Purpose and Organization of the Seminar

The purpose of this seminar is to interest you in the opportunities and challenges of systemic change in education and training organizations today. Systems theory and design theory offer an emerging theoretical base for the challenge of educational/training transformation that confronts the United States and the rest of the world.

This seminar is organized around solving a problem: fostering systemic change in a local school system, higher education institution, or corporation. Your explorations to solve the problem will be guided by the writings of Bela Banathy, Peter Senge, Phil Schlechty, Hammer & Champy, and many others.

This seminar will provide insights into societal evolution and the relationship of education and training to that evolution. It will provide images of an educational or training system to meet the needs of an information-age society. And it will explore the processes by which such systems might be designed and implemented. These serve as focal points for discussing the complexities of systems thinking about education and training.

This is a seminar about the future, not about the past. We as educators and trainers are living in turbulent times, times of great change in our educational and training institutions. My hope is that this seminar will give you some intellectual tools to understand the complex worlds of education or training. By the end of the seminar, I hope that each of you will see that you can make a valuable contribution to the process of creating the future of education/training through the use of systems thinking and design competence.

Seminar Philosophy and Management

R667, Systemic Change In Education and Training, is an introductory seminar in the field of educational/training systems design. At the same time, it is a doctoral-level seminar that is intended to provide a springboard for those of you wishing to do focused research in advance of a dissertation.

I view you as professionals. I expect you to take initiative, participate actively in discussions, and learn through collaboration. We are all learners together in this seminar. I will give you guidance and feedback, but I expect you to take major responsibility for your learning and for determining your grade. Let me know how I can better meet your needs. I expect you to offer suggestions and guidance on how this seminar should proceed. There will be a couple of specific times when we will discuss the seminar, but I strongly encourage you to talk to me at any time. I am open to modifying assignments, changing the syllabus, or any other adjustments you think better suit your needs.

Required Texts
Larry Hutchins, *Systemic Thinking*
Bela Banathy: *A Systems View of Education*
## Course Schedule

### Week 1:  Jan. 16  Orientation & Paradigm Shift in Society, I

**Readings to do before class (in recommended order):** (ER = Electronic Reserve)

- **Alvin Toffler:** *The Third Wave*, Introduction, Chapters 1, 2, 10, 11, 24.  ER1
- **Bela Banathy:** *Systems Design of Education*, Chapter 1 and pp. 21-26, 62-73.  ER3
- **Peter Senge, *Schools that Learn,* Chapter 1.**  ER14 (first half)

**Discussion Topics:** Seminar syllabus and project

- Introductions. Choose a context area. Discuss project: change an organization of your choice.
- Plan to form teams of 3 and select an organization for project. Three concepts of systems.
- Discuss the readings. View and discuss first half of the *Mindwalk* video.

### Week 2:  Jan. 23  Paradigm Shift in Society, II

**Readings (in recommended order):** (ER = Electronic Reserve)

- **Robert Reich:** *The Work of Nations*, Assorted pages.  ER2
- **Charles Reigeluth:** The Imperative for Systemic Change. In C.M. Reigeluth & R.J. Garfinkle (Eds.), *Systemic Change in Education*, Pages 3-11.  ER4
- **Hammer & Champy:** *Reengineering the Corporation*, Chapter 1.  ER5
- **SCANS Report, What Work Requires of Schools.**  ER10

**Discussion Topics:**

- What changes are going on in society that have implications for your organization? Do we need systemic change (a paradigm shift) in education and business? Large group debrief. View and discuss second half of the *Mindwalk* video.

### Week 3:  Jan. 30  Systems Thinking, I

**Readings (in recommended order):**

- **Russell Ackoff,** *Creating the Corporate Future*, Chapters 1-2.  ER8
- **Peter Drucker,** *The Age of Discontinuity*, xi-xiii and xxvii-xxx.  ER9

**Education context:** *A Nation at Risk*.  ER11

- **Tyack & Cuban,** *Tinkering toward Utopia*, pp. 85-109.  ER13
- **Peter Senge, *Schools that Learn,* Chapter 2.**  ER14 (second half)
- **Duffy, Rogerson & Blick,** *Redesigning America’s Schools*, Intro & Ch. 3.  ER12

**Corporate context:** Peter Senge: *The Fifth Discipline*, Chapters 1-5.  (On reserve in Ed Lib)

**Optional:** Martin Covington, *The Myth of Intensification*, *Educational Researcher, 25*(8). ER15

**Trilling & Hood:** Learning, Technology and Ed Reform, *Educ Technology*.  ER7

**Focus for Readings:**

- Make a list of all ideas that might influence your approach with your organization. Bring the list to class to discuss those ideas and their implications for your organization.
- As you read Senge, think about how his ideas relate to your organization.

