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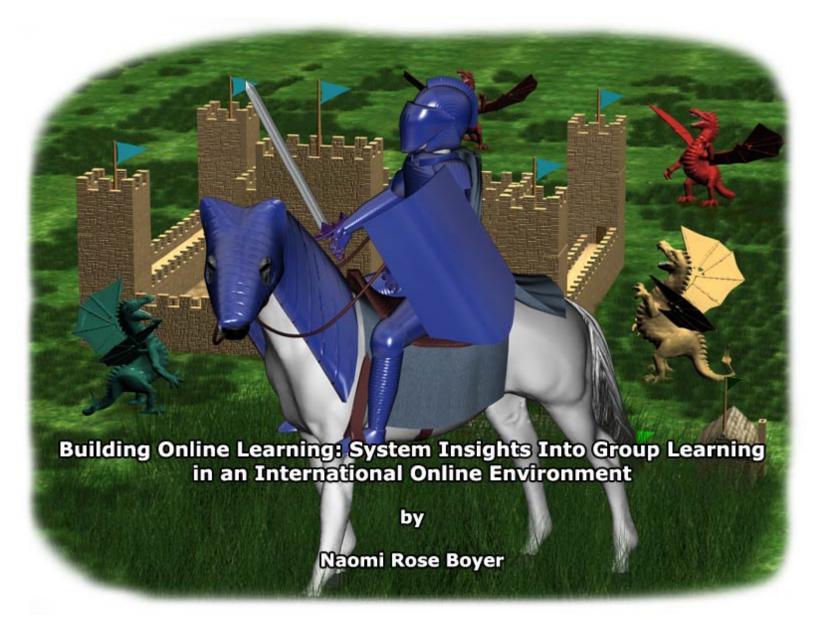
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# BUILDING ONLINE LEARNING: SYSTEM INSIGHTS INTO GROUP LEARNING IN AN INTERNATIONAL ONLINE ENVIRONMENT

### NAOMI ROSE BOYER

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
in
Curriculum and Instruction
College of Education
University of South Florida

Major Professor Karolyn J. Snyder, Ph.D.

# Members

Ríchard O· Sullivan, Ph.D. Bruce Hall, Ed.D Barbara Emíl, Ph.D. William Locander, Ph.D.

October 12, 2001

Tampa, Florida

Keywords: Online learning, portraiture, online research, social learning

# **DEDICATION**

This paper is dedicated to those whom have loved, encouraged, supported and guided me through the extensive and intensive process of writing this document. To my grandparents, whose example and continued respect for educational pursuit propelled me to begin this lifelong journey of learning. The ongoing gentle shove and continued expectations provided by my Mother and the loving critical thinking skills provided by my Father set the stage for a passion of knowledge and expression. Further appreciation is given to my wonderful family of aunts and uncles, cousins and close family friends, whose energy and kindness, were absorbed during frustrated tired moments.

May the fairies and dragons dance forever to attract the attention of my lovely, compassionate and patient daughters, who allowed their Mother the freedom to produce with the constant reminder of fun and priorities. Finally, to my loving and editorial husband who read every word with a critical, questioning, and diligent eye in a manner that inspired excellence. The spontaneous moments created by you, my loyal and incredible husband, diminished the stressful intent and replenished the soul, as well as the spirit, lending the strength and fortitude to complete this ambitious project. My mind, my heart and my being are grateful for who you are and what you have generously bestowed upon me.

A simple but heart felt thank you to each and every one of you whom I love and cherish, those who held my hand while I was sick, those who reminded me of my limitations, and those who walked the path of intellectual stimulation along with me. With laughter and joy I face the next phase of my life, remarkably with each of you still bound to me despite my selfish determination to complete this degree and dissertation.

# **ACKNOWLEDGEMENT**

It is with amazing fortune that I was blessed with the supportive and guiding relationship with each of my committee members. Dr. Paul your gentle suggestions to explore portraiture as a possible way to tell the story lent scaffolding to the tale that threatened to be large, murky and unattainable. Dr. Emil, your expertise in the online forum provided a pathway for investigating the nature of online learning. You helped shape the leader in me Dr. Locander, through positive questioning, urging and a continual open forum. The measurement ingenuity, private discussion time, warm and gracious manner and honest sharing, Dr. Hall helped me to better absorb the intricacies of this qualitative work.

