A New Look at Studying

DP 025 - Developmental

By

Linda A. Sergeant and Bruce C. Hamilton
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A NEW LOOK AT STUDYING:
For Students in Academic Jeopardy
by Linda A. Sergeant and Bruce C. Hamilton
DP 025 – Developmental
Revised by The Clearinghouse May 2002

Introduction

This program is a structured group intervention aimed at students in documented academic jeopardy. Its overall goals are the following:

1. To assist students in clarifying what probation means to them personally;
2. To introduce students to problem-solving and time management techniques and their possible application to their particular situation; and
3. To help students understand the nature of the other resources available to them and ways these resources may be used.

Rationale

This intervention attempts to assist students in academic difficulty before such problems lead to dismissal or voluntary withdrawal from the University. A survey of the literature produced a great deal of research aimed at “under-achieving” students. At best, the results of the various approaches were conflicting and inconclusive (cf. Mitchell and Piatkowska, 1974). For the content of A New Look at Studying, the authors therefore depended primarily on their own experience with these students, drawing only support from past research.

One important area of difficulty seemed to be the students' inability to conceptualize and approach their problems in a systematic and effective manner. Many did not seem able to relate to how they had arrived at the point of withdrawal; others were surprised to see the number of items raised in the interview that seemed to contribute to their decision. For the most part, attempts to deal with the problem situation prior to the exit interview seemed to consist of the student's emotional reaction to the situation and were usually internal. If they had shared their concern with anyone, it was usually for the purpose of obtaining solace, as from a friend, or “permission” to withdraw. Thus, it was concluded that effective early intervention with such students should provide assistance in clarifying their academic situation, as well as some training in problem-solving skills. Some support for this conclusion is found in the work of Richards and Perri (1978) and Morris and Harris (1976), who both report some success in effecting positive change in under-achieving students employing problem-solving training.
The authors saw academic anxiety or “fear of failure” as a major contributing factor to the perceived deficiencies in problem solving. This is again a subjective evaluation drawn from the exit interview experience and is reflected in the hypothesized interrelationship between personal problems and academic difficulties discussed earlier. The factor analysis suggested in that discussion might add weight to such anxiety as a dynamic in the withdrawal decision. Additionally, a correlation of items reported as effecting withdrawal with the time the withdrawal was initiated might provide further support. It is suggested that the number of students citing academic difficulties may increase significantly around midterms—a time when most undergraduates are faced with having to prove what they have learned. A second decision was to address the phenomenon of “academic anxiety” in this program (cf. Mitchell and Piatkowska’s (1975) work with “bright, failing under-achievers.” They found that treatment conditions that included work with test and academic anxiety as well as study habits effected longer-lasting change for greater numbers of students.

A third factor, perhaps related to problem-solving deficiencies, seems to be the lack of awareness of available resources discussed early in this section. It was therefore decided to include in the group program a discussion of such resources and how to obtain them.

In addition, time management was seen as a major deficiency contributing to the academic difficulties of withdrawing students. Its concepts are key to organizational development efforts (Huse, 1975) and to most self-management programs (e.g. Williams & Long, 1979, Walter & Siebert, 1976 and Swell, 1976).
Outline of Sessions

SESSION I

Overview:
1. Introduction to workshop: ”Yellow Flag” concept
2. Pre-test
3. Introduction of participants—interviews in dyads
4. Brainstorming exercise—consequences of probation
5. Lecture: academic stress and anxiety
6. Self-Appraisal Inventory
7. Didactic presentation: problem-solving
8. Homework

Handouts/Materials:
- Flipchart/Newsprint & Markers
- Appendix A: Pre-Test
- Appendix G: Interview & Rules of Brainstorming
- Appendix H: Self-Appraisal Inventory
- Appendix I: Problem Solving Stages
- Appendix J: Problem Solving Process Checklist
- Appendix K: Types of Oversimplification

1. Introduction

The session begins with the leaders introducing themselves and giving a brief biographical sketch, plus information pertinent to the goals of the workshop. The general goals of the program, as cited in the above rationale, are briefly explained.

The content of the introduction should affirm the intentional character of the name of the workshop. That is, that the participants will be given an opportunity to examine their academic situation in a new light. The idea of probation as a possibly positive one, their attention to a problem before a successful outcome is impossible should be presented.

2. Pre-Test (Appendix A)
3. Introductions

After pre-testing, the participants are asked to choose partners, preferably someone they do not know well, and to interview each other for a few moments concerning their ideas about attending this workshop, taking turns being the interviewer. First, interview sheets with suggested questions are passed out (Interview & Rules of Brainstorming, Appendix G). The leaders explain that following the interview, each member will introduce their partner to the group.

After 2 to 3 minutes, the leader should tell the participants to take another minute to finish the first interview and then switch roles. After a similar passage of time, the leader should tell the group to finish up and rejoin the large group. When everyone is finished, the leaders ask for a volunteer to begin. After each introduction is completed, the leader should ask the person introduced if there is anything she or he would like to add. This process continues until all members have spoken and been introduced.

4. Brainstorming Exercise: Consequence of Probation

The goal of the brainstorming exercise is to help the participants begin to conceptualize and express possible factors contributing to their problem situation, namely “academic difficulty.” The process of brainstorming is described and some “rules” for effective brainstorming are explained (see Rules of Brainstorming handout, Appendix G).

The leaders explain that the group is to brainstorm the consequences of being on or being at risk of academic probation and that all the group's ideas will be recorded on newsprint. The leaders can facilitate the group's process by suggesting that participants consider such items as specific academic or social consequences of probation.

5. Lecture on Academic Stress and Anxiety

Once the brainstorming is completed, the participants are given a short didactic presentation concerning academic stress and anxiety. This lecture should include the following points:

(1.) Stress is viewed as an action or situation that places special physical or psychological demands on a person. These demands may be short-term or long-term.

(2.) Anxiety is the person's response to stress, and demands may be positive (e.g. eagerness or happy anticipation) or negative (e.g. uneasiness or dread).

(3.) Anxiety has been shown to have a curvilinear relationship to performance; low stress produces low anxiety and little action, and high stress produces high anxiety and paralysis; however, a medium amount of anxiety has been shown to produce maximum levels of performance, as the figure below illustrates.
(4.) Anxiety is a universal occurrence, a normal, inevitable, and often useful experience. It is learned and often translated into apprehension where no real threat exists. This can interfere with thinking processes and result in physiological indicators such as sweaty palms, sleeplessness, and body tension.

(5.) Academic anxiety has been demonstrated to have a direct relationship to the quality and completeness of academic preparation.

It is anticipated that the data produced during the brainstorming session will reflect the eight academic demand factors cited by Knott and Kriebel (1976) as categorically contributing to academic stress. These are:

- social
- curricular
- faculty
- psychological
- physical/ecological
- performance
- significant others
- economic factors

Following this lecture on stress and anxiety, the leader should tape up a piece of newsprint listing these factors next to the newsprint containing the ideas from the brainstorming. Then explain that these are factors commonly seen as contributing to academic stress, and taking them one at a time, give brief examples.

The leader should then ask the group if they see any relationships between these factors and the items they suggested as being consequences of probation, as well as what such a relationship might indicate.

The leader can facilitate this by picking an item as an example from the brainstorming data and explaining the relationship to the appropriate demand factor. The goal of this is
to help the participants establish the connection between external and internal factors and
the generation of excessive anxiety. It will be easy for all participants to recognize the
similarity of these factors to what has already been presented as consequences.

In establishing this relationship the participants should begin to recognize the “vicious
cycle” possibilities inherent in their situation.

