

University of Toronto  
Faculty of Applied Science and Engineering  
Department of Mechanical and Industrial Engineering

FINAL EXAMINATION - APRIL 26TH, 2001  
Third Year - Program: Mechanical and Industrial Engineering

COURSE MIE 359 ORGANIZATION DESIGN

Exam Type A

Examiner: - H. F. Kolodny

Do any three questions. Each question is worth 36 points and the entire exam is out of 108 points. In multiple part questions, the weights for each part are noted. Please use a separate booklet for each question you select.

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1. a) The article about "Sacred Cows" and the case about Mitel described how Geoff Smith and Steve Quesnelle from Mitel Corporation initiated many interventions to change the culture of Mitel's R&D Division to one that was more focused on quality and time-to-market rather than according to traditional, hierarchical approaches to organizing R&D. Identify and describe 4 change interventions used to change Mitel's R&D culture and suggest how each will result in change. (3 points each)

1. b) Purser, Pasmore and Tenkasi conducted action research in an R&D organization that used a deliberations and coalitions approach for one large research project (called BLITZ) and a traditional approach for another large research project (called AIM). Describe the factors that were different between the two R&D projects and explain how the factors were different. (20 points)

1. c) Why would a deliberations and coalitions approach be more appropriate than a social and technical approach in the R&D organization referred to by Purser, Pasmore and Tenkasi ? (4 points)

2. a) We reviewed Dexter Dunphy's brief article on the components of a theory of change in class. He compared a sociotechnical systems change approach to a strategic change approach. The change process in the Pooled Financial Services Group at GE Canada followed a sociotechnical systems change approach. How would the change process at GE Canada have differed if a strategic change approach had been used? (14 points)

2. b) Organizations engaged in change often use parallel structures. What is a parallel structure? Give an example of a parallel structure from one of the cases we have read or one of the videos we observed. (6 points)

2. c) Organizations today often have an explicit vision of how they see themselves and how they want to be seen by others. They also have mission statements about the kind of businesses or services they offer. You have been a student within the Faculty of Applied Science and Engineering for three years, taking your courses in the Mechanical and Industrial Engineering Department. Write a brief vision and mission statement for (i) the Faculty of Applied Science and Engineering (8 points) and (ii) for the Department of Mechanical and Industrial Engineering. (8 points)

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3. Teams showed up in quite a bit of our class material. There were teams in GE Canada's Pooled Financial Services. There were teams in the Topeka dog food plant film, in the Rohm & Haas film, in the film that served as a Task Force Report to the Premier's Council on Economic Renewal and in the film on the Federal Justice System in the USA. Teams were also discussed in Art Kleiner's chapter from The Age of Heretics. Your study team that carried out the project in this course is another team example. Drawing from what you have learned from these different sources, respond to the following questions or statements about teams (each is worth 6 points):

- a) What different kinds of teams does one usually see when people refer to team-based organizations?
- b) Why have so many organizations adopted team-based structures?
- c) What are some of the characteristics of self-regulating or self-managing or self-directed work teams?
- d) Identify and discuss the developmental stages that teams typically experience?
- e) What do individuals in self-managed teams like about that way of working?
- f) Describe some of the characteristics that make a group function effectively.

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4. PART 1

Social systems analysis is an aspect of sociotechnical systems approaches to change that one does not often see in other approaches to change.

4. a) If you were trying to understand the social system of a workplace, describe some of the methods you would use to do so? (10 points)

4. b) Cite and describe two design principles espoused by Albert Chermis and two design principles espoused by Richard Walton that address the social system of a workplace. (8 points)

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4. PART 2

Union membership has been declining and unions have had difficulty coming to terms with innovative work organizations.

4. c) What concerns do unions have about innovative work organizations? (10 points)

4. d) What can unions do to secure a more prominent role in innovative work organizations that would be consistent with union values? (8 points)

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5. Organizations often follow different paths in attempting to change themselves to improve their situations. Some implement total quality management approaches, some adopt sociotechnical systems designs, while still others use business process reengineering projects.

(a) In what ways are these three approaches different with respect to (6 points each):

- 1: the effects on organizational culture
- 2: the analysis methodologies used
- 3: the organizational change processes used
- 4: the effects on organizational structure

(b) In what ways are these three approaches similar? (12 points)

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