To my friend Dr. O'Sullivan whose urging, prompting and unfailing confidence maintained a presence throughout the arduous doctoral process. You have forever, my undying appreciation and respect. May you find happiness and success in every endeavor.

Dr. Snyder, whose program I have explored and whose family I invaded. Thank you for the opportunity to explore and learn both from you and this fabulous program which you have co-created. The journey was at times rough, from initial tears of insecurity to a developed independence and autonomy. The lessons that have been learned extend well beyond the scholarly insight into a world of global relationships and traveling adventures.

For each hug that has been given, each book that has been read, every question that was asked, and every paper that was read, I say thank you. My gift to you can be no more complicated than a home-made cake that bakes your lives with sweetness and joy.

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# **Building Online Learning: System Insights Into Group Learning in an International Online Environment**

Naomi Boyer

(Abstract)

The virtual world exists as a dimension between concrete physical reality and abstract fictional fantasy. This cyber essence has become a place of commerce, social development, and educational pursuit. To build an understanding of the Kingdom of the Internet, the resulting case study sought to explore the community learning experiences of groups involved in an international online distance education program to create a tale of the process of a system. An assumption in this research was that the program under study was framed within a social learning context. Therefore, the recommendations and findings must be considered within this context and applied within similarly framed learning programs.

The method of this study followed an input-process-output model with an added element of outcomes. Participants completed a preliminary technology survey, locus of control instrument, self-regulated learner instrument and a learning styles inventory along with provided background information to form group input profiles. The process of the system was observed through the use of focus groups with the participants, process leaders and instructors as well as transcripts from discussion and chats. The group interaction, the site usage information and technical feedback all served as output information. The outcomes were measured through the use of a group effectiveness measure and instructor rating of final products.



# **Literature Review**

### Introduction

#### The Foundations of New Science

Over the past 50 years, science has provided theories and concepts that support the idea of a web of systems, which are interdependent to form a complex and dynamic whole of networks that continually interact with other networks (Capra, 1996). The scientific theories of complexity theory, chaos theory, systems theory, and self-organizing systems, all of which are contained in the label of "new science", supply a foundation for research of complicated systems. The Newtonian paradigm or mechanistic models can be limiting when studying networks and collectives. The rate of change has become exponential, and new perspectives have become necessary for interpreting the world. Life is filled with combinations of possibilities, shades of gray, and a continuum of potentiality, that should be studied within natural environments (Handy, 1995).

Moving toward holism provides a paradigm for understanding systems as relationships that exist among seemingly discrete parts (Wheatley, 1994). Organizations are complex systems, which are better understood from the lens of elaborate design rather than reductionistic, linear thought (Zohar, 1997).

# **CHAPTER III**

# **Method**

# Introduction

A case study has been used as a framework to add insight into the system phenomenon of the ISC to explore the processes, events and persons leading to group learning (Gall, Borg, & Gall, 1996; Merriam, 1988). The specific phenomenon in this case involves an online distance education program, with a three-year duration, titled the International School Connection: Global Organizational Development Program (ISC). This case study was conducted over the period of the fifteen weeks comprising the first semester of the International School Connection (ISC) Program, with a subsequent time frame to complete data collection online. Courses were offered in the spring semester, covering two general content areas (Globalization- EDG 6931/EDG7931 & Adult Learner/Adult Development- ADE 6385/ADE 7388). A start-up phase, the six-week time frame between the beginning of the program and the start of courses, was also included in this research. This start-up phase involved a one-week conference held in November, 2000 in Tampa, Florida allowing for the building of community, training, and content exploration. Also included in this start-up phase was the introduction to materials, which would be used to structure the learning, time for dialogue without the structures of content, and an acclimation period to become comfortable with the technology medium. The total time frame for the research data collection covered a 32-week period.