OPTIONAL BREAK

6. Self-Appraisal Inventory

Following a short break, the Self-Appraisal Inventory is administered (see Self-Appraisal
Inventory, Appendix H). The participants are asked to find a private place to fill it out
and are told that the inventory will not be collected—it is for their own use only. Once
the members have completed it, they are asked to rejoin the group and to keep the survey
handy for later reference.

(This inventory was adapted by the authors from the SSHA, Brown & Holtzman, 1967, and from a self-concept exercise presented by Morris and Cinnamon, 1974, pp. 273-278.)

7. Problem Solving

The leader then gives a lecture on the components of effective problem-solving
(Appendix I: Problem-Solving Process Checklist). The leader points out that problem-
solving skills have been recognized as being of key importance not only in academic
areas, but also in personal issues and in business. Several problem-solving models
(illustrated on newsprint) are presented briefly (Appendices I and J) and the similarities
among them pointed out.

Common pitfalls in approaching problem situations are discussed (Appendix K: Types of
Oversimplification). Handouts of all these materials are given to participants for future
reference.

The leader then explains that the members are to review their self-appraisal inventory and
choose two items that they would especially like to improve. After they have selected the
items, the leader tapes up a sheet of newsprint illustrating the process for force-field
diagnosis and explains the underlying concept and steps, using a sample item from the
inventory. One method of accomplishing this has been to give each participant a
workbook (NTL, 1969). They are then told to complete a diagnosis of the two items they
selected from the inventory before the next session, using the NTL workbook* as a guide.

SESSION II

Overview:
1. Discussion of homework in dyads
2. “Vicious Cycle” role play
3. Didactic presentation:
   • Memory
   • “How we set ourselves up to fail”
   • Academic competence and time management
4. Homework

Materials:
• Appendix E: Scheduling Time
• Appendix L: Remembering
• Appendix M: Training Your Memory
• Appendix N: Academic Competence & Time Management

1. Discussion of Homework

The second session begins with the participants choosing partners to discuss the homework. They are told to audit each other’s work by asking questions to make statements more specific and understandable, by suggesting additional restraining and driving forces which might be active in the problem chosen, and lastly by offering any additional possibilities for action that might be pertinent.

They are told they will have 20-25 minutes each to go over their homework and that the leaders will warn them when it is time to switch.

The leaders move about, facilitating the discussion, asking clarifying questions and making suggestions where appropriate.

Once each partner has had a chance to explore his or her homework, the leaders call the group back together and general observations on the exercise are elicited. The participants are then told to relax—that the leaders are going to work for a while and they hope that the group will enjoy it and take note of the points being made.
2. “Vicious Cycle” Role Play

The leaders then present a humorous, somewhat exaggerated role-play that shows a typical day in the life of a student who has obviously not learned the benefits of effective time management.

The role play should include a variety of situations familiar to most college students. These can include waking late (“hitting” the alarm off and then going back to sleep); missing breakfast; being late to class; falling asleep over studying (on a comfy couch); being enticed away from study for a game of Frisbee in the afternoon and again by a love interest in the evening; trying to study late but giving up in favor of sleep; and, finally beginning the following day by “knocking” the alarm off once more! Throughout all of this the “student” in the sketch has complained about the amount of work pending and of bad grades.

Following the role play, the leaders should ask the group members what they might pick out as contributing to ineffective study in the skit shown.

3. Didactic Presentation

The role-play also has served to introduce a didactic presentation by the leaders on important factors contributing to effective time management. The first section highlights the characteristics of long- and short-term memory and the importance of review (Appendices L and M). Then, a leader discusses “how we set ourselves up to fail.” She or he discusses the five factors presented by Slavit in *Gaining Control of Your Lifestyle and Workstyle: Personal Congruence and Time Management* (1979).

They are:

1. Over-committing oneself;
2. Setting unrealistic expectations;
3. Not allowing for the unexpected;
4. Not allowing enough psychic space—rest and relaxation; and,
5. Not being flexible—abandoning the whole project when one part doesn't live up to expectations.

Finally, the leader presents for discussion some suggestions on academic competence and time management (Appendix N).

For homework the participants are asked to keep track of how they use their time in the week (Appendix E: Scheduling Time) between this and the next session. They are given blank schedules and instructed that they need only indicate the use of general blocks of time, not specific activities.
Session III: Personal Consultation

Because of the perceived importance of academic anxiety and its relationship to personal difficulties, the authors elected to make private consultation time available for the third meeting. During this time, the participants could meet individually with one or both leaders to discuss any issues not dealt with adequately or completely in the workshop thus far.
Session IV

Overview
1. Lecture: How many hours in the day?
2. Case study
3. Didactic presentation: principles of time management
4. Discussion of available resources
5. Post-test and evaluation

Materials:
- Newsprint & Markers
- Appendix O: The SQ3R Method of Study
- Appendix P: Avoiding the “Vices” of Services
- Appendix B Workshop Evaluation Post-Test
- Handout on Student Services: Leaders may wish to create a list of the available appropriate services at their institution to hand out to students.

1. Lecture: How many hours in the day?

The major part of the fourth and final session is devoted to further exploration of the basics of time management and an attempt to relate these to the participants' own situations.

The session begins with an examination of exactly what time is available to each person for scheduling. The leader takes the group through the process of “defining basic parameters of time.” She or he begins by asking for the number of hours in a week; then the average number spent sleeping; the average spent eating; and the average spent in classes. The result might look something like this:

\[ 24 \times 7 = 168 - 56 \text{ (for sleeping)} = 112 - 21 \text{ (eating)} = 91 - 15 \text{ (classes)} = 76 \]

This illustrates that after the absolute necessities are accounted for, there are over 10 hours a day to assign to work, study, recreation, family and so on. This is usually a surprising revelation.
2. Case Study

The second part of this session is devoted to the examination of a case study. On newsprint a leader presents a sample schedule on which all the “givens” or required activities have been blocked out (e.g., sleep, eating, classes, job, etc.). These are explained and then the leader discusses how the individual in this “case” might plan ahead for a major test, highlighting the importance and effectiveness of such aspects as—

- Breaking the work into small steps;
- Allowing for the unexpected (e.g., a quiz in another course);
- The inefficiency of cramming the night before;
- The importance of being aware of personal style (e.g., need for a leisurely lunch to prepare for afternoon, need for exercise, need to relax between classes to look up reference in library or review notes from last class);
- And, finally, the simple fact that “evening”—the time most students devote to study, is for most people the least efficient time of day.

Throughout this discussion, the leader should elicit personal examples of concepts discussed from the participants and work towards a better understanding of their own use of time.

3. Didactic Presentation on time management and budgeting.

Following this, the leader gives a didactic presentation on time management and budgeting, elaborating on many of the issues raised by the case study. This should include discussion of the following topics:

- daily review of notes
- importance of setting stable time for study
- identification of times of highest personal efficiency
- realistic goals for amount of time to be spent studying
- dangers of overloading
- allowing for unexpected (what we KNOW will happen)
- allowing for rest and relaxation
- using schedule as a flexible format—not an “all or nothing”
- identification of personal strengths and weaknesses and relation to appropriate scheduling (e.g., do least liked subject first and reward self with favorite)
• possible planning formats (i.e., suggestion of 2-week schedule—long enough to plan blocks of time but short enough to “see” or understand goals)
  • schedule “musts” first
  • importance of nutrition, sleep and exercise

Toward the end of the presentation, the leader may introduce the basics of a particular study method that might be used by the participants to organize their study. SQ3R (Appendix O) was used in this workshop.

OPTIONAL BREAK

4. Discussion of available resources

Following a short break, the leaders discuss various aspects of seeking assistance for academic or personal difficulties. They present information on services available to students both on and off campus (New Handout) and discuss what kind of situations might be alleviated by seeking out each of the services described.

