and the other she terms the *dominator model*. The latter emphasizes hierarchical relationships in which a small elite controls the lives of the majority by virtue of political power, financial influence, or simple brute strength. Such elites, almost always male, have for the most part determined the destiny of humanity since the Indo-European invasions of the peaceful Old European culture right now to the present day. (p. 7)

The best intentions of aperspectival arational/integral consciousness beings of today tend all too frequently to be undercut by self-centered egoic agendas, nit-picking, and failure to see beyond one's own perspectival limitations. Author Bardy strongly identifies with being undercut. People talk about thinking and doing things "out of the box"; but when it comes down to it, the box keeps most people safe and inside, with their ego, fully guarded and protected, ready to defend. Clearly, most people do not have the capacity to think beyond the box, let alone live outside the box where egos might get

trampled. If sustained cooperation is to be achieved in personal relationships, in national

and international economic ventures, and in local, national, and international political

arenas, a more effective form of consciousness is needed to be allowed to come to a fuller

blossom rather than letting the seedling wither and die, never to see the origin of the light

of day.

The Arational/Integral Structure

Arational/Integral structure of consciousness is not a structure among structures.

It is the wonderment to experience all of the structures in their fullness, without being

consumed by any one of them. From this position an individual experiences one's own

motives and aspirations with increased clarity and sees them in the context of the needs

of others and of society, even the world. It is possible to overcome the ego's neurotic

habit of concealing from itself its own self-serving agendas with such vengeance. The

freedom of this structure from the temporal and spatial constraints of perspectivity allows

a degree of objectivity that no previous structure of consciousness could enjoy (Combs,

n.d., p. 8).

As this section of laying out Gebser's structures of human consciousness comes to

a close, author Bardy concludes with Combs' (n.d.) thoughts on Gebser (1986).

> In Gebser's words, "the pursuit of power is replaced by the genuine capacity for
> love." (p. 8)

> The integral structure may seem like a pipedream of a troubled world, or the
> province of only a trivial few, but such may not be the case. Gebser saw evidence
> of its coming in many spheres of human activity, ranging from biology to music,
> from mathematics to jurisprudence, and from physics to poetry. (p. 8)

> Though Gebser gave us relatively few suggestions regarding how to further the
> unfolding of consciousness to the level of the integral structure, he clearly

perceived its development as an on-going and large-scale process within society, involving many more than a few isolated individuals. (p. 8)

Let us hope that his whole system of structures of consciousness shares something in common with levels of human moral development in this sense, that by interacting with others more advanced than ourselves we may also be drawn upward to the highest levels. (p. 9)

<u>Bardy is a Believer</u>

As a believer in the idea of a shift in consciousness to an arational and integral

structure, there is some glimmer of hopeful light. In an earlier draft, feedback on the

previous statement was "I'm afraid time has passed Gebser by. It is too late." (J. K.

Smith, Ph.D., personal communication, August 22, 2001). My response is that to survive

in the mental rational structure while having an aperspectival approach to

communicating, this philosopher keeps one foot firmly planted in mental rationalism and

one foot in arational/integral, maintaining a transegoic state.

Taken from the Jean Gebser Society Web site, Feuerstein (n.d.) writes about a

diary entry Gebser made many years before Gebser's death in 1973.

'When we are born, we cry and weep; when we lie, we should smile.' He followed his own counsel. He felt sure that death is but a translation. He had played the game of life courageously and fully as he knew that an all together different adventure lay before him. What was the secret of his life? And what is the significance of his work for today? (p. 1)

Gebser's unabashedly spiritual orientation, which is unique in European philosophy, has confounded and annoyed his peers. Especially those anxious to uphold the neutral rationalist standards of academia. Today, American Gebser scholars, unfortunately, tend to repeat the error of their European counterparts when they try to make Gebser into a phenomenologist of *consciousness and culture, ignoring his strong spiritual communication.* (p. 4)

The reason-dominated individual tends to be heavily ego-defensive, because identity is defined in terms of the ego personality. *The person who has broken through to the arational-aperspectival consciousness, however, sees the*

limitations of the ego, and is not threatened by the suggestion that he or she is
more than the narrow field of awareness and angular vision that is associated
with the ego. In fact, that person welcomes the idea that individuality arises in
participation with the larger reality that by far eclipses the rational mind and even
the feeling heart that is so often closed to the rationalist. (p. 3)

During an April 2004 literature review, one doctoral dissertation and one master's

thesis popped up on the radar of world literature. The dissertation *The Experience of*

Communication: Jean Gebser and the Expressive Dimensions of Consciousness was

written in August 1981 by Claire Elaine McCoy from Ohio University. McCoy writes of

Gebser's mutations,

> Gebser finds each dimension as a mutation from origin or originary wholeness.
> Each is a bursting forth of intensity rather than a system of derivation. Although
> historical illustrations leave the impression of an evolutionary movement, a better
> "image might be of a new mutation and in its expression appearing between and
> through remaining sedimented structures of consciousness disrupting and
> integrating the tracings of the other expressions." (p. 99)

The master's thesis "Mind, Consciousness and Epistemology" was written in

1991 by George M. Thompson III from University of North Carolina at Asheville.

Thompson argues with Gebser's approach to modalities of consciousness when he writes,

"The thesis of this paper is that Jean Gebser's model of the structures of consciousness is

not a theory of consciousness, but an epistemology. Gebser's model is a psychic

ontology constructed from phenomenal evidence" (p. 1).

According to the preface in the 1987 book *Structures of Consciousness: The*

Genius of Jean Gebser an Introduction and Critique written by Feuerstein...

> His work is increasingly acknowledged as a profound and sobering analysis of the
> dilemma in which we find ourselves, as individuals and collectively. It is also
> deemed highly controversial, which may be taken as a good sign. The
> controversy is as much about Gebser's unorthodox approach as it is about his
> conclusions. These imply an uncomfortable moral demand that only those will

meet who are committed to living as "homo humanus," the whole human being, transcending the parochial visions of egotism, sexism, nationistic ideology, religious imperialism, and racism. Gebser's field is the entire spectrum of human culture, beginning with the first stirrings of consciousness. (p. ii.)

In other words, individual consciousness and the voice within the individual consciousness is a continuous rebirthing of the larger humankind consciousness. The focus now will be a discourse on mental rationalism in authoritarian society and democratic society and its impact on communication and education.

Mental Rationalism as Control of Society

Mills (1979) writes, "In the completely authoritarian society, manipulation is not a problem, because authority is openly identified with the ruling institutions and their agents, who may use authority explicitly and nakedly. They do not, in the extreme case, have to gain or retain power by hiding its exercise" (p. 317). The consciousness structures of authoritarian societies are clearly fixed in a mental rational framework and communicate via total control of communication networks, including education. Mass media is strictly gatekeepered, editing out and censoring content through their own underpinning coding systems of values. Authoritarian governments have layers of reasoned censorship and usually have numerous arms of police functions and governmental enforcements in controlling content and thus the individual citizen.

Personal experience of living in such an environment, the Kingdom of Saudi Arabia, 1982-1988, 1993, reflects upon the numerous opened letters and packages received, the pages of *Time* and *Newsweek* ripped out, the telephone calls mysteriously disconnected, and the calls to prayer five times a day via electronic loudspeaker systems at the top of every minaret on every mosque, in every village in the Kingdom which is

charged with the tabernacle of the Holy Kaba. As an educator in Saudi Arabia's higher

education system, the management of content and self-censoring took place each and

every day. One prime example personifies the total nature of control of communication

when told in 1993, in the aftermath of Kuwait, not to talk about the Kuwaiti invasion nor

the role of the United States in liberating the Kuwaiti people from occupying Iraqi forces.

A virtual "gag order" had been issued.

We live in a democratic society yet nonetheless the truth of how we communicate

is also manipulative. Mills (1979) writes, "…the intermediate reality of the American

today – that manipulation is a prime way of exercising power" (p. 317). Not only is

communication manipulative, it is controlled by relatively few people. As a society we

have become blinded about authority, and we communicate via manipulators to keep the

social classes in line and separated. Mills (1979) explains society's blind sightedness

about authority.

Authority formally resides "in the people," but small circles of men in fact hold

the power of initiation. That is why the standard strategy of manipulation is to make it

appear that the people, or at least a large group of them, "really made the decision." That

is why even when the authority is available, men with access to it may still prefer the

secret, quieter ways of manipulation (p. 317).

Mass Education, Mass Media, Mass Censorship

It is in these small circles of men, the true decision makers from military, the top

fifty corporations, and government who need the seeds of aperspectival thinking and

communicating. Although our society would like to believe that the media in a

democracy is open, gatekeepers carefully control it. As a holder of a graduate degree in radio, TV, film, (1977) this communicator agrees with Mills (1979) when he says, "...that mass education in many respects, has become–another mass medium" (p. 317). On many occasions this educator has likened his classroom to that of a television program where we come together twice a week for story time and the whatnots of self-presentation. And now with laptops in the hands of each student, educators are now in a whole new reality show where we compete with the wireless laptop for the nanosecond attention spans of the clicking and clacking students, keyboarding their streams and dreams of consciousness into cyberspace while ignoring the "live" event in the front of the classroom.

As a 1994 holder of a graduate degree in communication studies, we are communicating at all eight levels of communication, (intrapersonal, dyad, triad, small group, large group, one to many/many to one, global, and inter-informational) using mental rational frameworks of consciousness which is nearly always persuasive or manipulative at best. "How did we do it in the past?" is often heard in brainstorm sessions. Depending on previous frameworks or constructs to lead us into the future keeps us in the same mental rational consciousness box. Also keeping society confined is the sorting through and communicating through dualistic lenses which have been set up in our minds and maintained in the leadership of government, big business, and the military--with the American educational system a continued trickle-down effect of censored content and information.

A Shift in Consciousness

Having made the arational/integral consciousness shift, it is quite easy to see the hold that mental rationalism has on most people even to the degree of policing academic freedoms. Good examples of pure mental rationalism are reflected in my own colleagues in the Department of Communication Arts at Loras College. On the eve of philosopher Bardy's founder lecture "Mind's Eye Meets Third Ear: Tales from the Backpack and Other Consciousness Journeys," (2002), which celebrated scholarship in the field of communication and consciousness, this philosopher was told by a friend and colleague: "You are not to talk or lecture on consciousness any longer in the classroom. Consciousness has nothing to do with what we teach here in public speaking and group communication. If they (the department) hear that you are talking about consciousness, you will not be asked back for another contract year. Consciousness is not part of the curriculum in Liberal Arts 110" (personal communication, Craig Schaefer, Associate Professor, Loras College, February 12, 2002). Surprising how the previous statements violate the Loras College Mission Statement,

> ...Loras College recognizes the human dignity of each individual and challenges men and women to grow with purpose and direction. Relating the rich liberal arts tradition to a changing world, Loras strives to develop active learners, reflective thinkers, ethical decision makers and responsible contributors in their diverse professional, social, and religious roles. (Loras College Catalogue, 2002-2003, p. 4).

The Bardy and Payne (1999) education mission statement is also moot to the faculty in the Department of Communication Arts. It is difficult for many people to see, hear, and comprehend how arational/integral beings communicate through differing consciousness structures and thus how we educate ourselves and others.

Chapter 1 of the dissertation points out, "In much of Dewey's writing, he defines education as communication. Education needs to establish shared meaningful experiences for both sender and receiver, teacher and student" (p. 11). This sentient being maintains that there is hope for humankind to change and shift consciousness frameworks, at least a few at a time. We need to stop being tricked (manipulated) to stay in the box and following communicating via the same mental rational boxes of consciousness. The question remains is, *how long will a shift in consciousness take where individuals process content and information through the eight levels of communication, working within themselves and in groups from an arational/integral aperspectival approach when and while communicating and thus in educating?* Centuries? Another millennium? Let's start with a look at mass media programs of the last decade which raise the idea of consciousness and sentience.

<u>Prime Time Television and Consciousness</u>

Flipping through the cable television channels the other day, I noticed the character of Lieutenant Commander Data, from the Starship Enterprise, on *Star Trek: The Next Generation* (Braga, 1992) was reciting his own poetry in the beginning of the episode entitled, "Schisms."

ODE TO SPOT by Commander Data

Felis Catus is your taxonomic nomenclature,
An endothermic, quadruped carnivorous by nature.
Your visual, olfactory and auditory senses
Contribute to your hunting skills and natural defences.
I find myself intrigued by your sub-vocal oscillations,
A singular development of cat communications
That obviates your basic hedonistic predilection
For a rhythmic stroking of your fur to demonstrate affection.

A tail is quite essential for your acrobatic talents:
You would not be so agile if you lacked its counter-balance.
And when not being utilized to aid in locomotion
It often serves to illustrate the state of your emotion.
Oh Spot, the complex levels of behavior you display
Connote a fairly well-developed cognitive array,
And though you are not sentient, Spot, and do not comprehend
I none-the-less consider you a true and valued friend.

As fingers hovered over the remote control, Lieutenant Data recited, "Ode to Spot" in honor of his pet cat Spot. In the course of the poem, Data referred to Spot as not being a sentient being. Data, in dialogue, spoke, though, of the consciousness of Spot.

Fingers won out and the next television passage and program watched was *Northern Exposure* (Hall, 1993). The episode entitled "Rosebud" dealt with the possibilities of one person having another person's dream. Several main characters were having other characters' dreams. The playlet interwove quotes from Carl Jung, Sigmund Freud, Carl Rogers, and explored the consciousness of the unconscious and collective consciousness.

These two programs: *Star Trek: The Next Generation*, airing from 1987 to 1994, and *Northern Exposure*, airing from 1990 to 1995, seemed to be the only two main stream "networked" programs which addressed the communication of consciousness in sentient beings during the early late 1980s and 1990s according to this researcher. Prior to these two television programs the words *sentient* or *consciousness* probably had not been interwoven into story lines by scriptwriters. Some viewers had to dust off a dictionary to define words such as sentient.

Lieutenant Commander Data, an android, using his positronic brain, would define *sentient* as, "Adjective, having sense perception; conscious; experiencing feeling or

sensation. Noun, a sentient person or thing. The mind. Defining the word sentience. Quality or state of being sentient; consciousness. Feeling as distinguished from perception or thought" (Guralnik, 1974, p. 1297).

Gebser Defines Consciousness

From the android Data to the humanoid Algis Mickunas (1973) in his academic paper for Ohio University, "Jean Gebser and the Comparative Study of Civilizations" the term consciousness is examined.

> The term 'consciousness' does not mean some inherent characteristic in human physiology, psychology or other such metaphysical notion or some universal mind developing itself through nature and history ala Hegal; consciousness rather consists of concrete structures given in various modalities of expression, s.a. linguistic, religious, social, artistic, architectural etc. (p. 2)

Michael Purdy (1990) of Governors State University, University Park, Illinois, writes in his academic paper, "Consciousness Structures and Communication: Oral, Literate, or What?" the following: "The study of consciousness is the study of the way we conceive of reality, but more it provides and [sic] understanding of the way we structure all of our experience whether conceived to be real or otherwise" (p. 4).

Helen Keller and Individual Consciousness Mutations

Two major sets of questions came to mind while reading Purdy's academic paper, "Consciousness structures and communication: Oral, Literate, or What?" The first set of questions focuses in on one individual. The questions are: "I want to know what Helen Keller would have to say about intrapersonal communication, the listening self, the linear processes of a mental rational consciousness; and as a young girl, how her thought processes might compare to the thought processes after she learned to sign, bringing into

her world a linear sense. What changes took place within her own mind and thinking patterns as she matured? What would Helen Keller have to say about Jean Gebser's work on consciousness? Would she consider herself a born integral thinker/communicator/educator? How did linguistic sign language speech and hearing shape her or change her consciousness outlook?

The second set of questions is more general for individuals. Are individuals born with an integral structure and through enculturation do they either develop towards an integral consciousness or develop a mental rational consciousness? Can individuals truly learn integral thought processes and grow (mutate) out of mental rational consciousness? Can individuals who are totally immersed in mental rational consciousness be able to understand an integral consciousness? With maturation, is understanding and integrating integral consciousness easier and more accepted to the intrapersonal self? How can, in one family--The Bardy's--there be nine siblings who fall all along the continuum of mental rational and arational/integral consciousness structures? Do family members bring their ancestral genetic coding to the communication table as well? Because the Bardy family can trace their roots to Transylvania, Romania; Vienna, Austria; Hungary, Ireland, England, The Netherlands, The Cherokee Nation, and France can (do) these places and consciousness roots act as consciousness contact lenses when we communicate? Do the experiences of living in Abha and Dhahran, Saudi Arabia; Istanbul and Antalya, Turkey; Germany; The Netherlands; Chicago, Illinois; Epworth, Iowa; Hazel Green, Wisconsin, among others, have a bearing on how I personally communicate and educate?

Beginning with the first set of questions about Helen Keller which arose during reading Purdy's (1990) academic paper, this writer can only speculate on some of the answers to the inquiries. From, "The Origin of Consciousness, Gains and Losses: Walker Percy vs. Julian Jaynes" Laura Mooneyham (1993) of Trinity University writes,

> Percy, too understands consciousness as a product of language. In his *The Message in the Bottle*, Percy describes how his obsession to understand the human existential and linguistic predicament returned him repeatedly to the figure of Helen Keller as a child, joining in her mind the cold liquid pouring on her one hand with the letters signed to her by Annie Sullivan on her other, joining them and knowing that water is "water": "For a long time I had believed and I still believe that if one had an inkling of what happened in the well-house in Alabama in the space of a few minutes, one would know more about the *phenomenon* of language and about man himself than is contained in all the works of behaviorists, linguists, and German philosophers" (Percy, 1975, pp. 35-36). What has happened, according to Percy's recasting of the American linguist Pierce, is the delta phenomenon: an irreducible triad of self, object, and sign, a metaphysical leap into symbol-mongering. Curiously, like Jaynes, Percy seems to believe that language does not immediately lead self-consciousness. Helen, like the unfallen Adam in the garden, spends her first day with language in an exuberant round of naming; only several weeks later do abstract and metaphorical thoughts begin. In the *Story of My Life*, Helen recalls how puzzled she was by the word "love." Miss Sullivan tells Helen that "love" is in her heart, and though Helen is aware for the first time of her own heartbeats, she cannot read her teacher's meaning: "her words puzzled me very much because I did not then understand anything unless I touched it." But two days later, when Helen is laboring at a sorting exercise with different shaped beads, Miss Sullivan touches her forehead and spells "think" – "In a flash I knew that the word was the name of the process that was going on in my head. This was my first conscious perception of an abstract idea." A moment later, and Helen has come to an understanding of that first abstraction that had eluded her, "love": "the beautiful truth burst upon my mind – I felt that there were invisible lines stretched between my spirit and the spirits of others. (as quoted from Keller, 1954, pp. 30-31; 171)

Microcephalic Individuals

The previous quoted passage provides brief insights into the answers about Helen Keller's mind and spirit sense. As this piece is being written, questions of individuals who are born with inutero stunted brain growth, also known as microcephalic brain

deformity where the skull does not form, expand, and grow properly by not enlarging,

thus failing to expand, come to mind. What is their consciousness structure like? What

is their intrapersonal communication like? How do these special individuals

communicate within themselves without linguistic and mental rational programming

models? How do these individuals learn? How do they communicate? Is/Was their

tabernacle dwarfed as well? Has anyone seen a microcephalic person not projecting

happiness or contentment as their usual self? In the case of the microcephalic child,

Alison Biskup (personal communication, 1986-2004), how did her physical, emotional,

and consciousness life unfold? How did consciousness, communication, education, and

technology delivery learning systems come together for her?

A January 13, 2004, press release from the Howard Hughes Medical Institute

(2004) headlines, "Gene may be key to evolution of larger human brain."

> "People have studied the evolution of the brain for a long time, but they have traditionally focused on the comparative anatomy and physiology of brain evolution," said Lahn of the Howard Hughes Medical Institute (HHMI) at the University of Chicago. "I would venture, however, that there really hasn't been any convincing evidence until now of any gene whose changes might have contributed to the evolution of the brain." (p. 1)

> In this study, the researchers focused on a gene called the Abnormal Spindle-Like Microcephaly Associated (ASPM) gene. Loss of function of the ASPM gene is linked to human microcephaly – a severe reduction in the size of the cerebral cortex, the part of the brain responsible for planning, abstract reasoning and other higher brain function. The discovery of this association by HHMI investigator Christopher A. Walsh and colleagues at Beth Israel Deaconess Medical Center is what prompted Lahn to launch an evolutionary study of the gene. (p. 1)

The following six pages (pp. 72-77) define more thoroughly the symptoms of

microcephaly, and provide the reader with a synopsis and timeline of five published

scientific articles which document and discuss the most up-to-date findings of the

Abnormal Spindle-Like Microcephaly (ASPM) gene and its link to hominid man,

evolutionary man, and modern super skull man.

<u>Background on Microcephaly: Symptoms</u>

> Infants with microcephaly are born with either a normal or reduced head size. Subsequently, the head fails to grow while the face continues to develop at a normal rate, producing a child with a small head, a large face, a receding forehead, and a loose, often wrinkled scalp. As the child grows older, the smallness of the skull becomes more obvious, although the entire body also is often underweight and dwarfed. Development of motor functions and speech may be delayed. Hyperactivity and mental retardation are common occurrences, although the degree of each varies. Convulsions may also occur. Motor ability varies, ranging from clumsiness to spastic quadriplegia. (CureResearch, n.d.)

<u>Finding the Missing Gene Connecting Hominid Brain to Super Skull Humans:
Following an Online "Microcephaly" Literature Review Trail–A Time Line</u>

The September 23, 2002 issue of *Science Now*, in the article, "Small Brains

Hint at Human History," Bohannon writes:

> Big brains gave humans an evolutionary edge, but how did they grow so big? An important clue may come, ironically, from a gene that has been found to stunt the cerebral cortex in people with *microcephaly*. (p. 1)

> A team led by biologist Geoffrey Woods of the University of Leeds, U.K., found the brain-shrinking gene, called ASPM, by sequencing the DNA of people afflicted with primary microcephaly, a familial disease that stunts the growth of the cerebral cortex during development. The researchers discovered that in microcephalic people, chunks of the protein encoded by ASPM are missing because of mutations in the gene. To determine where in the body ASPM is active, they screened different fetal tissues and found the gene expressed in the progenitor cells that produce cerebral cortex neurons. (p. 1)

> Previous work with fruit flies suggests how the gene might influence brain size. The fruit fly version of ASPM organizes the spindle fibers that separate chromosome pairs into the two halves of dividing neuronal progenitor cells. The orientation of these fibers determines how many neurons a progenitor cell will produce, and the more neurons produced, the larger the brain. Humans with microcephaly probably have fewer cortical neurons because mutant ASPM disrupts cell division in the progenitor, says Christopher Walsh, a neurobiologist at Harvard University and co-author of the new study....However, says Walsh,

there are also clues that ASPM is part of a bigger evolutionary story. Searching through genetic databases, the team found similar versions of ASPM in other animals – such as mice and nematode worms – and intriguingly, the ASPM protein was larger in species with proportionally larger brains. Woods believes this suggests that jumps in brain size may have coincided with mutations in ASPM that led to more proliferation among progenitor cells and boosted brain size. (pp. 1-2)

What is exciting about the effect of mutated ASPM, says Andre Goffinet, a neurobiologist at the University of Namur Medical School, Belgium, is that the brain is only smaller, not more primitive-looking, suggesting that changes in ASPM could indeed have scaled up the human brain during evolution. To test this idea, says Walsh, the team is now trying to move the human ASPM gene into a mouse to see if it will grow a bigger brain. (p. 2)

The October 2002 issue of *Nature Genetics*, in the abstract for the article,

"ASPM is a Major Determinant of Cerebral Cortical Size," Bond et al. write,

One of the most notable trends in mammalian evolution is the massive increase in size of the cerebral cortex, especially in primates. Humans with autosomal recessive primary microcephaly (MCPH) show a small but otherwise grossly normal cerebral cortex associated with mild to moderate mental retardation. Genes linked to this condition offer potential insights into the development and evolution of the cerebral cortex. Here we show that the most common cause of MCPH is homozygous mutation of ASPM, the human ortholog of the Drosophila melanogaster abnormal spindle gene (asp), which is essential for normal mitotic spindle function in embryonic neuroblasts. The mouse gene Aspm is expressed specifically in the primary sites of prenatal cerebral cortical neurogensis. Notably, the predicted ASPM proteins encode systematically larger numbers of repeated 'IQ' domains between flies, mice and humans, with the predominant difference between Aspm and ASPM being a single large insertion coding for IQ domains. Our results and evolutionary considerations suggest that brain size is controlled in part through modulation of mitotic spindle activity in neuronal progenitor cells. (p. 1)

The November 16, 2002 issue of *Science News*, in the article, "Sizing up the Brain," Travis writes about the discussion of research into mutations that produce small brains and how they may reveal the evolution of human intelligence.

Microcephaly is a rare condition characterized by an abnormally small head, the result of an undersized brain. In particular, the cerebral cortex-the layers of nerve

cells that cover the brain's surface and are the seat of higher reasoning-is shrunken. "The cerebral cortex is the part of the brain that, for better or worse, makes us human," notes Christopher A. Walsh, a Howard Hughes Medical Institute (HHM) investigator at Harvard Medical School in Boston. "Children who have abnormal development of the cerebral cortex fail to achieve the kind of talents we pride ourselves on, such as language." (p. 2)

...Moreover, by pinpointing genes that seem to regulate the size of the cerebral cortex, the scientists have set the stage for studies into what genetic changes produced the rapid expansion of the cerebral cortex as primates, including humans, evolved....(p. 2)

Brain's black box containing billions of nerve cells, the cerebral cortex is the largest structure of the human brain. Essentially a flat sheet not much thicker than an orange peel, the cortex folds and refolds into the familiar deep creases of the brain's surface. The cerebral cortex varies in size dramatically among species. It "mostly grows by becoming a larger sheet rather than a thicker sheet," says Walsh. (p. 2)

The human cortical surface area is about 1,000 times greater than that of the mouse, for example. And compared with the cortex of the chimpanzee, our closest living relative, the human cerebral cortex has three to four times more surface area. Some scientists attribute the greater intelligence of modern humans to the rapid expansion of the cerebral cortex as hominids evolved. (p. 3)

In microcephaly, the cerebral cortex grows unusually slowly and reaches a size no bigger than that of early hominids. Various circumstances, such as prenatal infections or a mother alcohol abuse, can produce microcephaly, but they usually also generate other physical abnormalities. In so-called primary microcephaly, the small brain and head are the only obvious defects. The brain's basic architecture is preserved, albeit in a smaller form. In such cases, the child or adult is mentally retarded but has no other apparent neurological problems such as seizures. (p. 3)

Author Bardy notes that Alison Biskup (personal communication, 1986-2004) had seizure onset at about eight years old; and gradually the seizure time increased from two minutes to two-and three-month long periods, the last being December 2003-February 2004. *Long* being defined as continuous, with continuous interruption of "normal" Ali consciousness. However, surprising everyone, she woke up at Loyola Hospital in

Maywood, Illinois, early one morning, March 1, 2004, back to her old self of laughing

and giggling and jerking. She returned to school and family life routine by March 3; for

one month the routines of attending school and being with her mother Susan, older sister

Carrie, and two older brothers David and Jonathan were a much-needed welcome.

Suddenly on Friday, April 2, 2004, Alison Claire Biskup died quickly, succumbing to a

blood coagulation disorder. Travis (2002) continues,

> Primary microcephaly typically occurs when a mother and father each pass on a
> mutated copy of a gene that controls brain size. Since among the families that
> migrated to England from Mirpur (Pakistan), cousins often married each other, so
> the chances that a baby would have two mutated copies of a gene increased....(p.
> 3)

> ...In the July *American Journal of Human Genetics*, Jackson, Woods, and their
> colleagues report finding mutations in a novel gene in affected family members
> but not in unaffected ones. They named the gene microcephalin and, by studying
> human and mouse fetal tissue, showed that the gene is active in the cerebral
> cortex as it develops before birth....(p. 3)

> A much more provocative story has emerged from the second reported
> identification of a gene for primary microcephaly. It's the human version of a
> gene called asp, which stands for abnormal spindle. Originally studied in fruit
> flies, this gene encodes a protein associated with cell division. When a cell
> divides, two networks of fibers form, each one pulling a set of chromosomes into
> one of the two daughter cells. In flies with asp mutations, these networks, called
> spindles, don't work as well as normal, and the overall rate of cell division is
> lowered....(p. 3)

> When comparing the fly, worm, mouse, and human versions of asp, the
> researchers noticed something remarkable. The proteins encoded by each gene
> have multiple copies of a stretch of amino acids called an IQ domain--the name
> derives from the scientific notation for two amino acids, isoleucine (I) and
> glutamine (Q), present in the domain. The number of IQ domains in the protein
> differs considerably from one species to the next. The worm, fly, mouse, and
> human proteins have 2, 24, 61, and 74 IQ domains, respectively....(p. 3)

> To examine the evolutionary questions surrounding the microcephaly gene, the
> investigators intend to deactivate the mouse version and see whether that
> produces animals with small brains. They may also replace the mouse version

with the human gene and observe whether big-brained rodents result. (p. 4) (A TV Movie of the Week; see, you can make money from academics.)

Furthermore, Woods and Walsh have started to sequence the asp gene in chimpanzees. "If they have exactly the same gene as us, then, while it's clearly important for brain development, it isn't the step that has made our brain three times bigger than higher primates," says Woods. (p. 4)

Bruce Lahn, an HHMI investigator at the University of Chicago, is looking for genes that drove human-brain evolution. He agrees that the newly identified microcephaly genes cry out for further study....(p. 4)

"Very little, if anything, is known about the genetic basis of brain evolution. It's a complete blank slate," he says. "It's not too far out to speculate that evolution may have played on these genes to select for a larger brain. The caveat is that there are many such genes. It takes thousands, if not tens of thousands, for the brain to develop properly." (p. 4)

The December 2003 issue of *Genetics*, in the abstract for the article, "Evolution of the Human ASPM Gene, a Major Determinant of Brain Size," Zhang, from the Department of Ecology and Evolutionary Biology, University of Michigan writes,

The size of human brain tripled over a period of 2 million years (MY) that ended 0.2-0.4 MY ago. This evolutionary expansion is believed to be important to the emergence of human language and other high-order cognitive functions, yet its genetic basis remains unknown. An evolutionary analysis of genes controlling brain development may shed light on it. ASPM (abnormal spindle-like microcephaly associated) is one of such genes, as nonsense mutations lead to primary microcephaly, a human disease characterized by a 70% reduction in brain size. Here I provide evidence suggesting that human ASPM went through an episode of accelerated sequence evolution by positive Darwinian selection after the split of humans and chimpanzees but before the separation of modern non-Africans from Africans. Because positive selection acts on a gene only when the gene function is altered and the organismal fitness is increased, my results suggest that adaptive functional modifications occurred in human ASPM and that it may be a major genetic component underlying the evolution of the human brain. (p. 1)

The December 16, 2003 issue of *Science Now*, in the article, "Big-Brain Gene?" Balterm writes,

We humans are proud of our big noggins. The average human skull, which packs some 1350 cubic centimeters (cc) of brainpower, is larger than that of any other animal, relative to body size. Now a molecular biologist suggests that a recently identified gene called ASPM might be implicated in the impressive hominid brains have undergone over the last 2 million years. (p. 1)

The work builds on studies of a rare disease called autosomal recessive primary microcephaly (MCPH). In this inherited malady, the brain is typically just 400 cc – roughly the same size as that of the early hominid Australopithecus africanus, of which "Lucy" is the best-known specimen. A [sic] earlier report concluded that the most common cause is a mutated ASPM gene. (p. 1)

Jianzhi Zhang of the University of Michigan, Ann Arbor, hypothesized that ASPM might have played a key role in human brain expansion. To test this hypothesis, he looked for evidence that the gene was under "positive selection," meaning that it had provided an evolutionary advantage to hominids. Zhang compared the DNZ nucleotide sequence of the human version of ASPM to that of two of our great ape cousins, the chimpanzee and the orangutan, as well to more distantly related animals such as rhesus monkeys, seals, dogs, and hamsters. A gene is considered to have undergone positive selection when it has a relatively high ratio of nucleotide changes that lead to a change in the amino acid sequence of the corresponding protein, compared to changes that make no difference. This ratio was quite high in humans but much lower in chimpanzees and orangutans, Zhang reports in the December issue of Genetics. (p. 1)

Experts say this is strong evidence that ASPM could have contributed to human brain expansion. (p. 1)

Microcephaly and Consciousness

All of this matters since we are looking at the development of human

consciousness via Gebser (1986) mutations (archaic, magical, mythical, mental rational,

arational/integral) and consciousness communication modalities of delivery and

receiving. The literature review of microcephaly provides parallel questions concerning

sentience and soul and each person's tabernacle. Did some of us human beings and our

ancestry line become sentient and soulful before other hominids? Looking at Alison

Biskup, who had a rare case of extreme microcephaly, we ask, how were her messages sent? Meanings are in people not in words.

With the earthly death of Alison Biskup on April 4, 2004, more questions surface in relation to intuition as a functional form of communication and education, the role intuition plays in our lives, and its connection to archaic and magical consciousness structures in hominid man and super skull man. As Alison had no linguistic skills, caretakers and others relied heavily on consciousness communication and intuit levels of communication to convey and receive messages. Using the inter-informational level of communication, where technology and intrapersonal communication work together to build a body of knowledge, the following unfolds.

The Spirit of Alison C. Biskup Within Daniel J. K. Bardy

Sitting in the Loras College Library on Easter Monday, April 12, 2004, for four hours, Ali Biskup was full of questions. "What happened to me? Why was I born like this? So what was the problem? Have scientists learned anything from this condition? I had a hominid brain; how did my mother, father, sister and brothers develop their brains?"

Let's Ask Jeeves, "What is microcephaly?" Then cross reference microcephaly, consciousness, communication, and education. What does Expanded Academic Search say when you cross-reference these search parameters? As a college freshman in 2006, Ali needed to get up to speed on inter-informational communication without technostress.

A second aim of this dissertation was to find answers to the above questions. Microcephaly is a malady which has an abnormality in the gene coding system

preventing the elasticity and ability of the human skull to expand, as we would consider "normal" expansion. As termed by researcher Bardy, the modern human skull is known as a super skull. The ASPM gene is seen as a missing link and one gene of several genes responsible for moving hominids with small skulls to super skulls, which enabled evolutionary human beings to grow bigger brains, which then developed higher order thinking, critical thinking, reasoning, and linguistic capabilities.

By studying Alison Biskup and microcephaly, I have discovered indeed that by studying children with microcephaly, scientists have traced questions of consciousness as well. The discovery of the ASPM gene is reported in *Science News* on November 16, 2002. Scientists were very near the discovery of the gene responsible for super skulls to thrive and grow. *Genetics* in December 2003 reports scientists have found the gene and identified it as ASPM.

Now that foundation has been laid concerning physical aspects of man's skull mutations, the discussion turns to consciousness and explication of the concept in the literature, begging the questions: "Alison Biskup lived for seventeen + years in an archaic and magical consciousness; yet was surrounded by mental rational and arational/integral communications—did ancient hominids' consciousness souls communicate intuitively, telepathically, and have clairaudience and teleaudience delivery systems? Were hominid peoples generally good spirited?"

Alison Claire Biskup–December 3, 1986–April 4, 2004

Bardy (1994) shares the following narrative section which has traces and beginnings from June 1994 while author Bardy was completing M.A. written work in

communication theory in Communication Studies at Governors State University, University Park, Illinois. Author Bardy feels a present tense voice needs to be maintained in the first one-half of this chapter section. The latter half was updated on April 30, 2004.

Alison Biskup (personal communication, 1986-2004) is a seventeen-year-old girl whom I have known since her birth on December 3, 1986. Chronologically, Alison is seventeen. However, she is someone who is unable to walk, talk, and feed herself among other personal care independencies. She can see. She can hear. Alison does go to school each day when she is healthy enough to attend. She can make connections. Watching her carefully over the years, Alison has developed in slow increments. She recognizes and acknowledges others. She has developed her abilities to comprehend and to listen and to participate within a group by laughing and scooting on the floor where she sits or jerking her entire body back and forth while in her specialized chairs. Unfortunately, lucid speech for Alison is something that will not happen in either of our lifetimes.

