MPS Unit 3: Self assessment.

**Definition:** deciding on the merit or value of your own performance

**Rationale:** owning the assessment motivates us, develops a positive self image; develops our confidence; helps us to see where we are and to see progress; is a skill needed in life and in professional practice; guides us in modifying our life.

**Background:** where it fits into the overall MPS program; misconceptions about assessment; role play demonstration of "draw a perfect circle" where inadequate communication leads to an anticipation of a grade of 9/10 whereas the teacher assigns 2/10; discussion of "what went wrong".

**Route ahead:** address the four issues of "observable goals"; "measurable criteria"; that are "consistent with the resources available"; and being able to "provide evidence of achievement". The issues are considered in:
1) an everyday example such as "brushing your teeth" or "driving the car";
2) an enrichment objective of "creating your own goals, criteria and evidence" for a personal goal;
3) writing a resume and a job application;
4) writing a reflective journal;
5) presenting yourself in an interview.

**Activities:** The five main activities are enriched by having small, short tasks to develop skill in identifying observable objectives and then creating observable objectives; identifying measurable criteria and then creating these.

**Post Workshop activities:** write a reflective report about the workshop, about the bridging the application of the skill to solving homework problems in their "other courses" and extending the skill application to solve everyday problems.
Other activities include creating their own goals for personal enrichment (and submitting criteria and evidence as to the extent to which they have achieved their goal); writing a resume and the personal interview.
Table 84.3: Example Topics of Units in the MPS Program.

Units to Develop Personal Confidence and Skill in Solving Well-defined Problems

1: Awareness:
2: Background:
3: Self Performance Evaluation:
3a: Choose a Goal:
4: Strategies:
5: I want to and I can: Managing Stress management:
6: Analysis: Classification:
7: Creativity:
8: Introduction to Visual Thinking:
9: Defining Stated Problem:
10: Getting Unstuck:
11: Identifying Personal Preference & Implications:
12: Learning Skills:
13: Analysis: Consistency
14: Creating the Look Back & Extending Experiences
15: Exploring the Situation to Identify the real problem:
16: Tactics:
17: Time Management for Individuals:
18: Evaluation & Stress Management
19: More on Visual Thinking: Reading P&ID:

Units to Develop Interpersonal Skill & Team Building

20: Asking Questions:
21: Analyze: Sequences & Series
22: Broader Perspectives:
23: Establishing Criteria:
24: Decision-making:
25: Time Management for groups and projects:
26: Listening & Responding:
    a. Attending and Following:
    b. Body Language:
    c. Reflecting:
27: Group Skills:
28: Evaluating Group Skills:
29: Being an Effective Chairperson:

Units to Develop Personal Confidence and Skill in Solving Ill-defined Problems

30: Analysis: Reasoning & Drawing Conclusions:
31: Defining Real Problems: Goals, Mission & Vision
32: Implementing:
33: Coping with Ambiguity:
34: Trouble Shooting:
35: Clinical Skills:
36: Heuristics or rules-of-thumb for Problem Solving:
37: Self-directed Learning:
38: Simplifying & Generalizing:
39: Consolidating the Knowledge Structures:
40: Creating Tacit Information or Experience Knowledge:
41: Finding your Own Problems:
42: Procrastination & Other Attitudes:

*These Units have not been written as yet.
For most of the Units, a teacher’s guide is available.
MPS Unit 3: Example Objectives