The focus, in this case, was on how groups in the ISC program learn with each other within the confines of the online environment that has been provided for them. Each of the 42 participants served as a unit of analysis, which was then aggregated to form a group (learning community) reports. Thus the individual



# Results

# **Setting the Stage**

The day is a typical one, yet it would be difficult to describe the environmental conditions. It could be rainy and wet, hot and sunny, dry and cold, or even tepid and beautiful. Depending upon where a participant is at any given moment in the world, a host of external circumstances could exist to wreak havoc on the senses. The view, however, for most participants is the same as one sits and works at this endeavor.

A chair, a desk or table and a screen of sort become the focus of attention. Buttons clicking, computer buzzing and thoughts swirling as one enters this organization. There is no grand entryway, nor a physical reality to be described, rather one enters a world of wonder through the gateway of a screen to be placed within a new, kingdom. Whether entry is granted through dial-up capacity or other high speed options, the result is the same. Upon entry to this kingdom a new world exists; the Internet, a place of amazing promise. Then on to the heart of the experience within the main castle, which is at the center of learning for the ISC.

Regardless of the speed of connection, one travels at a rate faster than ever imagined to engage with others in a sort of modern day fairy tale. Having never left the physical reality of "home", a separate place of being exists to learn, live, laugh and interact within. Burbules (2000) has supported the existence of such a place that has an abstract inanimate form of physical being, in work, interaction, opportunity and learning are continually transformed. A portrait of the story shall be created here to merge into wholeness

# **CHAPTER V**

# The Learning Communities-The Clans Within Dominion

The learning communities lived within the Kingdom of the Internet, in the dominion of the ISC surrounding the Castle of virtual learning. It must be remembered that each member of the learning community existed in both a physical reality and within this cyber realm. The daily existence of these participants was full with jobs and families, recreation and work, life and death. Entering into the place of being within their learning community did not suspend who these individuals were by culture and background, experience and education. The people of this program were busy and active yet seeking a bit more by international connections and educational pursuit. As they sat down to work, from whatever place in the world they resided, they looked upon a computer screen and entered the gates of the castle. They entered their passwords as a sort of code to cross the moat and found themselves as part of a joint workspace where there was an overwhelming amount of information and sights, passageways and corridors, some boring unchangeable locations and others with continual movement.

The learner in this environment came to this place of learning with a host of experiences, which both contributed to the richness of the story and added to the confusion of the dragon. Not only did the learner enter this experience for themselves, to gain what it was that they individually hoped to achieve, but the learner was also joined to a learning community, in which participation contributed to the overall experience of the group. Each member of the group had the responsibility of providing information that would add to the knowledge of the others. The diverse nature of the learning communities in the ISC added to what was hoped would result in "social learning".

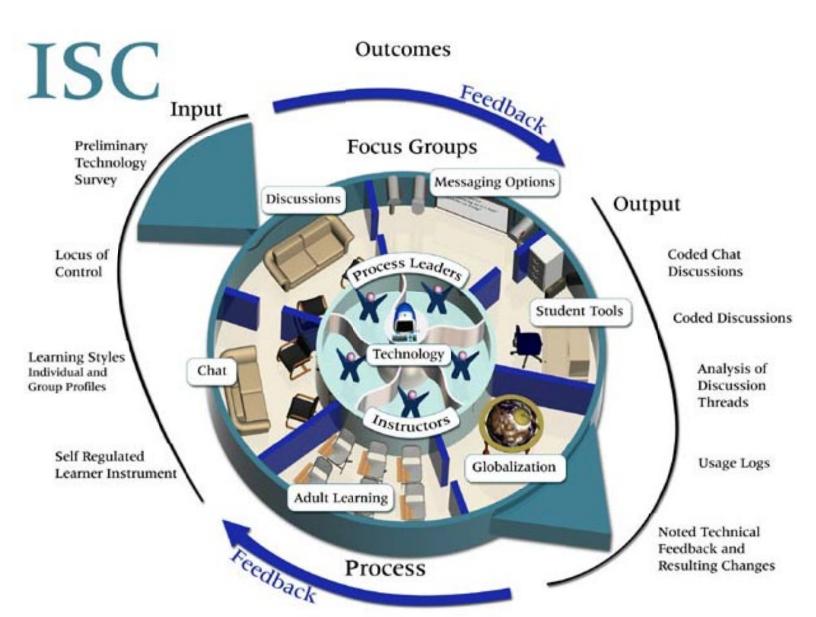
# **CHAPTER VI**

# **Discussion of Results**

#### Introduction

The research topic explored in this study, exists somewhere between physical reality and fantasy. Yet the Kingdom of the Internet is a global reality for international organizations, industries, education and individuals. Where better to begin a program involving international participants hoping to gain knowledge from one another and influence each others physical lives. At times this cyber existence merges with day to day life as personal face to face connections bridge the gap between the realms.