A leader also raises for discussion the question of how to be a wise consumer of service and the risks and responsibilities involved (Appendix P).

5. Post-Test and Evaluation

Following that, the group is given a short summary of the session, a brief topical recapitulation of all four meeting topics, and are asked to fill out the post-test or evaluation instrument (Appendix B).

If time allows, solicit group members’ comments on what they have learned and the feelings they have experienced during the workshop.

Adjournment follows.
Evaluation Measures

Note that Appendices C, D and F, while described here as useful tools, do not appear in the sessions. It is recommended that leaders assess their usefulness and integrate them into the sessions as appropriate.

**Appendix A & B: Group Forms**—The pre-test version (Appendix A) was used to elicit demographic data, motivation for attendance, and perceived goals for the workshop. The post form was a self-report on the usefulness of the content in meeting goals and the students' evaluations of the leaders (Appendix B).

**Appendix C: The LES—**Life Events Scale (College Form) was based on the stress research of Holmes and Ray. It was created for use with college students by Knott, Daher and Schaffran (1980) and is used here to give an indication of the participants' perception of the impact of situations commonly occurring in the college years and also of the perceived stress of those events the participants reported as actually occurring in their own lives in the past year. It was believed that any change in this measure following such a brief intervention must be due to chance and it was therefore administered only once during pre-testing. It was to be used for its descriptive value especially in relation to other measures.

**Appendix D: Personal Reflections Measure**—Rosenberg's test of self-esteem (1965) was administered as both a pre- and post-test. In his research, Rosenberg related self-esteem to anxiety and subsequent performance rates. It was therefore hoped that the content of this measure would be adequately sensitive to the situation of students on probation and the effect of a successful intervention reflected by it, i.e., that if the participants' self-image as a student, their major role, was affected, the measure would also be affected.

In addition, recognizing the possible insensitivity of standardized measures to changes following such a brief intervention, two instruments attempting to measure change in skills related to specific content areas of the program were constructed.

**Appendix E: Scheduling Time**—Shows the instrument created to measure changes in the students' awareness of time management. It was anticipated that successful intervention would be reflected in the quantity and quality of the steps listed in the response to item 3 to meet the requirements listed in item 2.

**Appendix F: Measuring change in Skills**—shows the measure devised to reflect change in the participants' problem-solving skills. The idea for this measure was drawn from Torrance's work in creative thinking (1965). It was anticipated that the successful participant would be able to list more and different alternatives to the problems presented using Torrance's concepts of fluency and flexibility as bases for the measurement of change.
References


Morris, J. D., and Harris, M. Beating academic probation, 1976. Available from the Clearinghouse for Structured Group Programs, Office of Counseling and Student Development, University of Rhode Island.


Appendices

Appendix A: Pre-Test

Developed by Office of Counseling and Student Development, University of Rhode Island 1979

1. Name: ____________________________  2. Phone: ____________________________
3. Address: _________________________________________________________________
4. Class: Freshman_____ Sophomore_____ Junior_____ Senior__________
5. Major: ____________________________  School: ____________________________
6. How did you hear of this program?__________________________________________
7. Grade point average for current term: _______________________________________
   Cumulative grade point average: _____________________________________________
8. Have you spoken to anyone concerning being on probation? Who? _______________________
   ____________________________________________________________
9. What motivated you to come to A New Look at Studying? ________________________
   ____________________________________________________________
10. What do you hope to accomplish here, i.e., what are your goals for the coming three
    sessions? ___________________________________________________________________
   __________________________________________________________________________
11. Have you ever participated in other workshops? What kind? Where? _________________
    __________________________________________________________________________
Appendix B: Workshop Evaluation Post Test

Developed by the Office of Counseling and Student Development, University of Rhode Island

1. Name: ____________________________________________________________

2. What was your goal(s) for this program?

   Were they met?

3. Did your goal(s) change during the program? If so, how?

4. Was “A New Look at Studying” helpful and/or a positive experience? If so, how?

5. Were any of the ideas presented (listed below) especially helpful? Please number in order of importance (i.e., most important #1, etc.).

   #   Comments (if any)
   _____ creative thinking (brainstorming) ____________________________
   _____ problem-solving model _________________________________
   _____ time management _________________________________
   _____ resource info _________________________________
   _____ other(s) (please specify) _________________________________
   _____ }
6. Was there anything you learned about that you'd like to follow up on?

7. Has being in this group in any way affected your ideas about being on probation?

8. Would you recommend a group like this to a friend? Yes / No ______
   Why / Why not?

9. Is there anything you would recommend we include or try to address in future groups?

10. Is there any feedback you can give us as leaders?
    General:

    Leader 1:

    Leader 2:

11. Any other comments?
Appendix C
Life Events Scale: College Form

Below is a list of events that often happen to college students which may require changes in their daily choices and life patterns. We would like you to think about each event and decide what kind of impact each would have on the AVERAGE COLLEGE STUDENT. Use what you know about other college students to make your judgment.

If you feel the event has a POSITIVE impact on the AVERAGE COLLEGE STUDENT, circle a “plus” number, choosing a higher or lower number depending on the perceived strength of the impact. If you feel the event has a NEGATIVE impact on the AVERAGE COLLEGE STUDENT, circle a “minus” number, again choosing a higher or lower number depending on the perceived strength of the impact. If you feel the impact of the event has neither a positive nor negative impact, circle the “zero.” Be sure to CIRCLE your choices (do not use X). There are further instructions at the end of the list.

<table>
<thead>
<tr>
<th>LIFE EVENT</th>
<th>NEGATIVE IMPACT</th>
<th>POSITIVE IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>( ) 1. Pledging to a fraternity/sorority</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>( ) 2. Parents separate or divorce</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>( ) 3. Parent stops work--retirement</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>( ) 4. Increase in alcohol or drug intake</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>( ) 5. Parent remarries</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>( ) 6. Being behind in coursework</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>( ) 7. Additional person coming into parent's household</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LIFE EVENT</th>
<th>NEGATIVE IMPACT</th>
<th>POSITIVE IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Decrease in sexual activity</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>9. Parent begins work</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>10. Change in eating habits--more intake</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>11. Decrease in alcohol or drug intake</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>12. Changing roommates</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>13. Decrease of financial resources</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>14. Commuting to/from campus</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>32. Ending of long-term intimate relationship at own initiation</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>33. Graduating from college</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>34. Ending of long-term intimate relationship at other's initiation</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>35. Death of a close friend</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>36. Improvement in financial status</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
</tbody>
</table>

REMEMBER--YOU ARE ANSWERING FOR THE AVERAGE COLLEGE STUDENT!  
Continued on the next page
<table>
<thead>
<tr>
<th>LIFE EVENT</th>
<th>NEGATIVE IMPACT</th>
<th>POSITIVE IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>( ) 37. Being placed on academic or disciplinary probation</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>( ) 38. Voluntarily leaving school</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>( ) 39. Increase in argument with roommate</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>( ) 40. Decrease in religious activities</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>( ) 41. Change in sleeping habits--more sleep</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>( ) 42. Revoked driver's license</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>( ) 43. Decreasing workload at place of employment</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>( ) 44. More arguing with boyfriend/girlfriend</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>( ) 45. Undetected violations of the law or campus regulations</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>( ) 46. Decision to terminate a pregnancy</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
<tr>
<td>( ) 47. Change in sleeping habits--less sleep</td>
<td>-10 -9 -8 -7 -6 -5 -4 -3 -2 -1</td>
<td>0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10</td>
</tr>
</tbody>
</table>
Please provide the following information: (Fill in today’s date and mark an “x” next to the appropriate choices.)