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>given an evaluation or appraisal situation, you will be able to state the components necessary to do the assessment.</td>
</tr>
<tr>
<td>3.1</td>
<td>given an evaluation or appraisal situation, you will be able to write out in observable terms the goals and expectations. Your results should agree to within 90% of that of the tutor.</td>
</tr>
<tr>
<td>3.2</td>
<td>given an evaluation or appraisal situation and an observable goal, you will be able to write out measurable criteria that are consistent with that goal. Your results should agree to within 90% of that of the tutor.</td>
</tr>
<tr>
<td>4.1</td>
<td>given your written evidence, you will be able to objectively discuss your self assessment with another person and reach agreement as to the assessment.</td>
</tr>
<tr>
<td>4.2</td>
<td>given a workshop activity related to problem solving, you will be able to write down what you did before and what you can do after the unit, to provide evidence and interpret that evidence in terms of the goals and the degree to which you can achieve the goals. Your reflections will be judged to be consistent and objective by the tutor.</td>
</tr>
<tr>
<td>5.1</td>
<td>given situations encountered in other courses, at work or in your everyday life, you will be able to evaluate how well you can apply your problem solving skills to solve those problems. The goals, criteria and evidence and your interpretation will be assessed by the tutor to be consistent, complete and objective.</td>
</tr>
<tr>
<td>5.2</td>
<td>given a personal goal, you will write that in observable terms, create measurable criteria, select evidence and write a reflective journal such that an independent assessor will agree that you have achieved your personal goals.</td>
</tr>
</tbody>
</table>
Discovery: this is completed in-class at the end of the Unit.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Discovered</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Draw a perfect circle&quot;</td>
<td><em>problems need to be defined so that they are not ambiguous</em></td>
<td></td>
</tr>
<tr>
<td>Toothpaste example, Joe’s goals and criteria activity</td>
<td><em>creating measurable criteria is not easy; the suggestion &quot;look at the extremes of good and lousy behaviour helps&quot;</em></td>
<td></td>
</tr>
<tr>
<td>Creating your own goals for enrichment</td>
<td><em>need more than 20 min. hard to do. easy to think in general terms but hard to write it out; how to present evidence?</em></td>
<td></td>
</tr>
<tr>
<td>Job Application</td>
<td><em>everything you’ve ever done is important; hard to extract evidence</em></td>
<td></td>
</tr>
<tr>
<td>Lab writeup</td>
<td><em>pain to do; easier to do things than to write about them; we don’t treat the activity as thoroughly when we are doing them as opposed to when we write about them</em></td>
<td></td>
</tr>
<tr>
<td>Interviews</td>
<td><em>Lab writeups are marked on consistency and objectivity; interviews are based on the degree to which I have achieved the Unit’s objectives; it is hard to separate the two.</em></td>
<td></td>
</tr>
</tbody>
</table>

MPS Unit 3

Title: SELF ASSESSMENT
Name: 1330 Date: OCTOBER 24, 1993

Objectives
Numbered on attached orange sheet. Min personal objective of: To define exactly what "criteria" means to define the term "observable." Criteria 1. To identify and set clearly stated goals for myself. To feel good about my self-assessment.

Key Concepts
List five or six you feel were important (Attach \"Discovery\" Sheet)

Objective:

Before:

1. I am able to rewrite a goal into a series of sub-goals. However, my skill/competence at this is lacking.
2. The definition of \"observable\" terms is unclear.
3. I am somewhat able to do this but I need direction on this area.
4. The definition of \"measurable\" terms is unclear.
5. My ability to evaluate my personal progress through this course is improving weekly.
6. I am quite confident in my ability to provide evidence of my personal progress. Perhaps I can use some work in the next course, or I can use this activity again.
7. Sometimes I find it hard to discuss my \"personal progress\" with others. I demand quit a lot from myself and expect a lot. It's hard for me to discuss this right now.
8. The objective is basically what I'm doing now. What we've done for the past two labs write-ups. I feel that I'm pretty aware and capable of writing down and identifying what has been learned throughout the unit, and I identifying what evidence I have to support my claims.
9. When solving a problem, regardless of the course, I always try to implement my problem-solving scheme. However, I'm finding that in 2D, even though my problem-solving scheme is in action, I get stuck in explore and can't proceed immediately.
10. I think I'm quite aware of my self-evaluation when it comes to applying problem-solving skills in everyday life... Almost 100%.
11. This is a problem area for me. I'm not sure I will ever really work on it. I'm apprehensive about my job application. I feel it's lacking and unimpressive.

After:

1. I am so much more confident in my ability to rewrite a goal into a series of sub-goals. Now, I just need to polish my skill.
2. The definition of \"observable\" terms is now clear. I am improving using this skill.
3. This area has improved drastically. It is easier to evaluate the extent of improvement in a sub-goal.
4. The definition of \"measurable\" terms is now clear. I think it is easier to employ this skill.
5. I think this objective has been fully achieved. I am quite confident in my ability to evaluate my personal progress.
6. I am still quite confident in my ability to provide written evidence of my personal progress. I am able to rationalize my evaluation.
7. I didn't really get any feedback with this objective. I can say that there was still a lot of negative feedback.
8. This is the same as \"before\". I feel confident with my ability to provide written evidence of what I have learned. What I did before and after, and how I've changed.
9. I am happy with how I evaluate my ability to apply problem-solving skills to solve problems. I am improving somewhat but there are still times I get stuck in the explore stage.
10. I think I'm quite aware of my self-evaluation when it comes to applying problem-solving skills in everyday life... Almost 100%.
11. I feel more confident now. I realized that some of my jobs I didn't think were worthy of writing down and including are perfectly acceptable and, in fact, I can provide evidence of several skills/qualities based on these jobs.