The groups in the dominion of the ISC hold a wealth of knowledge in their voice and action for other growing web communities. Virtual learning has become the focus for many university programs, the bulk of which are based upon the individual learner and not the social element of group learning. There were major themes between role groups, system elements and communities which emerged that will be explored as possible influences in the learning process. These themes are described as part of the summary of study subsection described below. The implications of these themes will then be examined along with a discussion of the results. Recommendations for program improvement, specific to the ISC, will also be investigated. Finally, this research study provided a broad systemic view of this system. Further micro research is needed. The research opportunities are scattering the pages of this lore and these possibilities will be explored.



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# **APPENDIXES**

# **Appendix A: The Degree Programs Structure/Curriculum**

# **Global Organizational Development**

Professional Development/Masters Degree Program in Adult Education

#### Year 1

Semester 1

# 1.1.a Globalization (EDG 6931)

- What is Globalization?
  - o Global Economic Systems
  - o Global Environmental Systems
  - o National Culture and Global Development
- Technology and the World Wide Web
  - Global Political Forces
- The Interdependence of Global Forces
- Global Backlash

# 1.1.b Adult Learner (ADE 6385)

- . Characteristics of Adults
  - o Self-directed learning
  - Learning Styles
  - o Structures for Learning: Learning Organization & Continuous Progress
- . The Learning Contract
- . Distance learning
- . Diversity

Semester 2

1.2.a Educational Leadership (EDA 6192)

- Global-centric organizational leadership
- Building organizational capacity
- Visionary Leadership
- Building and Organizational Global vision declaration

### 1.2.b Special Topics in Global Adult Education (EDG 6931)

- General Adult Education
- Global Human Resource Development Systems
  - o Independent programs/external degrees
  - o Education/colleges, universities, k-12 schools
  - o Quasi-education programs/churches, mass media
  - o Non-education institutions/ business, agencies
- Global Training and Development
- Global Staff Development
- Mentoring and Coaching

#### Year 2

Semester 1

### 2.1.a Current Trends in Vocational, Adult & Technical Education\_(EVT 6661)

- . Human competence in the age of globalization
- . New demands on workers
- . Emerging global competencies
- . Technology for global Learning
- . Schooling to advance competence
- . The changing roles of teachers and students
- . Tracking career pathways
- . Strategies for development

# **2.1.b Program Management in Adult Education** (ADE 6061)

- Program Design and Management
  - o . Strategic planning and development
  - Integrated structures of work (networks, partnerships, task forces, work teams)

### 2.2.a Issues in Multi Cultural Education (EDF 6883)

- Characteristics of the global citizen
- . Values of the global citizen
- . Cultural heritage
- . Diversity locally and globally

### **2.2.b Practicum** (EDA 6945)

- . Design an information system
- . Environmental Data gathering systems
- . Organizational data entry and retrieval systems
- . Case Study technique
- Linking data to organizational planning
- . Using information to improve quality
- . Involving the customer in design activity
- . Redesigning services with information and technology
- . The school/district profile

#### Year 3

Semester 1

# 3.1.a School Curriculum Improvement (EDG 6285)

- Quality student/worker performance
- . Authentic learning & assessment
  - o problem-based learning
  - o authentic projects/portfolios
- . Student/worker learning program
  - o globalization curriculum
  - o career development
  - o life-long learning abilities

# 3.1.b Foundations of Research (EDG 6481)

- . Approaches to research and measurement
- . Examining organizational development
- . Benchmarking progress
- . Creating feedback loops
- . Researching processes and effects of practice

#### Semester 2

### **3.2.a Seminar** (EVT 6930)

- Design and begin project as outcome for program
- Preparation for comprehensive exams

