The objectives of this course are (1) to assist each participant with the development of a consciousness about the future and the impact of change; (2) to assist each participant in discussing and assessing the implications of change and future shock in our present times; and (3) to stimulate each participant's creative abilities as to how the future might be and, therefore, what kinds of action might be warranted. The course guide is divided into two sections entitled: Can Technology Solve the Problems Caused by Technology? and Setting the Course for the Future. Each section contains several behavioral objectives and learning activities, including discussing the book "Future Shock," preparing a multimedia presentation on future shock, writing a science fiction story, and preparing a report on the values and role of future society. (TS)
"COMMUNICATION AND FUTURE SHOCK"
INTERTERM JANUARY 1975

DOANE COLLEGE
CRETE, NEBRASKA

Are you already a victim of future shock?

Instructor
Richard B. Gartrell
Assistant Professor of Communication
INTRODUCTION.

Society is experiencing a nervous breakdown; the accelerated pace of change and novelty are having a devastating affect upon institutions and man. We are no longer isolates, living in our own worlds; we have through the inventions of technology, become part of a global village.

There was a time when you knew what tomorrow would bring; those were the good old days. The future isn't what it used to be. Conceptions of time, space, work, religion, sex, family, and social institutions in general are changing, and in many instances, overnight. Society is in constant turmoil. There is mass disorientation. The world into which all of us plunge each morning is increasingly filled with new-ness. Given few clues as to what kind of behavior is rational, under the radically new circumstances, many individuals, their senses rattled and stretched and shattered, suffer the disease of change--future shock.

Limits to the amount of change that the human organism can absorb are being discovered; however, submitting man to change without first determining the limits of tolerance is to run the risk of throwing masses of men into future shock. How adaptable is man? Future shock is defined as "the distress, both physical and psychological that arises from an overload of the human organism's physical adaptive systems and its decision-making processes." Future shock is a phenomena of time, a product of an accelerated rate of change in society arising from the superimposition of new cultures on old ones.

Reacting to gross social changes--the equivalent of a millennia of change within the compressed span of a single lifetime--man has been described as suffering from exhaustion, imbalance, fatigue, hypersensitivity, confusion, bewilderment, psychic maladjustment, and irritability. Within society, we see some of the extensions of these psychological and physical breakdowns: the spreading use of drugs, social withdrawal, the rise of mysticism, the recurrent outbreaks of vandelism and undirected violence, the lack of personal involvement, moral neutrality, the politics of nihilism and nostalgia, and the sick apathy of millions. Ours is an anxious society, manifesting apprehension, dread or chronic fear from the uncertainties of our times.

The objectives of this interterm experience fall into the following dimensions:
(1) To assist each participant with the development of consciousness about the future and the impact of change;
(2) To assist each participant in discussing and assessing the implications of change and future shock in our present times.
(3) And to stimulate each participant's creative abilities as to how the future might be, and therefore, what kinds of "shock absorbers" might be warranted.

The basic assumption of this performance-based curriculum is that the participant has the freedom to come and go in order to do the necessary

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1Toffler, Alvin. Future Shock.
research; probably the best way to describe the structure is to indicate that there is a preceptor, and a resource center to which participants come to view, listen to, or discuss materials. A significant amount of the work would therefore be accomplished "outside" the walls of any given classroom setting. Learning activities have been arranged to allow the most efficient use of allotted time.

**COURSE SCHEDULE.**

See attached.

**GRADING SYSTEM.**

Student option.

The future always arrives a little before you're ready to give up the present.

Can technology solve the problems caused by technology?
INSTRUCTIONAL OBJECTIVE #1

To assist with the development of a consciousness about the future.

BEHAVIORAL OBJECTIVE #1

Upon completion of the following learning activities, the learner will have been able to evaluate change and its affect upon their own life-style.

LEARNING ACTIVITIES FOR B.O. #1

1. Take and evaluate the results of the "Social Readjustment Rating Scale." Discuss the results of this scale within a small group; what kinds of implications about your behavior can you derive from the scale score as related to adjustment?