**DATE:**

<table>
<thead>
<tr>
<th>SEX</th>
<th># OF YOUR CHILDREN:</th>
<th>FATHER’S OCCUPATION:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>1 (1)</td>
<td>1 (Manual/blue collar)</td>
</tr>
<tr>
<td>Female</td>
<td>2 (2)</td>
<td>2 (Business/white collar)</td>
</tr>
<tr>
<td></td>
<td>3 (3)</td>
<td>3 (Professional)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AGE:</th>
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</thead>
<tbody>
<tr>
<td>1 (17)</td>
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<td>2 (18)</td>
<td>5 (5)</td>
<td></td>
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<tr>
<td>3 (19)</td>
<td>6 (6)</td>
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<tr>
<td>4 (20)</td>
<td>0 (0)</td>
<td></td>
</tr>
<tr>
<td>5 (21)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 (22)</td>
<td>1 (Protestant)</td>
<td></td>
</tr>
<tr>
<td>7 (23)</td>
<td>2 (Jewish)</td>
<td></td>
</tr>
<tr>
<td>8 (24+)</td>
<td>3 (Roman Catholic)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 (Other)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RELIGION:</th>
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<tbody>
<tr>
<td>1 (Protestant)</td>
<td>1 (Manual/blue collar)</td>
<td></td>
</tr>
<tr>
<td>2 (Jewish)</td>
<td>2 (Business/white collar)</td>
<td></td>
</tr>
<tr>
<td>3 (Roman Catholic)</td>
<td>3 (Professional)</td>
<td></td>
</tr>
<tr>
<td>4 (Other)</td>
<td>4 (Domestic/non-paying)</td>
<td></td>
</tr>
<tr>
<td>5 (Unemployed)</td>
<td>5 (Unemployed)</td>
<td></td>
</tr>
<tr>
<td>6 (Retired)</td>
<td>6 (Retired)</td>
<td></td>
</tr>
<tr>
<td>7 (Disabled)</td>
<td>7 (Disabled)</td>
<td></td>
</tr>
<tr>
<td>8 (Deceased)</td>
<td>8 (Deceased)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RACE:</th>
<th>OVERALL GRADE AVERAGE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Black)</td>
<td>4.0 Scale (0-1.5)</td>
</tr>
<tr>
<td>2 (Hispanic)</td>
<td>3.0 Scale (.5-1.0)</td>
</tr>
<tr>
<td>3 (White)</td>
<td></td>
</tr>
<tr>
<td>4 (Asian)</td>
<td>(1.6-2.0)</td>
</tr>
<tr>
<td>5 (American Indian)</td>
<td>(1.1-1.5)</td>
</tr>
<tr>
<td>6 (Other)</td>
<td>(2.1-2.5)</td>
</tr>
<tr>
<td></td>
<td>(2.6-3.0)</td>
</tr>
<tr>
<td></td>
<td>(3.1-3.5)</td>
</tr>
<tr>
<td></td>
<td>(3.6-4.0)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MARITAL STATUS:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Never Married)</td>
<td>1 (Freshman)</td>
</tr>
<tr>
<td>2 (Married)</td>
<td>2 (Sophomore)</td>
</tr>
<tr>
<td>3 (Separated)</td>
<td>3 (Junior)</td>
</tr>
<tr>
<td>4 (Divorced)</td>
<td>4 (Senior)</td>
</tr>
<tr>
<td>5 (Widowed)</td>
<td>5 (Graduate)</td>
</tr>
<tr>
<td></td>
<td>6 (Special/Unclassified)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CLASS:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Freshman)</td>
<td></td>
</tr>
<tr>
<td>2 (Sophomore)</td>
<td></td>
</tr>
<tr>
<td>3 (Junior)</td>
<td></td>
</tr>
<tr>
<td>4 (Senior)</td>
<td></td>
</tr>
<tr>
<td>5 (Graduate)</td>
<td></td>
</tr>
<tr>
<td>6 (Special/Unclassified)</td>
<td></td>
</tr>
</tbody>
</table>
Appendix D: Personal Reflections Measure

PERSONAL REFLECTIONS MEASURE

Instructions: The following ten items are to be read to yourself one at a time, and after reading each, you are to circle the letter(s) which corresponds to your level of agreement as you reflect on the statements meaning for you personally.

<table>
<thead>
<tr>
<th>SA = Strongly Agree</th>
<th>A = Agree</th>
<th>D = Disagree</th>
<th>SD = Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>1. On the whole, I am satisfied with myself.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>2. At times I think I am no good at all.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>3. I feel that I have a number of good qualities.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>4. I am able to do things as well as most other people.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>5. I feel I do not have much to be proud of.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>6. I certainly feel useless at times.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>7. I feel that I am a person of worth, at least on an equal plane with others.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>8. I wish I could have more respect for myself.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>9. All in all, I am inclined to feel that I am a failure.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>10. I take a positive attitude toward myself.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**********
**Appendix E: Scheduling Time**

Office of Counseling & Student Development, University of Rhode Island

**Scheduling Time**

1. Note your class schedule for this semester in the chart below.

<table>
<thead>
<tr>
<th>Day</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
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<tbody>
<tr>
<td>Time</td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td>8am</td>
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<td>9</td>
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<td>10</td>
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<tr>
<td>4</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

2. On the timeline below, indicate the class requirements for each course (e.g. exams, papers, etc.).

- Week 1
- Week 2
- Week 3
- Week 4
- Week 5
3. Below, indicate what you need to do each week to meet your deadlines.

Week 1

Week 2

Week 3

Week 4

Week 5

Week 6

Week 7

Week 8

Week 9

Week 10
### Appendix F: Skill Assessment

Office of Counseling & Student Development, University of Rhode Island

Next to each skill listed below, please indicate in Column A the degree of satisfaction you feel with your competency level for that skill at this point in time.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reading comprehension</td>
<td>-4 -3 -2 -1 0 +1 +2 +3 +4</td>
<td></td>
</tr>
<tr>
<td>2. Writing research papers</td>
<td>-4 -3 -2 -1 0 +1 +2 +3 +4</td>
<td></td>
</tr>
<tr>
<td>3. Short/long term memory</td>
<td>-4 -3 -2 -1 0 +1 +2 +3 +4</td>
<td></td>
</tr>
<tr>
<td>of subject matter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Overall organization of study work</td>
<td>-4 -3 -2 -1 0 +1 +2 +3 +4</td>
<td></td>
</tr>
<tr>
<td>5. Note-taking—understandable, useful</td>
<td>-4 -3 -2 -1 0 +1 +2 +3 +4</td>
<td></td>
</tr>
<tr>
<td>6. Concentration</td>
<td>-4 -3 -2 -1 0 +1 +2 +3 +4</td>
<td></td>
</tr>
<tr>
<td>7. Vocabulary</td>
<td>-4 -3 -2 -1 0 +1 +2 +3 +4</td>
<td></td>
</tr>
<tr>
<td>8. Attention to detail in work handed in</td>
<td>-4 -3 -2 -1 0 +1 +2 +3 +4</td>
<td></td>
</tr>
<tr>
<td>9. Meeting deadlines, completing work on time</td>
<td>-4 -3 -2 -1 0 +1 +2 +3 +4</td>
<td></td>
</tr>
<tr>
<td>Skill</td>
<td>Column A</td>
<td>Column B</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>10. Listening skills attention, comprehension</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Completion of assigned work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Enjoyment of learning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Planning assignments before starting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Ability to recognize where and when more study is needed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Picking out key parts of lecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Picking out key parts of text</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Asking questions when needed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Participation in class discussions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Periodic review of coursework</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Taking tests calmly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Taking tests confidently</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Organization of personal study area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skill</td>
<td>Column A</td>
<td>Column B</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>23. Choice of appropriate place of study</td>
<td>-4 -3 -2 -1 0 +1 +2 +3 +4</td>
<td></td>
</tr>
<tr>
<td>(free of distractions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Free from worry about grades</td>
<td>-4 -3 -2 -1 0 +1 +2 +3 +4</td>
<td></td>
</tr>
<tr>
<td>25. Breaking assignments into steps</td>
<td>-4 -3 -2 -1 0 +1 +2 +3 +4</td>
<td></td>
</tr>
<tr>
<td>26. Using study time efficiently</td>
<td>-4 -3 -2 -1 0 +1 +2 +3 +4</td>
<td></td>
</tr>
<tr>
<td>27. Knowledge of own capabilities</td>
<td>-4 -3 -2 -1 0 +1 +2 +3 +4</td>
<td></td>
</tr>
<tr>
<td>28. Using capabilities fully</td>
<td>-4 -3 -2 -1 0 +1 +2 +3 +4</td>
<td></td>
</tr>
<tr>
<td>29. Setting goals</td>
<td>-4 -3 -2 -1 0 +1 +2 +3 +4</td>
<td></td>
</tr>
<tr>
<td>30. Satisfaction with courses taken</td>
<td>-4 -3 -2 -1 0 +1 +2 +3 +4</td>
<td></td>
</tr>
<tr>
<td>31. Ability to talk to professors</td>
<td>-4 -3 -2 -1 0 +1 +2 +3 +4</td>
<td></td>
</tr>
</tbody>
</table>