**Discussion Topic:**

- What changes are going on in society that have implications for your organization? Do we need systemic change (a paradigm shift) in education and business? Large group debrief. Introduce IST as a system.
Week 4:  Feb. 6  Systems Thinking, II

**Readings (in recommended order):**

Bela Banathy: *Systems Design of Education*, pp. 30-37, 149-151.  ER16
Peter Senge: *The Fifth Discipline*, Chapters 6-7, Appendix 2.  ER18
Larry Hutchins: *Systemic Thinking*, Study Intro, Chs. 1, 2, 5, pp. 111-117; Skim Chs. 3, 4.

*(Required text)  (See list of systems concepts from Hutchins on SSF.)*

**Focus for Readings:**

Make a list of all ideas that might influence your approach with your organization. Bring the list to class to discuss those ideas and their implications for your organization.

As you read Senge, think about aspects of his ideas that may be helpful to transforming your organization.

As you read Hutchins, think about the IST Department as a system. For each of Hutchins' systems concepts listed on the handout, think about how the concept is operationalized in IST as system. Come to class prepared to lead a discussion of how each concept is operationalized in that system.

**Discussion Topic:**

As a large group, analyze the IST Department as a system, using Hutchins' concepts and Senge’s principles.

As a context group, analyze your organization as a system, using Hutchins' concepts and Senge’s principles.

What additional ideas have implications for your organization?

Week 5:  Feb. 13  Three Lenses for Viewing a System, I

**Readings:**

Squire & Reigeluth: The many faces of systemic change.  ER21

**Focus for Readings:**

Think of the IST Department as a system, and prepare a 1-page outline that can help you to describe it using each of Banathy's 3 lenses (3 pages total of outline). Make copies and bring them to class for peer review. Also, be prepared to give feedback to others about how well they have used Banathy's 3 lenses to describe theirs.

**Discussion Topic:  Looking through the three lenses**

In large group, discuss Banathy’s 3 lenses. In small context groups, give each other feedback on how well you have utilized each of Banathy's 3 lenses to describe IST as a system. Large-group debrief.

Week 6:  Feb. 20  Three Lenses for Viewing a System, II

**Assignment 1 Due  Project: System Description**

Write a short paper describing your team's organization (current status) using each of Banathy's 3 lenses. Do not collaborate with teammates on this assignment.

**Discussion Topic:  Looking through the three lenses**

Review each other’s descriptions in your teams, giving feedback and synthesizing your work. Meet in sharing groups to learn what the other groups are doing. Hand in your paper with comments for improvement in your margins. View and discuss a video tape.
Week 7: Feb. 27  Systemic Change Cases

**Analysis Report Reading (all teams):**
Bela Banathy, *Designing Social Systems in a Changing World*, pp. 117-120.  ER20

**Education context:**
- David Bennett and Thomas King, "The Saturn School of Tomorrow," *Educational Leadership*, May 1991.  ER22
- **Add a CSR article***

**Corporate context:**

**Focus for Readings:**
Consider the extent to which the changes in each case are systemic, and relate the case studies to your organization to see what should be useful lessons for future systemic change (reengineering) efforts there.

**Discussion Topic: Case Studies in Systemic Change**
What constitutes a "systemic" change?  What kinds of changes have been tried?

Week 8: Mar. 6  Analysis for Systemic Change

**Assignment 2 Due**  **Project: Analysis Report**
Hand in your team report identifying the characteristics of your SOI and its environment that will impact on (1) the change process and (2) the changes you make. (See assignment sheet)

**Readings:**
Materials about your organization. Also, conduct interviews if possible.

**Discussion Topic: Your Organization’s Recent Change Efforts**
In sharing groups, discuss the team reports on your organization’s recent change efforts. View and discuss a video tape.