# 3.2.b Practicum (ADE 6946)

• Project completion and defense

#### Year 1

Semester 1

#### **1.1.a Globalization** (EDG 6931)

- What is Globalization?
  - o Global Economic Systems
  - o Global Environmental Systems
- National Culture and Global Development
- Technology and the World Wide Web
  - Global Political Forces
- The interdependence of global forces
- Global Backlash

# 1.1.b Adult Development and Learning (ADE 7388)

- . Characteristics of Adult Learners
- . Self-directed learning
- . Brain-based learning and learning styles research
- . Structures for Learning: Learning Organization & Continuous Progress
- Learning Contracts
- . Life Cycles Research

Semester 2

# 1.2.a Educational Leadership (EDA 6192)

- Global-centric organizational leadership
- . Building organizational capacity

- Visionary Leadership
- Building and Organizational Global vision declaration

# 1.2.b Special Topics in Global Adult Education (EDG 7937)

- General adult education
- .Global Human Resource Development Systems
- Independent programs/external degrees
- Education/colleges, universities, k-12 schools
- Quasi-education programs/churches, mass media, libraries
- Non-education institutions/ business, agencies
- Global Training and Development
- Global Staff Development
- Mentoring and Coaching

#### Year 2

Semester 1

# 2.1.a Foundations & Philosophy of Vo Tech/Adult Ed\_ (EVT 7066)

- .Human competence in the age of globalization
- . New demands on workers
- . Emerging global competencies
- . Technology for Global Learning
- . Schooling to advance competence
- . The changing roles of teachers & students
- . Tracking career paths
- . Strategies for development

# **2.1.b Seminar** (ADE 7937)

- Program Design and Management
- Strategic planning and development
- Integrated structures of work (networks, partnerships, task forces, work teams)

Semester 2

2.2.a Issues in Multi Cultural Education (EDF 6883)

- Characteristics of the global citizen
- . Values of the global citizen
- . Cultural heritage
- . Diversity locally and globally

# **2.2.b Special Topics: Information Systems** (EDG 7931)

- . Design an information system
- . Environmental Data gathering systems
- . Organizational data entry and retrieval systems
- . Case Study technique
- Linking data to organizational planning
- . Using information to improve quality
- . Involving the customer in design activity
- . Redesigning services with information and technology
- . The school/district profile

#### Year 3

Semester 1

## 3.1.a Graduate Seminar (EDG 7937)

- . Quality student/worker performance
- . Authentic learning & assessment
  - o problem-based learning
  - o authentic projects/portfolios
- . Student/worker learning program
  - o globalization curriculum
  - o career development
  - o life-long learning abilities

# 3.1.b Research Seminar (EVT 7761)

(same as currently offered)

• . Preparation for Quals and dissertation (EdS/Ph.D.)

Semester 2

# 3.2.a Thesis (Ed Specialist) (EDG 6971)

• Design and begin work on the Specialist project

\*At the completion of the ISC three-year program, the Specialist project will be completed and defended.

# Global Organizational Development Ph.D. Program in Interdisciplinary Education

### Three areas of: 1) Globalization & Workforce Development

- 2) Educational Leadership
- 3) Adult Education

#### Year 1

Semester 1

#### **1.1.a Globalization** (EDG 6931)

- What is Globalization?
  - Global Economic Systems
  - o Global Environmental Systems
- National Culture and Global Development
- Technology and the World Wide Web
  - Global Political Forces
- The interdependence of global forces
- Global Backlash

# 1.1.b Adult Development and Learning (ADE 7388)

- . Characteristics of Adult Learners
- . Self-directed learning
- . Brain-based learning and learning styles
- . The Learning Contract
- . Distance learning
- . Diversity

Semester 2

# 1.2.a Educational Leadership (EDA 6192)

- . Global-centric organizational leadership
- . Building organizational capacity
- Visionary Leadership
- Building and Organizational Global vision declaration
- . Structures for Learning: Learning Organization & continuous Progress

# 1.2.b Special Topics in Adult Education (EDG 7937)

- . General Adult Education
- . Global Human Resource Development Systems
- Independent programs/external degrees
- Education/colleges, universities, k-12 schools
- Quasi-education programs/churches, mass media, libraries
- Non-education institutions/ business, agencies
- Global Training and Development
- Global Staff Development
- Mentoring and Coaching