Almost losing her in 2001 and again in late 2003, after severe reactions to changes in medication, there was a time when her mother, Susan Biskup (personal communication, November 25, 2001), said to me, "Her consciousness sense was at the point where neither of us knew if she would ever come back." Four months in the doing in 2001, Alison did come back to laugh and to scoot and to jerk back and forth. Where indeed did her consciousness go for that period of time? And today in January 2004, Alison is more and more frequently escaping into days and days of petite mals and extended seizures where her consciousness goes to other places for twenty to thirty

minutes at a time, frequently throughout the day, and for all of January 2004. The University of Chicago Hospital doctors looked, tested, examined, MRIed, and after weeks sent Alison back home saying, "We do not know what to do."

Problems with a feeding tube, reactions to different medications, and an always fatal blood coagulation onset, sent Ali back to another hospital and after several weeks nothing less than a miracle happened. Suddenly one morning in early March 2004 Alison woke up, near to her old self. She was laughing so wonderfully that one of her attending physicians at Loyola Children's Hospital in Maywood, Illinois joyously laughed with her. So Alison went home the next day. Ali's mother Susan asked the physician how this turn around could have played out, as Susan was told days prior, "…that time was at hand for the end." So near the end in fact, that feeding tubes had been removed. The attending physician responded to Susan Biskup's question, "Ali must have seen the light and decided that she wasn't ready yet" (personal communication April 6, 2004). At Alison's wake held in our home town of LaGrange, Illinois, Susan Biskup (personal communication, April 6, 2004) said to me that, "The doctor did believe in near death experience and that Ali wanted to be with family one more time and be remembered as a happy and loving little girl."

> Educating and Communicating with Alison Claire Biskup: Written by Alison's Older Sister Caroline and Older Brothers David and Jonathan, as Spoken by Caroline Biskup on April 7, 2004–Eulogy for Ali

April 7, 2004

I will never forget the day Ali was born. My dad came home from the hospital, woke me up and whispered in my ear that I finally had a sister. I looked at him and said "No, I don't!" I had just been having a very vivid dream that my mom had another boy. Luckily, I was wrong and it turned out Ali started surprising me

early in her life and as the years went on the surprises kept coming. Ali has always been an example of pure happiness. The joy of her brothers walking into the room or her grandmas coming for a visit was always apparent through her big smile and the roar of her laughter. Even on our toughest days she always showed us that it really wasn't that bad. She was just happy to see a familiar face walk through the door. It was impossible to be in Ali's presence and not smile back. As she got older and started school, when the rest of us were trying to think of ways to avoid going, she started laughing before the bus even came to a complete stop in front of our house. Just the word *school* brought a smile to her face. She was a constant reminder that things aren't always what they seem. One memory that sticks out in our minds was the day Ali sat up on her own for the first time. What we thought would be an average day at the Biskup household turned into an extraordinary one. As we all did our own thing while keeping an eye on our sister who was lying nearby on the floor, my mom walked into the room and asked which one of us sat Ali up? We all looked at each other and shrugged and in unison said, "It wasn't me." My mom, of course, thought we were goofing around with her and said, "No, really, who did it?" We were adamant that we had not touched her. So, we laid her back down and watched and sure enough she popped right back into a sitting position all by herself. From that point on we never knew what Ali had up her sleeve. Expect the unexpected.

Throughout her life her family, her doctors and her teachers were always amazed by their inability to predict what tomorrow may bring. This was never truer than last February when we all spent a week preparing to say good-bye to her and then she woke up with the biggest, brightest smile we had ever seen. Miracles do exist. For someone who couldn't say that she loved us, no one expressed it more. This love sparkled brightest when her mom was in the room. If I ever was taught the meaning of love it was from the two of them. It goes without saying that love was the greatest gift Ali gave to us. Sitting next to her always meant a back rub or a hand to hold. Davy and Jonny always had a captive audience for hours of video games. Our dad had a willing companion to countless baseball card shows, our mom had someone to watch reruns of *Bonanza* with and I was just glad to have a little sister. Whether it was playing ball on the floor, going for a walk, pulling her brothers' hair or waiting for the school bus, she taught us that you don't have to look deep to find happiness. The gift of Ali in our lives is one that can never be replaced or forgotten. We couldn't have asked for a better sister, daughter, granddaughter, niece or friend.

Now Ali and her dad are back together again. They will always be in our minds and hearts. And we will always love them. (C. Biskup, Biskup, Biskup, 2004)

Consciousness Mutation

Some questions are repeated. Some questions are rephrased. And more questions arise. 1) Are individuals born with an integral structure, and through enculturation do they maintain an integral "voice" or do they slide into the mental rational? 2) Can individuals truly "learn" integral consciousness thought processes and transcend from mental rationalism? 3) Is the seed of integral consciousness in each person in each culture? 4) Can individuals who are presently totally immersed in mental rational consciousness be able to understand an integral consciousness? 5) With maturation, is understanding integral consciousness easier and more accepted? 6) How can, in one family - The Bardy's - there be nine siblings who fall all along the continuum of consciousness?

Turning to Purdy (1990) for some insight in answering these questions he writes:

The current predominance of the rational makes the emergence of the integral tentative.... As Jean Gebser says none of these antecedent structures of consciousness ever reaches an end. Previous modes of consciousness are not historical relics, rather each is very much "Alive" and operative now (Feuerstein p. 9). Each of us still moves and expresses ourselves in magical and mythical ways....Furthermore, as Feuerstein explains: "just as the unborn in utero recapitulates the phylogenesis at least in principle, so the growing individual traverses the ancestral structures of consciousness, gradually adding them to his or her repertoire of responsiveness to self and world" (54). Or as Walter Ong explains, the child of today probably passes through a stage something like that of the old oral culture....But the stage is only something like the old, for it remains a child's stage and cannot be protracted into adulthood. The old oral work was not a world of children but of adults, who had children of their own. (p. 9-10)

Feuerstein, Litt, and Behnke (1987) in the article, "Jean Gebser–The Man and His Work," refer to the transition from one structure of consciousness to the next as a mutation. "The only major theoretical conclusion that Gebser's correlation of various

civilizational phenomena has suggested is that consciousness-structures do not develop linearly but undergo mutations" (p. 1). The writers elaborate on what they mean by mutation.

<div align="center">Verition for Gebser and Steiner</div>

> Each structure or "mutation" of consciousness is the apparently sudden actualization of latent possibilities that were present from the beginning. With each new transmutation the origin itself – which is prior to all the structures of consciousness – becomes more transparent. Only in the arational/integral consciousness, however is the origin directly apprehended or "awarded." For Gebser, this apprehension ("verition") is of the utmost significance. Indeed, it constitutes the spiritual message of his life's work. (Feuerstein, Litt, and Behnke, 1987, p. 1-2)

Verition, meaning truth, "constitutes the spiritual message of his life's work." As Bardy (2000) states, "The seeking of truths and the attainment of knowledge are universal questions for educational theorists: what is done and how it is done. What content is to be covered and how will the methodology uncover the truths of the content? How do we incorporate curriculum which vibrates through the sentience and right mindfulness of the human spirit?" (p. 4). In addition to Gebser, Steiner, philosopher, educator, and founder of Anthroposophy and Waldorf education is in true alignment with Gebser's ideologies and with Bardy's view that the mind is the tabernacle of the consciousness soul.

In Steiner's (1928) view, this essential being is neither product of inheritance nor the environment; it is a manifestation of the spirit. "The ground on which it walks and into which it sinks its roots is the intelligence that has ripened out of the matrix of will and feeling into clear, experienced thought" (Barnes, 1999, p. 5).

Neither "inheritance nor the environment" or the "nature vs. nurture" duality of mental rational consciousness is broken under Steiner, for he makes reasoned arguments

for the manifestation of the spirit to be a guiding force in one's own development. The manifestation of the spirit begins with our own intrapersonal communication, comprised of intuition, emotion, and linguistic processes.

Learning Integral Consciousness

Learning about an integral consciousness and learning to use an integral consciousness can be related to learning a second language. Turning to *Culture Bound* by Valdes (1986) to help with this analogy, she writes:

> Guiora has described the process of developing a second language identity as that of essentially adding on another personality. The experience of anyone who has come close to mastering a second language surely supports that notion. There inevitably comes a time when learners become aware of their new personas in the new language, when instead of just "acting French," for example, they start to "be French" unconsciously, at least occasionally, perhaps doing things they would never think of doing in their native aura. (p. 28)

Integral consciousness is a concept which can be learned if the learner is open and aware of the depths of the development of the previous consciousnesses, and acculturation of an integral consciousness is possible. Bardy (1994) writes, "Like the language learner going through what William R. Acton and Judith Walker de Felix, linguists from the University of Houston, have outlined as the four stages of language learning: Tourist, Survivor, Immigrant and Citizen, (Valdes, 1986) so does this integral thinker communicator" (p. 13).

Returning to Final Discussions with
Dewey and Democracy and Education, 1917

Dewey (1917) writes: "While methods are individualized, certain features of the normal course of an experience to its fruition may be discriminated, because of the fund of wisdom derived from prior experiences and because of general similarities in the

materials dealt with from time to time" (p. 211). I find the similarities to the tree of consciousness analogy theory I teach to reflect Dewey's above words. The universal state of being known as consciousness is our listening selves: and the message being sent always vibrates off of our roots, sending signals continuously throughout our body and mind to decipher all of our channels' information simultaneously. Or does Dewey have another interpretation?

I agree with Dewey (1917) later on and feel the following is also the nature of teaching. "Expressed in terms of the attitude of the individual the traits of good method are straightforwardness, flexible intellectual interest or open-minded will to learn, integrity of purpose, and acceptance of responsibility for the consequences of one's activity including thought" (p. 211).

I think that the current discussions in education are how, after a century or more of empty vessels, learners need much more contextual learning activities. Yet mandated test scores reign, pulling on the "reins" of instruction to keep subject matter delivery systems "taut." The industrialization of communities is also imposed on many of our schools because schools followed an industrial model which more or less followed a military model of training. Dewey (1917) mentions in the summary of Chapter 14, "The nature of subject matter" that teachers need to be wary of isolated information packets of knowledge. "Especially is the educator exposed to the temptation to conceive his task in terms of the pupil's ability to appropriate and reproduce the subject matter in set statements, irrespective of its organization into his activities as a developing social member" (p. 227).

The very end of the summary of Chapter 14 seems very reflective of European educational systems. Dewey (1917) states: "The positive principle is maintained when the young begin with active occupations having a social origin and use, and proceed to a scientific insight in the materials and laws involved, through assimilating into their more direct experience the ideas and facts communicated by others who have had a larger experience" (p. 227).

Time and time again the issues facing higher education are keeping a liberal arts tradition vs. the practical skills of preparing individuals for the work force. Repeatedly mentioned in class by Professor Reppas (2000) of the University of Northern Iowa and me is the need for a balance of practical and theoretical frameworks in the nature of teaching. "Skill and information about materials, tools, and laws of energy are acquired while activities are carried on for their own sake. The fact that they are socially representative gives a quality to the skill and knowledge gained which makes them transferable to out-of-school situations" (p. 241).

The author Studs Terkel (1974) decades ago wrote in his novel *Working* that work for him was his play and that was truly rewarding for him. He encouraged individuals to seek work which could serve as play. Dewey's (1917) final thought in Chapter 15, "Play and Work in the Curriculum": "Work which remains permeated with the play attitude is art – in quality if not in conventional designation" (p. 242). I feel fortunate that most of the time my work is my play, in spite of the "gag order" on consciousness discussions in my speech communication classroom imposed by fellow colleagues at Loras College. I feel sometimes that some of my work at University of Northern Iowa (UNI) is my play as

well, in spite of multiple references to "jumping through hoops" punctuated by one professor saying "like a Schnauzer" (personal communication, February 2, 2004). Many a night the two-hour drive home from UNI magically mutated away while this philosopher spun many threads of consciousness together, listening along to music and phone-ins with Delilah or rocking out to the musician Tarkan from Turkey.

The role of art and teaching is raised again, another question posed in philosophy of education by Professor Reppas (personal communication, November 16, 2000) of the University of Northern Iowa. Working through rewrites of this dissertation, time does dissolve away, and the clarity of consciousness voice stirs within me. Art and teaching are coming together here and now with each keystroke, art because many of these tinctures of thought are creative original manifestations of what is in "my mind's eye" and teaching because you as a reader audience is/are the participant(s) or receiver(s) on the other end, in hopes of being on the same page wavelength. Using the richness of acquired verbal and nonverbal vocabulary, rhetorical organizational planning, resolve at finding answers to the 355 plus question seeds (see Appendix A: Question Seeds Presented in the Dissertation) posed, sharing both in new knowledge presented in *The Mind Is the Tabernacle of the Consciousness Soul* and the process to form the linguistic, rule-ordered language-reflecting synthesis and evaluation of multiple metacommunication discourse is kind of fun, especially in the storytelling.

Dewey (1917) almost crystallizes the work and play theory, "In well-formed, smooth running functions of any sort–skating, conversing, hearing music, enjoying a landscape–there is no consciousness of separation of the method of the person and

subject matter. In whole-hearted play and work there is the same phenomenon" (p. 195).

I feel during these times that time is suspended and an individual is truly "in the moment"

of being.

Dewey (1917) presents that when play engagement of the activity stops, work

begins, which means shifting (kicking) consciousness structures of the individual into

mental rational habits of mind, readying the individual for the pouring of the magic liquid

elixir of information into their empty, yet already cluttered, tabernacle.

> They [educators] engage his activities, and in the process of engagement he
> learns: the same is true of the more successful methods in dealing with number or
> whatever. But when the subject matter is not used in carrying forward impulses
> and habits to significant results, it is just something to be learned. The pupil's
> attitude to it is just that of having to learn it. (p. 199)

Love the use of "whatever" in the above quotation, very mod. Learning is simply

changing behavior, creating and using habits, and using the force of consciousness drive

of intrapersonal mind's eye and third ear to create the reality of the moment at the

completion of the spiritual effort. "Celebrate the Moment" works so nicely as a tag line

for Kodak. Postdoctoral discussion of Dewey would be to see the effects of technology

on educational and communication delivery systems, from chalk to television to laptop

use: Are we bigger than our brains have or need to be? Why are we buying into the

notion that we have to be multi-tasking and communicating even during our daily

routines? In the year 2020 will we all be wearing an all-in-one headset with miniature

view screen, listening to music, receiving telephone calls while simultaneously watching

a favorite film and word processing a document via a handheld keypad? When will man

burst forth in a "'Supersized', Super Skull?" to compensate for the backlash and pitfalls

we have created under the information and entertainment explosion modality of mental rationalism?

<p align="center">Bringing Dualism, Democracy, and Dewey to a Close</p>

Reading John Dewey's *How We Think* (1910) and *Democracy In Education* (1917), I have been keeping track of several of his threads and theories including dualism, frames of mind in work and play attitudes, consciousness and communication frameworks, and learning and educational strategies. A key or specific thread exists in the summary of Chapter 16, "The Significance of Geography and History." Dewey (1917) rhetorizes and defines communication as,

> Any experience, however trivial in its first appearance, is capable of assuming an indefinite richness of significance by extending its range of perceived connections. Normal communication with others is the readiest way of effecting this development, for it links up the net results of the experience of the group and even the race with the immediate experience of the individual. By normal communication is meant that in which there is a joint interest, a common interest, so that one is eager to give and the other to take. (p. 255)

In most aspects the quote is the essential most front line baseline for sentient beings: having a cooperative tabernacle of mutual respect and harmony. I feel that other components such as innate intuition and instincts are also key components, which are in the essential first sensory perceptions a person moves through at any given moment.

Throughout Chapter 2 of the dissertation we have been discussing dualisms that are inherent in mental rational communication, education, and societies. The summary of Dewey (1917) Chapter 19 "Labor and Leisure" traces labor and leisure consciousness structures to the Greeks. "While the distinction is often thought to be intrinsic and absolute, it is really historical and social. It originated, so far as conscious formulation is

concerned, in Greece, and was based upon the fact that the truly human life was lived

only be a few who subsisted upon the results of the labor of others" (p. 305). If we

examine eastern lines of consciousness development, can the same be said? Repeating

from McDermott (2003) in "The Spiritual Mission of America": "…the West is a

tragedy brought on by the myth of progress and the disastrous effects of alienation,

technology, and gender imbalance" (p. 1).

> In relation to the ancient Greeks, Dewey (1917) continues,
>
> This fact affected the psychological doctrine of the relation of intelligence and
> desire, theory and practice. It was embodied in a political theory of a permanent
> division of human beings into those capable of a life of reason and hence having
> their own ends, and those capable only of desire and work, and needing to have
> their ends provided by others. The two distinctions, psychological and political,
> translated into educational terms, effected a division between a liberal education,
> having to do with the self-sufficing life of leisure devoted to knowing for its own
> sake, and a useful, practical training for mechanical occupations, devoid of
> intellectual and aesthetic content. (p. 305)

My questions are, "Do the financially affluent, physically strong, and the people

who were 'born' into the right classes continue to dominate the weak and ordinary? Do

they govern even how people are educated and who is educated? Who will serve the

aristocracy best? Who will best serve the proletariats' needs? Is Dewey correct about all

cultures for all people? Maybe, maybe not. Dewey's (1917) discussion focuses in on a

democratic society.

Problems seem inherent in education in a democracy, especially since its roots are

planted in the field of political manipulations by the Greeks; especially since their pre-

literate consciousness structures are imbedded in a mythical period of humankind

consciousness structures. Additionally, the people of that time had structures of the

magical construct and the archaic where no language was spoken, a follow-the-leader type thinking. Who were the leaders of those times, the physically strong? And where does group consciousness come into play? How far have modern humans advanced and those of American Society? How far have we as Americans removed ourselves from the ancient Greeks? Look to the Middle East for answers. People love us there.

Dewey (1917) and Bardy answer: You have to throw away the dualism. A true education and a true society of democracy mean that everyone works in order to have structured leisure. Our developing consciousness is infinitesimally moving towards an integral and arational state of being; but in the meantime, we, the common folk, are doing the best we can at reshaping the have and have-nots in education. "The problem of education in a democratic society is to do away with the dualism and to construct a course of studies which makes thought a guide of free practice for all and which makes leisure a reward of accepting responsibility for service, rather than a state of exemption from it" (Dewey, 1917, p. 305).

In some ways, would Dewey's concept be setting up a sort of dualism, people who work for the betterment of society on one side of the teeter-totter and on the other side the elite who still don't have to work? Yes, we still have that dualism of the "have" and the "have-nots"; yet humankind is continuing to grow individually and communally. We have the stored constructs to collectively work for the betterment of mankind and promote and foster individual intrinsic and group self-actualizations. If Alison C. Biskup and the Biskup family can do it, we all can.

CHAPTER 3

TECHNOLOGY AND HUMAN COMMUNICATION:

VOTIVE LIGHT FROM THE TABERNACLE

Introduction

Bardy and Payne (1999) state, "Socrates, without much use of technology, had

students continually ask and answer questions that he would pose or have students pose."

Much like sections in this dissertation. Feuerstein (n.d.) from the Jean Gebser Society

Web site writes,

> The Swiss philosopher and poet Jean Gebser belonged to that Socratic breed. He
> was a man of extraordinary vision who did not allow himself to be seduced by his
> learning, but intrepidly pushed beyond the boundaries of accepted truth. He
> likened modern philosophy to the 'picking apart of a rose.' His foundational
> work on the evolution of human consciousness and culture is among this
> century's finest contributions to our modern self-understanding. (p. 2)

In discussions of technology, deep consciousness is very much at the forefront of

problem solving by creating simple tools or complex technology systems to manage work

and leisure. Dewey, Gebser and Steiner all had similar philosophical stands on the uses

of technology. Simply put, "Do no harm."

Aim of the Chapter

The aim of Chapter 3 explores how consciousness, communication, education,

and technology connect and have connected over the spans of Gebser's modalities of

consciousness. Steiner's view on the double-edged sword of technology is presented:

Creating and bringing to fruition "mind's eye and third ear" with and without

technostress. The foundations of technology are established; an explication of Hickman's

(1994) article on John Dewey's philosophy of technology is provided; followed by

definitions of technostress, and a review of literature about technostress. Final discussion in the chapter examines possible answers to "Why" technostress, answers being embedded in the false sense of real time events portrayed on television. Finally, Bardy (1991) explores further his "inter-informational" level of communication.

<u>Laying Foundations of Technology</u>

What is technology? It is a tool, a tool to help or harm a being. It is a tool or instrument created by a being to help ease burdens, both physical and emotional well-being, or an instrument of destruction in order to annihilate one another. It is a means to an end. *The World Book Encyclopedia Volume 17 "T"* (1961) has these 109 words appear,

> Technology. We live today in an age which depends on technology. Technology means supplying the wants of mankind by means of tools and machinery, instead of doing everything by hand. It tells us how to make much out of little. And it tells us how to make many things which never could have been made by hand at all. (p. 62)

> Technology is sometimes called applied science. It is the link which connects science and invention with the stores, which sell what man needs or wants....Without technology, man would not have machines and tools to work for him, and life would be a continual struggle for the bare essentials of existence. (p. 62)

Webster's New World Dictionary (1974): "1. the science or study of the practical or industrial arts, applied sciences, etc. 2. the terms used in a science, art, etc.; technical terminology 3. applied science 4. a method process; etc. for handling a specific technical problem 5. the system by which a society provides its members with those things needed or desired" (p. 1460).

Webster's New Universal Unabridged Dictionary (1996) defines technology as,

1. the branch of knowledge that deals with the creation and use of technical means and their interrelation with life, society, and the environment, drawing upon subjects as industrial arts, engineering, applied science, and pure science.
2. the terminology of an art, science, etc.; technical nomenclature. 3. a technological process, invention, method, or the like. 4. the sum of the ways in which social groups provide themselves with the material objects of their civilization. [1605-15; < Gk *technologia* systematic treatment.]. (p. 1950)

Focusing in on technology hardware and software creation, distribution, subject content, application, use, evaluation, and financing in pre-kindergarten through higher educational institutions, the literature abounds. Fisher, Dwyer, Yocam (1996) chronicle the 1985 project Apple Classrooms of Tomorrow (ACOT) in their book *Education & Technology.* "And ACOT's duration was open-ended; not a two-week trial, not a one-semester foray, but a long-term commitment" (p. xiii). Fisher et al. (1996) tackle in Chapter 11, "Does Technology Work in Schools? Why Evaluation Cannot Tell the Full Story" written by Baker, Herman, and Gearhart.

Glennan and Melmed (1996) produced the RAND report publication, *Fostering the Use of Educational Technology: Elements of a National Strategy.* In the preface,

Since early 1992, at the direction of the president and vice president, federal officials have been exploring ways to encourage greater and more effective use of modern technology in the nation's schools....In 1994, the Goals 2000: Educate America Act directed the Secretary of the U.S. Department of Education to develop a national long-range technology plan for actions promoting higher student achievement through the use of technology in education. (p. 1)

In the summary of the RAND report, Glennan and Melmed (1996) write,

In 1983 there was about one computer for each 125 students in the nation's public schools. By the 1995, there was a computer for each nine students. In 1994, the nation's schools spent about $3 billion on computer-and network-based technology. Additional funds were spent for other kinds of equipment such as

video players, facsimile machines, and telephone lines as well as for technology-related training. (p. 1)

Healy (1998) writes *Failure to Connect*. Chapter titles include, "Computers and Our Children's Health", "The Growing Brain Meets Artificial Intelligence", "Emotional, Social, and Personal Aspects of Children's Computer Use", "Cybertots: Technology and the Preschool Child", and "Learning With Computers in Elementary, Middle, and High School" (p. 9). *Log On or Lose Out* (2000) connects technology to content learning:

> As educators look to the future, the challenge, according to Linda Roberts of the U. S. Department of Education, "is to connect technology more substantively to the content itself, to the very concepts in particular areas of the curriculum" (Jerald & Orlofsky, 1999, p. 62). To achieve this goal means that attention must be directed to instructional issues, because one cannot separate pedagogy from the content being taught. (p. 123)

Tomei (2003) writes in the Introduction of *Challenges of Teaching with Technology Across the Curriculum: Issues and Solutions,*

> *Teaching with Technology Across the Curriculum* is a book for teachers who wish to use technology as a tool to enhance the teaching-learning process. Its focus is on integrating technology into the P-12 (preschool through Grade 12) curriculum using computers, software, and web-based instructional materials to analyze, evaluate, and apply the academic content to be delivered. (p. 1)

Marsh and Willis (1999) write about technology as a national issue in the United Kingdom, Australia, and New Zealand where in the 1980s and 1990s they introduced a new school subject under the name "technology." Introducing new school subjects into the school curriculum is always difficult. In the United Kingdom, Australia, and New Zealand, arguments ran that technology epitomized the need to prepare students for the 21st century – to ensure that the present generation of young students is not "technologically disadvantaged because of the limitations in their schooling experiences"

(p. 157). Technology as a new school subject invented by curriculum designers brings together "a set of activities which in the 'real world' are found to be widely scattered across a diverse spread of occupations and functions" (as quoted from Medway, P., 1992, in Marsh & Willis, 1999, pp. 158-159). "Johnson (1989) identified technology as including the following set of technological areas to be studied in schools: materials, energy, manufacturing, agriculture and food, biotechnology and medical technology, environment, communications, electronics, computers, transportation, and space" (Marsh & Willis, 1999, p. 158).

According to McCormick (1990) (as cited in Marsh & Willis, 1999) the value of technology is not identical to the value of any other school subject since technology is the following,

> *Wide-ranging.* It is found in areas of human activity associated with, for example, food, health, energy, and work. *Multidimensional.* Problems and their solutions must be developed and judged according to a variety of criteria, including economic, social, and environmental considerations as well as technical criteria. *Integrative.* It demands a variety of kinds of knowledge, understanding and skills that must be integrated when dealing with a problem. It is not sufficient to look at problems from the point of view of one discipline. *Value-judgmental.* Careful weighing of alternatives needs to be exercised in all technological activity. *Human-related.* The problems technologists tackle serve both to create and to satisfy human needs and wants. *Process-centered.* Processes central to technology include designing, creating systems, modeling, decision making, producing, and manufacturing. Concept-particular. Technology introduces students to basic concepts such as control, quality, and information in ways unique to it and not to other subjects. (p. 158)

Educational Technology: Changing Teaching and Learning

The U. S. Advisory Council on the National Information Infrastructure states in their KickStart Initiative (n.d.) the following nine benefits of educational technology.

Brings the world to the classroom. No matter what their socioeconomic or ethnic background, and no matter where they live, the learning field for all students can be leveled. Students are introduced to people, places, and ideas they might otherwise not be exposed to;

Enables students to learn by doing. Studies have confirmed what many instinctively knew – that children who are actively engaged in learning, learn more. The effects are particularly noticeable among students who were not high achievers under more traditional methods. Networked projects, where students work with others and conduct their own research and analysis, can transform students into committed and exhilarated learners;

Encourages students and parents with limited or no English skills to learn English, by engaging them in interactive learning;

Makes parents partners in their children's education by connecting the school with homes, libraries, or other access ports;

Makes it possible for educators to teach at more than one location simultaneously. Vastly expands opportunities for students in small, remote areas, linking them to students in more diversely populated, urban and suburban areas;

Enables educators to accommodate the varied learning styles and paces of learning within the classroom. This makes available individualized instruction techniques that are a proven factor in student achievement;

Encourages students to become lifelong learners, who can access, analyze, and synthesize information from a variety of sources;

Enables administrators and educators to reduce time spent on administration and recordkeeping, increasing efficiency so they can spend more time with students;

Makes students proficient in the basic technological skills needed to take their place in society, whether they enter the working world directly after high school or pursue further formal education. (p. 1)

As inclusion of special needs students in American schools today is an important consideration, technology access and services for individuals with disabilities is also being made available. The U. S. Department of Commerce, *National*

Telecommunications and Information Administration (1995) states the following, "A
landmark study on the use of technology for children with disabilities showed that
**'almost three-quarters of school-age children were able to remain in a classroom,
and 45 percent were able to reduce school-related services'** when computer-assisted
learning techniques were employed" (p. 2).

<u>John Dewey and "Instrumentalism"</u>

With permission given by Larry A. Hickman, Ph.D., professor of philosophy and
Director of the Center for Dewey Studies located at Southern Illinois University, the
following condensed passages summarize Hickman's (1994) article "John Dewey:
Philosopher of Technology." The passage reflects Dewey's philosophy of technology,
the role of technology and social change in the early part of the 1900s, Dewey's
"instrumentalism" school of philosophy that Dewey founded during his decade at the
University of Chicago (1894-1904), and consciousness connection to author Bardy in the
inter-informational level of communication purported by Bardy (1991). The article
begins,

> John Dewey (1859-1952) was widely known among the reading public of his time
> for his humanism, his progressive educational theory, and his commitment to
> social reform. Near the end of his life, his work had become so influential that the
> New York Times dubbed him "America's Philosopher." (p. 2)

> Among his fellow academics, Dewey was also known as heir to the pragmatism
> of C. S. Peirce and William James and as an energetic opponent of dualistic
> metaphysical systems. He was especially critical of the ones that advanced
> supernatural or transcendent outlooks. He argued that their separations of facts
> from values and the mental from the physical had stifled human progress. (p. 2)

Dewey Overlooked Concerning a Philosophy of Technology

With the exception of his closest colleagues, however, few during Dewey's lifetime seemed to notice that he was also the first philosopher in America to develop a systematic critique of technology. (p. 2)

Three factors may have contributed to this oversight. First, there was during Dewey's lifetime no academic discipline, nor even clearly defined set of issues, known as the philosophy of technology. Some philosophers, to be sure, were interested in the theoretical aspects of science. But technology just seemed to most of them too mundane–too practical–to be worthy of serious consideration. (p. 2)

Second, although Dewey wrote books that were devoted to established sub-fields within philosophy, such as ethics, political philosophy, and the philosophy of art, he never consolidated his philosophy of technology within a single volume. His critique of technology is diffused throughout dozens of books and essays. (p. 2)

Third, Dewey's work was so far ahead of its time that few of his contemporaries were able to grasp its significance. Only now are philosophers beginning to appreciate the extent to which he undercut the assumptions that have dominated Western metaphysics since Plato. His understanding of the place of technology in human life played a crucial role in his radical critique of philosophical business-as-usual. (p. 2)

Dewey's interest in tools and instruments, already apparent in works he published before the turn of the century, continued throughout his career. His essay "Moral Theory and Practice" (1891) argued that ethics involves the same type of intelligence that is required in the selling of wheat or the invention of the telephone. Later, in Essays in Experimental Logic (1916), Experience and Nature (1925), and Art as Experience (1934), Dewey presented rich analyses of the interaction of human beings with their tools. Among these tools was language, which he called "the tool of tools." Given Dewey's early and extensive philosophical critique of technology, it is ironic that Martin Heidegger's *Sein und Zeit*, published in 1927, is still widely accepted as the first major philosophical work to take up these matters. (p. 2)

Dewey's Integral "Technology and Inquiry" Synonymous Outlook

Dewey's interest in technology was an integral part of his broader philosophical outlook. He tirelessly argued that philosophy ought to be relevant to everyday life and that all philosophers worth their salt have the obligation to provide a critique of their environing social conditions. (p. 2)

The formative factors within Dewey's society were so patently technological that one is left wondering why his philosophical contemporaries were so slow to take them into account. At the time of Dewey's birth, America was just beginning its transformation from pre-industrial technologies of wind, water, and wood. As Dewey matured, America increasingly turned to technologies of steel, coal, and iron. Synthetics, television, and nuclear power had become realties before he died. One of Dewey's last published essays contained a discussion of the atomic bomb. (p. 3)

At the heart of Dewey's philosophy of technology is his theory of inquiry, or deliberation. Breaking with the long tradition of Western epistemology, Dewey argued that inquiry is neither primarily theoretical nor primarily practical. It is instead a kind of production. He thought that inquiry starts with raw materials and then reworks them with specialized tools. But since change is the only constant, the tools of inquiry are themselves always in need of improvement. As conditions change, inquiry uses some of its tools to rework others. Technology and inquiry thus became for Dewey virtually synonymous. Both involve the invention, development, and use of tools and other artifacts to resolve perceived problems. (p. 3)

Dewey also argued that inquiry requires the production and stockpiling of intermediate parts. There might include just about any artifact that has proven valuable enough to keep around for further use. In this category Dewey included not just tangible objects, such as lumber or sheet metal, but also intangibles such as concepts and habits. Successful inquiry continually uses these intermediate products to produce new and more finished products: new ways of thinking, new materials, and even new tools. (p. 3)

This view, that deliberation relies on instruments of all sorts, both tangible and intangible, is the core of what Dewey called "instrumentalism" or his unique brand of pragmatism. The term was used to identify the school of philosophy that Dewey founded during his decade at the University of Chicago (1894-1904)....
(p. 3)

Dewey's "The General Method of Intelligence"

Dewey's refusal to admit a gap between the tangible and the intangible in inquiry led him to some remarkable conclusions. He thought, for example, that a mathematician working in a room by herself without the aid of a computer or pencil and paper is nevertheless engaged in technological production just as surely as a metalworker in his shop. Just like the metalworker, she uses raw materials (numbers), stockparts (theorems that have already been proven), and tools (rules of inference) to create a finished product (a new proof). (p. 3)

This view provided Dewey with a powerful tool to use against philosophers and theologians who argued that there is an unbridgeable gap between what is "material" and what is "mental" or "spiritual." For Dewey, these terms just refer to different but interacting types of tool use. A "therefore" and the number 2 are no less tools than are hammers and saws. In all inquiry that is successful, these two types of tool-use cooperate with one another in ways that are subject to our control through the study of what he called "the general method of intelligence."... (p. 3)

Dewey thought that if men and women ever realized that their metaphysical and religious systems are just technological artifacts, and not absolutes, then there would be less dogmatism, less hatred, and less bloodshed. Like other conceptual artifacts, metaphysical and religious ideals need to be measured and warranted by tools that assess their outcomes or "cash value."... (pp. 3-4)

Dewey and Darwin Connect

Because he was a committed Darwinian naturalist, Dewey rejected the view that technology and nature are in conflict. He viewed technology instead as the cutting edge of evolution. Since human beings exist within and as a part of nature, then what they do is also a part of nature. (p. 4)

Because he identified inquiry with technology, Dewey thought that abandoning or limiting technology was not a live option. The real issue, he argued, is how better forms of technology can be found to replace ones that have proven unsatisfactory.... (p. 4)

Because Dewey took Darwin seriously, and because he wanted to construct a new naturalism that would take into account continuities within nature, he looked for a way to define technology broadly enough that it could include two major categories of technological production that some had thought incompatible. One would involve the prudent alteration of the environment to meet human needs by balancing costs and weighing alternative outcomes. The other would be a technology of self and community, that is, an equally judicious production of new ways of adapting human beings to environing conditions.... (p. 4)

Living in Dewey, Gebser, Steiner, and Bardy World

If Dewey's contemporaries had understood his critique of technology and acted on his suggestions, our world might now be quite different from its present state. We would have long since begun to attack social and moral problems with the same type of experimental outlook that has proven so successful in the physical sciences. Instead of holding tightly to dogmas that separate humans from nature, body and mind, thinking from feeling, and one social class from another, we

would now be involved in a common effort to articulate and solve common problems. Instead of clinging uncritically to the frayed products of metaphysical and religious systems invented decades or even centuries in the past, we would by now have subjected them to the same experimental tests that have worked wherever they have been applied within science and industry. (p. 5)

Dewey realized that dogmatic religious and metaphysical views tend to break communication and isolate human beings from one another. In his view, technology offers the best hope for common action because it is the most basic and therefore the most common human project. The reward of undertaking honest technological inquiry, he suggested, would be "a society worthy to command affection, admiration and loyalty." (p. 5)

How true this last paragraph is reflective today in June 2004 of current world events between and among the United States, Iraq, and Saudi Arabia today, both internally and externally. Modern technology has involved everyone in a chaotic physical and ideological quagmire. We clearly are not sharing the same tool of language and using technology for the good of all. Theoretically, if we look back 50,000 years to hominid man and his abilities for the common action of forming language tools to communicate for harmony with others in order to achieve shared goals and interests, we could relearn some basic dynamics of group communication. Modern, technologically advanced man lives in stark contrast between the present set of mental rational circumstances and the archaic past consciousness. Perhaps by tapping into the prior consciousness structures of archaic, magical, and mythical time periods of our past, we might find the future of communicating in arational/integral consciousness ways for shared meaning and being, using technology for the good of all.