2. Construct a personal chart in which the following can be plotted and assessed:
   (a) How long have you lived in your present home?
   (b) How many jobs has your father held in the last five years?
   (c) Is your father planning to change jobs this year (including assignments with same employer?)
   (d) How many close friends do you have within a 5 mile radius of your home? Within 10 mile radius? Within 25 mile radius? Within 50 mile radius?
   (e) How many homes have you lived in?
   (f) How many schools have you attended?
   (g) How many friends have you written within the last week, who you knew from living elsewhere? Within the last 2 weeks? Within the last month? Within the last year?
   (h) How many new people do you come in contact with each day? For how long does your contact last?
   (i) How many jobs have you held?
   (j) How old is your home? Car? Pets? TV Set(s)? Appliances?
   (k) When was the last time you bought new clothing? What did you buy, and why?
   (l) What was the last item of clothing you discarded? Why?
   (m) What was the last nick-nack you discarded, and why?
   (n) What is your oldest piece of wearable clothing (including shoes)?
   (o) Where have you gone on your vacations during each of the last five years? Where do you expect to go this year? How much travel was involved in each trip?
   (p) What are your values toward each of the following: sex, marriage, religion, family, work, government, environment?
   (q) What are your family's values toward each of the above items? Do you agree with them and/or do they agree with you? Can you provide reasons for the agreement and/or disagreement? If you do not agree with them, can you provide a reason as to what it was that affected your decision?
Compare your personal chart with other members in a small group; prepare a composite chart for your small group. What kinds of generalizations can you make from the composite chart about life styles, and about the affects of change, novelty, and mobility on life patterns?

3. Participate in a value clarification exercise. Discuss implications of your involvement.

**COMPLETION CRITERIA FOR P.O. #1**

Each learner will turn in the Readjustment Scale and their Personal Chart for appropriate credit notation. Secondly, each small group will be prepared to share with the total class, their findings about their group, and their generalizations.
"COMMUNICATION & FUTURE SHOCK" SCHEDULE

The following schedule is provided for the first five (5) days of the interterm; there are planned two meetings per day, one in the morning from 9:30 - noon, and again in the afternoon from 1 until 3 p.m.

<table>
<thead>
<tr>
<th>DAY #1</th>
<th>A.M. (1) Read &amp; Discuss Syllabus</th>
<th>(2) View: &quot;Future Shock&quot;</th>
<th>(3) Discuss Film Materials</th>
<th>(4) Read Future Shock Handout</th>
<th>P.M. (1) Listen to &quot;2000 A.D. with Chet Huntley&quot;</th>
<th>(2) Discuss Audio Tape</th>
<th>(3) Read Article &quot;Up-dating the Crystal Ball&quot; (73)</th>
<th>(4) Do I.O.#1, B.O. #1.</th>
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<tbody>
<tr>
<td>Assignment:</td>
<td>Read and be prepared to discuss Toffler's Future Shock, Chapters 1-8.</td>
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<tr>
<th>DAY #2</th>
<th>A.M. (1) Discuss Future Shock, Chapters 1-8</th>
<th>(2) View &quot;This is Marshall Mc Luhan: The Medium is the Message&quot;</th>
<th>(3) Discuss Film Materials.</th>
<th>P.M. (1) Form Mini-Think Tanks</th>
<th>(2) Review Syllabus for appropriate objectives.</th>
<th>Check I.O.#1, B.O.'s 1-4 and I.O.#2, I.O.#1.</th>
</tr>
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<tbody>
<tr>
<td>Assignment:</td>
<td>Read and be prepared to discuss Toffler's Future Shock, Chapters 9-16 and Fabun's The Dynamics of Change, Chapters 6, 3 and 4.</td>
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<tr>
<th>DAY #3</th>
<th>A.M. (1) Discuss Toffler and Fabun's materials.</th>
<th>(2) View &quot;Fuller's World&quot; (3 parts)</th>
<th>Discuss.</th>
<th>P.M. (1) View R. Buckminster Fuller: Prospects for Humanity.&quot; Discuss.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment:</td>
<td>Read and be prepared to discuss Toffler's Future Shock, Chapters 15-17, Fabun's The Dynamics of Change, Chapters 2, and assigned articles.</td>
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| DAY #4       | A.M. (1) Discuss reading materials and related objectives. | (2) View "Man's Impact on the Environment." | | P.M. |
|--------------|------------------------------------------------|---------------------------------|--------------------------------|
| Assignment: | Finish reading all assigned readings in Toffler and Fabun; have completed for discussion on fifth day materials related to I.O. #1 and I.O. #2. |

| DAY #5       | A.M. (1) Listen to "Toward 1984". Discuss article on Futurism & tape, and materials for I.O. #2. | |
|--------------|-----------------------------------|---------------------------------|--------------------------------|
BEHAVIORAL OBJECTIVE #2

Upon completion of the following learning activities, the learner will have been introduced to the basic concepts of future shock.