**Final Step:**

Now, go back to the items you have indicated dissatisfaction with, or are not sure (items scored 0, -1, -2, -3 and -4). In Column B indicate as many ways of handling that dissatisfaction as you can think of, i.e., ways you currently or might in the future handle that concern.

For example, say there was an item, “Keeping appointments,” a skill you did not feel positive about. In Column B you might have a list that included: keeping a pocket calendar, having someone call to remind you, taking a memory course, tying notes for the day's appointment to your hat brim, seeing a counselor to work out why you're forgetful, and so on.
Give yourself a couple of minutes for each item and jot down any ideas that come to you.
Appendix G: Interview & Rules of Brainstorming

Office of Counseling & Student Development, University of Rhode Island

1. Name, class, major

2. Why did you decide to come to this workshop?

3. Did you have any doubts about coming?

4. What do you expect to happen?

5. What would you like to accomplish?
“Rules” of Brainstorming

1. DEFER JUDGMENT—Save decision-making for later—no right or wrong, good or bad, practical or impractical—no concern for what others might think—all of these block creativity.

2. QUANTITY IS WELCOME—Include everything remotely connected (and then ideas remotely connected to these).

3. “FREE-WHEEL”—Relax: give yourself permission to roam and then say anything that crosses your mind. Look through many sets of eyes—from all points of view.

4. TAG-ON—The number of ideas can always be increased with combined thoughts, changed endings, additions, etc.
**Appendix H: Self Appraisal Inventory**

*Read each item and decide how it truly describes you. Answer by placing in the blank in column A in front of each number:*

- If it is very true of you; very like you + 2
- If it is more like you than unlike you + 1
- If you can't decide: 50-50 0
- If it is more unlike you than like you - 1
- If it is quite untrue of you; very unlike you; just the opposite of what you are - 2

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I know how to approach a subject to master it.</td>
<td>_______</td>
</tr>
<tr>
<td>2. I keep a time schedule.</td>
<td>_______</td>
</tr>
<tr>
<td>3. I review in my studying.</td>
<td>_______</td>
</tr>
<tr>
<td>4. I am able to concentrate in class.</td>
<td>_______</td>
</tr>
<tr>
<td>5. I can express myself in written form.</td>
<td>_______</td>
</tr>
<tr>
<td>6. I participate easily in class discussion.</td>
<td>_______</td>
</tr>
<tr>
<td>7. I ask for help when I need it.</td>
<td>_______</td>
</tr>
<tr>
<td>8. I set priorities.</td>
<td>_______</td>
</tr>
<tr>
<td>9. I think things through before starting assignments.</td>
<td>_______</td>
</tr>
<tr>
<td>10. I complete my work.</td>
<td>_______</td>
</tr>
<tr>
<td>11. I write down the most important tasks I wish to accomplish each day.</td>
<td>_______</td>
</tr>
<tr>
<td>12. I try to understand things before I memorize them.</td>
<td>_______</td>
</tr>
<tr>
<td>13. I feel that I reflect my ability in my test taking.</td>
<td>_______</td>
</tr>
<tr>
<td>14. I can divide my work into logical steps.</td>
<td>_______</td>
</tr>
<tr>
<td>15. I take usable notes.</td>
<td>_______</td>
</tr>
<tr>
<td>16. I know how to minimize the distractions.</td>
<td>_______</td>
</tr>
</tbody>
</table>
17. I use my most efficient study time to study my hardest course.

18. I can produce a well thought-out research paper.

19. I know when I am wasting time.

20. I allow for unexpected events that interrupt my schedule.

21. I realize that I need time to relax.

22. I know when I study best.

23. Other...?? Can you think of anything else that applies to you either as a strength or weakness?

From the Office of Counseling & Student Development University of Rhode Island. This inventory was adapted by the authors from the SSHA (Brown & Holtzman, 1967) and from a self-concept exercise presented by Morris and Cinnamon (1974, pp. 273-278).
Appendix I: Problem-Solving Stages

1. General Orientation:
   a. confidence in ability to control environment in which problem occurs
   b. ability to identify and accurately label problem situations
   c. avoiding acting on impulse

2. Problem Definition & Formulation:
   a. Definition:
      • gather information
      • translate vague or unfamiliar into simple terms
      • identify relationships among elements of problem situation
   b. Formulation:
      • assess oneself, one's behavior, knowledge and emotions relevant to problem situation, and the consequences of these
      • assess one's environment relevant to problem situation
      • delineate problem situation e.g. goals, expectations and conflicts

3. Generating Alternatives:
   a. beware of effect of past experiences — may hinder process of generating alternatives
   b. incompatible reactions to watch for include negative transfer effects, emotional components or narrow perspective — all of these may reduce the number of alternatives perceived

4. Decision Making:
   a. utility value — the anticipated-reward value
   b. probability outcomes:
      • objective
      • subjective

5. Verification & Evaluation:
   a. identify successful outcomes (often these are cues for self-reinforcement)
   b. identify discrepancies or problem situations and decide to reenter problem-solving sequence
Appendix J: Problem-Solving Process Checklist

1. Defining the problem
   a. Statement of problem
   b. Desired outcome
   c. Restatement of problem (Does it have a single (unitary) focus?)

2. Goal Clarification
   a. Is it feasible for me to solve? (Can I realistically expect to influence the desired change?)
   b. What needs to happen for that change to occur?
   c. How will I be able to know that the problem is solved (using behavioral terms)?

3. Information-gathering
   a. List the data I already know
   b. Identify additional needed information and seek out by:
      • talking to others (identify who, how, where, & when)
      • reading selectively
      • identifying further things to do to gather needed information

4. Identifying and weighing merits of alternative solutions
   List the various alternative solutions possible (do not be selective here), and their respective “costs,” “payoffs,” and the net outcomes of each

5. Selecting a solution
   a. Choose the single most promising alternative for solving the problem and develop a plan for acting on it (implementation) Consider:
      • how can “it” be done?
      • who needs to be involved?
      • who needs to be informed?
      • what material resources are needed?
      • how are they to be acquired?
b. When should this be done?
   • Total time frame:
   • Beginning:
   • Initial evaluation point:
   • Final evaluation point:
   • How will I know “it” has worked (criteria)?