<u>United States Technology Initiative: 2000</u>

In the fall of 1999, this researcher gave two of his communication classes a collaborative and cooperative learning assignment based on the following: How

successful has the United States been in achieving President Bill Clinton's (White House, 1999) 1996 technology initiative which was stated in Clinton's State of the Union Address in 1996.

> In our schools, every classroom in America must be connected to the information superhighway, with computers and good software, and well-trained teachers. We are working with the telecommunications industry, educators and parents to connect 20 percent of California's this spring, and every classroom and every library in the entire United States by the year 2000. I ask Congress to support this educational technology initiative so that we can make sure this national partnership succeeds. (p. 1)

The communication classes were divided into various groupings of geographic sub-sets of states and in the end as reported state by state, the United States was close to 90% in compliance by November 1999. Some states reported early on that their own state initiatives had them at compliance from the outset. Nearly every state received federal funding, with Vermont going it alone. The questions which arose time and time again during the state speeches delivered by the communication students were, "How will the system be maintained, and for what length of time? Federal funding was provided up front to get jumpstarted, but who will cover the costs over the lifespan of the system? Who will pay? Who will pay? To achieve success, grant money was established, private corporations and really big business contributed funds and hardware equipment and software programs to schools nationwide. Author Bardy recalls high tech arriving in his elementary school.

<u>High Tech Arrives in Schools 1963 - 1982</u>

In September, 1982 as this deep wanderer was getting ready to leave the United States for the Kingdom of Saudi Arabia and work as associate chairman of educational

technology and writer-in-residence for the College of Education, King Saud University, Abha Branch, he visited St. Francis Xavier grade school in LaGrange, Illinois. Over the summer of 1982, like magic and from prayers from the Sisters of St. Joseph, and deep pockets of budding computer giants, the school had acquired ten Apple computer stations that were set up in the school library.

Twenty years earlier televisions had arrived at the school in much the same way. Author Bardy shares reflection on the introduction and role of television in a Chicago suburban Catholic school in the 1960s. In 1963, the summer after our collective consciousnesses had been sitting on the floor in the school hallways waiting for the atomic bomb to blast us into eternity, St. Francis Xavier acquired televisions. The following comes from a reflection posting on WebCT, Technology and Education, 1999.

<u>St. Francis Xavier School's History of Television in the Classroom–1963-1969</u>
<u>Module 3–by Dan Bardy, 15 October 1999</u>

Jean Marie Cooney ran onto the playground after lunch one day in November 1963 and breathlessly said, "They interrupted the 'Grand Prize Game' on Bozo Circus to say President Kennedy was shot." Most of the students did not want to believe Jean Marie because, unfortunately at the time, Jean Marie was the kid with the most and biggest cuties in class. Some of the students said, "But she said they interrupted the 'Grand Prize Game'." The afternoon bell rang within two minutes of Jean Marie's announcement and lickity-split, in Taylorism fashion, all the students were in their rank and file rows on the playground of St. Francis Xavier School in a suburb of Chicago. The afternoon was November 22, 1963.

"According to critics, instruction was regimented, mechanical, and mindless. Teachers, according to one researcher, told students 'when to sit, when they should stand, where they should hang their coats, when they should turn their heads.' Students entered and exited classrooms, rose and sat, wrote and spoke-as one" (Cuban, 1986, pp. 9-10). A turning point in the nation, President Kennedy's assassination, proved to be a highpoint in the impact of media, especially television, and a watershed moment in education. Not until the moment the trigger was pulled on an assassin's rifle and a shot rang out was the rank and file classroom questioned. Television was on the scene.

The students at St. Francis Xavier solemnly walked into their classrooms, stood and said their afternoon prayers as one, greeted their teachers as one, sat down in their desks as one, and when each teacher turned on the television in each classroom to watch the unfolding "interrupted special report", each class member in a collective consciousness manner watched and heard the details, spellbound to the events in Dallas, Texas as one.

Televisions had been installed throughout the entire school during the summer of 1963. How they got there seemed to be "poof...like magic," to most of the students. The teachers in early September explained to the students that St. Francis was participating in an educational television project where airplanes would fly around in the sky and beam television waves to the rooftop of the school. Fourth graders were going to learn Spanish in the morning and science in the afternoon.

After three weeks of viewing airborne broadcasts, the fourth grade class stopped watching the Spanish program. The technical difficulties of sending and receiving the broadcasts were numerous. The first week of teaching Spanish went well. Students were instructed in counting, a universal building block. By the second and during most of the third and fourth weeks of the broadcasts, teachers and the principal became concerned about continuity and dropped the Spanish broadcasts from the curriculum. Teachers needed to be in control of the classroom at all moments and television had proved to be too uncertain in the daily routine.

However, throughout the rest of the first semester, the class viewed the science program, often as a reward. If the class was good, we would watch the science program; but if the class was not well behaved, no program. The technical difficulties were less prevalent in the afternoon.

Launched in the Chicago region in 1963, after more than five years in the planning, television watching for instructional purposes took off. The program crashed and burned in its first year. The stewards of the program, the classroom teachers, had enthusiasm for the program. However, after scrambling lesson plans for a month, the principal made the choice to not continue with morning broadcasts. Control of the day was important.

The television's role in the day-to-day classroom became one of high honor, meaning it was hardly ever turned on except for special broadcasts concerning the advance of the space program. President Kennedy did say it was his dream to have a man on the moon by the end of 1969. His dream came true on my fifteenth birthday, July 20, 1969. This time the program did not crash and burn. The entire nation watched those moments of landing and walking on the moon. If students had been in school, all would have watched. And I am sure some of the

students' fathers who were early home movie fans, filmed off of their home
television screens. (pp. 1-2)

Ely and Plomp (1996) Write About Educational Technology

A concept as complex as educational technology requires an equally complex
definition. The following definition–all 16 parts–are meant to be taken as a
whole; none alone constitutes an adequate definition of educational technology.
1. Educational technology is a complex, integrated process involving people,
procedures, ideas, devices, and organization, for analyzing problems and devising,
implementing, evaluating, and managing solutions to those problems, involved in
all aspects of human learning. In educational technology, the solutions to
problems take the form of all the Learning Resources that are designed and/or
utilized to bring about learning; these resources are identified as Messages,
People, Materials, Devices, Techniques, and Settings. (p. 3)

The rest of "part one" of the definition of educational technology and the other 15

parts continue on for eleven more pages. The role and usefulness of computers in

educational settings has had discourse since the 1960s. In the autumn of 1972, during

this author's first quarter at College of DuPage, a community college located near

Chicago, the Introduction of Education course discussed: "Someday, there will be a

computer on every desk. Pros and Cons." The discussion at the time tipped the scales

towards the con side. Displacement and replacement of teachers and students feeling

isolated if they only interacted with a machine supported the con. Pros, not memorable.

A Computer on Every Child's Desk

Today, the reality of the statement, "Someday, there will be a computer on every

desk" has come true as reflected in Loras College's technology initiative of 1999 to

install a campus-wide wireless network with students receiving a "notebook" when they

walk in the door. What educators, administrators, business professionals, and corporate

personnel have not given much thought to over the last five decades of computer

inclusion in our lives has been some of the drawbacks and backlash of assimilating so much technology and information into an individual's consciousness structure. The thrust of Chapter III "Technology and Human Communication: Votive Light From the Tabernacle" confronts some of these overlooked outcomes. Misperceptions and mental image manipulation of "real time" combined with assimilating all the button pushing may lead to manifestations of stress and anxiety attacks.

<div align="center">To Compute or Not Compute: Personal Background</div>

Each person is unique in his or her own way in handling both the magic of the technology and the stress factors that modern technology and computer tools bring on as well. From the autumn of 1972 to the autumn of 1974, this young philosopher earned his college money by being an IBM 360-30 "Big Blue" computer operator for La Grange State Bank, being trained to operate and run every single bank report from the day shift, to night shift, to end of year shift. From the early morning daily "Statement of Condition", to the nightly "Demand Deposit Accounts" (D.D.A.) reports, to the weekly commercial paper run, all the while running proof transit sorties throughout the day on the 15-pocketed 1419 magnetic character reader. It was a great job. Once trained, people stayed away and let the young man do his magic. Surprisingly it was stress free, except for the occasional dream sequences of running checks through the 1419 magnetic character reader. The checks, as they were zipping along the conveyer belt at 40 miles an hour and into their designated pockets, magically turned into piles and piles of fresh cash. Ah, to have those days again.

One of the reasons this wanderer returned home to 31 North Kensington in the autumn of 1988, to La Grange, Illinois, from the Kingdom of Saudi Arabia, was to not fall behind in the technological gateways and jetways opening up each day in the United States. Too late. It seems this old world "Big Blue" computer operator has been dog paddling ever since to catch up, all the while technostress playing more of a role in my intrapersonal communication than would like, a most unwelcome role. To combat the consciousness backlash, the author looks at the causes and helps to find and form new solutions to help ease the way for all the new "inner" consciousness voices that all this technology brings with it.

Zielinski (2004) in the February edition of *Presentations* magazine writes in the cover story "Technostressed?" about both the anxiety and the "real time" manipulation the consciousness is forced to adapt to while interfacing inter-informationally.

> Technostress, a term coined by clinical psychologist Craig Brod in the 1980s…is an unfortunate but inevitable by-product of societies wed to the marvels of technology. Each successive upgrade of hardware or software may represent a technological step forward, but it also places demands on the user–to relearn tasks, troubleshoot new problems, get comfortable with new systems and gear, etc.–and these demands can cause a great deal of stress. Presenters are particularly vulnerable because the success of their jobs, if not their careers, is often bound to devices–laptops, projectors, electronic whiteboards–that don't always work the way they are supposed to. (p. 29)

> Then there's the angst of what experts call "technologically captive moments," those increments of time in which you wait for some machine-driven event to happen–or in many cases, not happen. The hours spent futzing with technology siphon away valuable time from researching, refining or rehearsing a presentation, compounding frustration levels further. (p. 29)

> Couple this presentation-technology tsunami with long days spent juggling email, voice mail, pagers, fax machines or Webconferences, and you've got all the ingredients for technology meltdown….Millions of workers the world over are running on the very same treadmill. (p. 29)

In the broadest sense, of course, everyone is affected by technostress to some extent. Technology has inserted itself almost everywhere in our daily lives, and when it doesn't work the way we expect it to—if the phone stops working, say, or the network goes down—frustration and anger aren't far behind. (p. 29)

<u>The Management of Intrapersonal and Interpersonal Communication in Reducing Technostress: Lessons Learned by Librarians and Instructors</u>

<u>Overview of Technostress</u>

The definition and evolution of the definition of technostress has expanded over a twenty-year period where it primarily affected technocrats. With the burgeoning daily use of computer hardware and software in educational settings and libraries, a majority of individuals are experiencing stress manifestations and anxiety attacks. Particular attention is paid to librarians and teachers who have been given the stead of integrating technology into libraries and classrooms all across the United States. Solutions are outlined to help alleviate the anxiety brought on by the ever-quickening pace of the information age. Success in handling technostress lies in one's own intrapersonal communication and in interpersonal communication relationships. Do any of the following scenarios sound familiar, from both student and teacher views?

"The server went down. You were right in the middle of your research. Those Internet sites had been taking a long time to load. You got so caught up in all the hyperlinks that you forgot where you originally were headed. Where is the one document that summarized all the research so beautifully? Now you lost your link; you need to sign on again. Oh no, the printer isn't working and the electrical surge fried your disk, and you don't have a back up. Now what are you supposed to do? You're not sure if you can get your assignment posted on time because the school site won't open. Another year

and yet another attendance software program to learn? Maybe you had prepared your whole lesson around the computer only to find that the computer crashed and there is nothing that you can do. Students are arriving any minute."

Traditional and nontraditional students who are currently enrolled in an education course may have uttered some of these statements and questions over the past few years. Librarians and teachers who are integrating computer technology driven resources may also have felt this stress. When the technology works as planned, everything is a dream and an individual can feel on top of the heap or at least coasting along at a good clip. When the technology fails, an individual often feels disillusioned, disappointed, depressed and depleted, mentally exhausted about how to even approach a solution to the problem. If a person's heart begins racing, the pulse rate quickens, and the mouth gets dry while working on a computer, chances are the person may be suffering from "Technostress." According to Figueiredo (1994), "Our society has undergone rapid computerization. Computers affect our lives every day. But, because of our constantly improving technology, some people still have not adapted to this new lifestyle" (p. 4).

<u>Defining Technostress</u>

Technostress was first coined in the mid 1980s; and the subject is fully developed in psychologist Craig Brod's book *Technostress*, published in 1984. Brod (1984) writes, "This is the first book to address the current struggle of individuals to adapt to computer technology. It is also a chronicle of the disease that results when the delicate balance between people and computers is violated. I call that disease technostress" (p. xi). He continues,

Not only were they [workers to CEOs to computer programmers] contending with easily recognizable stress reactions such as headaches and fatigue, they were beginning to internalize the standards by which the computer works: accelerated time, a desire for perfection, yes-no patterns of thinking. These internalized standards combined to reduce the ability of the person to perform creatively or to relate to others in a loving way. (p. xii)

He concludes, "It is my belief that an awareness of technostress and its remedies will be our best hope for the future" (p. xiii).

Champion (1988) defines "Technostress as the modern disease of adaptation caused by an inability to cope with new technologies" (p. 48). McKenzie, Mims, Davidson, and Clay (cited in Connell, Devoogd, & Blackburn, 1996) report, "Stone (1993) states that technostress happens when the equipment either stops working or that frustration of the user is so overwhelming as to cause concern" (p. 32). McKenzie et al. further explain,

Dobb (1990) further defines technostress as a process with three distinct parts: the nature of the stressor, the reaction of response to the stressor, and the results from the reaction that lead to a new cycle of reactions and stress. Most of the literature defines the problem as it relates to media specialists, librarians, and instructional technologists. (p. 32)

More than a decade has passed since Dobb wrote those words, and technostress can be seen and felt across all career paths today. Computers are here to stay. They are found in businesses, in hospitals, in supermarkets, in homes, in libraries, and in schools. Most individuals born in the last half of the 1980s and all through the decade of the 1990s have been raised with the use and the language of computers. Many of those individuals can route the mouse as well as any expert. According to Figueiredo (1994), "There is not a big problem with young students becoming technostressed. Kids take to computers very easily. They have fun with computers and find them challenging. Nowadays,

almost every child gets computer experience in the classroom" (p. 10).

Statement of the Technostress Problem

Those who are a little older, or much older, and not a computer whiz or a "techno nerd," may be having a difficult time adjusting to the fast pace of change, especially with computer technology. One part of an educator's job is to adapt to educational change, particularly with the implementation of computers. Teachers are to use computers and software programming in the classroom to assist student learning. Not only do teachers have to learn the hardware, they have to select, adapt, and evaluate, and justify spending money for appropriate software programs for classroom use. They also have to teach students how to use the technology for themselves and may have to teach other teachers. With all these buttons to push and additional tools of learning to choose from and limited hours in a day, technostress needs to be examined and included in any area of study where technology implementation is planned. More importantly, helpful solutions must be raised to assist individuals to combat technostress situations.

The topic originated for author Bardy (2001) while working inter-informationally, combining the words "technology" and "emotions." The first group of "hits" had articles with the term "technostress" in the title. Technostress articles have appeared in journals and magazines in the fields of psychology, library science, semantics, communication and information management, human resource management, educational technology, computing technology, presentation technology, and teacher education.

The search was narrowed to educational issues. The field of library science had the first and has had the greatest number of articles on technostress due to the fact that

librarians were at the forefront and on the front lines of technological implementations when card catalogues were computerized. With the development of the information superhighway and the development of electronic databases in all fields of study, the librarian has had to not only learn hardware and software systems but also has had to teach colleagues and students how to use the system as well. Much of the literature concurs that proper training and repetitive use of any hardware and software will help to significantly reduce technostress.

Preventing and Overcoming Technostress

Training is critical for successfully handling the stress brought on by technological change. Some people learn best with traditional, formal classroom instruction. Others prefer print documentation, one-on-one tutorials, hands-on instruction, or working on their own.

Research has found that men and women learn technological skills differently and this must be taken into consideration when designing training curricula. Just as different people prefer different styles of learning, similarly, staff is motivated by different factors. Some staff is naturally curious and need little encouragement to learn new technical skills (Clark & Kalin, 1996, p. 32).

Educators who teach students should remember to be aware that computers are machines; they assist in research, information management and retrieval, computations, and independent learning. They do not replace human beings. In the classroom or at home, it is how a teacher or a parent relates to a child that matters, not what gadget they show them. Figueiredo (1994) concurs, "Teachers play an important role in guiding

students. They must use the right balance of computer work so that it does not take over the classroom" (p. 10).

Connell, DeVoogd, and Blackburn (1996) who summarized seventeen technology integration articles for an on-line web site state, "Given the number of possible sources of anxiety, it should come as no surprise that many of our teachers and teacher candidates report being 'Technostressed'" (p. 1). Technology is permeating elementary and high schools just as it is in higher education and the workplace. Teachers and library media specialists are finding it hard to cope with changes wrought by technology. Resistance is certainly not new, nor is it limited to computerization. What many regard as technostress is really resistance to change.

Clark and Kalin (1996) report that Sara Fine, psychologist and professor at Pittsburgh's School of Information Studies, has examined the history of resistance to automation. "'Human beings tend to resist change,' she writes, 'even when change represents growth and development.' We like the familiar and comfortable and feel threatened when something new is introduced that changes the way our workplace functions" (p. 31).

Kilpatrick (1997) reports reasons why these professionals have trouble coping with technology

    (1) constant changes

    (2) pressure to integrate new technology into the classroom

    (3) minimal training

    (4) little time for training

(5) little incentive

(6) spread too thin

(7) expected to keep up with the latest technology

(8) expected to keep up with integration strategies

(9) often required to train teacher colleagues as well as students. (p. 179)

Coping Strategies and User's Bill of Rights

Kilpatrick (1997) suggests techniques for assistance in controlling technostress, which include

(1) staying healthy

(2) being aware of technostress levels

(3) practicing good time management

(4) increasing awareness of technology

(5) taking time to relax

(6) seeking training in technology

(7) establishing collaborative efforts between schools and businesses

(8) using outside experts for training

(9) keeping school administrators apprised to technostress levels within the
    school. (p. 179)

Lally (1997) reports that "...the annual price tag of stress-related

ailments for U.S. corporations is $300 billion and rising. Technostress is the culprit.

Weil and Rosen (1997) set out to explain why technology makes people feel stressed out

and what can be done to preserve one's humanity and sanity in an increasingly digital

world. Their book begins with a chapter entitled, "How Technostressed Are You?" and

categorizes people's reactions to technology with three "Technotypes": Eager Adopters,

Hesitant "Prove Its," and Resisters. Levinson (1999), in reviewing the 1997 Weil and

Rosen book, states,

> ...it is probably a good idea to learn how to use technology effectively at home and at work (for more and more people, technology has actually made it possible to stay at home and work). In order to facilitate that learning, and to empower the learner by dispelling fears about becoming dependent on technology, Weil and Rosen propose an 'Independent Worker's Technology Bill of Rights,' that aims to put technology's role in life in its proper perspective. It declares,
>
> (1) I am the boss, not my technology.
>
> (2) Technology is available to help me express my creativity.
>
> (3) I decide when to use the tools technology provides.
>
> (4) I have the right to choose what technology to use and what to put aside.
>
> (5) I can use technology to stay connected, informed, and productive-my way.
>
> (6) Technology offers a world of information. I get to choose what information is important to me.
>
> (7) Technology will produce problems for me, but I will be prepared to handle them.
>
> (8) Technology can work 24-hour days, but I choose when to begin and when to stop working.
>
> (9) Technology never needs rest, but I do.
>
> (10) I can work successfully by enforcing my boundary needs.
>
> The bottom line in all of this is to learn to make technology dance to your tune – not vice versa. (pp. 358-360)

Looking towards role models is one of the most important "intrapersonal"

feedbacks a person can do for himself or herself during a technostress attack. Review the

enthusiasm of the role model. Talk with someone who seems to handle technology in a good way. Repeat "I think I can. I know I can." For educators, at all levels of teaching and learning, in order to help both teacher and student to cope with technology, let students know what is planned for inclusion of technology in the curriculum. Let students know the importance of working with hardware and software takes time and patience. Both the teacher and the students need to talk about their feelings, both good and bad.

Conclusion and Implications for the Future

Training helps relieve technostress by reducing anxiety. It is important to remember that timing and location of computer training are key elements in reducing anxiety and also to present materials in different ways to meet all learning styles. It is important that handouts are ready, samples displayed, and that the software is installed on all computers.

McKenzie (cited in Connell, et al., 1996) conducted a study of educators and technostress, and developed some conclusions and implications for the future.

(1) Technostress is a problem. The educators in this study overwhelmingly agreed that technostress was a common part of what they and their colleagues must cope with in their jobs. (p. 36)

(2) Technostress will continue to be a problem in the future and will get worse. As present technologies become outmoded and new technologies emerge, the pressure on educators will grow to keep abreast of the latest changes in hardware and software and to better utilize technology in the curriculum to make learning meaningful to students. As this pressure continues, so will the resultant stress and its negative impact on the well being of educators. (p. 36)

(3) Technostress shows no respect for individuals and their role or position as educators. It is currently a problem for all groups of educational professionals: classroom teachers, technology specialists, and administrators. As technology

increasingly pervades all aspects of education at all levels, so too, will technostress. (p. 36)

(4) There are coping strategies out there which, according to the literature and professionals in the field, do assist in relieving technostress. Such things as maintaining a healthy state of being, improving time management, seeking additional training for specific technologies, and attending workshops to work to relieve stress. As the future brings all educators into more contact with more technologies, the need for and importance of more well defined technostress coping skills will grow. (p. 36)

(5) If the numbers of this study are representative of the whole then little is being done in schools, at any level, to seriously address the issue of technostress (123 out of 305 respondents indicated that no activities were being conducted in their schools to deal with this problem). Continued failure to respond to the needs of educators for training in the management of technostress could result in serious problems with the implementation of technological advancements in schools of the future. This could be disastrous for all concerned. (p. 36)

(6) Technostress can be dealt with by the professional who is willing to seek assistance, work independently at reducing their particular stress factors, and participate in activities provided by their school system and/or institution. (p. 36)

However, too often help opportunities lag behind the help needs of those affected

by technostress and, again, as technology continues to explode in the future the needs will

only increase (p. 36). The McKenzie et al. (cited in Connell, 1996) study is quite

significant in the preliminary findings and in foreshadowing of the future of technostress.

They define it, "Technostress is defined in most studies as an inability to cope with

technology, negative aspects of high tech, a lack of competence in technical use, and

deficiencies in knowledge and skill" (Bichteler, 1986; Champion, 1988; Benedict &

Fimian, 1989; Brod, 1984; Dobb, 1990; Kupersmith, 1992; Stone, 1993, p. 31).

Respondents in their study identified two areas of assistance which are most

needed, as were most of the articles, to reduce technostress. First, technology training

must be increased. Second, more immediate technical assistance must be made available to teachers and students, particularly when it involves problem-solving situations.

Technostress levels or quotients vary from point to point on the continuum of time humans call each day. Moment to moment, nanosecond-to-nanosecond, humans progress through each day communicating within themselves, each other on interpersonal levels, and technology inter-informational interfacing. From computing the magic time and power input needed to have the expectation of the ultimate microwave popcorn experience, to writing an intricately woven philosophical tale of consciousness and human communication within a greater framework of societal needs, ask, "How does the frail human maximize time and output co-efficient which measures up to productivity expectations?" Then ask, "At what point now in time is human consciousness suffering from digital backlash?" And, "How do humans handle the messes of everyday stresses, especially technostress?"

Creating a Future Technostress Measurement Tool

According to University of Northern Iowa researchers Bardy and Wilson, no technostress measurement tool exists to gauge or track the phenomena, particularly physiological manifestations which develop while working on the keyboard and looking into the magic light, or the dark abyss, of the computer monitor. One on-line survey exists, "Teaching and Learning With Technology Survey" created by Michele Jacobsen of the University of Calgary, Canada, 1998. The Jacobsen survey stems from Weil and Rosen's (1997) book *TechnoStress: Coping With Technology @Work @Home @Play*. The survey does not directly define, ask for participants' self assessment of their own

technostress, or inquire about physical manifestations of technostress while at the keyboard and screen. The Bardy-Wilson "What's My Mad Dog-Wilson – Technostress Quotient Now" (WMMDW-TQN) gauge will be created in response to the technostress phenomena being played out each day in classrooms, workrooms, offices, and within us.

As far as authors Bardy and Wilson note, no such barometer measure of technostress is on the commercial market today; and as young entrepreneurs, the authors will fill this void by building an interactive commercial web site where people can check their technostress levels any time of day or night, or as television actor Walter Grimley says about checking blood sugar levels with diabetes, "Check your blood daily, check it often."

As individuals and as educators, the hypothetical future of a computer on every desk is here with ever changing software and buttons to make it all work or not at all. The computer revolution will continue and, with it, the need to manage technostress continues to be an ongoing "intrapersonal" dilemma. The most important thing one can do is relax. Breathe deep. Develop relaxing thoughts. Learn one thing new at a time. Always be positive and stay healthy. And say to yourself: I think I can. I think I can. I know I can. Affirm I am.

Taking Polish philosopher Jean Gebser's (1986) view on time and combining with philosopher Bardy's perception of being: Time is in the moment; it dissolves in order for the magical and mythical consciousness to flow from the inner tabernacle of the consciousness soul. Should the University of Northern Iowa start building the

technostress web page and begin strategizing about marketing their own "little purple pill" for technostress relief?

Discovering Answers to Research Questions

How do we talk within ourselves each moment of sentience as we go about our life? How do we manage each waking and sleeping moment? How does one work with technology and maintain harmonious intrapersonal communication? Through discovery process in Descriptive Research, this researcher, writer, educator, philosopher, storyteller, and consciousness spirit reflects on two research projects during the Spring 2003 semester: my technostress gender study and my Rudolf Steiner technology project. The answer to, "Who is more technostressed, first year college females or males?" is simple: males. The answer to the role and boundaries of technology in Rudolf Steiner's Waldorf education and human development is much more complicated than first thought.

What were Rudolf Steiner's underpinnings to use or not to use technological devices teaching in Waldorf curriculum? The answer to my Steiner question is simple: no physical or emotional harm. The technological device should not cause the user any undue physical harm or emotional harm. The technological device should be ergonomically designed and be used to support a harmonious state of being while using the tool. Although the foundation of the first Free Waldorf School (Freie Waldorfschule) in Stuttgart, Germany did not open until autumn 1919, within a year of Germany's defeat in World War I on November 11, 1918, Steiner (1914) spoke about the nature of technology in a lecture he gave in Dornach, Switzerland, "Art as Seen in the Light of Mystery Wisdom."

Let us start by looking quite superficially at what happens in modern technology. In the first place this is just work carried out in two stages. The first consists of destroying the interrelationships of nature: We blast out quarries and take the stone away, maltreat the forests and take the wood away, and the list could go on – in short, we get our raw materials in the first instance by smashing and breaking down the interrelationships in nature. And the second stage consists of taking what we have extracted from nature and putting it together again as a machine, according to the laws we know as natural laws. These are the two stages, if we look at the matter on the surface. (p. 1).

Steiner (1914) believed that elemental spiritual beings are within nature. When we mine minerals or cut down trees, we cast out of nature the elemental hierarchal spirits which hold nature together. "In all natural existence there are elemental spiritual beings" (p. 1). The spirits are no longer bound to their allotted dwelling places; thus, the first stage is the casting out of the nature spirits (Steiner, 1914, p. 1). The second stage is putting together something new, according to our understanding of natural law, from what we have plundered from nature. "Now when we construct a machine or complex of machines out of raw material, we put certain spiritual beings into the things we construct. The structure we make is by no means spiritless. We make a habitation for other spiritual beings, but these beings that we conjure into our machines belong to the Ahrimanic hierarchy" (Steiner, 1914, p. 1-2).

Pausing briefly to reflect on Ahrimanic, Guralink, (1974) defines **Ahriman,** "*Zoroastrianism* the spirit of evil: see ORMAZD" (p. 28). Guralink (1974) defines **Ormazd,** "*Zoroastrianism* the supreme deity and creator of the world, or the spirit of good" (p. 1003). So it looks like we have the dualities of spiritual good and spiritual evil in the things we create and in the technology we use to create. Philosopher Bardy ponders the questions, "Would Rudolf Steiner believe in a 'bad seed consciousness'?";

and "What sayeth he about such a being? Would the being always be spiritually

Ahrimanic in Steiner's world?"

Steiner (1914) continues,

This means that by living in this technological milieu of modern times, we create an Ahrimanic setting for everything that goes on in us in a sleeping state, by night or day. So it is no wonder that a person at the first stages of initiation, bringing back into his waking life all that he has experienced outside in the way of noise and confusion, feels its destructive character. For he is bringing back into his organism the results of having been in the company of Ahrimanic spirits. Thus we could say that at the third stage, at the cultural level, we have technology around us, stuffed full of Ahrimanic spirits which we have put there. This is what things look like from the inside. (p. 2)

Very little has been written by Steiner and about Steiner concerning technology

and human communication, virtually nothing in relation to Waldorf education. Steiner

(1914) concludes his discussion about the spiritual-cosmic connection in the forces of

good and evil by saying, "The real remedy is to make the forces of the soul strong so that

they can stand up to modern life. A courageous approach is necessitated by world karma,

and that is why true spiritual science requires a really hard effort of soul." (p. 2).

Reflecting upon the context of the time, Steiner spoke those words on December

28, 1914, six months to the day that Archduke Franz Ferdinand, heir to the throne of the

Austro-Hungarian Empire, was assassinated in Sarajevo, Bosnia. World War I was well

underway.

Steiner's original plan for his Waldorf Free School was to have the curriculum

adopted throughout the schools of a new, post-World War I Germany, not a curriculum

for those who would pay private tuition. In the autumn of 1919, he saw a great

opportunity for societal reform where hegemony might not have such a hold on the

populace. Quite the contrary, the war to end all wars just set the scene for World War II. However, "The Waldorf School movement that he originated, by 2003 had schools in 57 countries" (Windsor Castle, n.d., p. 1). "Waldorf education is the fastest growing independent educational movement in the world with more than 800 Waldorf Schools worldwide....The Detroit Waldorf School was founded in 1966 as an independent, nonsectarian, nonprofit, coeducational day school. It is one of the oldest of the 100 Waldorf Schools in the United States...." (Detroit Waldorf Schools, n.d.).

<div align="center">Additional Themes and Stories Emerged</div>

Five themes and many more stories have emerged over the past six years (1999-2005) of academic reading; experiential learning trips to Poland, Holland, Germany, and Turkey; course taking; and mentoring concerning consciousness and technology. What are philosopher Bardy's tinctures and fruition of thought on connecting consciousness, communication, education, and technology for doctoral studies?

The Power of Intrapersonal Communication

1) Consciousness in Communication: Bardy's intrapersonal and inter-informational levels of communication—how and when did this journey begin? College of DuPage Professor and Director of Forensics, Jim Collie (personal communication, September 1972) asked my first class of freshman speech students, "What do you think is the most influential communication in your lifetime?" No one, not even me, raised their hand. After all, it was the first day of class and no one had read Chapter One of the Brooks' text. Professor Collie (personal communication, September 1972) said softly,

> Intrapersonal Communication. Understanding how you work within yourself is
> the key to sustaining human communication. Intrapersonal communication is the

most driving force, 'your inner voice which speaks to you' how you relate this stream of thought and feelings to every waking moment; if it is communicating with others or regenerating physical needs through sleeping cycles, any given moment a person breathes, intrapersonal communication is always there. If there is anything you get out of this course, it is the power of intrapersonal communication and how you manage it; intrapersonal communication is the driving force to true meaning in life.

The story continues when Bardy (1991) coined the phrase term "inter-informational" in June 1991 in an academic paper for Governor's State University course, "Technology and Human Communication." He addresses how intrapersonal communication and technology interfacing helps or hampers self-actualization by creating a level of communication propelled by human thought while utilizing a tool and the feedback from that tool to propel further thought and action. In addition to further courses in communication studies, including a 1993 summer course "Intrapersonal Communication" mentored by Michele McMaster, Ph.D., seeking truths about human consciousness development and technological communication devices motivated me to seek answers from a higher power. Particular thanks goes to Melissa Beall (personal communication, October 1997), Professor of Communication Studies at the University of Northern Iowa, who fostered thinking and direction of student Bardy to study at the University of Northern Iowa. This dissertation is a good representation of the power of the intrapersonal, interpersonal and inter-informational levels of communication.

<u>Steiner and Technology</u>

2) How does the spiraling 1920's Waldorfian curriculum of today color outside the technological boundaries established by founder, educator, artist, philosopher Rudolf Steiner? A dialogue taking place on both sides of the Atlantic. During three visits (2000,

2001, 2003) to two Waldorf Schools, one located in Deventer, Holland, and one in Harderweg, Holland, and two visits (2001, 2002) to the Pleasant Ridge Waldorf School located in Viroqua, Wisconsin, discussion centered around the introduction, non-introduction, and use of computers into the school curriculum. A majority of Waldorf schools worldwide do not use computers in instruction. The general philosophy on not having students use computers is based on the groundwork that children need to foster their own imaginations and creative visions with a minimum of technology, particularly high technology such as television and computers.

Computers were introduced in the two Holland schools beginning in the academic year of 2002-2003. The Deventer and Harderweg Waldorf School administrator, Ferdinand de Bek (personal communication, March 8, 2003) believes that the time has come for students at the age of eight to begin to learn about computers and how to use them. "I feel Waldorf schools would be doing a disservice at this day and age to not have some computer instruction for students. We need to slowly prepare them for the technology challenges they will face in their futures. We need to prepare them for the next stages that high school will bring" (Ferdinand de Bek, personal communication, March 8, 2003).

In discussion with the Pleasant Ridge Waldorf School in Viroqua, Wisconsin, teacher Maureen Karlstat (personal communication, October 30, 2001) said she was surprised that the two schools in Holland were introducing computer technology to students at an elementary level.

> As far as I know computer technology sessions are not included in the elementary
> Waldorf Schools in the United States, not until the end of eighth grade when we

go to the public school and learn keyboarding. We are not luddites. We want students to understand themselves and their creative selves without the distraction of a computer. If we introduce computers into the Waldorf curriculum I think it will be from the inside out. Bring in a computer and take it all apart. Look at a computer chip and talk about sand. Similar to when the children learn to knit. We teach them about where does yarn come from and how it is made.

Thus far little has been written on computer technology inclusion in Waldorf elementary schools. On the 7th and 8th grade level, the upper school, of the Rudolf Steiner School in New York, NY, has the following entry about technology on their Internet cite, "Students are exposed to a wide variety of software aimed at improving word processing skills. Using our state of the art computer lab facilities, students are able to gain first-hand, practical knowledge about computers. Some of the courses which may be offered are listed below: COM: Keyboarding" (Rudolf Steiner School, NY: NY, n.d., p. 1). In Norway "the Stavanger model" exists.

> ...here at the Waldorf School in Stavanger, Norway, to develop an educational concept for providing the upper level students with a general insight into the workings of a computer. By "general", we imply that they should leave school with the same understanding of how a computer works, as they do with cars and airplanes. Making the students well familiar with specific software may have the advantage of making them more confident, but we don't see this as the school's main aim with regards to computer education – understanding the tool *itself* is our main concern for our 9th to 12th grade students. (Straube & Danielsson, n.d., p. 2)

Philosopher Bardy postulates his answer to the question of Steiner and technology. Steiner had four underpinnings about technology inclusion. One, his primary thought was to do no harm. He was concerned about the Alfred Nobel diabolical backlash where Nobel created dynamite for the good and was horrified to see his invention used as a weapon of destruction against one another. Two, the technological device should be introduced through an understanding on how the physical apparatus

interacts with human spirit. Three, human spirit and technology need to come together to better humankind. Four, the technological device should be designed ergonomically for comfort for the human spirit to adapt to and use. Ultimately, no undo strain on the human anatomy should be manifested by use of the technological device.