LEARNING ACTIVITIES FOR B.O. #2

1. Read the following and be prepared to discuss them in small groups (see attached course schedule)
   (a) Alvin Toffler, Future Shock
   (b) Don Fabun, The Dynamics of Change
   (c) Wendall Johnson, Living with Change

Various articles and/or additional readings will be suggested throughout the course.

2. View the following:
   (a) "Future Shock" with Orson Wells, Narrator
   (b) "R. Buckminster Fuller--Prospects for Humanity"
   (c) "This is Marshall McLuhan--The Medium is the Message"
   (d) "R. Buckminster Fuller--Fuller's World" (3 part Videotape)
   (e) "Man's Impact on the Environment"

3. Listen to the following and be prepared to discuss:
   (a) "2000 A.D." with Chet Huntley, Narrator
   (b) "Alvin Toffler: Future Shock"
   (c) "Toward 1984"

4. Discuss the above items in small groups. Enumerate the basic concepts listed by the authors read in such areas of concern as life, telecommunication, knowledge, population, technology, human relationships, human resources, travel, organizational structures, etc. What are the symptoms of change and future shock? Why are we suffering from future shock? What are the implications of future shock for our society? How does one go about developing future shock absorbers? Why is it even important to discuss the future? Each group will have an opportunity to present their ideas to the class as a whole, and to interact with each other's perceptions.

COMPLETION CRITERIA FOR B.O. #2

Class participation and involvement will be the basic parameter for evaluating the success of these learning activities.
BEHAVIORAL OBJECTIVE #3

Upon completion of the following learning activities, the learner will have had the opportunity to "creatively" deal with the basic concepts of change and future shock.

LEARNING ACTIVITIES FOR B.O. #3

1. Based on your readings and interaction with other materials participate in and write a DELPHI STATEMENT with regard to future and the nature of change and its effects upon your area of interest.

   and/or

2. Write a "laugh-in" script featuring jokes, skits and songs dealing with change.

   and/or

3. Write a "future autobiography" exploring your life in the future.

   and/or

4. Write a science fiction story dealing with the future.

   and/or


   and/or

6. Write and prepare a newspaper which deals with the year 2001.

   and/or

7. View the following films, and write a critical essay on one or more of them: 2001 Space Odyssey, Profiles of the Future, CBS Camera Three: Alvin Toffler, R. Buckminster Fuller and Arthur C. Clarke, The War Game, Of Time, Work and Leisure, or any others as approved by the instructor which related to future shock.

   and/or

8. OPEN--discuss with the instructor your idea for approval.

COMPLETION CRITERIA FOR B.O. #3

Presentation of the project undertaken, either to the class as a whole, or as a written project handed in.
BEHAVIORAL OBJECTIVE #4

Upon completion of this objective, the learner will have become acquainted with some of the resources available for discussing and developing materials and ideas related to the "future".

LEARNING ACTIVITIES FOR B.O. #4

1. Each person is to write requesting information as to the (a) nature and scope of the research being performed (b) the type of staffing (c) the type and frequency of their publications as related to their research and (d) the availability of free materials from their organization, from the following:

   Commission on the Year 2000

   Harvard Program on Technology and Society

   Institute for the Future

2. Each person is to (a) either obtain a subscription to one or more of the following, (b) or obtain a copy of a recent past issue and review the type of materials which might be available, of the following:

   The Futurist (bi-monthly out of Washington)

   Futures (quarterly from Surrey, England)

3. Each person is to compile a listing of useful resources which might be consulted when dealing with themes for the future; these resources should include organizations (see above), publications (see above, including books and periodicals, and very useful articles), games (see Future by the Kaiser Aluminum Corporation), and/or any other useful items. All members shall pool their findings and make a master compilation for distribution to all class members.

COMPLETION CRITERIA FOR B.O. #4

This is a self-directed objective with exception of item #3. All class members shall be encouraged to contribute to the final resource package as quickly as possible.
The following is a factual summary of the new Dallas/Fort Worth Airport:

Size/Location The airport is about eight miles north of the 34-mile-long Dallas/Fort Worth Turnpike, which connects the two cities. It is approximately 17 miles from the center of either city. Larger than Manhattan Island, the airport is nine miles long, eight miles wide and covers 17,500 acres. This is the first airport conceived and planned using extensive computer simulation analysis. The result is an airfield that when completed will accommodate higher volumes of air traffic than any other airport in the world. The 80-nautical miles of air space around Dallas/Fort Worth will be able to sustain an ultimate annual enplanement of more than 100 million passengers. Perhaps of more significance is the fact that at ultimate capacity this airport can handle as many aircraft in a peak hour as all three New York airports combined now handle in the same time period.