#### Year 2

Semester 1

# 2.1.a Foundations & Philosophy of Vo Tech/Adult Ed\_ (EVT 7066)

- Human competence in the age of globalization
- . New demands on workers
- . Emerging global competencies
- . Technology for Global Learning
- . Schooling to advance competence
- . The changing roles of teachers & students
- . Tracking career paths
- . Strategies for development

# **2.1.b Seminar** (ADE 7937)

- . Program Design and Management
- . Strategic planning and development
- Integrated structures of work (networks, partnerships, task forces, work teams)

# **2.2.a** Seminar in Global Cultural Heritage (EDG 7937

- . Characteristics of the global citizen
- . Values of the global citizen
- . Cultural heritage
- . Diversity locally and globally

### 2.2.b Special Topics: Information Systems (EDG 7931)

- . Environmental Data gathering systems
- . Organizational data entry and retrieval systems
- . Case Study technique
- Linking data to organizational planning
- . Using information to improve quality
- . Involving the customer in design activity
- . Redesigning services with information and technology
- . Design an information system
- . The school/district profile

# Year 3

Semester 1

# 3.1.a Graduate Seminar (EDG 7937)

- . Quality student/worker performance
- . Authentic learning & assessment
  - o problem-based learning
  - o authentic projects/portfolios
- . Student/worker learning program
  - o globalization curriculum
  - o career development
  - o life-long learning abilities

# 3.1.b Research Seminar (EVT 7761)

Preparation for Quals and dissertation proposal

Semester 2

# 3.2.a Administration of School Personnel Policies & Practices (Ph.D.) (EDA 7222)

- . Employee recruitment and selection
- . Designing professional development systems for all role groups
- . Performance appraisal
- . Promotion and retention
- . Career development

# 3.2.b Career Development in Vo Tech & Adult Ed (EVT 7155)

- . Develop a career model to facilitate career development
- . Facilitate career development of students
- . Articulate vocational education and career guidance
- \* At the completion of the three-year ISC program, coursework in Curriculum, Foundations (Psychological and Social) and Research/Statistics (EDF 6407, EDF 7408, and EDF 7410) will need to be completed. The courses will be followed by a Qualifying Exam and 24 hours (minimum) of dissertation.

### ABOUT THE AUTHOR



Naomi Rose Boyer received a Bachelor's Degree and a Masters degree in Special Education from the University of Florida in 1989. Naomi taught for four years in a variety of special education areas and national locations before beginning a family. Upon returning to school, Naomi completed the requirements for Education Leadership certification and began work on the doctoral degree.

As a graduate assistant, she traveled to Sweden to facilitate technology coordination for an international program for organizational leaders sponsored by the University of South Florida. She managed the online dimension and resulting technologies as well as worked on web site development for this innovative international project. A member of Phi Kappa Phi Honor society, Naomi maintained educational excellence throughout her doctoral experience.

# **CHAPTER I**

# Introduction

The current political, technological, and economic forces have led to the reduction of boundaries, increased opportunity, and infinite knowledge transmission. Within the emerging global society, financial and intellectual transactions occur by the nanosecond, altering basic social paradigms, and platforms for sharing information (McIsaac & Blocher, 1998). These emerging global conditions have produced a space for innovation, collaboration and diversification, which will directly influence educational systems around the world.

The Internet serves as a place, virtual though it may be, where communities and neighborhoods form around common interests. Individuals in various international locations can be attracted to participate in dialogue revolving around specific educational topics. Communication systems can be customized to accommodate the diverse backgrounds, educational experiences, and professional affiliations of members.

Distance education has been embedded within the dynamic online landscape, taking shape both locally and globally to raise many questions in regards to the impact of this forum on both learning and educational opportunity. Distance education has been defined by the California Distance Learning Project (1997) and restated by Palloff and Pratt (1999) as providing learning resources through distance teaching and distance learning to remote learners. There are various resources available to facilitate distance learning such as software programs, courseware applications, use of the World Wide Web, teleconferencing, and other technological means for transmitting information over extended distances.