Laptops in the College Classroom

3) How will Loras College faculty and first year college students react to a wireless laptop campus? Is there a battle between the magic white box of educational light and the evil black box of classroom subversion? Who will be more technostressed, females or males? The stories are just beginning with these topics. Should a college professor be, and how much time does it take away from quality instruction to be, "a laptop police person?"

Consciousness and Technology

4) How does technostress play a part in every day consciousness? Is there some way to measure it, develop a tool, create a web page to track it, and then market the results at conferences?

This researcher has explored throughout this dissertation how consciousness, communication, education, and technology connect and misconnect in human development. Even further, there has been discussion on how humans educate, evolve, invent, create, and use technological devices to enhance, advance, and sometimes destroy one another and civilizations. Modern western minds of today seem to be driven by the ever-quickening pace of the inter-informational level of communication. What is of most importance to philosopher Bardy is human assimilation of understanding themselves with

the complex layers of knowledge constantly scaffolding new meaning from the inter-informational levels of communication. And ultimately, the relationship of all that inter-informational communication to a spiritual consciousness feedback of the intrapersonal self who seeks well-being and connectedness for the greater good, standing at the forefront. Unfortunately, the dualistic struggle of good vs. evil exists in the reality of current global conditions, similar to the World War I period of Rudolf Steiner.

However, the stakes seem to be even higher in 2005 with the idea(ology) of a Democratic nation rising from the American-made rubble of the former idea(ology) of Iraq. Events unfolding in Sudan, Iraq, Israel, and Afghanistan are in our American consciousness faces everyday through mediated communication networks. What about the tabernacle of Saddam Hussein? What about the consciousness soul of Osama bin Laden? Or of George W. Bush for that matter? And what about John Kerry? What is his truth and agenda?

Gebser has his tincture birthing moments of the dawn of emerging light of arational/aperspectival consciousness in the early dark years of Nazi Germany and World War II. Probably what the world community needs to come together is an invasion of outer space alien beings who have come back to Earth to harvest their food supply of humans. Maybe then, the killing would stop.

> In the winter of 1931, Gebser had received in a flash of inspiration the concept of his later work, and now he was dedicating his life to making explicit what he had intuitively grasped in that moment. What he had realized was that the phenomenal transformations in the arts and sciences during the first three decades of the twentieth century amounted to a change in the very consciousness of humanity, in the way we perceive ourselves and the world. He compared it in its significance to the transmutation that ancient humanity had passed through at the

time of Socrates in Greece, Lao-Tzu in China, and Gautama the Buddha in India. Gebser saw that early period as a transition from what he came to call the mythical structure to the mental-rational structure of consciousness. He felt that the restructuring he was witnessing in his own time was equally fundamental shift from the mental-rational structure to the arational/aperspectival structure of consciousness. Remarkably, he formulated this essentially positive concept at a time when entire nations were in shambles, and when Oswald Spengler's predictions about the doom of Western civilization were capturing the feverish imagination of the public. In a diary entry of 1941, Gebser affirmed: "Our era is, despite or because of its visible destruction's, an era of overflowing formative fullness." His words still run true today. (Feuerstein, n.d., p. 3)

Manipulating Real-Time in Prime Time

5) How has human consciousness been tricked by modern technology magic about the true realities of spatial and temporal articulations to perform and accomplish complicated tasks? How has mediated communication trickery backlashed consciousness and supported dimensions of technostress?

What often gets in the way of positive feedback loops while working with personal computers is that expectations of the new medium of communication are often reflective of humans' exposure to media messages which manipulate real time events and outcomes in accelerated vignettes cleverly written, with tight continuity. For example, when viewers watch *Law and Order* (Wolf, 2004) or futuristic shows such *Star Trek: The Next Generation* (Roddenberry, 1987-1991; Berman, 1991-1995) everything gets wrapped up in forty-two minutes.

People who watch television see the manipulation of real time when it comes to almost all scenes involving how technology is a problem-solving device for the frail human, where seconds count for all the worker bees in the capitalist hives of society. Viewers of these television and movie industry messages about humans and computer use

may have formed an unreal time consciousness which competes with the true realities of the speed of the computer screen or other technological devices to fix the problem.

Viewers of the *Star Trek: The Next Generation* often see and hear, "I would like some tea," when Jean-Luc Picard, Captain of the starship Enterprise D, walks over to the food replicator. "Tea, hot, Earl Gray." Within an accompanying sound of a harp in an energy surge, two seconds later comes a delicious replicated cup of Earl Gray tea, hot. A fictitious food replicator has provided Jean-Luc's elixir beverage, appearing magically for his pleasure and comfort. As a result of watching such scenes, people today stand in front of their microwave ovens and shout, "Hurry!"

The quantity of these real-time violations and the popularity of more down-to-earth television series reflect the practice of media to speed things up but not the norm of reality. Viewers now see three *Law & Order* series: *Law & Order:* (The Original) (Wolf, 2004); *Law & Order: SVU* (Special Victim's Unit) (Wolf, 2004); and *Law & Order: CI* (Criminal Intent) (Wolf, 2004) which all utilize exaggeration of real-time sequencing. A fourth Wolf series is coming in 2005: *Law & Order: Trial by Jury*.

Rural Grant County Wisconsin Sheriff Keith Govier (personal communication, July 4, 2004) addresses the issue of a real-time sequence in rural law enforcement. "On average it takes about 6–9 months for a murder to come to trial once an arrest has been made. Most murder trials usually take about two weeks from jury selection to jury instruction. In the few murder cases I have been involved in, the jury deliberation time is usually two days."

Not only are law enforcement television series pushing viewer consciousness expectations to get things done, "TV viewers can tune into a forensics drama almost every night of the week, starting with the trendsetting CSI on CBS; its first-season spawn, *CSI: Miami*, also on CBS; and *Crossing Jordan* on NBC. On cable, *The Forensics Files* is Court TV's biggest prime-time show ever, while *Autopsy* is wooing—and spooking— viewers on HBO" (Kluger, J., Cray, D., McDowell, J., Bower, A.., Song, S., & van Dyk, D., et al., 2002, p. 2). All of these programs are based on fictitious medical examiners and crime investigators who manipulate real-time events, particularly with the functions, accuracy, and abilities of various technologies from video wizardry to enhance images of a particular digital time-coded sequence of events, to "tox" screens, DNA testing results of defendants, and autopsy results of victims.

> There are plenty of experts who wonder if turning criminal science into a craze is a good thing. Solving crimes is not nearly so quick and reliable a job as a 46-min. story line would make it seem. Investigations can take months, evidence can get muddled and courts, dubious about all the new gadgetry, and often reluctant to trust it. And that doesn't touch the swamp of constitutional questions raised when a prosecutor tries to wade into a suspect's brain or DNA....All this creates unrealistic expectations in the minds of the public and juries. (Kluger, et al., p. 2)

A murder investigation in real-time with Sheriff Keith Govier. Author Bardy brings Sheriff Keith Govier (personal communication, July 4, 2004) of rural Grant County, Wisconsin, into the discussion of real-time sequencing, "...most autopsies that I have been involved in take from one to two hours. If they go beyond determining the cause of death to matching up evidence, or collecting bullets, etc., it might take a little longer." Sheriff Govier is a little concerned by the backlash of shows like *CSI* against the realities and expectations of his office. "I find that when shows like *CSI* come out, it

makes the public's expectation of what we do so much greater. They ask us to send in

DNA samples on litter cases or try to match striation marks on a bullet when their pet got

shot" (personal communication, July 4, 2004).

Kluger, et al. (2002) continue,

Then there's the problem of time. As Americans have learned by watching investigations from Ted Bundy to Son of Sam, most criminal cases don't get cracked overnight. On TV, however, investigators have less than an hour to go from crime to capture, so time lines get dramatically—sometimes preposterously—compressed. "People expect DNA to go into a box and results to come out two hours later," says Fred Tulleners, a lab director with the California Department of Justice. "The reality might be two months." (p. 4).

The myth of quick-and-easy crime busting may be starting to get in the way of law enforcement. Forensic scientists speak of something they call the CSI effect, a growing public expectation that police labs can do everything TV labs can. This, they worry, may poison jury pools, which could lose the ability to appreciate the shades of gray that color real criminal cases. (p. 4).

An autopsy in real-time with Dr. Edward Wilson. Dr. Edward Wilson, deputy

medical examiner for the state of Oregon, and on the Board of Directors for the National

Association of Medical Examiners, when asked, "Is there such a thing as a 'typical'

autopsy?" replied, "There is no typical autopsy. In my experience, deaths investigated by

the medical examiner's office are certified as follows: Approximately 60% natural

disease, 25% accident, 10% suicide, 5% homicide and a small number of deaths where

cause and/or manner of death cannot be determined" (personal communication, July 11,

2004).

A second query to Dr. Wilson was, "What is included in an autopsy?" After an

external examination of the body including all clothing and belongings, Wilson explains

further.

The external and internal exams of all the organs (including skin, brain, eyes, anus, vagina, etc.) of the body look for abnormalities/pathology/disease or injury. Pieces of the abnormal and normal tissue are removed and preserved in formalin and/or submitted to the histology laboratory for preparation of slides to be examined under the microscope for determination of such things as, is the abnormality an injury, and if so, how "old" is the injury. Microscopic slides should be available to the ME within 3 to 5 days. The 1st draft of my dictation is usually available to me within 2 to 3 days. Photos with digital camera are available within minutes. (personal communication, July 11, 2004)

A third question to Dr. Wilson asks, "In suspicious death cases or in the case of

homicide, what are medical examiner procedures?"

In suspected child abuse deaths, x-rays are made prior to autopsy and the diagnosis from the radiologist available with a few hours prior to autopsy. In a gunshot homicide, I may need an x-ray to locate one or more bullets, or in a stabbing death I may need an x-ray to locate a knife point broken off and left behind in the body. In an explosion/bomb I will need x-rays to locate important fragments of the device in the body. In a natural death 2 weeks ago, I removed a permanent pacemaker from the skin of the left chest and mailed it to its mfg. in California for analysis/testing of the heart rhythm during the minutes/hours prior to death, and testing may take a month. (personal communication, July 11, 2004)

A fourth and final question presented to Dr. Wilson for a reality "real" time, time-

line of how medical examiners actually uncover the evidence was, "What is included in a

'tox' screen and how long does the 'tox' screen take?"

Body fluids (and occasionally tissue) including vitreous humor from the eyes, blood, bile, urine, stomach contents, etc. are collected during autopsy (and some fluids may be collected during external exam only, without opening the body with a scalpel), and taken to the tox. lab., by mail to Portland in my situation in Eugene approximately 110 miles south, or walked "down the hall" to an in-house tox. lab. when an autopsy is done in the Portland ME Office. The tox. results are usually available within 2 weeks unless the toxin to be ruled in/out is exotic like Ricin, in which case the sample(s) to be analyzed are sent back to Willow Grove, PA. By Oregon statute every death due to an MVA (motor vehicle accident) must have a BA (blood analysis), if older than 13 years. The typical tox. screen of urine and quantitation in blood for meth., coke, THC, opiates, Benzos and methadone takes about 2 weeks for results to be in my hands. A typical blood organic base screen for most suicidal ODs by prescription drugs also takes about 2 weeks. If I request ASAP, as in a jail death I had a few weeks ago, the results will be back to me

within 7 days. Occasionally, after removal of the brain, it must be fixed in formalin for 2 to 3 weeks in order for an easier and more thorough exam to be done, especially by a consultant neuropathologist. (personal communication, July 11, 2004)

Thanks to Dr. Edward Wilson who was a colleague of educator Bardy when both were teaching at the King Saud University, College of Medicine, Abha, Saudi Arabia 1987-1988. Dr. Wilson also served as consulting medical examiner and pathologist for the Asir Province in the south of the Kingdom.

Backlash to consciousness. Each week a minimum of three law enforcement programs and three crime scene investigation series broadcast to homes in American and international markets and into the consciousnesses minds of millions of viewers. These 42-48 minute shows, utilizing the magical and mythical technological powers of computers and other gadgets to solve problems for the greater good, strive for the advancement of societies' peacekeeping members who repeatedly and never endingly battle the dark forces of humankind. The good and evil dichotomy plays out, as does the dichotomy of "time is on our side"; "time is not on our side." "I need those results, stat!" All the hegemony of truth, justice, and the American way is splayed out there in multi-national mass media markets.

Taking in all of these acts of quick results from the "mediated" inter-informational interface communication, expectations of actual computers is enhanced as well in consciousness. Humans are seen getting instantaneous results, when, in reality, the task may take eight hours and ten seconds. So one aspect of technostress is the consciousness communication level where we sit our asses down, stare into the abyss of the screen, find our focal point, and create these words or the images displayed in

simplistically laid out graphics, carefully constructed for the audience, a reader, or

overachieving people such as ourselves. Does the final product match up to "mind's eye"

and at what cost?

Moving From the Past, Through the Present, Hinting at the Future

Looking at the *World Book Encyclopedia (2003) Volume 19 "T"*, the

"technology" entry written by Reynolds (2003) is nearly five pages, with four full color

photographs, compared to the two paragraphs in the previously cited 1961 edition of the

World Book Encyclopedia. The opening paragraph of the 2003 edition reads

> Technology refers to the inventions – including tools, techniques, and processes –
> that people make and use to survive and prosper. Technology has made it much
> easier for people to satisfy their needs and desires. It has also helped make people
> more productive and freed individuals to explore such endeavors as art and
> science without having to worry about simple survival. (p. 74)

Technology is not always a problem solver; many times it creates disasters. The

final paragraph of the technology entry in the 2003 edition of the *World Book*

Encyclopedia, Reynolds (2003) concludes, "By itself, technology is neither good nor bad.

It can be either, or both, depending on how people use it. In the future, as in the past,

people must use intelligence, imagination, and skill to apply technology wisely and to

deal with the problems it creates" (p. 78).

Tilson, DeMarco, Strickland, and Gibson (2001) write about technological

changes in the foreseeable future in their article, "How Computers Will Change

Education."

> The microchip and the Internet will be the forces driving learning in the 21st
> century, just as the automobile was a force for change in the 20th century. (p. 1)

The very nature of computer and communication technology is changing as you read this article. Computing capabilities and communication in the next 50 years will be vastly different from today's technologies. Almost everyone will have a "personalized" computer that responds to voice, touch and possibly brain wave activity. (pp. 1-2)

Computers will be ubiquitous, which means they will be imbedded in the environment, intuitively obvious to use, pleasing to the senses and fun. A single calculator-size freestanding computer may have wireless communication, fax machine, phone and video camera all in one. Computers will be everywhere, including watches, jewelry, clothing, most machinery and, eventually, inside the body.... (p. 2)

Telepresence will become common and may replace phone calls, meetings and classrooms. For example, it [sic] a group of students need to "meet" to work on a problem, they can be anywhere on the globe and attend by telepresence. Increasingly, the home will be the place for everybody to get an education. (p. 2)

According to TELEPRESENCE Research (2004), "*Telepresence* is the term we use to describe a new communication medium that enables a person to feel as if he or she is actually present in a different place or time" (p. 1).

Novak (1999) writes in "TECHNOS Interview II: On Today Jane Healy," an article based on an interview with Jane Healy, Ph.D., author of four books on the subject of the development of children's minds and children's cognitive development. The interview article focuses on Healy's (1999) book *Failure to Connect: How Computers Affect Our Children's Minds – And What We Can Do About It*. The final chapter "Computing the Future" in Healy's book is the focus of the following excerpt.

Novak: The final chapter of your book touches on a fascinating topic. (p. 9)

Healy: Yes. The idea that our kids are going to be the first generation forced to make serious choices about interacting with artificial intelligence. Certain experts

are now saying that computers will be sentient in some sense by about 2030, and that they may in fact declare themselves autonomous and demand rights. (p. 9)

Novak: You know, I spoke with the author of one of those books [see Gregory Rawlins' Interview III], and he says that they'll be sentient only if humans allow them to be. (p. 9)

Healy: That's exactly the point: If humans allow them to be! But, if we raise a generation of children in thrall to the glitzy screen, raised to believe that the computer is *ipso facto* going to make them smarter, and without developing the personal, interior mental life and humanity and moral sense to make such decisions, who knows what could happen? (p. 9)

These kids will be grappling for the first time with real issues of what constitutes being human, of how to interact successfully with intelligent machines. We have barely thought about this yet. And yet, at the rate things are moving, these moral, ethical, and personal choices will very soon become critical. It's my contention that if human beings wish to stay in charge of our machines, we're going to have to raise a generation of kids who are capable of really deep and original thought about difficult problems. Unfortunately, the way most computer technology is being used right now – and of course this is a reflection of much that is happening in other aspects of education – we are not developing such deep, innovative thinkers. If we let the media and entertainment industry take over our children's minds at an early age, it will be no great surprise if they are soon in thrall to machine intelligence. (p. 9)

Novak: Sure. And if they allow the computer to do the work for them, why not allow that computer to become sentient as you say? (pp. 9-10)

Healy: Exactly. It's easier to let somebody take control. If you've been controlled by marketers all your life, and by software that has you going through certain tricks to get certain kinds of outcomes, it would be very difficult to move into feeling that you need to be in charge and be able to make decisions and focus your mind sufficiently to know how to think about things. (p. 10)

Novak: It's interesting that you end your book with this discussion, and you begin your book with a discussion of how the whole technological revolution is almost of a religious fervor. As I was reading it, I thought there were a lot of parallels here with a religious movement. (p. 10)

Healy: There are very interesting overlapping circles here in terms of the issues and the challenges. And it gets into several very basic questions, such as: What do we think is the nature and purpose of childhood? Is it simply to prepare kids for the future? Or is it to help them realize their humanity? And, secondly: What is the real nature of humanity? If we view children only as potential consumers to be developed and potential workers in a technological economy, we will treat them one way. But if we view them as thinking, moral individuals and see it as our obligation to help them come to grips with self and ethical issues, then we will treat them very differently. In that case, we're certainly not going to attach them to machines when they're preschoolers, nor are we going to market incessantly to them so that they think that shopping or being entertained is all there is to do with your mind and your life. (p. 10)

Did you get all that, Rudolf? John? Jean? Data? Philosopher Bardy is not too far off when he states that sentient beings in the future will need to have a *Supersized super skull* to handle all of the mediated messages and telepresence meetings demanded of and by American society and culture. Such a vision of things to come: everyone may be walking around holding their new best friend in the palm of their hand, or perhaps not holding, but actually "in" the palm of their hand, giving "palm pilot" a whole new meaning and sensation. Geordi LaForge, the visually blinded since birth, chief of engineering, who wears a specialized visor connecting his optic nerve to electromagnetic implants in his brain that allow him to "see" various wavelengths of the electromagnetic spectrum of light far beyond that of normally sighted individuals (personal communication, Marcia Bardy, July 15, 2004), from *Star Trek: The Next Generation* (Roman, Piller, & Danus, 1989) cautions though, "The intuition factor can't be replaced by computers....The future is always coming."

CHAPTER 4

EDUCATION 2020: VISIONS OF THE FUTURE,

SOME VALUABLE KEYS FOR THE TABERNACLE

Futurizing Education in 2020 - Background

From 1900–2005 education has evolved somewhat from an industrial model with top down control mechanisms to a more collaborative and cooperative engagement of learning. The future of education reflected here is technology, community and society bound, not just educational administrators, teachers, and students. Partnerships with businesses, parents, and all members of society are being formed, with computer technology as the holy Juggernaut. More importantly, people and educators in particular need to continue their progress on moving to a more arational and integral stage of consciousness, thinking, and communicating. In other words, human beings need to move away from the underpinnings of mental rationalism frameworks which bind their minds, especially in the continual and expanding growth of the American multicultural landscape of faces and races. Move out of the yes/no, black/ white, and have/have nots dichotomies, to a more collective engagement of being, thinking, sharing, and learning.

Aim of the Chapter

The aim of Chapter 4 "Education 2020: Visions of the future, some valuable keys for the tabernacle" presents information on philosophical, theoretical, physical, and technological constructs about the future of education in America and speculatively formulates various mind's eye visions of and for the future. What issues and problems

are currently in international and American educational systems and what pro-active

solutions are being rendered for 2020 and beyond?

Topics such as multiculturism and multicultural classrooms in elementary and

secondary education are discussed, along with the role of Catholic schools and Catholic

higher education identity, values, and belief systems in the educating of Americans.

Within the chapter, literature has been reviewed to reflect the special role that Catholic

education K-BA has had and will have on the future of America. Teaching in 2020 and a

fictionalized version of education in a futuristic Cyber City are presented. In addition,

philosopher Bardy continues to thread ideas of an emerging stage of human

consciousness known as an arational/integral structure. Arational/integral frameworks

move beyond the current mental rational consciousness structures which are entrenched

in a dualistic dichotomy of competition and yes/no frameworks of being and thinking.

The author applies the emerging arational/integral consciousness structure to educational,

interpersonal, and group settings. Attitudes toward teaching genetically enhanced

individuals of the future are approached in the chapter as well. Will all men and women

be created equal in a futuristic society?

Themes from the Literature Review on Education 2020

Using "Education in 2020" as the search parameters, a vast array of international

and national Web sites, discussions, and publications which have a futuristic view of

education surfaced. Common themes from the literature which project a 2020 futuristic

view include: community involvement, faculty involvement, collaborative types of

learning environments, portfolio-and project-based education, roles of parents, funding,

values and belief systems, site-managed schools, student preparation for the workplace,

multiculturalism, and technology in educational systems.

Resources reviewed for Chapter 4 range from the 1987 *Journal of College*

Admissions discussing Catholic Higher Education belief systems, to an Internet Web site

Education 2020 Project (Kelly & Moffat, 1998) discussing Australia's educational and

technological future, to the American Association for the Advancement of Science

Project 2061, AAAS Project, (2004) a long term AAAS initiative to advance literacy in

Science, Mathematics, and Technology. Of particular interest is a study of 48 of the 51

Chief State School Officers, CSSOs, (Morgan, Matranga, Peltier, & Hill 1998) and what

they have to say on issues in American education in the year 2000 and 2020.

The following literature review takes a look at the past, present and future,

including a futuristic view into a place called Cyber City. Beginning in the past:

> ...think of the changes in American living, working, and schooling patterns
> between 1894 and 1994. The "stereotypical" American has changed from rural
> dweller to urban dweller, from manual worker to knowledge worker, from
> isolated farmer to organizational employee, from participant to consumer, from
> piano player to TV watcher; in other words, the trends (which include both good
> features and bad features) are toward abstraction, knowledge, and intelligence.
> These trends will continue fortissimo during the next 25 years, and therefore the
> really important question is not, Which road is taking us there? But, What are we
> going to do when we get there? For we will get there, ready or not, like it or not.
> What will we do about it? How will we live in the continuing age of the future?
> (Heterick and Gehl, 1995, p. 25)

Predicting education in the year 2020 is a discussion in which educators and

business institutions are intricately intertwined. Businesses, as part of the community,

are involved because they need an educated workforce which will deal with the

"abstraction" of the future, able to think critically, communicate clearly, and problem

solve with efficiency. The search for a view of futuristic education has taken on a much

larger global picture than ever before, not just researching what is happening in America

but in countries all over the world.

> By 2020, the impact of the rapid advances of information and communications technologies on New Zealand will have been profound. Education will also need to have changed. What society will expect and value in an educated person will be shaped by the social and economic conditions of the day. The rate of growth of information will continue to be exponential. The ability to analyse [sic] information and apply knowledge will continue to be paramount. The need for learning in the fundamental communication skills, including literacy and numeracy will continue. Other skills and knowledge may be different in 2020. Different communities will expect different outcomes. (Kelly & Moffat, 1998)

Asking "Jeeves"

On July 4, 2000 Researcher Bardy asked Jeeves, "What will education be like in

the year 2020?" "Ask Jeeves" suggested asking an expert from the government

(Government at EXP.com) where the following press release headline came up:

"President Clinton announces $186 million for after-school grants" (U. S. Department of

Education, 2000).

> The press release whispers of education to come, neighborhood learning centers.

> Philadelphia, May 19–President Clinton today announced the award of nearly $186 million in new grants to 1,500 schools in 48 states and Micronesia to provide high-quality after-school community learning centers. The school-based centers, in collaboration with community partners, will provide enriched learning opportunities in a safe environment to an additional 275,000 children outside of regular school hours and during summer. (U. S. Department of Education, 2000, p. 1)

> "Safe and smart after-school programs are providing terrific options for working families and will serve some 650,000 children this year," President Clinton said. "I have asked Congress to double funding for after-school programs to $1 billion next year, which would help 2.5 million children – triple the number currently served. Such an important investment would provide children in low-performing

schools the extra help and extended learning opportunities they need after school and during the summer." (p. 1)

On June 30, 2004, Jeeves again was asked, "What will education look like in the year 2020?" The following article "A 2020 Vision: Education in the next two decades" (2002) by University of Illinois Educational Psychology Professor James Levin appeared. Levin (2002) writes, "So what will education be like in the year 2020? What should education be like in the year 2020? Technologies enable possibilities but they don't determine future development. This paper will explore some possibilities enabled by technologies that may have positive implications for education and society more generally" (p. 2).

Levin (2002) echoes Bardy, when Bardy writes earlier in this chapter "From 1900–2005 education has evolved somewhat...." Levin writes, "The dominant form of formal education today is schooling. It is so much a part of our concept of education that we sometimes forget that it is not the only framework for learning, and that the current form of schools and schooling has evolved fairly recently" (p. 2). Levin (2002) talks about the separation of learning and the actual doing which is applicable practice of the learning, "Schooling is education that takes place in building [*sic*] that are mostly isolated from the rest of society, in which most of the learning activities consist of exercises. There is a separation between learning and doing, a separation between the location of learning and the location in which that learning is eventually to be put into practice" (p. 2).

Levin (2002) brings quickly into the discussion the concept of *teleapprenticeships*. New electronic media have actually started to form new forms of

education. "As more and more of the work in a society occurs online, it becomes possible to engage more and more learners in 'teleapprenticeships.' These are formal educational frameworks that engage people in learning through their remote participation in ongoing work settings" (p. 2). Levin (2002) moves onto a discussion of *tele-task forces* which Philosopher Bardy threads right into his inter-informational level of communication. However in the discussion of tele-task forces, it is not just one individual interfacing with a computer propelling options and solutions to problems or creating individual mind's eye. Tele-task forcing is when interpersonal and group communicators become interactive, many times simultaneously, synchronically communicating in ongoing projects.

"With new technologies, it is possible to create collaborative network-based projects, with diverse participants from widely distributed locations....Let us focus here on one called 'tele-task forces'. [*sic*] With this interactional framework, learners and mediators jointly tackle some task, and interact for a time in efforts to accomplish the task" (Levin, 2002, p. 4).

Levin (2002) asks the question, "Why involve learners in teleapprenticeships and tele-task forces?" (p. 4). The answer is the embedded cornerstones core of Dewey (1910, 1917), Steiner (1973), Waldorf education, and Bardy's (2000) tabernacle. "Why would we want to involve learners in these kinds of interactions with the world outside of classrooms and schools? One advantage of teleapprenticeships and tele-task forces is that learners are acquiring knowledge and skills within the context of use" (Levin, 2002, p. 4). Yes, the context of application of the learned knowledge or skill to feel a real connection

of the theory or exercise to the application of the reality, can bring on those brief

moments of self-actualization and self-empowerment.

> One of the big problems facing our current educational system is the "transfer problem" – the things learned in the classroom often aren't used when the person is in the context in which those things should be used. Transfer is not as big of a problem in apprenticeship learning because the context of learning is the same as the context of practice. The context of learning in teleapprenticeships and tele-task forces is also much more like the context of practice than conventional schooling. (pp. 4-5)

In Professor Bardy's speech communication classroom he repeatedly refers to the

future, students' futures in our course, in their other coursework and in their future

careers. Storyteller Bardy says to them that most of what we do here in this classroom is

really fake. "The group service learning backpack journey project" and the "create your

own group test project" have a few elements of reality. For the journey project you have

to actually use your laptops for knowledge building, compiling, and sharing information

to complete the objectives and goals, rather than "I-Ming Mommy" or playing along with

Wheel of Fortune (Friedman, 2004).

Researching service and philanthropic organizations, planning travel, budgeting

finances, and creating a PowerPoint can be fun practice for when you actually want to

travel by yourself or with a group; or you need to create a presentation for your job.

Building segments of a test has reality context in that you need to work together to email

each of your chapter sections to one another to form one document for the whole test and

one document for the answer key, hopefully sharing with each other all the questions and

answers. But these are fake group projects.

The real interpersonal and group communication events are the days when we have speeches. Who is volunteering to run the video camera? Who is volunteering to put the speaker list on the board? Who is asking for volunteers for peer critiquing while handing out the critique forms? Who is volunteering to keep time? Are we moving the desks in a horseshoe before I walk into class, or are you waiting for me to tell you to do that? Have you helped each other get PowerPoint up and running? Are people putting "tops down" on your computers, on your own, when a speaker presents; and are you keeping those eye lids open? Are you helping each other trouble-shoot technology glitches? To me that is true interpersonal and group work. Are we six weeks into the course and no one has moved, except for your fingers on the lap top keys, until I walk into the classroom and start barking like a Mad Dog for you to work harmoniously and collectively to achieve those "As" you all want to "earn"?

The Bardy classroom does some of what Levin (2002) is talking about in the tele-task force in relation to both of the fake group projects. People divide up tasks and then rely very much on computer technology and interpersonal and group sharing to help create the end product, the test, and the end backpack journey presentation with a creative use of PowerPoint and other audio-visual aids to supplement the spoken words. In the end, each student reviews the video of their presentation and writes how mind's eye met third ear.

Levin (2002) connects with idea of learning centers in the future, particularly the future of pre-college education.

> What will the physical environment of learning be in the future? One extreme is the "video game arcade" classroom nightmare, which imagines that each student

will sit in a classroom in front of a computer, and the teacher will sit in the front with an even bigger computer, and most of the interaction is through networks (even though they're all seated in the same room). (p. 5).

Levin's vision is pretty much like the vision from Bardy's first education course in 1972 that pointed out that "in the future there will be a computer on every child's desk." This vision is also parallel to many college classrooms today. With and without laptops, students still sit in linear managerial rows with the professor standing in front projecting detailed outlines of the lecture unfolding while the clicking of the keyboards rapture students' attention.

"Once you have most of your interaction over computer networks, questions immediately arise: Why are both traveling to the same room to do this? Why not just stay at home? So the other extreme is a totally distributed model, in which learners stay at home and learn through interaction over computer networks" (Levin, 2002, p. 5). Part of the problem with the distributed model is that interpersonal and group face-to-face communication is eliminated. The magic moments of "live" teachable moments with a synergized class are lost. Secondly, a problem is learning and linear literacy. People have to know how to read and write critically. This would not be a problem if all participants are at equal levels on the literacy scale. In the year 2020 American students should have equal abilities because NCLB (2001) of 2005 put in place now, will assure that all students meet the standard expected of them. A third problem with reliance on so much computer interfacing and inter-informational sharing is the discussion of learning styles seems moot. This vision of the future depends highly on the linear literacy sense and pretty advanced keyboarding skills. Two solutions to this problem are first, a voice

activated computer screen so that whatever a person says, the words appear; second, a solution is based indeed on an advanced keyboarding learning chip being implanted shortly after birth, along with the baby's social security number and national identification number and other useful information to track. Levin (2002) continues his vision of the future.

"My vision is that there will be 'neighborhood learning centers', smaller than the current school, closer to learners' homes, and with adults there to organize the activity. What kind of activities? The reason why I like to call them 'neighborhood learning centers' and 'adults who organize the activities' is so that we can look more easily at what roles, learning frameworks, and social organization are most useful for such a setting" (p. 5). Levin poses a further question about learning in neighborhood centers.

> How would Learning be organized in these NLCs? I imagine more like the organization in a small day care center, rather than what is typical of a typical classroom. That is, there would be a number of different kinds of activities going on at once (in "centers", perhaps), with adults to provide overall supervision. There would be a lot of peer and cross-age interaction (something relatively rare in the prototypical classroom of today). The tracking of progress would be done to a large extent on-line, based both on the learners' work on-line and on notes taken by the adults on hand-held wireless-networked devices. (p. 6)

Connecting with Classmates: Morales and Kinneman

Two issues arose in class discussions from Educational Leadership and System Change during spring semester 2000 at the University of Northern Iowa which also surfaced in one way or another in researching education in the future. My colleague Pucci (H. Morales, personal communication, February 9, 2000) spoke of the importance of multicultural education because by the year 2020, fifty percent of the students in K-12 education will be from a minority culture. Researcher Bardy found this fact to be true as

found in two cited sources (Farkas & Johnson, 1999; Steinberger, 1991). Educators are addressing and will continue to address a multicultural worldview of education where faces and races of all people need to be reflected in resource materials. As a communication researcher, human beings need to continue their progress towards an arational and more integral consciousness of being, thinking, communicating, and educating and away from ethnocentrism.

The second issue, which borderlines *The X-Files* (Carter & Goodwin, 1993-2002) type of consciousness thinking, was presented by colleague Jackie, (J. Kinneman, personal communication, February 16, 2000) a practicing nurse of many years, that the University of Wisconsin at Madison is working on how a learning chip can be implanted in the human brain. Although this researcher did not find this "cutting edge" medical research fact, computer technology has assisted in augmenting the quality and extension of human life. Jarice Hanson, Ph.D., Professor and Associate Dean of Behavioral and Social Sciences at the University of Massachusetts, Amherst, and Distinguished Professor and Verizon Chair of Telecommunications at Temple University states, "Bionic devices replace dead muscle or tissue, like Steve Austin, the bionic man, the damage is too great to augment functioning material, so bionics are replacement parts. Telepresence devices are like pacemakers; they have to connect to living tissue or muscle" (personal communication, July 1, 2004). The telepresence device stated above is a different definition than the telepresence device mentioned in Chapter 3 of this dissertation.

Researcher Bardy did find the following statement which addresses the genetic manipulation fruition factor and echoes the multiculturism view of the world, "...a vision

of schools becoming the primary architects of societal values in ways not thought of in the twentieth century, such as through genetic engineering and the creation of new life forms..." (Morgan, Matranga, Peltier, & Hill, 1998, p. 340).

The possibility of teaching individuals who have been genetically manipulated or cloned does take a moment or two of pause to contemplate how future classrooms of multicultures, including gene enhanced individuals, would be conducted. Will educators communicate differently with (not to) a cloned individual? Mediated images and messages from the past about the future may hint at how people might respond. As an illustration on point, let us turn to and tune-in a 1997 *Star Trek: Deep Space Nine* episode "Dr. Bashir, I Presume" (More) when members of the crew of the space station and the members of the mediated audience found out that, "Dr. Bashir is a genetically enhanced human being?" Life form? In the 1982 film *Blade Runner* (Deeley, Scott, Fancher & Peoples), the protagonist must "...track down androids who have mutinied in space and made their way to Earth" (Maltin, 1997, p. 130). As with Dr. Bashir, the question remains, do these life forms have a soul, a consciousness? What would Lieutenant Commander Data say about their sentience? How will individuals communicate to share ideas in such an age? This researcher found the futuristic view of a mixed classroom with various types of "life forms" to be one of the most profound new question seeds of thought sprouting forth from the study.

Multiculturalism in America

In the United States, keeping a total European ethnocentric approach to learning about culture is being revamped and revisions to reflect a more diverse society are being

dictated by regional and local characteristics. Individual school accountability of curriculum and outcome assessments may be the norm in the year 2020 rather than the exception. Sharing a more integrated multicultural society needs to be on curriculum agendas.

Not only should American schools learn about cultural diversity of their own classmates and neighbors, curriculum discussions need to include the functions and the state of a more global world. Drinan (1987) stated in a speech to college admissions officers,

> We have young people with attitudes that are macho and Rambo, and yuppie, and it seems to me that all of that is at odds with citizenship in the world which they will be required to have in that year 2020.