Drive-To-Gate Concept Based on the planning concept of one terminal-one airplane configuration, the resulting design is an adjoining series of “mini-terminals” within “half-loop” structures, serving small groups of airplanes and passengers. Additional “half-loops” will be added as airline needs grow. So despite the vast size of the airport, passengers are concerned with only one small terminal area. Ticketing, check in services and baggage check, along with public concessions such as newsstands, lunch counters, and personal service facilities, are in close proximity to the check in areas. From front door of the terminal building to the aircraft entrance, the traveler may walk as little as 120 feet. Another convenience is automobile parking available in front of terminal buildings in direct proportion to the aircraft gates.

Passenger Accessibility The airport is accessible with both north and south entrances and exits. A passenger arriving in his own car drives along International Parkway, a multi-lane high-speed roadway connected to expanded state highways at the north and south ends of the airport. Autos travel on separate roadways from trucks and other commercial vehicles, which eliminates traffic confusion. A sophisticated system of dynamic signing smoothly guides the passenger to the entrance of his “mini-terminal.”

The inter-terminal people mover within the airport is a unique transportation system known as AIRTRANS (developed by the LTV Aerospace Corporation). This fully automated transit system utilizes 40-passenger rubber-tired cars that move along concrete guideways. Average riding time from point to point is ten minutes. In the opening phase there are fourteen passenger stations in the system linking terminals, remote parking areas, airport hotel, and regulatory facilities. A total of 51 vehicles do the “people moving” over a 13-mile course and seventeen utility vehicles move baggage, mail, supplies and refuse. Routes will be expanded as the airport grows.

100 Million Passengers by 2001 Due to begin operation on October 28, 1973, the opening phase provides a layout of two north-south runways over two miles long and a 9,000 foot crosswind runway. The 6,500 foot distance between the primary runways gives the airport a capacity for simultaneous aircraft operations. The four terminal buildings will house a total of 66 passenger gates and 12 cargo gates will also be in operation. The airport expects over 13 million passengers will use the facility during its first year of operation.

At ultimate completion in 2001, the jetport is expected to accommodate more than 100 million passengers annually through 260 gates in 13 “half-loop” terminals. There will eventually be six primary instrument runways capable of three simultaneous operations. Runways will be of length and thickness to handle any plane now in service and will be readily expandable to service aircraft weighing over 2 million pounds envisioned for future commercial use. Space is allocated for 200 cargo gates capable of handling as much freight as all 13 Texas seaports combined.

Ecologically Suitable Prior to land acquisition, about 12,000 acres of the airport site were devoted to agriculture with native low-yield harvest. Part of the present land management program of the airport currently includes leasing approximately 2,000 of these acres to a resident farmer for agricultural purposes. There are no significant bodies of water, fuel or non-fuel minerals, forests, fish, or wildlife species that will be altered or destroyed during the course of development. No significant recreational areas, areas of unique interest or scenic beauty, wildlife refuges, government reservations, geological formations, public lands, or other similar amenities will be destroyed or damaged by the development and operation of this facility. The airport’s own ecology plan for the opening will turn the prairie land into a park-like atmosphere with the addition of 10,000 trees, 4,000 shrubs, and more than one million ground cover plants. Dallas/Fort Worth is the only airport to win an international award for its landscaping program.

Sound Buffer Even when fully developed to meet air traffic demands of the year 2001, the airport’s north-south boundaries will be three miles from the ends of its primary runways, and crosswind runways will end two miles from the airport limits.

Henry L. Newman, director of the Southwest Region of FAA, points out: “Pilots will never have to resort to throttling back shortly after takeoff to prevent noise, nor will we need baffles, depressed runways, or wave curtains used for noise abatement.” That, plus the wide runways spaced for safety, is why the airport has been so strongly endorsed by the Airline Pilots Association.

Setting the course for the future.
INSTRUCTIONAL OBJECTIVE #2
To discuss and assess the implications of change and future shock in our present times.

BEHAVIORAL OBJECTIVE #1
Upon completion of the following learning activities, each learner will have made an intensive investigation and assessment of change as it affects present times.

LEARNING ACTIVITIES FOR B.O. #1

1. Student participants will form small (max. 5 members) mini-think tanks within which they will operate throughout the course.

2. Each mini-think tank will develop a series of questions with which they can assess current perspectives.

3. Each mini-think tank will be prepared to discuss their thinking and findings with the other members of the class, in order to develop a system for assessing change and future shock as a whole, and for the development of constructive recommendations.