6. Evaluating the outcomes of the alternative solution implemented:
   a. Is the problem solved? (if yes, go to B, if no, go to D)
   b. Are there incomplete aspects/unsolved parts to the problem? (if yes, what are they?)
   c. Are they necessary for a satisfactory solution?
   d. Has any new information gained significantly altered the problem? What? How?
   e. Does the cycle (PSP) need to be repeated re: This Problem? (If yes, go to step 1 and begin anew)
Appendix K: Types of Oversimplification

Types of Oversimplification in Thinking

1. **Over-generalizing from limited experience:**
When drawing any conclusion, one must be careful not to over-generalize unjustly from an insufficient experiential background. Specific example: studying came easy for you in high school, and you could usually “sail by” with a mere skimming or cram session. This lack of adequate experience with a new setting/old problem could lead one to inaccurately assume a little preparation was adequate for new academic demands (and increasing levels of competition) with unfortunate outcomes resulting.

2. **Misapplying general standards/norms/rules:**
What applies abstractly and generally speaking may not be appropriate for all situations. For example, the general rule that one should be honest does not necessarily call for you to tell a friend he/she has poor taste or judgment such as in apparel or particular words spoken.

3. **Mistaking correlation for cause-effect relationships:**
Just because two things so often go together, does not mean they are related through cause and effect. Example: You and an acquaintance had a “polite” disagreement about a social issue, such as environmental pollution, and since that interaction, you've not seen that person for over two weeks. By assuming that the disagreement is the only reason you may be overlooking some “easier” answers.

4. **Failing to recognize multiple “cause” possibilities:**
Related to #3, but here a person mistakenly applies but a single cause to an event despite a variety of examples. Example: You might simply assume your low grade on a test was due to the high “curve” of grades caused by so many doing well, overlooking the possibility that you just weren't as well prepared as you could have been; or you were expecting an objective test and got essays, or you spent too much time musing over lower value items to the avoidance of high value questions.

5. **All-or-none thinking:**
Viewing things, events, or people only in dualistic terms, such as good or bad, right or wrong, etc., thus leaving little room for shades of gray which are more often the case. Example: You recall how your younger sister and you did not get along well at all, and assume that to be the nature of all your peers’ relationships to younger siblings.

6. **Stereotyped thinking:**
Attributing a characteristic of one member of a group to be representative of all. Example: An upperclassman is not overly talkative, and responds to your greeting in the hall with utter “silence”. You assume most all upperclassmen to be disinterested in new first year students.

7. **Uncritical acceptance of majority or most vocal opinion:**
This can be seen in the unquestioning acceptance and repetition of opinions made in class by professors. Example: You are given a series of comments in a lecture, and integrate them uncritically into your own way of thinking.
Appendix L: Remembering

Psychologists do not fully understand just how memory works. It has been experimentally proved that tiny physical traces of what we have experienced remain with us. Electrical stimulation of certain areas of the brain will reproduce in our consciousness, as vividly as if they had just happened, the sounds, sights, and smells of events which we have not thought of in years and of which, until thus stimulated, we have had no conscious memory. So apparently we never actually lose what we have once experienced: it's still there, physically, encoded in our brain cortex. The problem is to get at it, as every suffering student knows.

A good deal is known about the learning process, however, and it has been proved that certain techniques of learning help retention and recall. The human mind is comparable to a data bank, and certain methods of input help us consciously produce what we need when we need it. The actual process of calling back to consciousness what we once consciously knew is a mystery. There is no button to push, no electric prod to apply to the skull. Meaningful material is remembered much more easily than is meaningless material. The more meaningful the material to you, the more relationships you can see, the more principles you understand, the more you will remember.

Farquhar, et al.* present the following lists:

<table>
<thead>
<tr>
<th>zis</th>
<th>coat</th>
<th>if</th>
</tr>
</thead>
<tbody>
<tr>
<td>yok</td>
<td>book</td>
<td>words</td>
</tr>
<tr>
<td>sul</td>
<td>warm</td>
<td>make</td>
</tr>
<tr>
<td>leh</td>
<td>pen</td>
<td>sense</td>
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<tr>
<td>xav</td>
<td>run</td>
<td>to</td>
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<tr>
<td>mot</td>
<td>chair</td>
<td>students</td>
</tr>
<tr>
<td>dah</td>
<td>dog</td>
<td>they</td>
</tr>
<tr>
<td>sj</td>
<td>window</td>
<td>will</td>
</tr>
<tr>
<td>pef</td>
<td>open</td>
<td>be</td>
</tr>
<tr>
<td>ruw</td>
<td>horse</td>
<td>remembered</td>
</tr>
</tbody>
</table>

*from Farquhar, Krumboltz and Wrenn, Learning to Study.
Which list is easiest to remember? Which is hardest? The more meaningful you make the material, the easier it is to remember. Here are some proven methods of facilitating memory.

1. Above all, UNDERSTAND what you are called on to remember. Set up a frame within which to organize the details and THEIR RELATIONSHIP to each other. If the whole makes sense, the parts are easier to recall.

   The medical student forced to remember the names of every nerve in the human body will remember more easily if s/he knows the function of each nerve and how it interacts with the others.

   The history student will better remember the necessary names, dates, and other details if s/he has a thorough understanding of purposes, trends, philosophies, the broad sweep of events.

   The language student will better remember the inflections of a language—the individual prefixes and suffixes which signal number, tense, etc., if s/he has a grasp of basic structure.

In other words, REMEMBER IN A CONTEXT of principles, theories, important generalizations. Before you try to fix details in your mind, KNOW THE STRUCTURE AND MAIN EMPHASIS OF WHAT YOU ARE STUDYING.

The SQ3R* method of study, with its emphasis on surveying, questioning, and reading for main ideas, is a valuable aid. In remembering the material, relating parts to the whole is the best way to remember. Any charts or organization that you can make will help.

2. The more thoroughly and the deeper you go into a subject, the better you will remember it. Apparently, broadening knowledge increases the number of associative links between one aspect and another makes the whole structure stronger. This is one virtue of extra reading—doing extra problems—seeking out other points of view—tracking down ramifications.

3. Get yourself beyond the recognition stage, to the RECALL stage, the FIRST TIME you encounter something you know you will have to remember. A certain amount of forgetting is inevitable anyway, but this method retards forgetting: and makes recall easier.

   The SQ3R (=Survey, Question, Read, Recite, Review) method of study puts heavy emphasis on the “recite” stage for this very reason. Deliberately closing the book, and going through the book, and going through the CONSCIOUS EFFORT of recalling the main points of what you have just read, WHILE IT IS STILL FRESH IN YOUR MIND,
seems to open the recall channel, so to speak, at a time when it is the easiest to open. The material seems closer to the surface, more easily accessible to review, if the deliberate attempt to recall is made immediately after first reading. This has repeatedly been proven in carefully designed experiments.

The emphasis here is on conscious effort: it is not enough to feel familiar with what you have just read, so that on second reading the main points and key details are easy to understand. CLOSE THE BOOK and pull the points and details back to consciousness, from memory. Write them out in your own words if necessary; WHEN YOU CAN SAY THESE THINGS IN YOUR OWN WORDS, YOU HAVE MADE THEM YOURS.

4. In certain subjects—foreign languages, sciences, math for instance—the process known as OVERLEARNING is of material help; in fact, in language study it is essential. Overlearning is defined as “practice well beyond the point of mastery.” It is an extension of the conscious effort to recall, to the point where conscious effort IS NO LONGER NEEDED. “Overlearning results when a person continues to use a response repeatedly, with confirmation” (quoted from Educational Psychology by Lee J. Cronbach). How did you learn the alphabet?