> Which brings me to my third and most important point. What do we do? What do we say to these young people during the next academic year? And what do we each say to ourselves about our work in our counseling? All of this is going to test your vision and your values. (p. 6)

> Drinan (1987) continues in the speech and uses the first person "we" most probably as referring to all members of the Catholic church and the gathered admission counselors who must have verbal and nonverbal communication skills reflective of a well-rounded world citizen.

"We do have a vision–you've had a vision for 50 years and now you forward to another 50 years. You have already recounted the enormous changes that have occurred in the past 50 years. We can only begin to understand the enormous changes that will occur across the global village" (p. 6).

Educators continue to recognize and revamp curriculum to be more inclusive of world conditions. The most major concern at the moment is multiculturism in their own back yards. Steinberger (1991) writes,

> By 2020, demographers predict minorities will comprise nearly one-third of the U.S. population and nearly half of the school-age youth. Changes in values accompany changes in our population. (p. 8)

> While America's past economic strength has been tied to the tenets of industrialization, with its emphasis on centralized authority, conformity, and standardization, many believe our nation's future success is linked to organizational principles that foster decentralization, diversity, and multiple perspectives. (p. 8)

Drinan (1987) believes that a wider view of the world is needed in classrooms in America. "It seems to me that we should say that what is needed now in our lives and in our counseling is some vision of the Third World" (p. 6).

Educators ask: Where do young Americans fit in? Now and in the future? Drinan (1987) continues,

> What are the values that we should commit to our young people? We are not valueless. We have many values that we should articulate more and more. All of the moral and spiritual legacies that we have need to be conveyed. If you didn't have morals or values, you'd be in a different profession. (p. 6)

> What do we believe? We believe very firmly that everyone should develop all of those talents that were given to them by God; develop them to their fullest. You spend your lives urging people to go to the best college they can get into for the most appropriate career. (p. 6)

> We also believe that education is not merely a way to acquire professional skills. It is to learn culture and literature to develop compassion. We want to train superb human beings; people with value, individuals who want to improve the world, who have compassion for those whose lives are barely worthy of human existence. (p. 6)

College counselors have a lot of values. Which ones should we be communicating to those people who will be 52 years old in that year 2020? There are many values that we can communicate to them. (p. 7)

The whole panoply of rights that we have from our Constitution and from the United Nations is now the law of the world, and we think that the individuals who are now into the colleges should know them. We believe in those values so strongly that for a long time we have been exporting them, but our sincerity is questioned when people look at us do all of the things that I have been talking about. (p. 7)

The task that confronts college freshmen will be infinitely more complex than any American has faced at any time. And those kids who are a generation or two behind us have tasks that they don't understand. Three decades from now, I don't want them to look back and say that all those people who counseled them in high school and in college never told them about what the United States and the developed nations have been doing. (p. 7)

They need to hear from you about the moral and spiritual values which all educated Americans must radiate in the next three or four decades. Again, you may say that all of this is too global, too idealistic, and even utopian; that this is putting Americans in a place where we feel uncomfortable. Well, I'm afraid that is the challenge that America has because of all the fantastic talent we have, because of our history, because of our Constitution, because of all the values we will be thinking about again next year when we reminisce about the 200 years of the Constitution. (p. 7)

Shifting American Value Systems

Shifts in a worldview consciousness partnership include moving away from a mental rational consciousness value system of dollars and cents, have and have nots, and black and white to a more arational/integral framework of human thought frameworks and communication networks. The shift in values is perhaps most evident in America's public schools. Court ordered desegregation in the 1960s and '70s, the push for bilingual education legislation, and the call for massive reforms during the past decade have brought multiculturalism to the forefront and cleared the way for changes that encourage respect for and appreciation of differences (Steinberger, 1991, p. 9).

In 1991 a national survey by the National Opinions Research Center at the University of Chicago revealed, "...many whites still hold negative stereotypes of minorities (Steinberger, 1991, p. 9). Steinberger (1991) articulates,

> The task of erasing racial stereotypes and prejudice has fallen squarely in the laps of America's public schools. Policymakers, educators, and sociologists see education as the key to overcoming bias and discrimination, to fostering an appreciation for diversity. (p. 9)

> James Banks, a professor of education at University of Washington, and other leading multicultural scholars, say, as a first step, the melting pot metaphor must give way to new imagery. (p. 9)

> Researcher Bardy remembers and recalls distinctly that in September 1963 Mrs.

Cosgrove's fourth grade class at St. Francis Xavier elementary school in LaGrange, IL, learned that "the United States is a melting pot of cultures," with a majority of those cultures at that time having come from western European nations. The task at hand and continuing towards and beyond 2020 is actively engaging the learner about world citizenship and citizenship in their own community.

If America is to prosper in an increasingly competitive global economy, all communities, urban, suburban, and rural, large and small, must find ways to engage youth who feel disconnected in school and who no longer see themselves, nor others in their group, as having a shot at future success (Steinberger, p. 9). On the world front, particularly the Kingdom of Saudi Arabia, the future of youth is indeed in turmoil.

In transition and heading towards a more pluralistic reflective society, student textbooks and all educational materials should be more representational of an integral world. Looking back, even thirteen years, to 1987, texts did not represent minorities. Steinberger (1991) reports,

In New York, State Education Commissioner Thomas Sobol convened a task force in 1987 to review state-prepared curriculum materials. Task force members were to determine if materials were bias-free and if they represented the pluralistic nature of American society. (p. 9)

They concluded not only was change essential but the materials were "contributing to the miseducation of all young people through a systematic bias toward European culture and its derivatives." (p. 9)

As a result of this 1987 national study, existing social studies curriculums reflect changes "that will result in increased students' understanding of how diverse groups have contributed to the history and culture of America and the world" (Steinberger, 1991, p. 9). To go even further, some social studies curriculums have been framed as "unhistorying of America" which includes showing some truthful sides of how American Indian populations were shoved off or "displaced" by white settlers. Steinberger (1991) pulls on educational authorities from all over the United States.

A number of scholars, including Diane Ravitch of Columbia University Teachers College, cast multiculturalism in a different light. While they recognize differences among groups, they also support the idea of a common American culture that belongs to everyone and is constantly reshaped. These cultural pluralists call for a balanced school curriculum—one which recognizes diversity while emphasizing our commonality. (p.10)

Gordon Cawelti, executive director for the Association of Supervision and Curriculum Development, defines cultural pluralism on the day-to-day, practical level. "First we have to help children understand what it means to become part of a school. Ultimately, it is here where children will learn to make sense of differences and where they will discover the common bonds that hold us together." (Steinberger, 1991, p. 10)

Humans need to engage in thinking behavior other than the one which currently exists in a large percentage of the world population which is an almost innate mental rational consciousness of "conquer" and then "dominate" those they conquer. Communicating a more unified global world is difficult to do when the consciousness is

deeply entrenched in competitive mental rationalism; a dualism of black and white

consciousness thinking often stymies arationalism.

<center>Teaching Multiculturalism in Arational/Integral
Ways Across the Curriculum</center>

Steinberger (1991) addresses the above in a roundabout way. Teachers have to

walk the talk of integrated multiculturism in classrooms each day. Each day the

classroom exudes culture. And often times the culture and then the climate are fixed

within the first few days of class. Students need to work with teachers to make the

learning energy positive, more engaging, and multi-communicative.

> Many people, speaking the multicultural rhetoric, talk about infusion but don't
> necessarily understand the operational implications, says Geneva Gay, professor
> of curriculum and multicultural education at Purdue University. According to
> Gay, infusion means dealing with the dynamics of classroom interactions and
> relationships and how these affect all students' learning. (Steinberger, 1991, p.
> 10)

> Vital components of a multicultural curriculum include an emphasis on social
> skills and higher-order thinking skills to help children develop meaningful
> interpersonal relationships, resolve conflict, and redress stereotypes and
> prejudices. Cawelti says a multicultural curriculum also should provide children
> experiences with people from their school and community who represent different
> cultures. (p.10)

Schools will continue to go through hit-and-miss-curriculums that successfully

deal with multiculturism as a world goal for all educational institutions. Creating the

space in an already full curriculum needs careful selection and integration of

measurements. Many curriculums by 2020 will have across-the-curriculum writing,

speaking, and multiculturalism content areas which reflect strong academic achievement.

Designers need to be careful.

The least promising curricular changes are those that tag units of cultural and ethnic study onto an already full syllabi and those that are limited to specific events such as Black History Month, cautions Gay. (Steinberger, 1991, p. 11)

In addition, units which move from one ethnic group to another, profiling their contributions, may set the stage for one-upsmanship, warns Gay. Such approaches may create inadvertent competition and further divisiveness. (p. 11)

As an Assistant Professor of Speech and Writing at Divine Word College (1995-1999), a missionary college with a ninety-eight percent foreign culture base, this educator observed how the one-upsmanship came into play because the college celebrated Vietnamese, Chinese, Hispanic, Indonesian, and American culture nights separately rather than select more universal times of sharing and celebrating all together. This observer noted at the time, "I can enjoy watching you eat the spring roll I made for you; but I do not want to share with you how I made it." Each cultural group over a period of four years engaged in "one upsmanship", with the Vietnamese culture dominating to the extent that some smaller cultural groups died out and no longer celebrated or even attended the college.

Steinberger (1991) connects several state educationalists' views on the subject of multiculturism inclusion in across-the-state(s) programs.

Edward Lalor, state director of program development for New York stated, "Because of the knowledge explosion, there's so much that we're going to demand the next generation to know and such a limited time to learn it." (p.11)

Thomas Lopez, an administrator in humanities education with the California Department of Education, prepared the 1987 document "The History-Social Science Framework for California Public Schools," strongly recommends local adoption of a multicultural curriculum across all grade levels. "We don't think multicultural education should be a separate course but taught throughout the curriculum everyday." The state is trying to integrate multicultural perspectives in pre-service and in-service teacher training. (p. 11)

Individuals now in education or in any of the education training programs from Pre through high school and all throughout college, need to be fully aware of demographics and know that the diversity changes from place to place, from time frame to another time frame. Steinberger (1991) moves from New York to California and on to Oregon: "Louise Waynant, associate superintendent for instruction in Prince George's district of Portland, Oregon, describes the district's approach as encompassing two vital components. The first emphasizes inclusion. All students must be able to 'see themselves' in the curriculum" (p. 12). The second focuses on providing access, resources, and support through environmental, instructional, and structural strategies. These include creating positive school climates, offering mentoring programs, incorporating cooperative learning, and teaching social skills and higher-order thinking skills (Steinberger, 1991, p. 12).

Steinberger (1991) writes about a Midwest urban setting. "Cynthia Ellwood, K-12 curriculum director, says Milwaukee's concept builds on what children bring to the classroom—not deficits because of their background, but their strengths as individuals" (p. 12). According to Ellwood, the curriculum is more than a document and collection of materials, "It is a function of all the complex interactions among children, teachers, adults, and the community" (Steinberger, 1991, p. 12).

Katie Brochu, director for curriculum and staff development for Sumter County, Georgia, schools, notes, "You can't get hung up on teaching any one culture – white, black, or any other. You have to expand your outlook and prepare students for a worldwide perspective" (Steinberger, 1991, p. 13).

On a personal level, Matthew Prophet, superintendent of Portland Public Schools in 1987 said, "It's important to have a clear idea of why it is necessary to infuse information about different ethnic groups and cultures into the curriculum currently offered in your district or school…. All vested groups must understand that infusion benefits not just so-called 'minorities' but all students." (Steinberger, 1991, p. 13)

<u>Assessing What CSSOs Say About Education in 2020</u>

The next twenty years will continue the infusion of world cultures across the curriculum and across the Pre-K through BA levels. Moving from the specific curriculum of multiculturism as an issue to wider brush strokes on the future canvas of education, *The Clearing House,* an ERIC publication, published an article in the July/August 1998 edition "What Issues Will Confront Public Education in the Years 2000 and 2020? Predictions of Chief State School Officers" written by Morgan, Matranga, Peltier, & Hill. Morgan was the former New Mexico superintendent of public instruction and is executive vice president for governmental relations for Voyager Expanded Learning, Inc. Morgan et al (1998) write,

> National education goals notwithstanding, public education remains a state-level responsibility by virtue of the Tenth Amendment to the U.S. Constitution. Specifically, state education systems must ensure access to a free public education for every citizen. To carry out that responsibility, the average state spends over 45 percent of its general fund budget to educate children in our elementary and secondary schools (NEA 1994). (p. 339)

Despite this high expenditure, the public perception is that "public schools have frittered away vast sums without much visible improvement in student performance" (Morgan et al, p. 339). As a result of this public perception, Morgan et al organized an across-the-nation critical issues assessment based on a survey they distributed.

> We surveyed the chief state school officer (CSSO) in each state to determine what he or she saw as the critical issues that will confront public education in the

future. The chief state school officer – known as commissioner, state
superintendent, or director of education – is the person in each state who oversees
and administers the state education system and so is in a particularly
advantageous position to predict what the education issues of the future will be.
(p. 339)

A questionnaire was mailed to all 51 CSSOs. Forty-eight returned the data

collection instrument.... In the questionnaire, CSSOs ranked the level of importance of

eleven critical issues of public education policy for the years 2000 and 2020; the issues

were as follows: utilization of technology in instruction, site-based decision making,

equity in funding school operations, equity in funding capital projects, student

preparation for the workplace, services for special populations, educator preparation and

licensure, preschool and early childhood education assessment of student progress, safe

environment for learning, and adult learning (Morgan et al, 1998, p. 339).

> The three top results for the year 2000 had very strong numbers. The three most
> frequently chosen public education issues perceived as likely to be very important
> in the year 2000 (of the eleven given) were (1) student preparation for the
> workplace (81 percent), (2) utilization of technology in instruction (79 percent),
> and (3) providing a safe environment for learning (79 percent). The three issues
> perceived most often as not likely to be important or not likely to be very
> important for the year 2000 were (1) equity in funding capital projects, (2)
> educator preparation and licensure, and (3) services for special populations.
> (Morgan et al, 1998, p. 339)

> The predictions for the year 2020 were somewhat different. The three most
> frequently chosen were (1) utilization of technology in instruction (73 percent),
> (2) student preparation for the workplace (71 percent), and (3) preschool and early
> childhood education (58 percent). Four of the eleven public education policy
> issues were rated by 30 percent or more of the respondents as not likely to be
> important or not likely to be very important in 2020: (1) equity in funding of
> capital projects, (2) site-based decision making, (3) equity in funding school
> operations, and (4) educator preparation and licensure. (p. 340)

> The questionnaire also invited respondents to make written comments regarding
> public education policy issues of the future. Among the issues identified in those
> narrative responses were the following: (1) concern over the potential withdrawal

of public support, and funding, of public institutions such as local schools; (2) a vision of schools becoming the primary architects of societal values in ways not thought of in the twentieth century, such as through genetic engineering and the creation of new life forms; (3) the burgeoning of individual and self-paced learning, at home or in the workplace, coupled with currently unknown technologies, thus eliminating the need for school buildings, school campuses, and traditional school-funding mechanisms; and (4) the possibility that society will put an increased value on education, as seen in the increasing support for lifelong learning and intergenerational partnerships. (p. 340)

The study also took on three studies within the key study and reported results. Regional differences, CSSO selection differences, and gender differences among the CSSOs were studied. The only issue regarding which statistically significant differences existed between the responses from CSSOs of different regions in the country was preschool and early childhood education as seen for the year 2000. Specifically, the CSSOs of the Pacific West perceived the issue of pre-school and early childhood education as being considerably more important than did their counterparts in the other four regions of the country (Morgan et al, 1998, p. 340).

The CSSO selection differences had one major issue with conflicting percentages. First is an explanation of CSSO selection.

> Each respondent had been asked to indicate the method by which he or she was selected to the position of chief state school officer. (Responses indicated that 27 percent of the CSSOs were elected by popular vote, 58 percent were appointed to their positions by state boards of education, and 15 percent were appointed by the governors of their states.) Based on the method of selection, the only issue for which a statistically significant difference existed…was "safe environment for learning" in the year 2020. Elected CSSOs viewed a safe environment as being of much greater importance than did the chief state school officers who had been appointed by governors or state boards of education. (Morgan et al, 1998, p. 340)

Gender differences in the CSSOs also showed one significant difference with one of the responses. This study found a statistically significant difference between male

respondents and female respondents with regard to the perceived importance of site-based decision making in the year 2000. Female CSSOs were far more certain than their male counterparts that site-based decision making would continue to be an important issue. Several male respondents, on the other hand, shared the perception that, in the future, schooling would not happen in discrete school buildings and on campuses but rather would occur through a more eclectic arrangement, one tailored to the needs of individual students in the workplace, home, and other physical settings – thus obviating the need for school site-based decision making. Both males and females perceived site-based decision making as likely to be less important by the year 2020 than it is now (Morgan et al, 1998, p. 340).

CSSOs also had the opportunity to add comments on the survey. In regard to the year 2020, comments included the following.

> Public schools will not likely exist as known in 1995. School-aged students may participate in a government-sponsored and publicly funded range of experiences. A child's early years may include more structured group processes. As children age, they may more likely be tutored, guided, and instructed through new partnerships representing the home, a work sponsor, and an educational liaison utilizing new technologies and advanced applications of learning theories. (Morgan, 1998, p. 341)

Joining the previous discussion on multicultural aspects of future education, the final comments of chief state school officers concurs in the following:

> America's new demographics warrant a new vision of public education. By the year 2020, almost 50 percent of the population under seventeen years of age will be composed of ethnic minority children. This trend suggests the projected change in composition will result in a substantial increase in the proportion of educationally disadvantaged children, thus requiring an unparalleled commitment to new teaching techniques, new technologies, new efficiencies, and new resources. (Morgan et al, 1998, p. 341)

The authors themselves speculate and conclude about the future.

> The results of the study lead us to speculate about emerging or continuing demands within education. For example, it is possible that, by 2020, the use of technology will not be seen to be as critical an issue as it is today because technology will be so pervasive as to be institutionalized; equity in funding capital projects will diminish in importance because students will be learning at home and in other community environments; adult learning will gain increased attention as the population grows older overall and demands lifelong opportunities for learning and an extended work life; and site-based decision making will be less of an issue in the future because school "sites" as we know them today will no longer exist. (Morgan et al, 1998, p. 341)

Studies such as the one done by Morgan et al rely on the knowledge, insight, and

"connectedness" of the respondents. The country's chief state school officers have given

us a look with a special lens into the future of public education policy issues.

Shaping Educational Outcomes in 2020

In Chapter Nine "Teaching in 2020" from *Teaching in America: The slow*

revolution Grant and Murray (1999) write,

> The conviction is growing among teachers that the kinds of outcomes that are being demanded for children–that all of them become competent problem-solvers and critical thinkers–can't be achieved if the teachers themselves are not similarly empowered to inquire into the nature of their own practice, and to have the ability to change its course. This conviction lies at the heart of the incipient second academic revolution. (pp. 215-216)

Grant and Murray (1999) state that schools are in a second academic revolution.

The first was when teachers and college professors formed unions and took control over

content and tenure in their disciplines.

> We see seven frameworks of comparison as critically determining the outcome of the second academic revolution. These include comparisons between the nature of peer control among schoolteachers and professors, allocations of time and money, how each credibly serves a public good, contrasts between a revolution by "sons" and one by "daughters" pressures for more egalitarian outcomes in pre-

college education, the differential effects of markets on demands for faculty skills in the two realms, and variance in the exercise of academic freedom. (p. 216)

Three parties have a legitimate interest in shaping educational outcomes: the student, the parents, and the state. The interests, talents, and motivations of the student, even at a young age, should be given primary consideration. A democratic society has an interest in assuring that its citizens will be educated to participate actively in the tasks of self-governance and that the young become adults who are capable of earning a livelihood and do not become burdens on the state. The interests of the parents have special weight in the moral formation of the child up to the point that the child is capable of making and sustaining his or her own choices (Grant & Murray, 1999, p. 226).

Grant and Murray project three scenarios for the year 2020.

If we look ahead one generation to ask how these factors might interact to reshape the teaching profession, we see three possible scenarios. The first predicts that there will be no big change; a teacher's career will not look much different in 2020 than it does today. The second foresees a reassertion of top-down direction of the educational system and a repeal of the first academic revolution; both teachers and professors lose ground. The most optimistic scenario would be the hastening of the slow revolution. (p. 228)

Foreshadowing of No Child Left Behind Program

Although teachers deserve better conditions of work regardless of whether test scores improve or more students graduate from high school, improving the quality of education for children—not enhancing the power or status of teachers—should be our primary aim. In the end, the value of board certification, increased autonomy for teachers, and better working conditions must be judged by their contribution to improving the quality of life and learning for children. The success of the second

academic revolution will depend on achieving results no less than did the first (Grant & Murray, 1999, p. 236).

However, any fair assessment of what teachers achieve must take into account causes of school failure over which teachers have little control. "Today, more children than ever before come to school with addictions, diseases, and disorders such as fetal alcohol syndrome, and without having had sufficient sleep, food, or supervision at home" (Grant & Murray, 1999, p. 236).

Harvard Professors Grant and Murray continue,

> Like doctors, professors and teachers are facing demands for changes in their practice. They must develop new techniques to teach and motivate those in the bottom half--students who were formerly expected to drop out or were sometimes pushed out by schools and colleges that expended most of their efforts on students in the top quartile. As we have said, this requires an immense shift in teaching practice from a concentration on stratifying and classifying to an emphasis on teaching all students. (p. 237)

Assessing Assessment

This reorientation will be helped by the growing movement toward new forms of assessment that require students to develop portfolios, engage in live debates, and arrange exhibits and demonstrations of their work, just as the new teacher boards will require teachers to do. Rather than just seeing where students rank, parents and children will see what students can do, and get more feedback about what they are competent to do and what they need to improve. It will be a more visible and useful form of demonstrating "results" than traditional report cards or percentile rankings on standardized tests (Grant & Murray, 1999, p. 237).

> But new forms of assessment alone will not produce better results in education any more than they will in medicine. Better results cannot be achieved unless

teachers embrace forms of teaching that are more inclusive and inviting, that emphasize problem-solving and peer tutoring, and that affect motivation to learn by engaging the genuine interests of all students. (Grant & Murray, 1999, p. 237)

If the second revolution triumphs, it will also help raise the status and quality of teaching in higher education. Except for professors in a few leading research universities, the real work of the professoriate is teaching, and although some sneer at those who hold teaching so dear, most faculty care about it. (p. 237)

The Role of Catholic K-BA Schools

Chief State School Officers have spoken of ideas for the future. In 1998, the National Catholic Educational Association published Volume 2 of *American Catholic Schools for the 21st Century: Reflections on the Future of American Catholic Elementary Schools*. Nineteen elementary teachers have written reflective essays on the topic of education in 2020. One teacher writes, "The question is not, 'What will Catholic schools of the 21st century look like?' The question is 'What *should* they look like? What do we *want* them to look like? Let us not predict the future; let us design it" (Kealey, 1998, p. 1).

Connecting to community involvement is also in the best interest for American Catholics and American Catholic education in the future of education. O'Brien, (cited in Marsden, 1994) states, "The American Catholic church, he suggests, can not act without the voluntary support of American Catholics and so American Catholic education cannot survive unless the American Catholic community sustains such an enterprise" (p. 1).

O'Brien (cited in Marsden, 1994) continues to name faculty as foundation posts for Catholic higher education.

...there is going to be no strengthening of the Catholic character of schools unless Catholic faculty voluntarily develop a substantive interest in the project. Neither

the rhetoric of mission statements nor the mechanical method of setting percentage of faculty who are Catholic will get anywhere without an indigenous intellectual community. (p. 1)

Faculty and Community Commitment in 2020

Faculty and community will be more committed in the future. The success of the future rides on the community and faculty to work together for the betterment of children and schools. Farkas and Johnson (1999) are senior vice presidents of Public Agenda, a nonpartisan organization that conducts in-depth research on how the public views critical policy issues. In their study, "Time to Move On: African-American and White Parents set an agenda for public schools," the final thoughts reveal, "Their agendas are clear: African-American and white parents want safe and orderly schools to provide a solid background in the basics, have higher academic standards overall, and strong teaching staffs; and they want parents to get involved" (p. 5).

Hypothesizing Education in Cyber City

In a total hypothetical environment of the future "A scenario of education in cyber city" authors Gooler and Stegman (1994) construct the future.

> We envision a formal educational structure in Cyber City, but it is a structure based on different assumptions than are currently held about how education is to happen. In Cyber City, two different but related learning goals are to be accomplished concurrently: the education system in the City should support efforts to individualize learning for each person; and to engage in learners in collaborative, rather than solely competitive learning, to the end of improving quality of life for all. (p. 3)

> The technologies and structures of education in Cyber City also make feasible collaborative teaching and learning to a degree only imagined today.... In Cyber City, the chasm between schools and business, schools and social agencies, schools and homes, and schools and work begins to disappear. The act of learning can be done mutually by pairs, small groups, or teams of people no matter where they happen to be. (p. 3)

In Fresco's [author of "Designing the future: A cybernetic city for the next century featured in the May-June *The Futurist*] conception of Cyber City, he provides for eight domes, located adjacent to the Central Dome, which house the library, science, art, music, research, exhibition, entertainment, and conference centers. Learners of all ages would frequent these domes to engage in activities suggested by the theme of the dome and thus, these domes serve many of the functions of our current idea of schools. (p. 5)

...We think the education system of Cyber City ought to have neighborhood learning centers, places that might be viewed in a way as "homerooms" for the young, and as local meeting places for older citizens.... We may finally be able to "deschool society." Neighborhood learning Centers will be expected to play very different roles for young children, adolescents, teenagers, and adults.... Our conception of the Neighborhood Learning Center would contribute to cross-generational learning. (p. 5)

A fundamental purpose of the neighborhood center is to provide a place where people come together to synthesize, analyze, and reflect on what they are learning. The centers would not be "warehouses," or places that measure success by time spent within the walls of the building. We envision the centers as very dynamic, exciting places, where learners engage with a broad range of information resources and tools, but where collectively (or collaboratively) they think about what they are thinking, and how they are thinking. In some respects, the neighborhood centers serve as venues for metacognitive activities, but also as places that promote and enhance personal and social development (Gooler & Stegman, 1994, p. 6).

Hoping for a Shift in Consciousness: A Steinerian Approach

From 1900–2005 education in America has evolved from an industrial model with top-down control mechanisms to a more collaborative and cooperative engagement of learning. The future reflected most often in Chapter 4 is community bound. Education is not just administrators, teachers, and students. Partnerships with businesses, parents, and

all members of society are being formed. More importantly, people and educators in particular need to continue their progress on moving to a more arational and integral stage of consciousness, thinking, communicating, and educating. In other words, human beings need to move away from the underpinnings of mental rationalism frameworks which bind their minds, move out of the yes/no, black/ white, have/have nots dichotomies and dualities to a more collective engagement of being, thinking, sharing, and learning without regard to labeling. Sentient life forms of the future may depend on how far current humans can think beyond the box of mental rational being. What will learning, schools, and United States hegemony look like in 2050? Will Dr. Bashir be in charge in 2100? Or better yet, Keanu Reeves from the *Matrix* (Silver, 1999)? Who knows? Time will tell.

Perhaps by turning again to Rudolf Steiner (1928) in the past and looking at the present Association of Waldorf Schools in North America (2004), these words by Arthur Zajone, Ph.D., Associate Professor of Physics at Amherst College in Massachusetts, which appear on the AWSNA homepage, may be the promise of the future. "By the time they (Waldorf students) reach us at the college and university level, these students are grounded broadly and deeply and have a remarkable enthusiasm for learning. Such students possess the eye of discoverers and the compassionate heart of the reformer which, when joined to a task, can change the planet" (n.d.). Are you listening out there Loras College students? Fellow Loras colleagues?

CHAPTER 5

QUESTION SEEDS GERMINATING, INCUBATING, SPROUTING,

AND GROWING FORTH FROM THE TABERNACLE

Aim of the Chapter

The aim of Chapter 5 is to closely examine the importance of intrapersonal

communication, interpersonal communication, and listening awareness to bring about a

shift in consciousness from the mental rational structure to the arational/integral structure

of thinking and being. The chapter begins with a discussion of listening focused on

Garrison's (1996) article, "A Deweyan Theory of Democratic Listening." The main stay

of the chapter is based on the work of Professor Michele McMaster, Ph.D. of Governors

State University and her ongoing scholarship in the field of intrapersonal communication

and the interpersonal communication process (ICP). Through extended personal

communications since September of 1991 and, with permission, author Bardy applies

McMaster's (1999a, 1999b) scholarship and writing to the education arena. The final

section of the chapter circles back to how a child acquires gesture, language, and

linguistic skills for shared meaning via writings of McCafferty (2004) as theorized and

investigated by Lev Vygotsky (1896-1934). Author and storyteller Bardy shares deep-

rooted connections of his own language learning and his spiritual connection to Rudolf

Steiner by meeting up with Daniel J. K. Bardy's own "mind's eye and third ear" face to

face.

Listening and Democracy

The discussion begins by returning to John Dewey (1910, 1917) and his view on

democracy. Through this view the discussion of listening unfolds. Dewey's (1917)

pluralistic conception of democracy led him to the following definition of democracy:

> A democracy is more than a form of government; it is primarily a mode of
> associated living, of conjoint communicated experience. The extension in space
> of the number of individuals who participate in an interest so that each has to refer
> to his own action to that of others, and to consider the action of others to give
> point and direction to his own, is equivalent to breaking down barriers of class,
> race, and national territory which kept men from perceiving the full import of
> their activity. (p. 93)

The government structure assumed by a democracy is of secondary concern. It

does not matter as long as it promotes communication. Conversation for Dewey was

about creating and sharing meaning; it was about growth (Garrison, 1996, p. 2). Garrison

(1996) points out that literature is scarce on empirical studies on the problems of

interpretation and understanding of the listening process. Michael Purdy (1986) notes,

"...that the emphasis in the literature on listening almost exclusively 'deals with speaking

and expression rather than reception,'" (p. 1) Purdy further observes, "...that models of

listening are largely drawn from information processing" (p. 2).

There are four components associated with a "conduit metaphor" of

communication purported by Michael Reddy (1979).

> 1) language functions like a conduit, transforming thoughts bodily from one
> person to another; 2) in writing and speaking, people insert their thoughts or
> feelings in the words; 3) words accomplish the transfer by containing the thoughts
> or feelings and conveying them to others; and 4) in listening or reading, people
> extract the thoughts and feelings once again from the words. (p. 290).

Much of what Reddy (1979) writes follows along the dualistic lines of Dewey's mind/body dichotomy. Listening, by most people's standard, is a passive activity. The conduit metaphor maps relations of power between the active speaker and the passive listener, active teacher and passive student. In Western civilization there is a predominance of control. Often times the command of "listen up people" can be heard to establish that the one who is speaking is the one in charge. Garrison (1996) explains further on the mental rational dualism of speaker/listener roles in Western culture.

> Western modernity's stress on the "rational" self-assertion of the autonomous individual who has the right to speak and be heard, ironically enough, devalues listening and listeners. This irony is felt far more by the oppressed than the oppressors, and by those from cultural traditions that place greater value on listening. The idea that listening is a passive and submissive activity leaves listeners open to the dangers of being theorized or colonized while being "assimilated" by some dominant cultural norm or standard, or being defined in someone else's terms. From the perspective of the dialogical multivoicedness of meaning, the conduit model is monological. Much of what claims to be democratic, equal, and empowering dialogue, the right to speak and be heard, is really a conduit metaphor monologue. (p. 3)

Teaching true listening is one of the most difficult subjects to teach. Listening is similar to reading yet far more complex, especially when you have nuances of emotion in the paralanguage. Everything a person hears has to vibrate off some already stored perception in our systemic tree of consciousness. Most of what we listen to we react to by our preconceived notions and past experiences with the information coming across our brain waves. Individuals play their own gatekeeper all the time, thus, learning is very individual. McMaster and Parmenter (2004) point out,

> Our emotions play a powerful role in our learning. It is often difficult to learn something because of the emotional response that is embedded in our mental models. Often our mental models don't have a place for a new construct or information and the resistance to this new input is caused by the emotions that are

attached. If the emotional response can be changed then the learning becomes easier....Learning becomes difficult if individuals are having a battle with themselves; the new information is rejected. (p. 1)

To listen well, individuals must actively strive to understand the meaning of others in their terms. To do so it is frequently necessary to forego attending to our own interpretations, forestructures of prejudices, and reactions to what is being heard, which are often based on ethnocentric structures already in place. Remaining open is awkward and somewhat risky. "Openness involves risk and vulnerability, but that is how we grow. Nonetheless, it is dangerous. The danger lies in the fact that openness is ontological; it is about our being" (Garrison, 1996, p. 4). Being sensitive and perceptive to what others are trying to communicate means being aware of one's own bias, so the other person can present and assert their own truth. In short, hear a person out without interrupting and without prejudgment.

Communication, Education and Integral Consciousness

Education, like every other field of study, requires communication to convey its messages. Therefore communication is closely linked to the things we teach. To teach without a vehicle to do it with, is to not teach. To explore education without understanding communication is only possible in the mental rational stage of consciousness where separations are artificially imposed. It is speculated in this chapter that, in the arational/integral stage of consciousness, communication and education are closely connected, and to understand communication is to assist in the understanding of education.

Each and every moment that we are awake and aware we are communicating. Even when a person is sleeping or comatose, communication is occurring. Hence, we cannot not communicate. Communication is always in the moment. One of the underlying principles of communication is that it is inevitable. It can never not take place. If it is always happening, then there must be some practical considerations for it to occur. Our abundant use of communication has made it transparent in most situations and has allowed us to develop for it expectations of which we are frequently not aware.

Though communication is at the foundation of all of our interactions, few of us realize our expectations about communication or the effect it has on our lives. There is not one part of our life that is not touched by it. It is our primary way of making contact with others and ourselves. Therefore, it is necessary that we examine how it will change as humankind moves into the integral stage of consciousness. McMaster (1999b) writes,

> The predominate communication modality at this time...is the ICP [interpersonal communication process]; therefore, that is where the majority of the research is focused (Littlejohn, 1999, pp. 257-259). Cognizance of another option does not seem to exist in anyone's awareness. Recognizing another option is the first step in the opportunity for growth. (p. 153)

Less is known about communication than we would like to believe because the current focus is on mediated communication: television, music, Internet. Even the interpersonal communication model is based on a mediated or broadcast perspective, where the primary purpose of communication is telling rather than listening and learning. "Though mediated communication is the primary focus today, it will more than likely fade from importance as the mental rational stage of consciousness fades into memory. Mediated communication is more than likely the death knell to the mental rational stage

of consciousness, rather than the harbinger of the arational/integral stage" (personal communication, Michele McMaster, Ph.D., September 8, 1993).

Communication supports the mental rational stage of consciousness as its structure and use is currently understood. To change the way we communicate is to promote the shift in consciousness. Having some idea about how a shift can be done requires that we look at communication at a more basic level, discovering what communication is about from a new perspective, rather than assuming that there is only one way to learn and understand it. "How have we done it in the past?" is the comfort zone of mental rationalism and that question will keep us there.

By examining communication and its variables, we are examining the very tools that are used to teach and educate. Learning takes place primarily through communication. Students learn through the interactions with their teachers or parents, whether it is by modeling, lectures, or discussions of assignments. Each of these interactions, we believe, should leave the student a better person, more learned. But does it? Can we have better students without examining the processes of communication that we use to teach them?

Facilitating the Consciousness Shift

Should we, for instance, specifically look at the reflection of ourselves in the student and see if it is the image we wish to convey. For a teacher this could be a difficult process, as Wolf (1988) suggests,

"It is quite weird to see yourself reflected an infinite number of times—a hall of mirrors. Each image is an exact duplicate of the first image, but each image grows

smaller and smaller as it reflects the image from the distant image coming from the other mirror" (p. 73).

Should we examine modeling as a specific form of communication and see what learning takes place from it? Modeling is a specific form of communication where students are really their own teachers. We do not so much teach them as they assimilate the information into individually understandable mental constructs in their own systems. These mental constructs differ with each person learning the material; therefore how the modeling is assimilated differs. To recognize this process of each individual's unique learning style and system of assimilating may be beneficial to the study of communication and education and may facilitate the consciousness shift (McMaster, 1999a, pp. 3-4).