Week 9: Mar. 13  Leadership for Systemic Change

**Readings:**
- Duffy, Rogerson & Blick, *Redesigning America’s Schools*, Chapter 10.  ER25
- Senge, *Schools that Learn*, pp 411-418.  ER26


**Corporate context:**  Hammer & Champy, *Reengineering the Corporation*, Chs 2-6.  (Ed Lib)

**Focus for Readings:**
Think about aspects of the reading that might be useful for your organization’s change process.

**Class Activity:**
Context-group discussions of the readings as they relate to your organization; large-group debriefing.
Week 10: Mar. 27  Systemic Change Process, I

Readings:
Bela Banathy, *Designing Social Systems*, pp. 55-77, 113-115, 124-142. (Ed Lib—no ER28)
Jean Swenk, “Strategic Planning and Chaos Theory: Are They Compatible?” In M. Cutright (Ed.), *Chaos Theory and Higher Education: Leadership, Planning and Policy*. ER29
Renate Caine & Geoffrey Caine, *Education on the Edge of Possibility*, Chs 1 & 7. ER30

Education Context:
Reigeluth, "Principles of Educational Systems Design" ER31
Hawley, Systemic Change in Education: A Road Map. *Educational Technology*, 37. ER32

Corporate Context:
Russell Ackoff, *Creating the Corporate Future*, pp. 65-76. (Ed Lib)
Daryl Conner, *Leading at the Edge of Chaos*, Chapter 2. ER35

Focus for Reading:
Make a list of the most important ideas presented, and come to class prepared to explain how they can be applied to your organization.

Discussion Topic:
The Systems Design Process

Class Activity:
Student-led discussions of the most important ideas in large group, with special focus on designing the fuzzy image of the new system. View and discuss a video tape.

Week 11: Apr. 3  Systemic Change Products

**Assignment 3 Due**  Project: Fuzzy Image or Process Selection & Vision
Hand in your team’s fuzzy image and definition or process vision for Project 2 and a description of the change process your team would like to have used to design that image.

Education Readings: Reigeluth & Garfinkle, "Envisioning a New System of Education." In C.M. Reigeluth & R.J. Garfinkle (Eds.), *Systemic Change in Education*, pp 59-70. ER36

Corporate Readings: Russell Ackoff, *Creating the Corporate Future*, Ch. 5. (Reserve in Ed Lib)

Focus for Reading:
Look for ideas that can be applied to your organization.

Class Activities:
Review each other's papers: to understand and evaluate them.

Discussion Topic: Designing the Fuzzy Image or Process Vision
Context group discussions of the readings. Compare them to the Jenlink et al. process.
Sharing group discussions of your projects.

Week 12: Apr. 10  Systemic Change Process, II

Education Readings:
Duffy, Rogerson & Blick, *Redesigning America’s Schools*, Chapters 1-2, 4-6. (Ed Lib)
Coalition of Essential Schools (booklet). ER37

Business Readings:
Hammer & Champy, *Reengineering the Corporation*, Chs. 7-9, 14  (Reserve in Ed Lib)
Hammer, *Beyond Reengineering*, pp. 206-225. ER38

Focus for Reading:
Make a list of the most important considerations for a successful systemic change process, and come to class prepared to explain to your classmates why they are important and how they relate to your organization.

Class Activities:
Discuss your design and your hypothetical process in context groups. Student-led discussions of the readings; sharing key points with the other group.

Week 13: Apr. 17  Systemic Change Process, III


**Education Readings:**
Jenlink, Reigeluth, Carr & Nelson, Parts of the *Guidebook*. Electronic copy on SSF
Education Commission of the States, *Bending without Breaking*. ER39

**Business Readings:**

**Focus for Reading:**
Come to class prepared to elaborate your design and your hypothetical process with your teammates.

**Discussion Topic:**
Elaborating the fuzzy image or process vision.

**Class Activity:**
Elaborate your design and your hypothetical process with your teammates, relating each to the readings. Compare them to the Jenlink et al. process.

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**Week 14:**

**Apr. 24**

**Systemic Change Process, IV**

**Discussion Topic:**
Elaborating the fuzzy image or process vision.

**Readings:**
Your choice.

**Focus for Readings:**
Come to class prepared to explain your design and your hypothetical process to another team.

**Class Activity:**
Discuss your design and your hypothetical process with another team.

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**Week 15:**

**May 1**

**Reflections**

**Topic:** Reflections on this Seminar

**Assignment 4 Due**

Project: Ideal Change Process
Before class, post to SSF a description of the ideal change process for your organization.

**Assignment 5 Due**

Do peer and self evaluations.

**Class Activity:**
Share your ideal processes with each other using PowerPoint presentations. Evaluate and redesign the seminar.