Verbs, formulae, comparative anatomy, whatever it is you have to know without reaching for it—should be overlearned. The process is speeded if you use sight, sound, and feeling to help you; write it down and say it aloud; let the senses reinforce each other.

A pack of file cards is often helpful. If you are studying complicated terminology for a science course, for instance, you can write the term on one side and its definition on the other. Flip through the pack front sides up and try to recall what is on the back. Then reverse the process. Then start at the middle of the pack and work forwards, or backwards (it has been proven that in any long memorizing job, the ends are memorized first, the middle last).

5. The importance of associations of ideas has already been emphasized. It often helps to BUILD ASSOCIATIONS deliberately with what you have to remember. Doing this is like constructing a chain which will lead you to what you want. If you have one end firmly in mind it will lead you to the other end. Human minds vary greatly in the type of associative link to which response comes easiest, so there is no one best method, but here are a few approaches that have worked. A multisensory approach is usually best.

a. Visualize. Some people have vivid, visual memories—i.e., memories for how things LOOK. If you find yourself visualizing often—that is if you remember better from charts and graphs than you do from the printed page, or if you remember how the page looked
when you are trying to recall what was on it, you can make this tendency into an effective “aide-memoire.”

In a history course, for instance, make yourself a time chart. If you are the medical student memorizing all the nerves, visualize the nervous system and attach labels. If YOU are taking a statistics course, remember visually the relationships between for instance, standard deviations, z scores, t scores, percentile ranks, and then reason from there. In recalling verb forms or vocabulary words, make 2 deliberate attempts to visualize the words.

Use VERBAL mnemonic devices to aid your memory. The world is full of examples. In spelling, for instance, the saying, “There is a RAT in separate”—nonsensical as it is—has helped many people remember how to spell SEPARATE.

Students memorizing the colors of the spectrum remember the nonsense name Roy G. Biv: red, orange, yellow, green, blue, indigo, violet. Another illustration of mnemonic devices is the pair “F-A-C-E” and “E-G-B-D-F” (every good boy does fine) for the spaces and lines on the upper music staff. Medical students have hundreds of such devices, passed on down the generations. Make up your own. A mnemonic device need not form a meaningful word or sentence. In some instance gibberish can be helpful meaningful mnemonic devices.

Mnemonic devices are useful for immediate recall only. They should be used with caution. It is far better to see meaningful relationships between parts of the material because often the mnemonic device is remembered long after the material it stands for is forgotten. Sometimes a mnemonic device can malfunction and lead to a wrong answer.

For example, the mnemonic device, “In fourteen hundred and ninety-two Columbus sailed the ocean blue,” was recalled as, “In fourteen hundred and ninety-three Columbus sailed the deep blue sea,” by one child and, “In nineteen 'hundred and forty-two, Columbus sailed the ocean blue,” by another.

Use many senses in learning—visual, auditory, etc. For example, you may SEE material in different ways such as by reading the text and reading your notes. You may SAY it to yourself and remember how it felt to say it. You may HEAR yourself saying it or hear it in lecture or from other students. You may feel yourself write it or experience a different kinesthetic feeling by typing or writing it in different forms or on charts. Occasionally the sense of SMELL may reinforce memory as in the case of smelling H₂S (Hydrogen Sulfide = smell of rotten eggs).

Some people with a strong sense of rhythm recall some things by first remembering the lilt or rhythmic pattern; the words come next, and are recalled because they fit the rhythmic pattern. One such person remembers phone numbers by the pattern they make. He recalls a number such as 8646265 by remembering the lilt of “EIGHT six FOUR six TWO six FIIIIIVE.”
6. Practice the material in the form in which you are to be tested. For instance, giving a principle or law orally does not guarantee your ability to write it or to apply it. On the other hand, writing a poem or selection does not guarantee your ability to deliver it well orally. It is more effective to actually DO some chemistry problems than to read about how to do them.
Appendix M: Training Your Memory

Aids to Recall

1. PLAN TO REMEMBER. When we complain that we can't remember, the truth usually is that we never really planned to. Before you start to read or study, tell yourself that you've got to remember. In this way you are putting your mind to work—you are concentrating.

2. REVIEW THE MATERIAL. Forgetting takes place shortly after learning takes place. You must review to overcome this. Go over the material either the same day or early the next, or at both times if possible. Repetition increases the ability to recall.

3. LOOK FOR PRINCIPLES. The key to effective study and remembering is in understanding what you are studying. Understanding comes from generalizing, as opposed to trying to remember isolated facts. Look for major principles. Try to generalize the material into several major ideas which you can readily repeat.

4. SCHEDULE MEMORIZATION LAST. If you study several subjects, the one you study last will probably be best recalled. Thus, if you know that you will be called upon to remember something the next day, study that subject last.

5. THINK ABOUT THE MATERIAL. After you have studied, work the material over in your mind. Examine and analyze it. This kind of mental manipulation significantly improves recall.

6. APPLY THE LEARNING. When studying subjects which permit practical application, an excellent way of ensuring understanding and recall is through performing the application yourself or on yourself. In whatever way you can, make the instruction meaningful for yourself; make it come alive.

7. DISCUSS THE MATERIAL. Discussion is an aid to understanding. Frequent conversation about a subject brings meaning and organization to the material.

8. USE MEMORY FORMULAS. Many students devise formulas to help them recall items on a list, steps to a procedure, or other things of a serial nature. MNEMONIC devices are one such aid and are useful when you are faced with memorizing material which bears no internal or natural kind of relationship. Remember that such formulas are aids and are not a substitute for understanding.

Appendix N: Academic Competence & Time Management

Insufficient time is the block to academic competence that is mentioned most frequently by students. This is understandable, since time is our most limited commodity. Students must find time to attend classes, time to hold down a paying job, time to fulfill life-maintenance tasks, time to enjoy some leisure activity, and time actually to sit down and study.

Finding time to study requires two skills: common-sense planning and discipline. Consider these practical suggestions for planning your time and for increasing your ability to be self-disciplined:

1. Set aside a few minutes or an hour (depending on the task) after classes each day to review the material covered in your daily classes. It is easier to review than to relearn. Immediate review retards forgetting and prevents new material from slipping out of your mind.

2. Set aside regular study time(s). Having a routine of studying and never scheduling anything else for that time increases the probability that you will avoid missing study due to poor management of time.

3. Have one particular place where you can go to study. Setting aside a work place helps you to get down to the business of studying and usually cuts down on the number of distractions that you will encounter while studying.

4. Identify your periods of peak efficiency and periods when you are likely to have the best study conditions. Schedule that time for study, especially for studying your most difficult subjects.

5. Be realistic about planning study time. Generally, you will accomplish more with several shorter study periods than with one long study period.

6. Be mindful of your individual attention span and plan your study around it. If 30 minutes is a long time for you to sit and study, start by scheduling your study into 25 minute segments and reward yourself with a 5-minute break. The 5 minute break will serve not only to reinforce your self-discipline but also to refresh and make you more productive.

7. Limit your course load. Take only as many courses as you can handle well. Signing up for more than 12 or 15 credits will require extra studying time and may require more discipline than you presently have.

8. Allow some unscheduled time in case emergencies arise during your regularly scheduled study periods.

9. Plan some time in your schedule for recreation. Relaxation should be a regular part of your study routine.

10. Consider your study schedule a firm but flexible guide, not as a hard and fast rule.
APPENDIX O: The SQ3R Method of Study

“SQ3R” is a codification of methods actually used by the most successful and efficient college students. The initials stand for steps in the process. Thousands of high-ranking students were interviewed about how they achieved their goals and how long it took them to do so. Their responses were then boiled down into the following formula:

1. **Survey:** Look the Job Over

   **BECOME FAMILIAR WITH THE VARIOUS PARTS OF A TEXTBOOK.** You can learn from a text more efficiently if you know the function of the foreword, preface, summaries, glossary, appendix, bibliography, and index.