Everyone who has learned anything has had to contend with their own style of learning and their own mental constructs. Although not obvious when we are in the process of learning, the mental constructs limit and/or expand what we understand and learn about the subject matter being taught. So education is not just about learning new things, but how our mental constructs can assist us to learn new things in a way that we can easily assimilate and therefore grow. Being aware of these mental constructs allows us to assimilate more quickly what we are learning.

Perhaps to be aware of the human procedure of creating mental constructs is to recognize a genetically driven pattern. "These properties represent the genetic precursors of the motivational drive, needs, and goal-directedness of the adult animal; during

maturation, the former shade into the latter, and there is no sharp dividing line between them" (Koestler, 1964, p. 467).

Mental/rational constructs limit or expand our world. When they are limiting, the world has sameness to it; whereas, when we allow our mental constructs to be expansive, then we have a bigger world to learn in. Depending on the number of limited and expansive mental constructs, there is an effect on learning. Depending on the combination of mental constructs activated in any learning experience, how and what is learned is affected (McMaster, 1999a, pp. 4-5).

Self-awareness allows each individual to purvey the mental constructs they currently hold. Otherwise without self-awareness the mental constructs are difficult things to change because we have no awareness they exist. To not pay attention to them is to restrict what a person can learn and how to learn it. Pretending these mental constructs do not exist is to fall into the trap of the mental/rational stage of consciousness where the only thing valid is external experiencing or objective reality. Since these mental constructs are part of the intrapersonal system, it is hard to be intrapersonally aware of an experience or subjective reality from the mental/rational stage of consciousness. It is hard to believe in the validity and power of these constructs when we have little validation for their existence in the mental stage.

Platitudes such as "don't wear your heart on your sleeve," exist to keep our intrapersonal experience from our conscious awareness and our mental consciousness intact. It is because of the structure of the mental stage of consciousness that we refuse to see the validity of our mental constructs to our learning. By becoming aware of these

mental constructs, we can achieve three purposes: (1) to lessen the "grip" of mental

consciousness on our communication, (2) to ease the transition into the next stage of

consciousness, and (3) to improve our ability to learn (personal communication, Michele

McMaster, September 8, 1993).

Mental Constructs in Academia

So what do these ideas have to do with education? Boyer (1990) offers a quote

from Derek Bok that strongly illustrates the powerful impact of some of the mental

consciousness mental constructs existing in academia, one of author Bardy's favorite

topics.

> Armed with the security of tenure and the time to study the world with care,
> professors would appear to have a unique opportunity to act as society's scouts to
> signal impending problems long before they are visible to others. Yet rarely have
> members of the academy succeeded in discovering the merging issues and
> bringing them vividly to the attention of the public. (p. 76)

These mental constructs, about risk-taking in this case, common to much of

academia, keep the academy from becoming involved in the cutting-edge issues, like

human consciousness structures. How can things be changed to reflect the "emerging

issues" and simultaneously bring the academy closer to the integral stage of

consciousness mindset?

Fresh and expansive understanding only comes when we are willing to venture

into new territory, similar to listening to others without prejudgment, for instance, to take

a risk and see how a new type of consciousness will change what we already know.

Even speculation alone expands the range of options and mental constructs available to

us. Though no one may have a clear idea of what the next consciousness stage might be

like, our speculation will help in its creation. Only through broadening our mental

constructs and options we are creating it daily as we go along. What could we be

creating?

An example of how things can change with new mental constructs comes from

the study of nonverbal communication. It was originally believed that at least some of

our facial expressions were hard-wired into the brain circuitry. This conclusion was

drawn because research showed that New Guinea Islanders would interpret the emotional

meaning of several facial expressions the same way as the person on the streets of New

York. Though there were totally different cultural experiences (and perhaps even

different stages of consciousness) the same explanations would be offered for the same

facial expression. Now current research casts doubt on brain circuitry being the cause of

similar interpretations offered. For instance, smiles would be a hard-wired function of

happiness. "If smiles occur as a result of social interactions and not happiness, then this

brings a hard-wired/genetic brain connection between facial expressions and emotions

into question" (McMaster, 1999b, p. 43). When researchers began to speculate on the

connection between recent brain research developments and nonverbal communication

research, new ideas emerged.

In the field of education it appears that instead of speculating on new connections

and mental constructs about learning, the current mental constructs seem to repeat

versions of the previous mental constructs, like vouchers, charter schools, or higher test

scores can "fix" the school problems. The NCLB (U. S. 2000) legislation has cemented

mental/rationalism fears across much of the education landscapes today. None of those

options are workable if learning and education are not reconsidered from the option of a new stage of consciousness. "The "old" mental rational state of consciousness has brought us a limited range or way to behave, understand, and learn. It has brought us severe restrictions in how learning is perceived, therefore how we think about what education is" (McMaster, 1999a, p. 7). As a case in point regarding the power of consciousness to affect our mental rational constructs, the study of communication has also limited the ways in which we understand communication, what we communicate about, and how we communicate.

Interpersonal Communication Process

> In grasping for answers to understand our lives, we never challenged the interpersonal communication process [ICP]; we only challenged the constructs within it. In this way our challenges would fall to the ground and never take root, because the social fabric (culture) kept the ICP rules intact. This is like needing a new and larger house and rearranging the furniture in the living room instead. We were never encouraged to see anything bigger because we believed the interpersonal communication process to be the only and biggest option. If we abolished or demolished it in any way, we could not survive because there was nothing to replace it (McMaster, 1999b, p. 151).

Communication research studies are examples of at least one way through which we have restricted and limited mental constructs and therefore have a limited ability to learn communication skills. This occurs because we have not recognized the power of consciousness to shape the foundation of the arena of communication studies, or any other academic field, for that matter. Hence, the gag order issued to this communicator continues to keep communication studies in the mental rational stage, unable to incubate any new seeds of consciousness communication learning.

Trying to change the system without realizing that the components of the foundation are wrong is like trying to build a house right on the water line at the beach and wondering why the foundation keeps eroding. In each facet of education or communication, as examples, there is an increasing need to recognize that the foundation is wrong. The reason that the house does not stay in place and that the suggested "repairs" do not work is because we insist on building it on a foundation that we refuse to recognize as unstable. To think or suggest that the few good men from the military, business, and government, who make the decisions about our societies and the education of humankind societies are unstable is unspeakable.

Building a New Communication and Education Foundation

To look at options for a new foundation is to think past the limited scope we have of education or communication or even ourselves as human beings. Here it becomes important to expand to a place where self-awareness and a connection to ourselves are not only valuable in themselves, but where they also become core components of education, communication or perhaps any discipline. "Human development is severely inhibited when the individual does not have a sense of connection" (Dottin, 1991, p. 19).

Axioms based on a mental rational stage of consciousness foundation more than likely cannot be modified to fit but must be discarded to create a more appropriate foundation and for a more useful set of principles that rely on new ways of thinking, behaving, and being in the world. An example of a mental rational stage of consciousness axiom is that learning takes place from the more learned bestowing the knowledge on to the less learned. A new philosophy based on integral principles might

say everyone is learned about themselves and has the skills to assimilate new information

based on whatever they determine needs to be learned and the way it needs to be learned.

Axioms that allow little to no flexibility, the duality system, are useless in this new

consciousness.

"Many kinds of new things have to be created based on a new stage of

consciousness. To make changes that are not from the beginning or within us will be

ineffectual, because even partial limits will serve to restrict the freedom to create new and

to expand into the opportunities inherent in the integral stage of consciousness"

(McMaster, 1999a, p. 9).

> So what is the "whole," "human consciousness," the "higher forms of
> organization," the intrapersonal system? Perhaps part of what they are, are ways
> to account for any of the experiences we have that have a foundation in
> complexity or ways to understand things that the ICP [interpersonal
> communication process] has not let us acknowledge. Usually we have learned to
> ignore those experiences or value the wrong things about them, by shaping the
> results to what we expect. (McMaster, 1999b, p. 88)

Expansion of mental constructs is useless for those who believe that the next stage

of consciousness needs very little different understanding than the last. The mental

rational stage values the ability to possess information (information is power) and the

mental constructs about expansion are defined as collecting more information. But if

information is doubling in less than a year's time, gaining more new information just

leads to more information glut and overload and not expansion. When information

collecting is the mental construct we possess, other or new options for mental constructs

are lost to us. All expansion in communication or education based on the same mental

constructs will lead to naught if the mental constructs are not expanded to include an

integral stage philosophy (personal communication, Michele McMaster, July 16, 2004).

What might these expanded mental constructs look like?

First, curriculum has to be integrated. Not integrated between and among subjects necessarily, but more importantly it needs to be integrated within the person learning it. Integration within may lead to a sense of personal benefit and a sense of personal benefit seems to increase motivation. With increased motivation for learning, more effective learning can take place (McMaster, 1999a, p. 10).

> The first step in letting the interpersonal communication process go is to realize that something new, different, and more effective exists. Just standing in that realization will provide solid footing. We can never be better to ourselves than to seek solid footing in such a changing landscape. But for this changing landscape, solid footing needs to be redefined. In the intrapersonal system solid footing is in our consciousness. (McMaster, 1999b, p. 144)

Whether it is to win or learn to succeed, having new ways to learn that recognize and encourage the investment of the learner, makes teaching less of a struggle for everyone involved. No one learns from punishment or consequences. Consequences usually lead to memorizing and the least mental effort.

Fostering Self Awareness

One way to promote motivation and increase learning is to encourage self-awareness. Self-awareness is not something that is valued in almost any arena of life, yet it is a primary skill in the integral stage of consciousness. Generally, people in American culture are encouraged to sit in a learning environment and then ask for someone else's interpretation of what they have just experienced or learned rather than reflecting on our own experience of learning through self-awareness. Students of all ages have learned to do this because individuals fear their interpretations as the learner will be wrong, bringing

the ego discussion right back into the bull's eye of learning. As a communication instructor, especially of public speaking, where all eyes are watching, emphasis is placed on the role of ego and the negative impact it has. People are afraid of all the judgments and that is where their energy goes, rather than using the energy to be enthused and excited and somewhat organized, ready to share a topic with others, as an extended dialogue to bring new light onto a topic of their interest.

By sitting passively in a classroom, not contributing ideas or challenging one another, all education boils down to then is collecting more information. We are often told that each person is unique. Unfortunately when unique shows up, it is summarily dismissed. We seem to be afraid of uniqueness or originality in learning; we seem to be afraid of being our own theorists. McMaster (1999a) also is in tune with what often holds us back.

"The mental construct of 'we've always done it this way' may apply here. If we understand something in a unique way, we become the one who missed that 'correct' perspective, therefore we must be wrong," (p. 12). Being wrong is risky and fear-producing, because the only choices are to be right or wrong, as defined in the dichotomous mental rational stage of consciousness. With only two alternatives, we choose to be in the "right." The desire to be "right" and the dichotomous split of right/wrong appears in many aspects of our lives.

In an aperspectival integral stage of consciousness all ideas are of equal error or merit, one not being better than another unless one alternative leads to personal consequences that might be unpleasant. In an environment where ideas that are unique or

original are encouraged, then an aperspectival stance is probably the most workable plan.

If an aperspectival stance would be encouraged,

> A campus-wide, collaborative effort around teaching would be mutually enriching. A similar case can be made for cooperative research, as investigators talk increasingly about "networks of knowledge," even as individual creativity is recognized and affirmed. Integrative work, by its very definition cuts across the disciplines. And in the application of knowledge, the complex social and economic and political problems of our time increasingly require a *team* approach. (Boyer, 1990, p. 80)

Learning as a Survival Tool

When it is time to learn about new things, most people, out of fear, have learned

to make only a minimal effort. In a dichotomous consciousness that interprets any risk as

potential failure, to be too curious is only to invite greater expectations and more effort

from the learner, and potentially risk even greater failure. Therefore it becomes wise to

only learn the minimal amount and not satisfy the curiosity and interest in the new that is

typical of humans. We stifle learning by separating learning from the flow of living and

interest in new things by telling students that more will be required of them the more they

know. Even with these restrictions, many students learn expansively in part because of

their mental constructs (McMaster, 1999a, p. 13).

> But the nature and amount of stimulations derived from a given input depends, of course, on personality structure. One type of individual will respond to a monotonous situation with stereotyped reactions; another type will find monotony vexatious, that is to say, stimulating. "Active boredom," as this kind of reaction may be called, can provide alternatives to habituation; the subject may experience the very absence of change as novelty. (Koestler, 1964, p. 554)

In the mental rational stage of consciousness, learning has few, if any,

intrapersonal rewards. Learning seems more like a survival tool than a part of the human

experience. We have come to believe that learning is a task that we do for others, and not

a task that we do for ourselves. To do it for others is to take the spontaneity and joy from the activity. Spontaneity and joy is typical in the activities of many species, should it also not be true of humans' "being"?

Learning vs. Education

Before finding new ways to learn about learning and education, it may be beneficial to see what "rules" are already set up about learning. By more clearly defining learning and the communication we use to talk about it, we might see the effects of the mental rational stage of consciousness. By doing so, it may be easier to see how integral consciousness could change the face of education—the vehicle that we use to carry learning along. McMaster (1999a) writes,

> Learning is defined in a structure that we call education. Unfortunately, learning and education are often used as synonymous terms, but in reality, represent two very different kinds of things. Learning is something that happens in spite of education while education is the formal thing that we have put in place to make sure everyone gets his or her fair share of learning. Learning comes, as if unbidden, as we live; it is part of the flow of life. Education is what we separate out and say is important to learn. It is the difference between practical knowledge and book learning. We make these kinds of separations all the time, as a condition of the dichotomous mental rage stage of consciousness. (p. 15)

The dichotomy between learning and education has even contributed, in some ways, to the pollution of the planet. "The lesson whales teach us is that you can have a brain of great complexity that does not result in the death of the planet. And also that we should not necessarily admire intelligence for its own sake" (Ackerman, 1992, p. 144).

Besides the dichotomy between learning and education, there is the issue of how learning should take place. Teachers, supported by community and the state, believe that they have these pearls of wisdom that they must impart to the students. To this end, each

week they have designed to impart certain sections of that wisdom so that students will have a complete "packet" of information when the term is done and rigorously tested throughout the process to see and measure the continuum of winners and losers along the way.

Suppose that the material could be presented more concisely and in a manner conducive to learning the material effectively but not in the style of delivering pearls of wisdom? How many teachers would jump at the opportunity to offer it in this manner? Since many teachers were trained in the same limiting mental rational consciousness frameworks as the students they have before them, it is probably a safe bet that most of them would not want to venture into a new avenue of light, learning, and teaching fulfillment. Teachers are not willing to risk the students, or their jobs for that matter, not having what the teacher or community or state have determined is vital information; and again with NCLB in everyone's backyard and in the classroom front window watching and listening, new unique approaches need to be left behind as well.

<div align="center">The Hold of Mental Rationalism</div>

This pattern of "information is power" is typical of the mental rational stage of consciousness and even more specifically the "right" information has "greater" power. Campbell (1986) offers an example of how this process works. "In consideration of the fact that one of the major Christian philosophers of the period was the Irish Neoplatonist John Scotus Erigena (C. 810-877), whose principal work, *De divisione naturae*, suffered condemnation by the church because of its implication of pantheism " (p. 83). Imagine

writing a doctrine identifying the Deity with the universe and its phenomena, questioning

the role of religion and a belief in a god structure?

Author Bardy offers the case of Galileo Galilei (n.d.) who lived in Italy from

1564-1642 and made profound astronomical discoveries. Making his own telescope,

Galileo went about proving Nicolaus Copernicus' truth about sun-centered or heliocentric

theory. Galileo's support for the heliocentric theory got him in trouble with the Roman

Catholic Church. "An inquisition was held in 1633 and he was convicted of heresy and

forced him to recant publicly his support of Copernicus. He was sentenced to life

imprisonment, although he lived out his sentence under house arrest" (pp. 1-2). The

Catholic Church did not recant its inquisition until 1992.

> One of the first steps of John Paul's papacy, which began in 1978, was to begin
> procedures leading to the rehabilitation in 1992 of Galileo, the Italian astronomer
> persecuted by the Church for teaching that the Earth revolved around the sun.
> The Inquisition condemned Galileo in 1633 because his teachings clashed with
> the Bible, which read, "God fixed the earth upon its foundation, not to be moved
> forever." Galileo was rehabilitated after 359 years. (Pullella, 1999, p. 2)

In his defense at the time, Galileo (n.d.) said, "I do not feel obliged to believe that

the same god who has endowed us with sense, reason and intellect has intended us to

forgo their use" (p. 1). The Catholic Church, upholding denouncement of Galileo's

tabernacle soul and belief system of the universe for 359 years, may give us a clue as to

the timeframe for even a partial shift of humanity's long journey ahead to a more

arational/integral consciousness structure.

> Aspects of mental rational consciousness have been of benefit to humankind in
> the sense that it has allowed us to objectify the world in such a way that it can be
> studied in what appears to be a separate arena from human existence. The human
> condition even could be separated out for study and then plugged back into the
> fabric of existence, which we believed would provide us with additional

information about ourselves. Peculiarly we did not explore our intrapersonal understanding, but instead looked outside of ourselves to understand what was happening within. This has been a useful tool that has helped us in understanding about the nature of matter and some of the ways in which our attitudes influence our behavior. This imposed separation has not been beneficial when it comes to studying how we learn, because we keep separating ourselves out from ourselves. This makes it difficult to see how learning takes place when we are not attached to our learning about our learning. (Personal communication, Michele McMaster, Ph.D., July 17, 2004)

Here is where qualitative research can give us more insights into what we need. To do qualitative research is to develop theory from the very experiences of life. Now this is prone to the effects of mental rational consciousness if what we expect to see and have always seen is how we interpret what we see. But if we do not have any expectations about what will occur, we might discover something that would tell us about the integral stage of consciousness. Then perhaps we would find evidence of integral consciousness through the new interpretations. "Encompassing all of our experience in any moment, this journey will be the best ride of our lives" (McMaster, 1999b, p. 145).

The integral stage of consciousness would more than likely have new models or methodologies for communicating because the ways communication is typically done in the mental rational stage holds mental consciousness in place and encourages us to keep using the same failure methods for communicating. "When offered new tools and techniques that allow us to be more in charge of our interactions with others than what we believe we have in mental rational consciousness, we become inspired to be better at communicating and working in relationship with others. Face-to-face communication can become safe and highly rewarding; it can almost seem miraculous" (personal communication, Michele McMaster, Ph.D., July 17, 2004).

<u>Is Mediated Communication Holding Us Back?</u>

Perhaps mental rational consciousness has spawned so much mediated communication because we have such difficulty really communicating. We have little ability and few tools to use to communicate with others. Mediated communication keeps us isolated. We cannot as easily get hurt or feel ineffective, if others can only get to us through an intermediary--a media of some kind. Even the use of virtual reality is a mediated way to contact ourselves. We can be exposed to the world we want through a mediated means. We cannot have the kind of world we want otherwise, because mental rational consciousness has told us that the world is separate from us and that we don't have any control over reality that is external to us. Because reality is believed to be separate, we have no way to truly effect it so we can have what we want, so we make up the world we want through mediated means–a myth of sorts. "There may be some kind of need for myth in the vertebrate brain, whether it is located in the head of a whale or of a person. Nobody really knows" (Ackerman, 1992, p. 135). We can create the kind of world we want through a little imagination and a lot of technology–a world purely of our own making.

Currently media allows us to safely see what is possible, but then we have to choose from what it offers that which is most appropriate for each of us. Then that becomes what we ultimately have to learn to do for ourselves. It will be hard if we have an integral stage model from which to work because it requires a shift in human spirituality. Faraday (1974) suggests one component of this model:

"I'm going to try to accept my own goodness and spirituality, which doesn't mean being branded as a religious fanatic, and I hope this will enable me to accept the goodness lying beneath the surface of others. Only in this way will I become my own natural self" (p. 257).

Exploring a New Consciousness

Aside from the fact that we are not trained to think or act in an integral model and that we have little idea of how it might work, Gebser (1986) and Wilber (1979) have given us many ideas with which to speculate. These ideas allow us to explore potential methods of learning in a new model of consciousness that we could not encourage in the old. In the integral state of consciousness it is much more acceptable to be self-aware and have tools for self-awareness and interacting with others. These tools are not visible in the mental rational stage of consciousness. If these tools are invisible, how can we develop these new tools—how can we move from one spot to another, from one approach to another, from one or two perspectives to a position that is without perspective? How do we step above the dichotomous perspective of the mental rational stage since, as Campbell (1986) indicates, there seems to be a major schism.

> One can only wonder considering…the likenesses, both in breadth and in depth, of the two constellations of metaphorical images of the Old World and the New, whether the human psyche can possibly be so thoroughly programmed that these two all but identical constellations might indeed have arisen independently in the separated hemispheres of our planet. (p. 92)

The separation does not appear to just be in the hemispheres of our planet but also in the hemispheres of our brain. Perhaps this is part of the way we stay in one perspective—how we keep ourselves trapped in the mental rational stage of consciousness

rather than moving into the integral one. One way this happens is through communication. Our patterns of communication easily keep us trapped. Our thinking is a form of communication. The thinking patterns, reflected in our external communication, often become habitual and codified.

> But before we can change anything about communication, first we must find new ways to think about the process of communication, to have a different relationship to it. Blocks come in many forms, the greatest being an unwillingness to free our thinking, to consider another position from which to think about what communication is. Pieces put together differently render new insights–it becomes a new arena of study. (McMaster, 1999b, p. 63).

Consciousness, Communication, and Habits

One way that we might change our communication habits is to look at some of the things that limit our thinking in the mental rational consciousness stage. "These silent codes can be regarded as condensation of learning into habit. Habits are the indispensable core of stability and ordered behavior; they also have a tendency to become mechanized and to reduce man to the status of a conditioned automation" (Koestler, 1964, p. 96).

Most people are not even aware of the communication influences of the mental rational consciousness stage; therefore people are consciousnessly blind as to the awareness of how the mental rational structure limits them. As individuals free themselves of the confines of mental rationalism, it is probably important to recognize that there are new things that could be tried and learned. There are probably communication tools, if we would look for or develop them, to create a structure or at least a tentative working hypothesis for an integral stage communication model. Koestler (1964) offers an example of how this might work. "Put into a formula, we could say…

[there is] the ratio A:I–where A stands for crude emotion, and I for intellectual stimulation" (p. 89).

Already we have seen differences in the world spawned by the preliminary movements toward the integral stage of consciousness. Changes in music or art, or even science indicate that a new world order is afoot. What other kinds of things could promote this shift? Perhaps by standing in new perspectives and investigating other realities that already exist on this planet, we might further our transition.

Human Doings v. Human Beings

A way to promote this transition would be to shift our ideas about our very existence on the planet as human "beings." In the mental rational stage of consciousness, for instance, we were really human "doings" not "beings." We measured our ability and success (a mental rational concept) by our "doing". What can be accomplished is human "doing." What can be experienced is human "being." It seems that currently the world is full of "doing"–of hurrying and impatience as we work harder and harder to do more doing, to be more credentialed to reflect our meritocratic mental rational tendencies. We seem to have no other alternative available to us. When that is the case, "We bundle things out of our awareness, we do this because we have a tendency to believe that we don't have the additional pieces we need to change our lives. Then we are not willing to do something new, because we believe that we don't have the knowledge we need, since we have hidden it from our awareness" (McMaster, 1999b, p. 5).

What would the world be like without all the "doing?" What makes the "doing" so important? In the mental rational consciousness frame of reference, our worth is

measured by our accomplishments. It is very external. We can say what we have done rather than what we have been, and it will get us recognition. On the other hand, to value our being is, "To stand solidly in our intrapersonal system…the very essence of our being. When we acknowledge this, then we communicate from a place of confidence and joy–a place where we are free of the encumbrances of others' feelings, values, and attitudes. We are free to live joyously" (McMaster, 1999b, p. 107).

In the mental rational stage, people remember us for our accomplishments, not for our experience (Carse, 1986). To be remembered for doing is only important in the foundational principles of the mental rational stage of consciousness, but not important in the integral stage. Therefore how do we promote "being" so we can facilitate the shift in consciousness? How can we learn to value "being"? Even the educational system promotes doing. As students we ask each other "How many tests did you take? How many pages did you have to write for that Scottish Barbarian in Contemporary Issues? How did you "do" on that paper in Leadership? Thinking is not measure of doing; it is only a measure of being. Teaching is about doing, not about being. Learning, as we currently understand it, is about doing not being. Education is how we do the doing of learning what the military, business, and government want the citizenry to know. We should stop educating people via the mental rational framework and begin encouraging them in the experience of human "being". We can more readily find solutions for our lives through the experience of self-awareness rather than through gaining additional information so we can go out and "do" something with it.

> Each time our consciousness presents us with a solution, no matter how obscure, mysterious, or confusing…we find ways to improve our life and resolve dilemmas

based on solutions that have come from our consciousness–not solutions that rely on our intellect and the rules we have been taught. Though rules may offer what seems to be concrete answers, they are often inappropriate or lacking when it comes to our intrapersonal system/consciousness-created solutions (McMaster, 1999b, p. 45).

Having help to learn "beingness" through encouraging is much different than having help to learn "doing" through educating. Learning still takes place, but in an ever-widening circle rather than through a linear process of doing. Who would we be if we were encouraged rather than educated? What would that mean to be teachers who thought they had control in their classrooms, if for no other reason than they were the all-knowing leader of the less knowledgeable students? In an encouraging model, learning might happen as the students sought it (Montessori, 1964), not as teachers said that it should be provided. We could provide learning experiences and not education. We could promote self-discovery and self-awareness and in this way might we encourage students to do greater things. Steiner (1928, 1973) promoted such learning as, as did Dewey (1910, 1917).

<div align="center">Experience as Learning</div>

Having less focus on doing and more focus on encouragement to learn, allows people the space to increase their self-awareness of their experiences as a learning tool. Prior to exploring alternatives to education, experience has not been valued as a source of learning. Experiential learner Bardy, who has extended and extensive international experience, is not allowed to teach intercultural communication at Loras College because he does not have a Ph.D. in the field. The person who does teach the course has been to Mexico. In mental rational consciousness, information which has been provided from an

objective world is what has been valued. Subjective learning that came from experience has no place in the mental rational stage of consciousness.

When alternatives to the mental rational stage of consciousness present themselves we often miss them because we hold a mental rational consciousness viewpoint that filters out anything that does not fit. We dismiss it. That is exactly what individuals do when we are "listening." The mental rational stage of consciousness also limits or dismisses our interpretation of our own experience. Generally we have learned to be intolerant of ourselves and misinterpret experiences that would allow us to be more accepting.

If encouraging is our goal, then what will happen if we started encouraging learning from an ever-widening circle mindset rather than thinking that learning takes place in a linear way. Ideas that Wheatley (1992) refers to as the New Science talk about non-linear systems and relationships. Perhaps systems and relationships are not just about science but also about our relationship with ourselves. What is our relationship with ourselves? Is there an intrapersonal system, and what is it? If we could think of and experience our relationship with ourselves, then we might begin to be aware of the integral consciousness encouragement model of learning rather than a mental rational education model of learning. The integral stage of consciousness could support a relationship with ourselves, increase self-awareness, and infuse new communication patterns. A next study would be to look at Austrian philosopher Rudolf Steiner and examine the Waldorf curriculum, explicating their communication structures in their learning environments and celebrating transpersonal experience.

Forming a New Parallel Learning Place

Viewing things from a new place is important to recognize that the arational/integral stage of consciousness has an expansive focus. According to Gebser (1986) we are seeking access to the strengths of each previous type of consciousness, not just the patterns of this one. How we move past dichotomous thinking and learn in an encouraging place is not an easy thing when our foundation of study, our understanding of learning, is something that promotes dichotomies that we call education. To study learning from an encouraging place is to require or presuppose a new foundation for understanding learning. Boyer (1990) offers an example of how this might work at the university level, "We would particularly encourage faculty at liberal arts colleges to establish collaborative relationships with colleagues at research universities so that resources might be shared" (p. 60).

Having developed numerous alternatives from many years of objectifying learning into a frame we call education has left us with many rigid beliefs that are not readily accessible to change. A body of knowledge, in any arena of study, eventually takes on a life of its own; and it becomes sacrilege when we challenge any of its underlying precepts, like any entrenched mythology. Galileo ring a bell? A better idea is to grow a new field, parallel to the one we call education, which offers alternatives without challenging what already is.

Through examining and questioning the role of communication and education in both individual consciousness and societal consciousness, much of the discussion has been about how humankind has transcended through various stages of consciousness

mutations. The current lock we have on ourselves is the mental rational consciousness which pays and plays pretty well for the military, business, and government agents in world societies today. However, the minds and voices of arational/integral, aperspectival thinkers, communicators, and self-actualized citizens are molding new keys and articulating the emerging consciousness structures of humankind, changing how we communicate, how we "teach", how we "educate", how we "learn", and we "be."

Feuerstein, Litt, and Behnke (1987) write in, "Jean Gebser–The Man and his work" the following last memorable utterances of Jean Gebser. "In the end everything is simple" (p. 2). And it is. Now go. You sentient being, you. Quit being a "doing." Build a parallel learning place in a parallel universe where hegemony does not exist, not even in Scotland or America or Saudi Arabia. Mutate now, for the next generation and generations to come.

Halliburton (1997) writes in "John Dewey: A Voice that Still Speaks to Us" about Dewey's presupposition to an integral consciousness about individual and group communication, "Community. The school, the family, the political party, and the general public all constitute communities. The particular job of the educational community, as Dewey saw it, was to overcome ever-competitive individualism with interactive cooperation, and this presupposed participation" (p. 5).

Communicating in the Arational/Integral Consciousness

Appendix F (McMaster, 1995) outlines characteristics of the five stages of consciousness along with characteristics of communication, communication systems or frameworks, and comprehending/attending/listening forms in the five stages. With focus

on the mental rational v. arational/integral, the following discussion summarizes how individuals communicate, the systems one uses to communicate, and the forms of listening engaged in during intrapersonal and interpersonal communication.

In the mental rational, the ego is central and individuals filter everything through the ego. In arational/integral, the ego becomes transegoic in which an individual recognizes the power and influence of the ego and moves beyond its grip and focuses on the other. In mental rational, dichotomies exist and the preponderance of the either/or quagmire bogging problem solution discussions. In arational/integral, an aperspectival approach offers a continuum of options. Time is fixed in the mental rational; whereas, time has flexibility and open-endedness in the arational/integral structure. Faith in reason holds individuals in mental rationalism, while intrapersonal awareness opens us to the power of intuition and our own being in the arational/integral. Communicate to control exists in the mental rational structure differing from integral in which communicate to connect is quintessential. Focus on speaking is carried out in mental rational forms; however, true listening empowers in the arational/integral stage. The system framework in mental rationalism looks to external sources for truth and validity, while arationalism allows our own being to be the source. Finally, comprehending and attending is the listening form in mental rationalism (MR), while true listening without prejudgment and bias filtering exists in arational/integral (AI) structures of consciousness.

Other examples of various differences in communicating within these two structures include: blame oriented in MR, solution oriented in AI; self esteem is external in MR, self esteem is internal in AI; agreement is necessary in MR, agree to disagree in

AI; compromise in MR, optimize in AI; and competition for a win in MR; cooperation

for winning in AI.

<u>Managing Conflict According to Mad Dog Bardy</u>

Throughout the past fifteen years communicator Bardy (1990) has compiled a list

known as, "Dan, the Mad Dog, Bardy's ten simple rules of communication" to assist

when intrapersonal and interpersonal conflict arise.

Rule 1: change is good, even death because for most, heaven is the eternal and internal reward of happiness for the spirit. To resist change often brings on unhappiness.

Rule 2: life isn't fair. It just isn't so don't kid yourself. Being born in the United States has brought me a good life. Can the same be said for individuals in western Sudan?

Rule 3: quit asking "why?" Why immediately puts people on the defensive.

Rule 4: rephrase "You" statements. When combined with "why" questions, "you" statements demand accountability and further defensive communication. For example, "Why did you use red for the sun? Why didn't you call me last night? Why did you tell the customer to call back tomorrow?" Think before responding and reconstruct questions. Using passive voice helps. "Is there a reason red is used here for the sun?" "I thought I would get a call last night." "Is there a reason the customer needs to call back tomorrow?" Rephrasing "you" statements and "why" questions takes time, practice, and patience, similar to learning a foreign language.

Rule 5: don't assume. Makes an ass out of you and me.

Rule 6: stop giving advice. People want to vent feelings and emotions or just share information. They do not necessarily want advice. We think we are good listeners when we offer up advice freely. Offer "options," not advice, when asked to do so by the other person.

Rule 7: eliminate saying "try." "Try" reaffirms in the intrapersonal an inadequacy in the task or tasks to come. "I tried my hardest," sets up self-doubt. "I did my best," is much more positive for the inner self.

Rule 8: eliminate "upset." "I'm upset with you." There are many more and more precise words in our vocabulary which more distinctly articulate emotions and feelings. Try using angry, confused, stressed out, furious, disappointed, bewildered, out of patience.

Rule 9: get rid of "but." Using "but" automatically sets up that dualism of good and bad. In many cases the word "and" is more suitable and positive. Substitute "and" and see how that works.

Rule 10: quit interrupting. Let the other person finish the thought. People interrupt because they want control, simple as that. Ego, at its finest. (pp. 1-3).

When communicator Bardy begins to feel his ego and emotions moving out of harmony, these three simple question rules are applied to the situation. First, with regards to what I am hearing or reading, I ask myself, "Is your hair on fire?" If that question doesn't calm me down, I ask, "Is this a disease I have which cannot be cured in my lifetime?" Finally if what I am hearing or reading begins to make my ego or feelings "go ballistic", I ask, "Is there ethnic cleansing in my neighborhood?" Those are my options when it comes to intrapersonal and interpersonal conflict management.

Going Back to Early Childhood

McMaster (1999a) writes, "Punishment does not promote self-awareness, as several centuries of mental consciousness training has demonstrated. Support does. Encouragement does. Anyone who has ever had an experience of support without judgment knows how encouraging in regards to learning that experience can be" (p. 27). The experience of support without judgment is something familiar to each of us as children. At a young age, we are encouraged to trust our experience, to move forward with lack of fear as our guide. No one actually teaches us how to walk. Walking is learned through experience by experimental trial and error. The very best and most

essential elements of existence in our early childhood are walking and eating, which are learned without "benefit" of education. Walking and eating are learned through the happy encouragement of others. Few can remember how one actually learned to walk, talk, and eat, and on several occasions our caregivers allowed us to fall down or spit up.

Time is very flexible in this period in our lives. We take whatever time is necessary to develop the skills of walking, talking, and eating. As singer Karen Carpenter would so melodiously serenade, "We've only just begun to live...We start off walking and learn to run....Sharing horizons that are new to us...Watching the signs along the way...Working together day to day...Together, together...So much of life ahead...We'll find a place where there's room to grow...Together, together...And yes, We've just begun" (Williams, 1970). Rudolf Steiner's (1928, 1973) biography states,

> In later life Steiner frequently made the point that the most prodigious feat any man achieves at any time is accomplished by him in the first two or three years of his life, when he lifts his body into the upright position and learns to move it in perfect balance through space, when he forms a vital part of his organism into an instrument of speech and when he begins to handle and indeed to fashion his brain as a vehicle for thought. In other words, when the child asserts his human qualities. (Windsor, pp. 1-2)

In Dewey's (1897), "My Pedagogic Creed," originally published in *The School Journal*, January 16, 1897, he writes his famous declaration concerning education. The declaration establishes five Articles. Article I–What Education Is; Article II–What the School Is; Article III–The Subject-Matter of Education; Article IV–The Nature of Method; Article V–The School and Social Progress (pp. 1-11). Dewey (1897) writes about the beginnings of learning and language stimulation in early childhood.

> I believe that the only true education comes through the stimulation of the child's powers by the demands of the social situations in which he finds himself.