4. Below are suggested some areas of concern within which an assessment of change can be conducted. The objective of these endeavors will be to (a) delineate some criteria for assessment, and (b) to assess the present status of society.
   (a) Survival Questions:
       Why do we burn and/or store food while millions starve? How might the population growth be stemmed? What pollutants are most serious to our community? Can we continue to tolerate unlimited consumption? How can we resolve our energy concerns?

   (b) What communities seem to be changing the most, and why?

   (c) Maintain a press clipping file on current changes; why has change come about? What criteria were used in assessing the affects of change? When sufficient clippings have been collected, prepare a newspaper that features the important news of change.

   (d) List animals and races of men that are extinct because they could not adapt to change. What animals and races of men today are again threatened due to a lack of ability to cope with change? What could have been, or can be done to avoid extinction?
The Astronauts have been described as the only ones in our present society educated with "future shock absorbers". What type of education do astronauts go through in preparation for travel into outer space? How does this differ from public education? List each of the astronauts who have flown into outer space, and determine the condition of their current life styles--family, marriage, job, etc. What conclusions might be drawn from this comparison?

Second-order consequences of invention are usually overlooked and must not be any longer. When the car was invented, roads had to be constructed, parking lots had to be built, new laws have to be introduced and old ones changed. List major inventions and unexpected consequences, including the area of warfare and space science.

What technological advances could we have done without? Is progress really our most important product?

Compile (bring in for display uses) objects that are obsolete or no longer popular (e.g. hula hoop). What effect does the obsolescence of things have on family life and generational differences? (If the objects are no longer available, try to obtain a photograph or picture of the object for the display). Develop a display of these objects, and predict into the future those objects currently in our society which likewise may become obsolete.

The world of athletics have had their limits continually expanded. The four minute mile, the pole vault have been breakthroughs. Name similar breakthroughs, the reasons why, and when we might expect them to occur (year). Prepare these materials one of two ways; ditto charts for all class members; or on a large poster board for use in a display area.

OPEN--there are many other areas which one might be interested in investigating and assessing. Consult with the instructor with regard to your idea, and the method of presentation.

5. Participate in a field experience.

COMPLETION CRITERIA FOR B.O. #1

Each mini-think tank will select one or more of the areas above and (a) develop a series of ten questions which have heuristic value for future research and/or (b) will prepare the materials as suggested above. Questions to be developed can be used in the field experience.
INSTRUCTIONAL OBJECTIVE #3

To stimulate each participant's creative abilities as to how the future might be, and therefore, what kinds of "shock absorbers" might be warranted.

BEHAVIORAL OBJECTIVE #1

Upon completion of the following learning activities, the learner will have had an opportunity to "fictionalize" the concepts of future shock and change.

LEARNING ACTIVITIES FOR B.O. #1

1. All learners will have an opportunity to participate in a mini-think tank, to deal with some of the following areas of concern:

   (a) Prepare a film or multi-media presentation on things which might shock people concerning the future.

   or

   (b) Prepare a report outlining ways in which society can manage change (see Toffler, p. 379).

   or

   (c) Prepare a report on the feasibility of enclaves of the future and of the past, methods for selection and operation (see Toffler, p. 392).

   or

   (d) Prepare a report on the role of ritual in the future (see Toffler, p. 394).

   or

   (e) Prepare a game which will assist in the development of human relations in the future (see Toffler, p. 95).

   or

   (f) Prepare a report on the recommended values for our future society (see Toffler, p. 467).

   or

   (g) Prepare a report on how man will survive, upon what criteria survival will be based, if change cannot be controlled, and gross-massive shortages of food occur coupled with environmental pollution.
or

(h) Prepare a report dealing with how to cope with "capitalism" and change in the future (see Toffler, p. 51).

or

(i) Prepare an indepth report on change and the future as it relates to an established professional organization (e.g. AMA, American Bar, Speech Communication Assoc., State Education Association, etc.) (see Toffler, p. 124).

or

(j) Prepare a report on recent medical inventions, and how medicine will affect future life (e.g. artificial insemination, artificial parts of the body, etc.) (see Toffler, p. 197).

or

(k) Prepare Delphi Event Statements on one or more subject areas as studied during the course.

COMPLETION CRITERIA FOR B.O. #1

Classroom reports and participation from the findings of those items indicated under Instructional Objective #3 will be the basis of assessing the involvement of each learner. Reports will be assessed on their depth and critical nature plus the seriousness and descriptive nature of their recommendations.

Whether you sink or swim depends on how you float.

Dynamics in an Age of Change

2000 A.D.?