   **LOOK THROUGH THE BOOK FROM BEGINNING TO END.** Before you start reading the text, survey the entire book to get an idea of what it is all about. Note the publication date, general layout, chapter headings and subheadings, quizzes, discussion questions, reading suggestions, graphs, pictures, diagrams, summaries, and other aids that the author and publisher have put in to help you understand the material.

   **READ THE PREFACE.** Here the author will tell you the main purpose for writing the book; and give you an overview of the subject matter.

   **SCAN THE TABLE OF CONTENTS.** This will show you how the book is organized and how much material is covered. Later on, when you are reading the chapters, the table of contents will continually remind you of the author’s entire plan.

   **LOOK OVER THE LAST OR FINAL PAGES OF THE BOOK.** The author will often summarize the main points made in the separate chapters.

   **SURVEY EACH CHAPTER.** Before you read an assigned chapter preview all the pages. Look for introductory paragraphs or summaries that may be included. They give valuable clues to the main ideas the author wants to emphasize and also serve as a handy outline. Take special note of chapter headlines and subheadings. The way they are arranged will tell you which are the main topics and which are the less important ones.

   The **survey** step gives you a set for the job of reading. Thoughtfully done, it allows you even to predict what the author is going to say and is the greatest time saver ever devised for the good student.

2. **Question:**

   **WHEN YOU READ A TEXTBOOK IMAGINE YOU ARE HAVING A DISCUSSION WITH THE AUTHOR.** Keep asking questions about the statements being made and the ideas presented. Ask yourself what, why, how, who, when. See whether the author is giving answers that satisfy you.
WHAT does a chapter title mean? What are the meanings of the headings and sub-headings? What are the important words in each paragraph? What do the tables, diagrams, and graphs demonstrate? What do the concluding remarks signify?

WHY did the author choose to develop ideas in this particular order? Why are certain points emphasized?

HOW does the author’s presentation correspond to your instructors? Is the course sequence the same as the textbook? If not, how and why do you think they differ?

FOR WHOM is the author writing? If it is a history or political science text, for example, is the writer trying to influence the reader's point of view? Might the author belong to a special school of thought and does this attitude shape the book’s ideas? Are you sympathetic to that school of thought?

WHEN was the book written? Have new developments made the content or the author’s opinion out of date?

ASK QUESTIONS IN CLASS. Bring any inquiries raised by your reading to class and pose them to the instructor and to other students. Your teachers will admire your interest and know that your textbook readings are contributing to your classroom work.

The question step makes you an active, not a passive, reader: you are reading for answers.

3. Read:

IDENTIFY THE AUTHOR’S MAIN IDEAS IN EACH CHAPTER. This should be your primary objective in reading your text assignments. Keep asking as if you were talking to the author, just what he or she is trying to get across. By focusing on the important ideas and facts you will not be over-taxing your memory.

CONCENTRATE ON WHAT YOU ARE READING so that you understand each chapter, paragraph and sentence. Read carefully and thoroughly, giving attention to each sentence and paragraph, so that you can grasp the major ideas and the notable details.

STUDY EVERY GRAPH, TABLE AND ILLUSTRATION. These visual aids are put in the book by the author and publisher to reinforce important elements. They usually illustrate the material under discussion and highlight major points for you.

SUMMARIZE WHAT YOU READ. Restate the main ideas in your mind after finishing a page and then glance back to see if you are correct. Before closing the text review the major points of material you have read. See if you can jot down the central ideas in the section. If you can, most of the supporting details will return to you rather easily.

STUDY YOUR TEXTBOOK BEFORE EVERY CLASS. By reading each assignment beforehand you'll be better able to join in the classroom discussion. Participating in class
discussion will help you to remember the material you have read. You can easily fall behind in your work if you wait until the professor and other students discuss a topic before you read it.

It is usually wise to read the material by major headings, that is, one major-heading section at a time. Do no underlining while you read!

4. **Recite:**

ASK YOURSELF QUESTIONS ABOUT WHAT YOU HAVE JUST READ. Look away from the assignment and from any notes you have taken.

MAKE THE DELIBERATE EFFORT TO RECALL THE IMPORTANT POINTS. If you can do so, you have mastered that part of the material; if not, you should reread it.

The recite step is what fixes the material in your mind. It makes reviewing for exams much easier. Understanding while you read is not enough.

5. **Review:**

REVIEWING IS AN IMPORTANT STUDY SKILL AND SHOULD BE BUILT INTO EVERY LEARNING ACTIVITY. Intelligent review increases our ability to remember. Reviewing ought to become a routine before and after every class or study session.

WHEN YOU HAVE FINISHED YOUR TEXTBOOK ASSIGNMENT, BRIEFLY SURVEY YOUR UNDERLININGS AND NOTES before you close the book. This two- or-three-minute review will help you retain what you have just learned.

BEFORE YOU BEGIN A NEW READING ASSIGNMENT, REVIEW WHAT YOU STUDIED PREVIOUSLY. Recalling what has already been learned will encourage you to begin another assignment and help you to better understand new material. By following this reading and review process throughout the term, you will find preparation for an exam a simpler matter.

TEXTBOOK BIBLIOGRAPHIES AND SUPPLEMENTS, STUDY GUIDES, OUTLINES, AND WORKBOOKS SUPPORT YOUR READING ASSIGNMENTS. Although they might not be required, you can be sure additional readings will give you a better understanding of the subject. Often a point that seems obscure in a text can be clarified; by more reading on the subject. During review time you might find it particularly useful to use study guides and notebooks because they usually contain quizzes and self-tests on the material in the text. This, in turn, will give you confidence and prepare you better for examinations.
PLAN YOUR EXAMINATION REVIEW CAREFULLY. Your objective should be to understand the main ideas and important details. Survey and review your class notes, and textbook notes, recalling the important headlines and ideas in each. Go from main idea to main idea, using the textbook chapter headings and your instructor's term outline as a guide. If certain items are difficult for you to remember, then re-read the textbook. Otherwise stay with your notes.

Whatever specific study, notetaking, and review system you develop, learn to rely on your instructors and your textbooks for basic information. Through consistent study and reading you will grow in knowledge and will have the confidence to question your teachers, your textbook authors, and yourself. This process of discovery and inquiry is the essence of education.

Is the SQ3R method an easy way to study? Not at first. It's easy to understand and memorize the steps, but putting them into practice will require deliberate effort, and for a while you may find that your older more passive habits will interfere with the active effort to study. But you can learn to apply SQ3R successfully, and you will find it rewarding.

P.S. The students who originated SQ3R by revealing that this was the way they got results also reported that they had no problem concentrating. The fact is that when you use this method you are concentrating.
APPENDIX P: Avoiding the “Vices” of Services

In our attempts to use the service agencies available on campus we usually realize we have to find out the TYPE of service it is and where it is LOCATED. Many of us stop our questioning at this point, only later to be frustrated when not obtaining the service we want because of other factors we didn't consider. Below is a list of other factors which might be helpful to find out about the agency through a phone call or a preliminary visit.

—Who is eligible to receive the service?
—Are there any fees involved?
—What types of personal information or identification will be needed from me?
—What are the hours the agency is open?
—Are there prerequisite tasks I must accomplish before I can receive the service?
—Is confidentiality an issue for me, and if so, what are the agency's guidelines?
—What amount of time should I expect to wait between my contact with the agency and the delivery of service?
—If I am dissatisfied, what are the complaint and appeal procedures?