Through these demands he is stimulated to act as a member of a unity, to emerge from his original narrowness of action and feeling, and to conceive of himself from the standpoint of the welfare of the group to which he belongs. Through the responses which others make to his own activities he comes to know what these mean in social terms. The value which they have is reflected back to them. For instance, through the response which is made to the child's instinctive babblings the child comes to know what those babblings mean; they are transformed into articulate language and thus the child is introduced into the consolidated wealth of ideas and emotions which are now summed up in language. (p. 1)

I believe that this educational process has two sides--one psychological and one sociological; and that neither can be subordinated to the other or neglected without evil results following. Of these two sides, the psychological is the basis. The child's own instincts and powers furnish the material and give the starting point for all education. Save as the efforts of the educator connect with some activity which the child carries on of his own initiative independent of the educator, education becomes reduced to a pressure from without. (pp. 1-2)

Education as a pressure from without sounds very similar to what was written in an earlier section of Chapter 5 concerning the differences in the frameworks and systems of communication between mental rational and arational/integral consciousness. Pressure from without can be interpreted as knowledge and education systems come from "external" sources in mental rationalism; whereas, in an arational/integral system, individuals are their own source of learning and enlightenment. Dewey (1897) cautions above that there is a delicate balance between the psychological, the individual, with the sociological, the group. If subordination or neglect occurs, "evil results" may follow. By bringing in the term "evil," readers are reminded of an earlier conundrum, "Are certain individual's born with or presupposed to "a bad seed" consciousness?"

Dewey (1897) continues with the ideas that we continue to trap ourselves in the mental rational consciousness without even and ever knowing we are trapped when he writes, "...it is urged that the social definition of education, as getting adjusted to

civilization, makes of it a forced and external process, and results in subordinating the

freedom of the individual to a preconceived social and political status" (p. 2). Sounds

like the raw rules of and beginnings of hegemonic cultural engagement of and for the

society being quickly put into place and set into mental rational consciousness motion

and reflection.

Finalizing Discussion with Thought, Language, and Gesture

Moving into and building upon early childhood language and meaning processes

and learning methodologies, the forthcoming 2004 special edition of the *International*

Journal of Applied Linguistics, highlights six articles and an introduction to the issue

which will focus on L1 and L2 learning from, "…a Vygotskian standpoint and,

specifically, focus on how inner and private forms of speech and gesture function to

mediate L2 learning" (McCafferty, p. 1). The labels of L1 and L2 learning are in the

vernacular of second language learning and linguistic skill acquisition studies. L1 is first

language learned; L2 second language learned (First, n.d., p. 1).

> Essentially, Vygotsky revolutionized Piaget's notion of *egocentric speech*,
> arguing that instead of revealing the asocial nature of children, it is a modality of
> thought stemming from the internalization of dialogic interaction as formed
> within specific cultural-historical contexts of activity, and thus that it is eminently
> social and, moreover, a critical aspect of intellectual development. Furthermore,
> in his study of the phenomena, Vygotsky found that private speech transforms
> consciousness and serves the function of self-regulation. (p. 1).

McCafferty (2004) continues with the concept of the function of private speech in

a young child, how private speech unfolds in human child consciousness, the function of

gesture and gesture relationship to thought, meaning, and language acquisition.

> At around age seven, private speech "goes underground", in Vygotsky's words, as
> *inner speech*, remaining a central aspect of our cognitive architecture (although,

of course, private speech does resurface in challenging circumstances). Vygotsky (1986: 249) stated that "[i]nner speech is to a large extent thinking in pure meanings". Syntactically, it is elliptical, reduced only to that which is psychologically most salient, that is, new information (what Vygotsky termed the 'psychological predicate'). Semantically, *sense* dominates meaning, the impressions of words as gleaned across a variety of contexts outweigh the more static or dictionary designations. The process of *agglutination* is also characteristic, so that "a new word not only expresses a rather complex idea, but designates all the separate elements contained in that idea" (Vygotsky 1986: 246). The final semantic component of inner speech concerns how words accrue an array of associations with other words, resulting in an "influx of sense", as with the word *war* in the current international crisis. (pp. 1-2)

With regard to gesture, Vygotsky, building on the work of Wundt, noted that it is through gesture that children first enter the human world of semiotic mediation (pointing leads to objects being brought to a child). Moreover, he stated that "the word, at first is a conventional substitute for the gesture" (Vygotsky 1968: 65), and that gestures are the "material carriers" of thinking (cited in McNeil and Duncan 2000). Therefore, he clearly recognized a vital connection between thought, language, and gesture. (p. 2)

Author Bardy has final reflections back to Helen Keller (1954) and the

wonderment of those magical moments when water spilled forth from the well house and

Helen's teacher Anne Sullivan signed the word "water" into Keller's palm, how thought,

language, and gesture culminated together, giving Helen a fuller sense of being and a

hope for self-actualization. And for my young friend Alison C. Biskup (personal

communications 1986-2004) how intuitive thought projection, body gesticulations, eye

contact and movement, great outbursts of joyful laughter, quiet crying of physical pain,

combined with facial expressions, all became the special language of her own design to

communicate and have shared meaning with her family and those around her each day.

Alison continues to be a true testament to the power of love, spirit, soul, connectedness to

the larger humankind, and a model of self-actualization being nurtured by her caregivers.

Fruition, at its finest.

Steven McCafferty (2004) continues with the connection between and among thought, language, and gesture.

> Over the last 35 years or so, David McNeill has championed this position both through empirical study and through his theoretical unit of analysis, the *growth point*. McNeill (1992: 246) posited that with germination of thought comes a dialectic between gestural imagery and linguistic structure, with *gesticulations* (the gestures that accompany speech in the renderings of a thought) representing the whole of an idea in global and synthetic images, and speech, following linguistic form, moving from the part to the whole. Furthermore, he stated that "a dialectic implies that the speaker's thought evolves through the course of the utterance-gesture formation, and comes as Vygotsky said, into existence with it". (p. 2).

Questions Seeds

It is all a matter of question seeds. "Question seeds." Those were the first words I used in critical thinking skills. I was only two years old, and I remember those moments sitting next to my mother in the '46 Olds.

"Uh, uh," I grunted. "What's inside?" is what I was really after.

Riding along in the car with my father to pick up my mother from her night job as a pediatrics nurses' assistant at Hinsdale Hospital, she would get in the car, often having a fresh new paper bag of some sort, something from the gift shop. Something from the gift shop, for me? So "Uh uh," meant, "what's inside?" between my mother and me.

I would repeat over and over again "Uh, Uh" and hear "Question Seeds" as the response after each "Uh." After about five or six tries, I gave up; by then, we were usually home and time for bed.

It wasn't until about a year later when I connected "Question Seeds." By the next year, a much more sophisticated way of speaking changed "Uh, Uh?" to "What's in the bag, mommy?"

"Question seeds" she responded.

And I said, "What's in the bag?" This time getting a little aggressive in the snooping department.

"Question seeds, and quit snooping around my purse," she said.

"Mommy, now I know 'question seeds.' It means, 'none of your business.' And it means 'quit asking. You won't tell me.' Is that what "question seeds" means?

"Question seeds."–the magical gateway of storyteller Bardy to the closing of Chapter 5 and this dissertation: The direct manifestation of the spirit and connecting with Rudolf Steiner, particularly in relation to Steiner's direct contact with a spirit as a youth when he was eight years old. The following rests in the sacred tabernacle of author Bardy.

Two summers after we had our faces to the wall in the corridors of St. Francis Xavier School, bracing ourselves and waiting for the collective macrocosm of the Cuban Missile Crisis atomic holocaust to begin, a microcosm of horror hung over the quiet neighborhood in La Grange, Illinois. In late August 1965, one of my classmates, Karen Mitchell, was brutally murdered by the twelve-year-old boy next door. Karen had been found stuffed in the crawl space in the home of the boy, stabbed over twenty times with a small penknife, her hands and feet bound and eyes blindfolded.

I was particularly fond of Karen, walking her home often throughout the third grade. We would stop at Hank's, a mom and pop shop that sold penny candy. She lived in a very modern new house six blocks in the opposite direction of my house. We stayed on the stoop of her house on several occasions just talking. She was a beautiful, petite,

little girl with shoulder length blond hair that flipped up at the end. Karen was very smart, much smarter than me, which she didn't seem to mind. She didn't make me feel like I "had shit for brains" as my father often said to me.

Karen's wake and funeral were my first experience with death. On the afternoon of the first day of waking Karen, I was in my upstairs bedroom, overlooking Kensington Avenue, getting dressed; and as I was tying the tie I had chosen, I looked up and saw a vision of Karen, in her first communion gown, sitting on the edge of my older brother David's twin bed. She was looking out the window. She spoke to me telepathically saying, "I'm all right. I feel fine. Please don't be sad. I'm in heaven."

At that time, which seemed like at least five minutes, Karen faded away slightly and then reappeared, sitting quietly, looking out the open window. The closest I can explain is the feeling when audiences for the first time saw Princess Leia from *Star Wars* being projected in three-dimensional form, sending a message from Obi-Wan Kenobe. In today's term we now know this projection as a *telepresence*.

Over and over again I said, "This is your imagination. Stuff like this doesn't happen." Over and over again I said, "This is a figment of my imagination. I remember calming down by thinking, "She's in heaven with my sister Mary. They are both angels next to God." My sister Mary was a child my mother lost four years before I was born. I could see the two little girls clearly, Karen on the left side of God and my sister Mary on the right side.

Arriving at the funeral home promptly at 4:00 PM, I sat with my friend Peter Krump, who had lived only two blocks away from Karen. He was bashing himself for

wearing a tie clasp which was a miniature version of a saw. "What a stupid thing to do. What if her mom sees this; what is she going to think?" Peter berated himself.

Suddenly Peter turned to the lady sitting next to him and said, "Do you think it's okay that I wear this tie bar which looks like a saw?" The woman burst into tears and turned the other way.

I said to Peter, "Take it off! Put it away. Put it in your pocket." Peter eventually became a carpenter.

To change the topic sitting there in the back of the viewing room with the open casket ahead, I whispered to Peter, "I saw her," as I gestured towards the front. "This afternoon when I was getting dressed. There she was sitting on the edge of the bed, talking to me in my head."

Not even a beat had gone by when Peter, "Yeah, I saw her too. Sitting on the edge of my bed, in her communion outfit."

"Did she say anything?" I asked.

"Yeah but didn't really move or anything. Just that she was in heaven and don't be sad."

"Do you think she appeared to everyone in class?" I inquired.

"Maybe," Peter said. So we just sat there, Peter and me for an hour or two, seeing if anyone else from our class would come to the wake. We were the first; that was important. Eventually Peter and I made our way up to the open casket to pay our last respects. Sitting in the back of the room earlier, I remember how I couldn't even think about looking up front; my heart started pounding each time I thought about going up

front to see her, to see my first dead person; someone my age, brutally murdered. Would scars show? Finally, the truth be told.

There were no scars, just the beautiful blond girl, very stiff and still, wearing her first communion dress and placed in a child-sized white casket. "Don't cry. Don't be sad. Don't cry. Don't be sad." That's all I kept hearing in my head. For weeks afterward, I rode my bicycle as fast as I could to have conversations in my head with my friend Karen because I didn't want to hear "Don't cry. Don't be sad."

The funeral was held at St. Francis Church two days later, in the morning. It was a very small turnout. Not many of my classmates attended, not even Peter. No one came up to me. No one spoke to me. I was hoping someone would come over and ask, "Are you going to the cemetery?" No one did.

With the service over, I stood outside on the curb by the first car in the funeral procession, watching carefully as the casket was rolled into the back of the black hearse. I saw Karen's mom, a small stout blonde woman, and Karen's older sister, who wore a back brace, beside themselves in tears as they moved into their funeral car. The motorcade started. Still no one asked me to go. Where were they taking her now? Will I ever know where she's buried in case I ever wanted to visit?

School started very shortly after those impressionable days in late August 1965. Now, looking and listening back, Karen Mitchell's name was never mentioned in public again. The teachers at St. Francis Xavier said nothing whatsoever to the students when we returned to school after Labor Day. It was as if Karen Mitchell had never lived. As if a gag order had been issued. No school counselors. No one to assist in the grieving and

death process. Is the manifestation of the spirit of Karen Mitchell I witnessed and felt as a child a similar experience that Rudolf Steiner may have experienced when he was eight years old?

On my 39th birthday, July 20th, 1993, I was working on my graduate degree in communication studies at Governors State University, taking two courses: Intrapersonal Communication and Listening, both from Professor Michele McMaster. One of the assignments was to find an answer to a question you've always had. So on this day, finding Karen Mitchell's grave was my quest. Both my parents are buried in Queen of Heaven Cemetery which is also the same cemetery as where the bodies of Karen Mitchell, Yogi and Alison Biskup, among others from my life lie in memoriam.

Finding Daniel J. Brady

For years, I drove around Queen of Heaven wondering where my fallen classmate had been buried; and on this beautiful day in July, after visiting with my parents, I drove to the cemetery directory office for the location. Using an electronic touch screen, with three or four brush strokes, the location of Karen Mitchell's grave came up and in five more seconds a paper copy of the location and directions were in my hand. Stopping for clarification with one of the information assistants, I drove to the "Giant Rosary" section. Queen of Heaven Cemetery is a 472-acre cemetery.

After getting out my car, I started to look at the ground for those circular markers with numbers on them. In my mind I heard, "Look at the first headstone to get a name to go on, to have a starting point for the search." Immediately, I looked down and to the right. The first thing that came into my view was the name "Daniel." Moving my eyes

ever so slightly to the right, I saw the middle initial "J." Moving even more slowly, my

eyes moved onto the last name, "B" "R" "A" "D" "Y" was what I read. It was a simple,

flat headstone, very similar to that of both my parents. The line below the name Daniel J.

Brady was 1903–1956. 1956, the year the Bardy's moved to LaGrange. Standing

shocked, contemplating the likelihood of Daniel J. Bardy meeting up with Daniel J.

Brady and the kismet of the day, I slowly moved, continuing my quest, all the while

contemplating how consciousness was an always coming together of perceptions,

experiential learning, and the coming together of intuition of millions of years. I

eventually found Karen Mitchell's gravesite.

There were fresh flowers on the grave and on the flatstone of the headstone were

the words "Our Saint." Carefully placed at the lower left-hand corner of the marker was

a small 12-inch statue of a kneeling angel. The angel's hands were posed in prayer over

the gravesite. Just as I had imagined her in the summer of 1965, standing with my sister

Mary on each side of God, Karen and my sister Mary were in my mind's eye and third

ear on my 39th birthday. Alison Biskup is there now, too, standing next to my sister

Mary on the right.

It was a melancholy celebration of sorts, experiencing closure to my first

experience with death and the question of my own death and that of Daniel J. Brady.

Sitting on the grass that day, next to the little girl I bought penny candy for, I wondered

where her family had moved. And what about the boy next door? What ever happened

to him? The last thing I heard, about two years after the murder and some troubled youth

detention for him, was the end result that he was never allowed to live in Cook County

again. Was that young boy a "bad" seed or did his play just get out of control? How has

his life been since that late day in August 1965? Maybe Google knows?

When I returned home that birthday afternoon in 1993 from my cemetery quest, a

telephone call came from an employment recruiter. The wandering for this journeyman

back to, for the second time, the Kingdom of Saudi Arabia was about to begin. The first

time I lived in Saudi Arabia holds witness to another, the strongest consciousness

manifestation of the spirit: Meeting my Turkish/Kurdish/Armenian friend, and brother of

twenty years, Kazim Gündoğdu, for the first time. It was a beautifully clear night in

Abhatown, the evening of November 17, 1984, as I stood fourth in line at the public

telephone line outside the Al-Hinawi supermarket. My mother's funeral was just getting

underway back home at St. Francis Xavier Church in LaGrange, Illinois. I turned to see

who was standing behind me and he asked, "Sprechen Sie Deutsch?" And that, too, is a

matter of question seeds and postdoctoral work.

Returning to the Introduction Questions of the Dissertation, With an Answer Key

Throughout this dissertation, *The Mind Is the Tabernacle of the Consciousness*

Soul: A Journey Visiting the Roles of Consciousness, Communication, Education, and

Technology in Human and Curriculum Development by Integrating Dewey, Gebser, and

Steiner–Past, Present, Future and discussions with Professors and students in the

doctoral program in curriculum and instruction 1999-2005, we have journeyed through

the questions and answers of how do we know what we know, (simple answer: page 5)

what is knowledge, (simple answer: page 6) what is individual, (simple answer: page 6)

what is society, (simple answer: page 20) what is method, (simple answer: page 4) how

do we teach, (simple answer: pages 4-5) what is democracy, (simple answer: page 7) what is learning, (simple answer: page 5) what is curriculum, (simple answer: pages 8, 10) what is the nature of teaching, (simple answer: page 4) what is truth, (simple answer: page 10) what is consciousness, (simple answer: page 38) what is technology, (simple answer: page 94) what is education, (simple answer: page 4) and what is communication, (simple answer: page 6) among other questions. We, and educators and communicators to come, will continue to ask and answer these questions, of ourselves, and the students we teach. Many times struggling for meaningful answers and always hopeful for new question seeds of inquiry from a 5 or a 50 year old.

Looking at the brief biographies of the three major philosophers, Dewey, Gebser, and Steiner, all of them had journeys filled with struggles, struggles not only for academic acceptance but also for their own democratic principles and political ideology freedoms. After ten fruitful years, Dewey left the University of Chicago as a result of various political issues within his newly formed Department of Education. Gebser was on the move from Poland to Germany, Spain, France and finally to Switzerland in order to just survive. Steiner, as well, was on the move going from Austria to Germany and settling in Switzerland to continue his work in Anthroposophy and Waldorf curriculum without persecution. Each of the philosophers and Daniel J. K. Bardy will now sign off.

<u>Signing off with Dewey, Gebser, Steiner, Bardy, Among Others</u>

Throughout the dissertation process many new discoveries have surfaced over the past six years (1999-2005). The connections among the four philosophers here are quite spiritually based. Each believes in the importance of an arational/integral outlook for

both individual and society, yet understands the hold that the mental rational consciousness has on most of humanity, particularly those in charge of educational systems. All believe that the source of learning is from within and that experiences continue to guide the building of knowledge.

Secondly, the discovery of the ASPM gene in microcephalic children and the connective link to early hominid man and the implications of how man developed a super skull, enabling reasoning and linguistic skills to blossom is truly thought enrichment. The third discovery process centers on Rudolf Steiner's (1914) view of technology inclusion into the consciousness structure and the inclusion of computer technology teaching in today's Waldorf schools worldwide, which challenges the modern adage that "information is power", and begs the question: power for good or power for evil?

What education in America will look like in the years ahead covers the fourth area of enlightenment here. Speculation is that community learning centers, long distance and telepresence learning, multiculturalism, and Catholic schools belief systems will be at the forefront in the decades ahead. In addition to these structures which deal with how and where we will teach and learn in the coming century, it also includes who we will be teaching. Will genetically enhanced individuals be in those multicultural Catholic community learning centers using telepresence devices to exchange ideas and knowledge with other genetically enhanced individuals in Sydney, Australia?

Finally, the evolution process of human physiology and consciousness has evolved for over 4 million years from an archaic to magical to mythical to mental rational and "infant" (ecimally) now to an arational/integral consciousness. The power of the

intrapersonal self contains and is able to bring forth all five stage mutations to view

reality and learning in whole new ways.

Each of the philosophers has some closing words for the reader. Dewey (1897)

closes out with passages from "My Pedagogic Creed."

> With the advent of democracy and modern industrial conditions, it is impossible
> to foretell definitely just what civilization will be twenty years from now. Hence
> it is impossible to prepare the child for any precise set of conditions. To prepare
> him for the future life means to give him command of himself; it means so to train
> him that he will have the full and ready use of all his capacities; that his eye and
> ear and hand may be tools ready to command, that his judgment may be capable
> of grasping the conditions under which it has to work, and the executive forces be
> trained to act economically and efficiently. (pp. 2-3)

Eye, ear, and hand are in harmony with Steiner's (1973) Waldorf curriculum

which emphasizes head, heart, and hands. There is also a strong correlation to Bardy's

"mind's eye meets third ear" approach to the power of the intuitive sense. In relation to

language and communication Dewey (1897) writes in Article III of his pedagogic creed

"The Subject-Matter of Education", "Language is the device for communication; it is the

tool through which one individual comes to share the ideas and feelings of others. When

treated as a way of getting individual information, or as a means of showing off what one

has learned, it loses its social motive and end" (pp. 6-7).

John Dewey (1897) leaves now with the final passage which concludes his credo.

The very end of article V, "The School and Social Progress" reads,

> I believe that every teacher should realize the dignity of his calling; that he is a
> social servant set apart for the maintenance of proper social order and the securing
> of the right social growth.

> I believe that in this way the teacher always is the prophet of the true God and the
> usher in the true kingdom of God. (p. 10)

Jean Gebser (1986) adds these words to the ending of the dissertation. From *The Ever-Present Origin*,

> Epochs of great confusion and general uncertainty in a given world contain the slumbering, not-yet-manifest seeds of clarity and certainty. The manifestations of the aperspectival world...show that these seeds are already pressing toward realization. This means that we are approaching the "zenith" of confusion and are thus nearing the necessary breakthrough. (p. 531)

On the homepage of The Jean Gebser Society (n.d.) the following two quotations are posted. "TO THINK WITH THE HEART IS TO THINK IN LIVING TERMS." Finally, "EVERY ONE OF US IS A GRAIN OF SAND. A GRAIN OF SAND ON THE BEACH AMOUNTS TO NOTHING. BUT A GRAIN OF SAND IN THE CLOCKWORK OF ETERNITY CAN TRANSFORM ETERNITY" (p. 1).

Rudolf Steiner poses the final two questions of the dissertation. The questions appear on the Windsor Castle (n.d.) Web page, underneath the header "Rudolf Steiner Biography." The questions read,

> *"Who says what to whom along what channel and to what purposes and with what probable effects? Maybe you can find it out?"* (p. 1).

Daniel J. K. Bardy signs off with a poem he wrote to Professor Lisa Hanson of the University of Northern Iowa (personal communication, May 5, 2000).

<u>more...</u>

i long for being
and connection
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    With thanks to Michele McMaster, Alison Claire Biskup, Kazim Gündoğdu, and

Craig Schaefer for learning and experiencing that an arational/integral consciousness

exists and some who have actualized this consciousness arena. All are the embodiment,

empowerment, and examples of *The Mind is the Tabernacle of the Consciousness Soul*.

In concert and celebration with and on my 50th birthday: this 20th day of July 2004.

REFERENCES

References marked with an asterisk indicate studies included in the meta-analysis.

Ackerman, D. (1992). *The moon by whalelight: And other adventures among bats, penguins, crocodiles, and whales.* New York: Vintage Books.

Agostinelli, J., Bischof, B., Bloom, J., Change, Ed., Darsie, R., Helmick et al. (n.d.). *Waldorf FAQ: frequently asked questions about Waldorf education.* Retrieved November 4, 2000, from http://www.fortnet.org/rsws/waldorf/faq.html

American Association for the Advancement of Science. (n.d.) Retrieved June 30, 2004 from http://www.project2061.org/default_flash.htm

Anthroposophy network homepage–*Biography of Steiner.* (n.d.). Retrieved November 4, 2000, from http://www.anthroposophy.net/frontpage.htm

Asen, R., & Brouwer, D. C. (2003). Introduction: John Dewey and the public sphere [Electronic version]. *Argumentation and Advocacy, 39*(3), 157-160.

Association of Waldorf Schools of North America. (n.d.). Retrieved July 5, 2004 from http://www.awsna.org/index.html

Balterm, M. (2003, December 16). Big-Brain gene? [Electronic version]. *Science Now,* 1-2.

Bardy, D. J. K. (1990). *Dan, the Mad Dog, Bardy's ten simple rules of communication* [Brochure]. LaGrange, IL: Author.

Bardy, D. J. K. (1991). *Developing the inter-informational level of communication.* Unpublished manuscript. Governors State University, University Park, IL.

Bardy, D. J. K. (1994). *Alison Biskup: A unique consciousness.* Unpublished manuscript. Governors State University, University Park, IL.

Bardy, D. J. K. (1999). *St. Francis Xavier School's history of television in the classroom–1963-1969.* Unpublished manuscript. University of Northern Iowa, Cedar Falls.

Bardy, D. J. K. (2000). *The mind is the tabernacle of the consciousness soul.* Unpublished manuscript. University of Northern Iowa, Cedar Falls.

Bardy, D. J. K. (2001). *The management of intrapersonal and interpersonal communication in reducing technostress: Lessons learned by librarians and instructors.* Unpublished manuscript. University of Northern Iowa, Cedar Falls.

Bardy, D. J. K. (2002, February 14). *Mind's eye meets third ear: tales from the backpack and other consciousness journeys.* Founder lecture presented for Loras College Arts and Lecture Series.

Bardy, D. J. K. (2003). *The Bardy-Wilson WMMDW-TQN summary report.* Unpublished manuscript. University of Northern Iowa, Cedar Falls.

Bardy, D. J. K., & Chin, Y. C. (2000). *Defining curriculum.* Unpublished manuscript. University of Northern Iowa, Cedar Falls.

Bardy, D. J. K., & Payne, E. (1999). *The Bardy and Payne educational mission statement.* Unpublished manuscript. University of Northern Iowa, Cedar Falls.

Barnes, H. (1999). *Waldorf education...An introduction.* Retrieved November 6, 2000, from http://www.awsna.org/waldorf/hb_intro.htm

Berman, R. (Producer). (1991-1995). *Star Trek: The next generation* [Television series]. Los Angeles: Paramount Television Productions.

Biskup, C., Biskup, D., & Biskup, J. (2004, April). *Eulogy for Ali.* Unpublished manuscript.

Bloom, B. S. (1984). *Taxonomy of educational objectives: The classification of educational goals.* New York: Longman.

Bohannon, J. (2002, September 23). Small brains hint at human history [Electronic version]. *Science Now,* 3-4.

Bond, J., Roberts, E., Mochida, G. H., Hampshire, D.J., Scott, S., Askham, J. M., et al. (2002). ASPM is a major determinant of cerebral cortical size [Electronic version]. *Nature Genetics, 32*(2), 316-320.

Boyer, E. L. (1990). *Scholarship reconsidered: Priorities of the professoriate.* Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching.

Braga, B. (Writer), & Wiemer, R. (Director), (1992). Schisms [Television series episode]. In P. Lauritson (Producer), *Star Trek: The next generation.* Los Angeles: Paramount Television Productions.

Brod, C. (1984). *Technostress: The human cost of the computer revolution*. Reading, MA: Addison-Wesley Publishing Company.

Burks, D. (1968). John Dewey and rhetorical theory. *Western Speech, 32*, 118-126.

Campbell, J. (1976). *The masks of god: Vol. 2: Oriental mythology*. New York: Penguin.

Campbell, J. (1986). *The inner reaches of outer space: Metaphor as myth and as religion*. New York: Harper & Row.

Carse, J. (1986). *Finite and infinite games*. New York: Free Press.

Carter, C., & Goodwin, R. W. (Producers). (1993-2002). *The X-Files*. Los Angeles: Ten Thirteen Productions.

Champion, S. (1988). Technostress: Technology's toll. *School Library Journal, 35*(3), 48.

Clark, K., & Kalin, S. (1996). Technostressed out?: How to cope in the digital age. *Library Journal, 121*(13), 3.

Clent, M. W. (1964). *Rudolf Steiner archive: Steiner biography*. Retrieved November 4, 2000, from http://www.eelib.com/Steiner/RSBio.php3

Combs, A. (n.d.). Jean Gebser and the spirit of cooperation. *HERE-NOW4U Online Magazine*. Retrieved April 9, 2004, from http://www.here-now4u.de/eng/gebser_online.htm

Connell, M. L., DeVoogd, G. L., Blackburn, A. C. (1996). *Technology and Teacher Education Annual–1996*. Association for the Advancement of Computing in Education [Electronic version]. Retrieved February 16, 2000, University of Houston, Insite Web site: http://www.coe.uh.edu/insite/elec_pub/html1996/17resear.htm

Cuban, L. (1986). *Teachers and machines: The classroom use of technology since 1920*. New York: Teachers College Press.

CureResearch. (n.d.). *Symptoms of microcephaly*. Retrieved April 12, 2004, from http://www.cureresearch.com/m/microcephaly/systems_printer.htm

Deeley, M. (Producer), Scott, R. (Director), Fancher, H. & Peoples, D. (Writers). (1982). *Bladerunner* [Motion picture]. United States: Warner Brothers.

Detroit Waldorf School, The (Mi). (n.d.). *Waldorf education*. Retrieved July 9, 2004 from http://www.detroitwaldorf.com/

Dewey, J. (1897, January 16). *My pedagogic creed* [Electronic version]. Retrieved July 15, 2004, from http://www.infed.org/archives/e-texts/e-dew-pc.htm

Dewey, J. (1910). How we think. Boston: D. C. Heath & Co.

Dewey, J. (1917). *Democracy and education*. New York: The Macmillan Company.

Dottin, E. S. (1991, July). Humans, labels, and the sharing of experiences: The struggle for human development. Paper presented at the Annual Minority Affairs Lecture, Louisiana State University, Shreveport, LA.

Drinan, R. F. (1987). Preparing for 2020: NACAC's role in affecting the future. *The Journal of College Admissions*, Winter, 1987, 3-7.

Dykhuizen, G. (1973). *The life and mind of John Dewey*. Carbondale, IL: Southern Illinois University Press.

Ecker, P. (1997). *John Dewey: 1859-1952*. Retrieved July 15, 2004, from Bowling Green State University, American Culture Studies Web site: http://www.bgsu.edu/departments/acs/1890s/dewey.html

Eisler, R. (1987). *The chalice and the blade: our history, our future*. San Francisco: Harper & Row.

Ely, D. P., & Plomp, T. (1996). *Classic writings on instructional technology*. Englewood, CO: Libraries Unlimited, Inc.

Ensign, J. (1996, Spring). A conversation between John Dewey and Rudolf Steiner: A comparison of Waldorf and progressive education. *Educational Theory 46*(2). 175-188.

Faraday, A. (1974). *The dream game*. New York: Harper & Row.

Farkas, S., & Johnson, J. (1999). Looking at the schools: Public agenda asks African-American and white parents about their aspirations and their fears [Electronic version]. *Arts Education Policy Review*. March, 1999, 1-5.

Feuerstein, G. (1987). *Structures of consciousness: The genius of Jean Gebser–An Introduction and Critique*. Integral Publishing: Lower Lake, CA.

Feuerstein, G. (n.d.). Jean Gebser: *Philosopher of the new order*. Retrieved April 9, 2004, from
http://www3.govst.edu/integrativeexplorationsjournal/who_jean_gebser.htm

Feuerstein, G., Litt, M., Behnke, D. (1987). Jean Gebser–The man and his work. *Spectrum Review, 1*, 1-2.

Figueiredo, J. R. (1994). *An evaluation of people's attitudes toward technostress and techniques on how to overcome it.* Retrieved February 16, 2000, from
http://www.soc.hawaii.edu/leonj/499s99/yamauchi/techno.htm

First and second language acquisition. (n.d.) *Differences between L1 and L2 acquisition.* Retrieved July 18, 2004, from
http://privatewww.essex.ac.uk/~vcook/L1%20and%20L2.htm

Fisher, C., Dwyer, D. C., & Yocam, K. (Eds.). (1996). *Education and technology: Reflections on computing in classrooms.* San Francisco: Jossey-Bass Publishers.

Friedman, H. (Producer). (2004). *Wheel of fortune* [Television series]. Los Angeles: Califon Productions Inc.

Gagne, R. M. (1965). *The conditions of learning.* New York: Holt, Rinehart and Winston.

Galileo Galilei–Astronomer and Physicist. (n.d.). Retrieved July 16, 2004 from
http://www.lucidcafe.com/library/96feb/galileo.html

Garrison, J. (1996). A Deweyan theory of democratic listening [Electronic version]. *Educational Theory 46*(4). 1-18.

Gebser, J. (1986). *The ever-present origin.* Athens, OH: Ohio University Press.

Gimbutas, M. (1982). *The goddesses and gods of old Europe.* Los Angeles: University of California Press.

Glennan, T. K., & Melmed, A. (1996) *Fostering the use of educational technology: Elements of a national strategy* [Electronic version]. Santa Monica: CA: RAND.

Gooler, D., & Stegman, C. (1994, July 12). A scenario of education in cyber city [Electronic version]. Paper presented at the Japan-United States Teacher Education Consortium, Hiroshima, Japan.

Grant, G., & Murray, C. E. (1999). *Teaching in America: The slow revolution.* Cambridge, MA: Harvard University Press.

Grice, G. L., & Skinner, J. F. (2004). *Mastering public speaking.* (5th ed.). Boston: Allyn & Bacon.

Guralink, D. B. (Ed.). (1974). *Webster's new world dictionary of the American language.* (2nd college ed.). New York: William Collins + World Publishing Co., Inc.

Hall, B. (Writer), & Fresco, M. (Director). (1993) Rosebud [Television series episode]. In J. Brand, J. Falsey, C. Rosin, R. T. Skodis (producers), *Northern Exposure.* Los Angeles: Universal City Studios.

Halliburton, J. (1997). John Dewey: A Voice that still speaks to us. *Change 29*(1).

Healy, J. M. (1998). *Failure to connect: How computers affect our children's minds -- for better and worse.* New York: Simon & Schuster.

Healy, P. (2002, May 29). At Harvard, a word sparks a battle. *Boston Globe.* Retrieved April 1, 2004 from www.commondreams.org/cgi-bin/print.cgi?file=/headlines02/0529-02.htm

Heterick, R. C., & Gehl, J. (1995). Information technology and the year 2020. *Educom Review, 30*(1), 22-25.

Hickman, L. A. (1994). John Dewey: Philosopher of technology [Electronic version]. *Free Inquiry, 14*(4), 1-5.

Hoffecker, J. F. (2002). *Desolate landscape: Ice-Age settlement in eastern Europe.* New Brunswick: NJ: Rutgers University Press.

Howard Hughes Medical Institute. (2004, January 13). *Gene may be key to evolution of larger human brain* [Electric version]. Press release Retrieved June 8, 2004, from http://www.eurekalert.org/pub_releases/2004-01/hhmi-gmb011204.php

Jacobsen, D. M. (1998). Teaching and learning with technology survey [Electronic version]. (University of Calgary, Alberta, Canada). Survey retrieved February 5, 2003, from http://www.ucalgary.ca/~dmjacobs/ph.d/

Jean Gebser Society, The. (n.d.). *About Jean Gebser.* Retrieved July 16, 2004, from http://www.3.govst.edu/integrativeexplorationsjournal/aboutgebser.htm

Kant, I. (2004). *In Merriam-Webster OnLine.* Retrieved July 15, 2004 from http://www.m-w.com/cgi-bin/dictionary?book=Dictionary&va=Kant&x=8&y=13

Kant, I. (2004). In *Wikipedia, the free encyclopedia*. Retrieved July 15, 2004 from
    http://en.wikipedia.org/wiki/Kant

Kealey, R. J. (Ed.). (1998). *American Catholic schools for the 21st century: Reflections
    on the future of American Catholic elementary schools*. Washington, D.C.:
    National Catholic Educational Association.

Keeley, J. (2004). Gene may be key to evolution of larger human brain. Howard Hughes
    Medical Institute [Electronic version]. Retrieved June 8, 2004, EurekAlert Web
    site: http://www.eurekalert.org/pub_releases/2004-01/hhmi-gmb011214.php

Keller, H. (1954). *The story of my life*. Garden City, NY: Doubleday & Company, Inc.

Kelly, H., & Moffat, C. (1998). *The strategy background: A vivid description of
    education in 2020*. Retrieved June 26, 2000, from
    http://www.tki.org.nz/ict/htmls/st/background/bg2020.htm

Khan, A. (2002, June 7). Muslim student delivers "Jihad" speech at Harvard
    Graduation [Electronic version]. *Islam Online–News section*. Retrieved April 1,
    2004 from www.islamonline.net/english/news/2002-06/07/article18.shtml

Kilpatrick, T. L. (1997). Trying to reduce your technostress? Helpful activities for
    teachers and library media specialists. *Library Software Review, 16*(3), 179.

Kluger, J., Cray, D., McDowell, J., Bower, A., Song, S., vanDyk, D., et al. (2002). How
    science solves crimes: From ballistics to DNA, forensic scientists are
    revolutionizing police work—on TV and in reality. And just in time [Electronic
    version]. *Time, 160*(17), 1-9.

Koestler, A. (1964). *The act of creation*. New York: Macmillan.

Lally, R. (1997, October). Managing technostress. Getting results…For the hands-on
    manager. *American Management Association, 42*(10), 5.

Lantos, R., & Egoyan, A. (Producers), & Egoyan, A. (Writer/Director). (2002). *Ararat*
    [Motion picture]. Canada/France: Serendipity Point Films.

Levin, J. (2002). A 2020 vision: education in the next two decades [Electronic version].
    Quarterly Review of Distance Education, 3(1), 1-10.

Levinson, M. H. (1999). Technostress: Coping with technology @work, @home,
    @play [Review of the book Technostress: Coping with technology @work,
    @home, @play]. *et Cetera, 56*(3), 358-360.

Ljunggren, C. (1996). Education, media and democracy: on communication and the nature of the public in the light of John Dewey, Walter Lippmann and the discussion of modernity. *Journal of Curriculum Studies, 28*(1), 73-90.

Log on or lose out: Technology in 21st century teacher education. (2000). Washington, D. C.: American Association of Colleges for Teacher Education Publications.

Loras College catalog. (2002-2003). Dubuque, IA.

Mager, R. F. (1997). *Preparing instructional objectives: A critical tool in the development of effective instruction.* Atlanta, GA: Center for Effective Performance.

Maltin, L. (1996). *Leonard Maltin's movie & video guide: 1997 edition.* New York: Penguin Group.

Marsden, G. M. (1994). From the heart of the American church: Catholic higher education and American culture. *Commonweal, 121*(20), 36.

Marsh, C. J., & Willis, G. (1999). *Curriculum alternative approaches, ongoing issues.* (2nd ed.). Upper Saddle River, NJ: Prentice-Hall, Inc.

Maslow, A. H. (1962). *Toward a psychology of being.* Princeton, NJ: Van Nostrand.

Maslow, A. H., & Honigmann, J. J. (1970). Synergy: Some notes of Ruth Benedict. *American Anthropologist, 72,* 320-333.

Math anxiety rating scale (MARS). (n.d.). Fort Collins, Co: Rocky Mountain Behavior Sciences Institute, Inc.

McCafferty, S. G. (2004). Introduction. *International Journal of Applied Linguistics 14*(1), 1-6.

McCoy, C. E. (1981). *The experience of communication: Jean Gebser and the expressive dimensions of consciousness.* Unpublished doctoral dissertation, Ohio University, Athens.

McDermott, R. A. (2003, Spring). The spiritual mission of America [Electronic version]. *ReVision, 25*(4), 1-19.

*McKenzie, B. K., Mims, N. G., Davidson, T. J., & Clay, M. N. (1996). Technostress!!! Coping strategies and future directions for teacher educators [Electronic version]. *Technology and teacher education annual – 1996,* 31-37.

McMaster, M. (1995). *Structures of consciousness and communication* [Brochure]. University Park, IL: Author.

McMaster, M. (1999a, October). *Incubating a new era: thinking about education from Gebser's integral stage of consciousness.* Paper presented at the 25th Annual Jean Gebser Conference, Governors State University, University Park, IL.

McMaster, M. (1999b). *An intrapersonal system view of communication.* Unpublished doctoral dissertation, The Union Institute Graduate College, Cincinnati, OH.

McMaster, M., & Parmenter, D. (2004). *What constitutes a learning experience?* Manuscript submitted for publication.

Mickunas, A. (1973). Civilizations as structures of consciousness. *Main Currents. 29*(5), 179-185.

Mickunas, A. (1977). *Jean Gebser and the comparative study of civilizations.* Unpublished manuscript. Ohio University, Athens.

Mills, C. W. (1979). *The power elite.* New York: Oxford University Press.

Montessori, M. (1964). *Montessori method.* New York: Shocken Books.

Mooneyham, L. (1993). The origins of consciousness, gains and losses: Walker Percy vs Julian Jaynes. *Language & Communication: An Interdisciplinary Journal, 13*(3), 169-182.

More, R. D. (Writer), & Livingston, D. (Director). (1997). Dr. Bashir, I presume [Television series episode]. In R. Bergman (Producer), *Star Trek: Deep space nine.* Los Angeles: Paramount Television Productions.

Morgan, A. D., Matranga, M., Peltier, G. L., & Hill, G. C. (1998). What issues will confront public education in the years 2000 and 2020? Predictions of Chief State School Officers. *The Clearing House, 71*(6), 339-41.

Novak, C. (1999). TECHNOS interview II: On today Jane Healy [Electronic version]. *Technos Quarterly, 8*(4), 1-10.

Pullella, P. (1999). *Pope says church to seek pardon for past errors.* Retrieved July 17, 2004, from http://www.bibletopics.com/biblestudy/71.htm

Purdy, M. (1986). *Contributions of philosophical hermeneutics to listening research.* Paper presented at the Annual Meeting of the International Listening Association, San Diego, CA.

Purdy, M. (1990). Consciousness structures and communication: Oral, literate, or what? Unpublished manuscript. Governors State University, University Park, IL.

Reddy, M. (1979). The conduit metaphor: a case of frame conflict in our language about language. In A. Ortony (Ed.), *Metaphor and thought* (pp. 290-315). Cambridge, UK: Cambridge University Press.

Reynolds, T. S. (2003). Technology. In *World Book encyclopedia* (Vol. 19, pp. 74-78). Chicago: World Book Encyclopedia.

Roddenberry, G. (Producer). (1987-1991). *Star Trek: The next generation* [Television series]. Los Angeles: Paramount Television Productions.

Roman, R., Piller, M., & Danus, R. (Writers), Beaumont, G. (Director). (1989). Booby trap [Television series episode]. In G. Roddenberry (Producer), *Star trek: The next generation*. Los Angeles: Paramount Television Productions.

Rudolf Steiner School, NY, NY. (n.d.). *Grades 7-8 technology courses at the Rudolf Steiner School*. [Electronic version]. Retrieved July 8, 2004, from http://www.steiner.edu/educate/7_8tech.html

Saudi Arabia: A Country Study. (1984). Washington, D. C.: U.S. Government Printing Office.

Schneider, J. S. (2002). *The Effects of the comprehensive school improvement process on gifted and talented programming in Iowa as perceived by middle level principals and teachers*. Unpublished doctoral dissertation, University of Northern Iowa, Cedar Falls.

Seeskin, K. (1986). *Dialogue and discovery: A study in Socratic method*. Albany, NY: State University of New York Press.

Silver, J. (Producer), & Wachowski, A., Wachowski, L. (Writers/Directors). (1999). *The Matrix* [Motion picture]. United States: Village Roadshow Productions.

Spielberger, C. D. (2001). *State-trait anxiety inventory for adults*. Retrieved July 7, 2004, from http://www.mindgarden.com/Assessments/Info/staiinfo.htm

Steinberger, E. (1991). Multicultural curriculum uncovers common bonds, individual strengths, and fiery debate. *The School Administrator, 48*(4), 8-13.

Steiner, R. (1914). *The nature of technology*, excerpted from *Art as seen in the light of mystery wisdom* [Electronic version]. Retrieved July 8, 2004, from http://home.earthlink.net/~johnrpenner/Articles/NatureTechnology.html

Steiner, R. (1928). The story of my life. London: Anthroposophical Publishing Co.

Steiner, R. (1973). A modern art of education. London: Rudolf Steiner Press.

Steiner, R. (1978). *A theory of knowledge implicit in Goethe's world conception.* Spring Valley, NY: The Anthroposophic Press.

Straube, G., & Danielsson, E. (n.d.). *Teaching about computers in the Waldorf Schools.* Retrieved July 8, 2004, from http://www.gottfried.no/articles/curr_eng.htm

Taylor, F. W. (1911). *The principles of scientific management.* New York: Harper & Brothers.

Technology. (1961). In *World Book Encyclopedia* (Vol. 17, p. 38). Chicago: World Book Encyclopedia.

Telepresence Research. (1998). *Background information: Telepresence.* Retrieved June 25, 2004, from http://www.telepresence.com/telepresence-research/background.html

Terkel, S. (1974). *Working.* New York: Pantheon Books.

Thompson, G. M., III. (1991). *Mind, consciousness and epistemology: The Gebserian paradigm.* Unpublished master's thesis. University of North Carolina at Asheville.

Thorndike, E. L. (1920). *Education, a first book.* New York: Macmillan.

Tilson, E. R., DeMarco, M. L., Strickland, G., Gibson, S. D. (2001). How computers will change education [Electronic version]. *Radiologic Technology, 72*(1), 1-5.

Tomei, L. A. (2003). *Challenges of teaching with technology across the curriculum: Issues and solutions.* Hersey, PA: IRM Press.

Travis, J. (2002, November 16). Sizing up the brain [Electronic version]. *Science News, 162*(20), 312-313.

U. S. Advisory Council on the National Information Infrastructure. (n.d.). KickStart Initiative, *Educational technology: changing teaching and learning* [Electronic version]. Retrieved August 25, 1999 from http://www.whitehouse.gov/WH/New/edtech/5etbulle.html

U. S. Department of Commerce. (1995, June). National telecommunications and information administration [Electronic version]. Retrieved August 25, 1999 from http://www.whitehouse.gov/WH/New/edtech/perform.html

U. S. Department of Education. (2000). *President Clinton announces $186 million for after-school grants* [Electronic version]. Retrieved July 4, 2000 from http://www.ed.gov/PressReleases/05-2000/0519a.html

U. S. Department of Education. (2001). No child left behind [Electronic version]. Retrieved June 8, 2004 from http://www.ed.gov/nclb/overvies/intro/index.html

Valdes, J. M. (1986). *Culture bound.* London: Cambridge University Press.

Webster's new universal unabridged dictionary. (1996). New York: Barnes & Noble Books.

Webster's new world dictionary of the American language. (2nd college ed.). (1994). New York: William Collins + World Publishing Co., Inc.

Wehr, G. (1996). *Gebser biography.* Retrieved July 15, 2004, from http://www.here-now4u.de/eng/gebser_biography.htm

Weil, M. M., & Rosen, L. D. (1997). *TechnoStress: Coping with technology @work, @home, @play.* New York: J. Wiley.

Weil, M. M., & Rosen, L. D. (1999). Don't let technology enslave you. *Workforce. 78*(2), 56.

Wheatley, M. (1992). *Leadership and the new science.* San Francisco: Berrett-Koehler.

White House. (n.d.). *The President's Educational Technology Initiative.* Retrieved August 24, 1999, from http://www.whitehouse.gov/WH/EOP/OP/html/edtech/html/edtech_f.html

Wilber, K. (1979). *No boundary.* Boulder, CO: Shambla.

Williams, P., & Nichols, R. (1970). We've only just begun [Karen and Richard Carpenter]. On *Close to you* [record]. California: A & M Records.

Willow Wood parents handbook, (1999). Retrieved November 6, 2000, from http://www.sonic.net/willowwood/philosophy.html

Windsor Castle. (n.d.). *Rudolf Steiner online works (links)*. Retrieved July 8, 2004, from http://oaks.nvg.org/wm6ra7.html

Wolf, F. A. (1988). *Parallel universes the search for other worlds*. New York: Touchstone.

Wolf, R. (Producer). (2004). *Law & order* [Television series]. Los Angeles: Wolf Films.

Wolf, R. (Producer). (2004). *Law & order: Criminal intent* [Television series]. Los Angeles: Wolf Films.

Wolf, R. (Producer). (2004). *Law & order: Special victim's unit* [Television series]. Los Angeles: Wolf Films.

Wolf, R. (Producer). (2005). *Law & order: Trial by jury* [Television series]. Los Angeles: Wolf Films.

Zhang, J. (2003, December). Evolution of the human ASPM gene, a major determinant of brain size [Electronic version]. *Genetics, 165*(4), 2063-2070.

Zielinski, D. (2004, February). Technostressed? *Presentations,* 28-35.

APPENDIX A

QUESTION SEEDS PRESENTED IN THE DISSERTATION

CHAPTER 1

1. How do we know what we know?
2. What is knowledge?
3. What is individual?
4. What is society?
5. What is method?
6. How do we teach?
7. What is democracy?
8. What is learning?
9. What is curriculum?
10. What is the nature of Teaching?
11. What is truth?
12. What is consciousness?
13. What is technology?
14. What is education?
15. What is communication?
16. Did hominid man of 4,000,000 years ago have a consciousness soul?
17. Can I claim the previous sentence as knowledge for me?
18. Can anyone else in the world know what I am talking about?
19. What is "super skull" man, according to author Bardy?
20. When did consciousness arrive in human beings?
21. Is there such a thing as a bad seed?
22a. In Biblical times, was Cain a bad seed from the beginning?
22b. Are we human beings or human doings?
23. How we teach?
24. How does this technology support our mission/philosophy statement?
25. How does this technology help us in assessment of learning and behavioral objectives?
26. What knowledge is of most worth?
27. Can the curriculum accommodate knowledge that reflects both the unchanging character of truth and also reflect the changing character of society?
28. How much of the curriculum should be devoted to what kind of knowledge?
29. What principles guide the selection of the contents of a curriculum?
30. How can subject matter be presented to students who could relate it to what they already knew?
31. Although there seemed to be short lived and sporadic attempts at individualism and societal aspects of education curricula throughout American education history, subject matter curriculum has historically been the most advanced and advocated. Why?

32. How do students and teachers build knowledge?
33. What makes learning alive for the learner?
34. How does the speech topic you choose have an impact in your own backyard?
35. What are the social implications for your claim and assertion on a controversial issue in society?
36. What is the W.I.F.I.M. (What's in it for me?) statement for the listening audience?
37. How and why is intrapersonal communication the key to success in your own learning?
38. How does consciousness construct and scaffold knowledge?
39. When does schoolwork become schoolplay and vice versa?
40. What is done and how it is done?
41. What content is to be covered and how will the methodology uncover the truths of the content?
42. How do we incorporate a curriculum which vibrates through the sentientness and right mindfulness of the human spirit?
43. Is this not what much of education is about?
44. As educators, how do we keep playfulness in our minds and how do or can we teach subject matter in play formats?
45. However, at the time of early Dewey (1910, 1917), what were the occupations teachers were preparing students for?
46. Were we preparing students for jobs or giving them a well-rounded view of life and the world?
47. Were the pressures of like in Dewey's time more or less than they are today?
48. Do children "play" at keyboarding these days?
49. How did people handle technostress a century ago?
50. How often do we hear teachers say, "Well it's time to stop playing and time to get back to work."?
51. When did language begin?
52. Who started it?
53. Why was it started?
54. How long did we exist without language?
55. What problem solving, critical thinking event took place for the need to create language?
56. I wonder if Dewey contemplated the ideas of telepathic thought, clairvoyance, or group consciousness thought?
57. How does author Bardy's "mind's eye and third ear" make connection to Rudolf Steiner's 3 forms of higher learning?
58. Dewey (1917) answers the question, "*What is education*?"
59. How far is it possible to prove that in human thinking real spirit is the agent?
60. Does it (education) boil down to the "acquisition of literacy?"
61. Thirty-two years ago while a forensics competitor, I played around with an idea for an after dinner speech on habits...do we control ourselves by habits or do habits end up controlling us?

62. So the question still remains, "Do we control ourselves by habits or do habits end up controlling us?

63. The intuition and energy of self life force need to be very much part of that beacon of intangibleness. So what would or do we call it may be another question?

64. What is strategy?

65. What is thinking?

66. Do we teach thinking?

67. Is the main point of teaching actually teaching "critical thinking" which is always being processed within an environment and within our own truths, beliefs, values, realities, and consciousness structures?

68. "The criterion of the value of school education is the extent in which it creates a desire for continued growth and supplies means for making the desire effective in fact" (Dewey, 1917, p. 62). What does this mean?

69. Self-motivation is a personal empowerment structure to succeed in education?

70. Do self-motivation and personal empowerment live in the tabernacle land and time structure of magical playfulness?

71. A sense of wide-eyed openness of the being of youngness needs to be stored by adults and utilized throughout his or her stages of time in life. Do we loose it?

72. Parents in particular?

73. Does he mean adult to adult?

74. Or does he mean adult to child?

75. Is that where the 1970s communication strategy was based on "Adult, Teacher, Child?"

CHAPTER 2

76. How is an individual formed?

77. What are the components which make up each sentient being?

78. When did human consciousness find both its individual and collective voices?

79. How does each communicate?

80. How do we educate the individual: for true self-actualization or to be a worker bee in the various hives of society?

81. Are there innate forces in each being which have predetermined forces of good?

82. Which begs the question, "Are all beings created "good?"

83. Is there such a thing as "the bad seed?"

84. Did hominid man of 4,000,000 years ago have an innate consciousness soul of goodness?

85. "Is a person born good or evil?"

86. Can the seed ever be bad from the beginning?

87. Is the spirit of life force evil at times?

88. Is a bad seed consciousness present from conception?

89. And what of the Biblical Cain and younger Brother Abel?

90. Was Cain always a bad boy?

91. Or did he just lose control in a jealous rage?

92. Is it a jump to link human warfare to bad seeds and the conflict, conquest, competition for and domination of others as a result of bad seed consciousness souls?

93. In the history of modern mankind, 50,000 years ago to present, if we were to weigh the positive outcomes of opening up to others vs. the "taking over" of others, which would tip the scales?

94. Has it always been like that?

95. People killing people?

96. Are souls predetermined by their birth to the type of consciousness chemistry and self-will and the matrix of communication?

97. Where is anyone's soul at any given moment in time?

98. Who can help with the answer?

99. Or some ide(a)ology?

100. Is their duality built into structures of consciousness?

101. Looking at the current war on terror and conflict takeover of Iraq, what do the consciousnesses of Saddam Hussein, George W. Bush, Osama Bin Laden, John Kerry, Colin Powell, Candaleza Rice, or Donald Rumsfeld look like?

102. To what affect does mass communication control each person's shape of human communication, education, and discernment of self-actualization?

103. Discernment of truth?

104. As the world's leading democracy, does America have equable and easy terms on any level?

105. "Plato's starting point is that the organization of society depends ultimately upon knowledge and the end of existence" (Dewey, 1917, p. 102). What does Plato mean here?

106. Does this mean the end of an individual's existence, a society's end, the end of the whole world?

107. "But how is the knowledge of the final and permanent good to be achieved?" (Dewey, 1917, p. 103).

108. To what extent do our schools reflect Plato's approach?

109. Is our approach to cultivate the individual's interest in order to prepare him or her best for society?

110. Or are we looking at the needs of society and training individuals to fit into society so that the whole would be maintained?

111. And what happens to the individual when there are too many candlestick makers?

112. "Education in accord with nature furnishes the goal and the method of instruction and discipline" (Dewey, 1917, p. 106). What does Dewey mean by this, especially, "in accord with nature?"

113. "Natural law would accomplish the same result in human relations, if men would only get rid of the artificial man-imposed coercive restrictions" (Dewey, 1917, p. 107). What does Dewey mean by this statement?

114. Does he mean that man when engaged in social intercourse is coercive in his communication, persuading the "other" to conform to his way of thinking and doing?

115. The former Yugoslavia splintered into five nations: Croatia, Macedonia, Serbia & Montenegro, Slovenia, Bosnia & Herzegovina. How were/are their transformations going?

116. How long did some of the "new world order" countries take before faltering back to mythical and mental rationalist ide(a)ologies feudalism?

117. Are American ideals and value system of a democratic society really a haven or existence?

118. How will the ultimate use of persuasive communication and education restore order and create a harmonious nature where individuals work in a collective aperspectival society, where the have nots, have?

119. Why or why not?

120. Could Iraq reflect their neighbor of the 1980s in the year 2020, having internal and external order?

121. And will Saudi Arabia for that matter reflect their own 1980s in 2020, publicly showing haves and not have-nots?

122. Dewey (1917), "The first step in freeing men from external chains was to emancipate them from the internal chains of false beliefs and ideals" (p. 107). Is this connected to the idea of "how do we know what we know?"

123. Mankind has ideas which internally chain him so that our own internal "inner/intra" police blocks new information from the external?

124. What could motivate such destruction?

125. What was the secret of his (Gebser's) life?

126. And what is the significance of his work for today?

127. "How did we do it in the past?"

128. The question remains is, *how long will a shift in consciousness take where individuals process content and information through the eight levels of communication, working within themselves and in groups from an arational/integral aperspectival approach when and while communicating and thus in educating?*

129. Centuries?

130. Another millennium?

131. "Consciousness Structures and Communication: Oral, Literate, or What?"

132. The questions are: "I want to know what Helen Keller would have to say about intrapersonal communication, the listening self, the linear processes of a mental rational consciousness; and as a young girl, how her thought processes might compare to the thought processes after she learned to sign, brining into her world a linear sense?

133. What changes took place within her own mind and thinking patterns as she matured?

134. What would Helen Keller have to say about Jean Gebser's work on consciousness?

135. Would she consider herself a born integral thinker/communicator/educator?

136. How did linguistic sign language speech and hearing shape her or change her consciousness outlook?

137. Are individuals born with an integral structure and through enculturation do they either develop towards an integral consciousness or develop a mental rational consciousness?

138. Can individuals truly learn integral thought processes and grow (mutate) out of mental rational consciousness?

139. Can individuals who are totally immersed in mental rational consciousness able to understand an integral consciousness?

140. With maturation, is understanding and integrating integral consciousness easier and more accepted to the intrapersonal self?

141. How can, in one family – The Bardy's – there be nine siblings who fall all along the continuum of mental rational and arational/integral consciousness structures?

142. Do family members bring their ancestral genetic coding to the communication table as well?

143. Because the Bardy family can trace their roots to Transylvania, Romania; Vienna, Austria; Hungary; Ireland; England; The Netherlands; The Cherokee Nation; and France can (do) these places and consciousness roots act as consciousness contact lenses when we communicate?

144. Do the experiences of living in Abha and Dhahran, Saudi Arabia; Istanbul and Antalya, Turkey; Germany; The Netherlands; Chicago and LaGrange, Illinois; Epworth, Iowa; Hazel Green, Wisconsin; among others, have a bearing on how I personally communicate and educate?

145. As this piece is being written, questions of individuals who are born with inutero stunted brain growth, also known as microcephalic brain deformity where the skull does not form, expand, and grow properly by not enlarging thus creating the individual's brain to stop expanding as well, come to mind. What is their consciousness structure like?

146. What is their intrapersonal communication like?

147. How do these special individuals communicate within themselves without linguistic and mental rational programming models?

148. How do these individuals learn?

149. How do they communicate?

150. Is/Was their tabernacle dwarfed as well?

151. Has anyone seen a microcephalic person not projecting happiness or contentment as his or her usual self?

152. In the case of the microcephalic child, Alison Biskup (personal communication, 1986-2004), how did her physical, emotional, and consciousness life unfold?

153. How did consciousness, communication, education, and technology delivery learning systems come together for her?

154. "Big-Brain Gene?"

155. Did some of us human beings and our ancestry line become sentient and soulful before other hominids?

156. By looking at Alison Biskup, who had a rare case of extreme microcephaly, how were her messages sent?

157. Ali Biskup was full of questions, "What happened to me?"

158. Why was I born like this?

159. So what was the problem?

160. Have scientists learned anything from this condition?

161. I had a hominid brain: how did my mother, father, Carrie, Davey, and Jonny develop their brains?"

162. Let's Ask Jeeves, "What is microcephaly?"

163. What does Expanded Academic Search say when you cross-reference these (microcephaly, consciousness, communication, and education) search parameters?

164. Alison Biskup lived for 17+ years in an archaic and magical consciousness – did ancient hominids' consciousness souls communicate intuitively, telepathically, and have clairaudience and teleaudience delivery systems?

165. Were hominid peoples generally good "spirited?"

166. Where indeed did her consciousness go for that period of time?

167. "My mom walked into the room and asked which one of us sat Ali up?"

168. "No really, who did it"?

169. Are individuals born with an integral structure and through enculturation do they maintain an integral "voice" or do they slide into the mental rational?

170. Can individuals truly "learn" integral consciousness thought processes and transcend from mental rationalism?

171. Is the seed of integral consciousness in each person in each culture?

172. Can individuals who are presently totally immersed in mental rational consciousness able to understand an integral consciousness?

173. With maturation, understands an integral consciousness easier and more accepted?

174. How can, in one family – The Bardy's – there be nine siblings who fall all along the continuum of consciousness?

175. What content is to be covered and how will the methodology uncover the truths of the content?

176. How do we incorporate curriculum which vibrates through the sentientness and right mindfulness of the human spirit?

177. Or does Dewey have another interpretation?

178. Are we bigger than our brains have or need to be?

179. Why are we buying into the notion that we have to be multi tasking and communicating even during our daily routines?

180. In the year 2020 will we all be wearing an all-in-one headset with miniature view screen, listening to music, receiving telephone calls while simultaneously watching a favorite film and word processing a document via a handheld keypad?

181. When will man burst forth in a "'Supersized', Super Skull?"

182. ...to compensate for the backlash and pitfalls we have created under the information and entertainment explosion modality of mental rationalism?

183. My questions are, "Do the financially affluent, physically strong, and the people who were 'born' into the right classes continue to dominate the weak and ordinary?

184. Do they govern even how people are educated and who is educated?

185. Who will serve the aristocracy best?

186. Who will best serve the proletariats' needs?

187. Who were the leaders of those times, the physically strong?

188. And where does group consciousness come into play?

189. How far have modern humans advanced and that of American Society?

190. How far have we as Americans removed ourselves from the ancient Greeks?

191. In some ways would Dewey's concept be setting up a sort of dualism?

CHAPTER 3

192. What is technology?
193. How successful has the United States been in achieving President Bill Clinton's
    (White House, 1999) 1996 technology initiative which was stated in Clinton's
    State of the Union Address in 1996?
194. How will the system be maintained?
195. For what length of time?
196. Federal funding was provided up front to get jumpstarted, but who will cover the
    costs over the lifespan of the system?
197. Who will pay?
198. Who will pay?
199. Technostressed?
200. Do any of the following scenarios sound familiar, from both student and teacher
    views?
201. Where is the one document that summarized all the research so beautifully?
202. Now what are you going to do?
203. Another year and yet another attendance software program to learn?
204. "How Technostressed Are You?"
205. "How does the frail human maximize time and output co-efficient which measures
    up to productivity expectations?"
206. "At what point now in time is human consciousness suffering from digital
    backlash?"
207. "How do humans handle the messes of everyday stresses, especially technostress?"
208. Should the University of Northern Iowa start building the technostress web page and
    begin strategizing about marketing their own "little purple pill" for technostress
    relief?
209. How do we talk within ourselves each moment of sentientness as we go about our
    lives?
210. How do we manage each waking and sleeping moment?
211. How does one work with technology and maintain harmonious intrapersonal
    communication?
212. "Who is more technostressed, first year college females or males?"
213. What were Rudolf Steiner's underpinnings to use or not to use technological devices
    teaching in Waldorf curriculum?
214. "Would Rudolf Steiner believe in a 'bad seed consciousness'?"
215. "What sayith he about such a being?"
216. Would the being always be spiritually Ahrimanic in Steiner's world?"
217. What are philosopher Bardy's tinctures and fruition of thought on connecting
    consciousness, communication, education, and technology for doctoral studies?
218. Consciousness in Communication: Bardy's intrapersonal and inter-informational
    levels of communication, how and when did this journey begin?
219. "What do you think is the most influential communication in your lifetime?"

220. How does the spiraling 1920's Waldorfian curriculum of today color outside the technological boundaries established by founder, educator, artist, philosopher Rudolf Steiner?
221. How will Loras College faculty and first year college students react to a wireless laptop campus?
222. Is there a battle between the magic white light box of educational light and the evil black box of classroom subversion?
223. Who will be more technostressed, females or males?
224. Should a college professor be, and how much time does it take away from quality instruction to be, "a laptop police person?"
225. How does technostress play a part in every day consciousness?
226. Is there some way to measure it, develop a tool, create a web page to track it, and then market the results at conferences?
227. What about the tabernacle of Saddam Hussein?
228. What about the consciousness soul of Osama bin Laden?
229. Or of George W. Bush for that matter?
230. And what about John Kerry?
231. What is his truth and agenda?
232. How has human consciousness been tricked by modern technology magic about the true realities of spatial and temporal articulations to perform and accomplish complicated tasks?
233. How has mediated communication trickery backlashed consciousness and supported dimensions of technostress?
234. "Is there such a thing as a 'typical' autopsy?"
235. "What is included in an autopsy?"
236. "In suspicious death cases or in the case of homicide, what are medical examiner procedures?"
237. "What is included in a 'tox' screen?"
238. "How long does the 'tox' screen take?"
239. Does the final product match up to "mind's eye" and at what cost?
240. And if they allow the computer to do the work for them, why not allow that computer to become sentient as you say?
241. And it gets into several very basic questions, such as: What do we think is the nature and purpose of childhood?
242. Is it simply to prepare kids for the future?
243. Or is it to help them realize their humanity?
244. And, secondly; what is the real nature of humanity?
245. Did you get all that, Rudolf?
246. John?
247. Data?
248. Jean?

CHAPTER 4

249. What issues and problems are currently in International and American educational systems and what pro-active solutions are being rendered for 2020 and beyond?
250. Will all men and women be created equal in a futuristic society?
251. These trends will continue fortissimo during the next 25 years, and therefore the really important question is not, which road is taking us there?
252. But, What are we going to do when we get there?
253. For we will get there, ready or not, like it or not. What will we do about it?
254. How will we live in the continuing age of the future?
255. On July 4, 2000 Researcher Bardy asked Jeeves, "What will education be like in the year 2020?"
256. On June 30, 2004 Jeeves again was asked, "What will education look like in the year 2020?"
257. Levin (2002) writes, "So what will education be like in the year 2020?"
258. "What should education be like in the year 2020?"
259. Levin (2002) asks the question, "Why involve learners in teleapprenticeships and tele-task forces?"
260. "Why would we want to involve learners in these kinds of interactions with the world outside of classrooms and schools?"
261. Who is volunteering to run the video camera?
262. Who is volunteering to put the speaker list on the board?
263. Who is asking for volunteers for peer critiquing while handing out the critique forms?
264. Who is volunteering to keep time?
265. Are we moving the desks in a horseshoe before I walk into class, or are you waiting for me to tell you to do that?
266. Have you helped each other get PowerPoint up and running?
267. Are people putting "tops down" on your computers, on your own, when a speaker presents?
268. And are you keeping those eyelids open?
269. Are you helping each other trouble-shoot technology glitches?
270. Are we six weeks into the course and no one has moved, except for your fingers on the lap top keys, until I walk into the classroom and start barking like a Mad Dog for you to work harmoniously and collectively to achieve those "As" you all want to "earn?"
271. What will the physical environment of learning be in the future?
272. "Once you have most of your interaction over computer networks, questions immediately arise: Why are both traveling to the same room to do this?"
273. "Why not just stay at home?"
274. What kind of activities?
275. How would Learning be organized in these NLCs?
276. "Dr. Bashir is a genetically enhanced human being?"
277. Life form?

278. As with Dr. Bashir, the question remains, do these life forms have a soul, a consciousness?
279. What would Commander Data say about their sentientness?
280. How will individuals communicate to share ideas in such an age?
281. What do we do?
282. What do we say to these young people during the next academic year?
283. And what do we each say to ourselves about our work in our counseling?
284. Educators ask: Where do young Americans fit in?
285. Now and in the future?
286. What are the values that we should commit to our young people?
287. What do we believe?
288. "What Issues Will Confront Public Education in the Years 2000 and 2020?"
289. One teacher writes, "The question is not, 'What will Catholic schools of the 21st century look like?"
290. "The question is 'What *should* they look like?"
291. "What do we *want* them to look like?"
292. What will learning, schools, and United States hegemony look like in 2050?
293. Will Dr. Bashir be in charge in 2100?
294. Who knows?
295. Are you listening out there Loras College students?
296. Fellow Loras colleagues?

CHAPTER 5

297. "How have we done it in the past?"
298. Each of these interactions, we believe, should leave the student a better person, more learned. But does it?
299. Can we have better students without examining the processes of communication that we use to teach them?
300. Should we examine modeling as a specific form of communication and see what learning takes place from it?
301. So what do these ideas have to do with education?
302. How can things be changed to reflect the "emerging issues" and simultaneously bring the academy closer to the integral stage of consciousness mindset?
303. What could we be creating?
304. So what is the "whole," "human consciousness," the "higher forms of organization," the intrapersonal system?
305. What might these expanded mental constructs look like?
306. Spontaneity and joy is typical in the activities of many species, should it also not be true of human "being"?
307. Suppose that the material could be presented more concisely and in a manner conducive to learning the material effectively but not in the style of delivering pearls of wisdom?
308. How many teachers would jump at the opportunity to offer it in this manner?
309. Imagine writing a doctrine identifying the Deity with the universe and its phenomena, questioning the role of religion and a belief in a god structure?
310. Is Mediated Communication Holding Us Back?
311. If these tools are invisible, how can we develop these new tools – how can we move from one spot to another, from one approach to another, from one or two perspectives to a position that is without perspective?
312. How do we step above the dichotomous perspective of the mental rational stage since, as Campbell (1986) indicates, there seems to be a major schism?
313. What other kinds of things could promote this shift?
314. What would the world be like without all the "doing?"
315. What makes the "doing" so important?
316. Therefore how do we promote "being" so we can facilitate the shift in consciousness?
317. How can we learn to value "being?"
318. As students we ask each other, "How many tests did you take?"
319. "How many pages did you have to write for that Scottish Barbarian in Contemporary Issues?"
320. How did you "do" on that paper in Leadership?
321. Who would we be if we were encouraged rather than educated?
322. What would that mean to be teachers who thought they had control in their classrooms, if for no other reason than they were the all-knowing leader of the less knowledgeable students?

323. What is our relationship with ourselves?
324. Is there an intrapersonal system and what is it?
325. Galileo ring a bell?
326. "Why did you use red for the sun?"
327. "Why didn't you call me last night?"
328. "Why did you tell the customer to call back tomorrow?"
329. "Is there a reason red is used here for the sun?"
330. "Is there a reason the customer needs to call back tomorrow?"
331. First, is what I am hearing or reading, I ask myself, "Is your hair on fire?"
332. If that question doesn't calm me down, I ask, "Is this a disease I have which cannot be cured in my lifetime?"
333. Finally, if what I am hearing ore reading begins to make my ego or feelings go "ballistic," I ask, "Is there ethnic cleansing in my neighborhood?"
334. "Are certain individual's born with or presupposed to "a bad seed" consciousness?"
335. "What's inside?"
336. Something from the gift shop, for me?
337. "What's in the bag, mommy?"
338. "What's in the bag?"
339. Is that what "question seeds" means?
340. What if her mom sees this; what is she going to think?
341. "Do you think it's okay that I wear this tie bar which looks like a saw?"
342. "Do you think she appeared to everyone in class?"
343. "Are you going to the cemetery?"
344. Where were they taking her now?
345. Will I ever know where she's buried in case I ever wanted to visit?
346. Is the manifestation of the spirit I witnessed and felt as a child a similar experience that Rudolf Steiner may have experienced when he was eight years old?
347. And what about the boy next door?
348. What ever happened to him?
349. Was that young boy a "bad" seed or did his play just get out of control?
350. How has his life been since that late day in August 1965?
351. Maybe Google knows?
352. "Sprechen Sie Deutsch?"
353. Power for good or power for evil?
354. It includes who will we be teaching?
355. *"Who says what to whom along what channel and to what purposes and with what probable effects?"*
356. *"Maybe you can find it out?"*

APPENDIX B

STRUCTURES OF CONSCIOUSNESS AND COMMUNICATION

Types of Conscious-ness	Archaic	Magical	Mythical	Mental/ Rational	Arational/ Integral
→ →	→ →	Increasing	Complexity	→ →	→ →
Characteris-tics	egolessness	clan or family as self	self-sense	ego	"trans-egoic"
	conscious-ness soup	subject/ object magically intertwined	continuum and polarities	dichotomies	aperspectival
	time did not exist	time is the moment	time as a sacred connection	time as absolute	time has flexibility
			imagination	faith in reason	intrapersonal awareness
Characteris-tics of Communi-cation	simultaneous knowing	symbols	language	communicate to control	communicate to connect
	psychic bond	clairaudience		focus on speaking	listening empowers
		clairvoyance			
Communi-cation System or Framework	Indiscernible	Intuitive	Traditional	External	Source
Attending ("listening") Form	indefinable	telepathic	empathic	Compre-hending	listening

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