Comments about pre & post test on orange sheets:

Before this unit got underway I felt somewhat aware of my skills at my self-performance evaluation. I think - No, I know - I underestimated my ability as I was completely in the dark when it came to the definitions of criteria and observable and measurable terms. As well in the test, I think I underestimated my ability when it comes to the skills I've obtained and to those I've improved upon. I am quite confident overall with my skills.
Unit 31 Self Performance Evaluation: Pretest

Definition:

Self-performance evaluation is the ability to identify and set goals, identify and quantify criteria and apply the criteria to identify achievement of the goals. The goals pertain to personal skills you possess, and skill at problem solving.

Awareness:

How aware are you of how you apply this skill? Use an "X" to indicate your assessment.

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Unaware, Aware, Very aware, I just do it, I can describe the details of how I do it

Skills:

How would you rate your skill? Use an "X" to indicate your assessment.

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Poor, Fair, Good, Very Good

Comments:

Unit 31 Self Performance Evaluation

1. Given a general goal "to improve problem solving", you will be able to rewrite this into a series of subgoals.

2. Given a poorly stated subgoal, you will be able to rewrite it into observable terms.

3. Given a well-stated subgoal, you will be able to write at least criteria that could be used to evaluate whether or how well the subgoal has been achieved.

4. Given a criterion, you will be able to rewrite this into measurable terms.

5. Given a course in problem solving whose goals are stated in the form of criteria, you will be able to use the identified criteria or improvements that you make for the criteria to evaluate your personal progress through this course.

6. Given your evaluation of your personal progress, you will be able to write down the evidence that you have used to establish your criterion and rationalize your evaluations.

7. Given your written evidence, you will be able to coherently discuss your self-evaluation with another person and reach agreement as to the evaluation.

8. Given a laboratory/workshop activity related to problem solving, you will be able to identify and write down what you learned from the unit, what you did before and after and how you changed and the evidence that you have used as a basis for your evaluation.

9. Given assignments in courses other than the problem solving course, you will be able to evaluate how well you can apply your problem solving skills to solve those problems.

10. Given situations in everyday life, you will be able to evaluate how well you can apply your problem solving skills to solve those problems.

11. Given that you want to apply for a job, you will be able to evaluate your unique skills and complete a job application form such that a person from Canada manpower/Career Counselling will give you an interview.
<table>
<thead>
<tr>
<th>Topics &amp; activities in Unit</th>
<th>Discovered</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit 3</strong> DISCOVERY</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Topics &amp; activities in Unit</strong></td>
<td><strong>Discovered</strong></td>
<td><strong>Application</strong></td>
</tr>
<tr>
<td><em>Problem Definition was Ambiguous</em></td>
<td><em>Lack of specification of task or professor lack of question part of question</em></td>
<td><em>Uncertain or must want to be close</em></td>
</tr>
<tr>
<td><em>Excessive Put-Downs Are Unnecessary</em></td>
<td><em>Excessive</em></td>
<td><em>Negative feedback can be negative feedback</em></td>
</tr>
<tr>
<td><em>Criticism should have been stated</em></td>
<td><em>Motivation of recipient of feedback</em></td>
<td><em>Be Yourself. Phone doesn't work</em></td>
</tr>
<tr>
<td>DR. WOODS INTERVIEW</td>
<td><em>Great approach (Interviewer)</em></td>
<td><em>Work to your advantage</em></td>
</tr>
<tr>
<td>TOOTHPASTE USE CRITERIA</td>
<td><em>State the criteria</em></td>
<td><em>Most people are not good at skill, level of writing observance and understanding of criteria</em></td>
</tr>
<tr>
<td><em>Creating your own goals</em></td>
<td><em>Need more than 20 minutes</em></td>
<td><em>Necessary to define criteria, well in order to achieve optimum results</em></td>
</tr>
<tr>
<td><em>Hard to develop measurable criterion (criteria)</em></td>
<td><em>Hard to work (in the class)</em></td>
<td><em>Thorough understanding of unit achieved</em></td>
</tr>
<tr>
<td><em>Hard to work (in the class)</em></td>
<td><em>Personal space, was ...</em></td>
<td><em>An opportunity to employ writing skills again!</em></td>
</tr>
<tr>
<td><strong>LABS</strong></td>
<td><em>It's easier to do the exercises in workshop than it is to write it up.</em></td>
<td><em>Opportunity to present the &quot;Best you!&quot;</em></td>
</tr>
<tr>
<td><em>Don't treat activity too thoroughly when done.</em></td>
<td><em>Be yourself. Phone doesn't work. It's too obvious. Nervousness is okay, phoniness is a bad approach.</em></td>
<td><em>Phone has been okayed.</em></td>
</tr>
<tr>
<td><em>A more thorough understanding of exercises, as opposed to exercises, as opposed to</em></td>
<td><em>Everything you've ever done in your life is important.</em></td>
<td><em>Opportunity to present the &quot;Best you!&quot;</em></td>
</tr>
<tr>
<td><strong>INTERVIEW</strong></td>
<td><em>What's your reason for leaving your last job?</em></td>
<td><em>Step to getting an interview</em></td>
</tr>
<tr>
<td><em>It's the first step to getting a job once your resume has been okayed.</em></td>
<td><em>You have to sell yourself.</em></td>
<td><em>It's just a piece of paper. Make it count.</em></td>
</tr>
<tr>
<td><strong>JOB APPLICATION</strong></td>
<td><em>On a resume, you will select only the important things you've done.</em></td>
<td><em>Opportunity to present the &quot;Best you!&quot;</em></td>
</tr>
<tr>
<td><em>Sometimes we don't see the relevance in the things we do.</em></td>
<td><em>Lack of previous job experience isn't as disadvantageous as I first thought.</em></td>
<td></td>
</tr>
</tbody>
</table>
### Observations & Evidence from the Workshop:

#### TABLE A:
- **Title**: Self Assessment
- **Date**: October 25/93

**Discussion of this evidence:**

*CIRCLE EXERCISE* - This is evidence from an October 4 workshop where I wrote down my feelings on what happened during the "perfect circle" exercise. The little example made me stop and think about making sure I know exactly what is expected to be considered a "perfect solution." As well, thoughts on the Dr. Woods interview were written down. However, these weren't discussed in the workshop.

*OBJECTIVES*: (2), (3), (4)

**TABLE B**:
This is also evidence from an October 4 workshop. This exercise was not mentioned on the discovery page as it is absorbed in Table C.1 and C.2. However, these are just my thoughts on the "key" exercise.

*OBJECTIVES*: (2), (3), (4)

**TABLE C.1 AND C.2**:
This exercise was to demonstrate that a set of instructions seeming to be unambiguous to one is still ambiguous to another. The exercise was difficult. I am satisfied with the revised subgoals but they may still be considered ambiguous to some.

*OBJECTIVES*: (2), (3), (4)

**TABLE D.1 AND D.2**:
This exercise was to help develop the skill of creating measurable criteria. Some of the ideas are a little crazy in my mind, but I'm "getting the hang" of creating such criteria.

*OBJECTIVES*: (3), (4)

**TABLE E.1 AND E.2**:
This exercise was to help develop the skills of identifying well-stated goals. I had a bit of difficulty in determining which ones were well-stated. Phrases like "write down" and "select" were problems. (OBJECTIVES: (1), (2)) As well, "lose goals" which weren't well defined, were revised and measurable criteria was stated.

*OBJECTIVES*: (1), (2), (3)

**TABLES F.1 TO F.6**:
These sheets were used as aids in writing a resume. These were extremely helpful. As stated before, I felt very insecure about my job application. However, now, even though my job experience in the workforce is not engineering oriented, I am more confident with my resulting resume.

*OBJECTIVES*: (11)

**TABLE G**:
This was also used in the development of my resume. It was extremely helpful in visualizing which skills I can provide evidence of having.

*OBJECTIVES*: (10)

**THIS LAB REPORT**:
These lab reports (ie. Unit 3, 7 and 4) relate to Objective (5). They are very helpful in obtaining a thorough understanding of each unit. By having to write out what I've learned, what I did before and after, and how I've changed and provide evidence that was used as an evaluation basis, you take a more in-depth look into the workshops and what their purpose was.

**SEE PAGE #**:
This sheet provides the opportunity to think back over the past week and reflect on how problem solving skills were applied and to evaluate the extent to which your final goal to problem solve was achieved. It is also a motivator to use problem solving skills learned in the workshop for other courses, especially CHE 224. (OBJECTIVE: (5))

**SEE PAGE #**:
As well, this sheet presents the opportunity to think back over the past week and reflect on how problem solving skills were applied for situations in everyday life and to what extent they were carried out. (Evaluate!) This is a helpful exercise because it is easy to forget that problem solving skills aren't just applied in school/work related problems but in everyday life as well.

*OBJECTIVE*: (10)

**ENRICHMENT UNIT TO BE HANDLED IN AT A LATER DATE.**:
This unit which is to be handed in at the end of November, is a personal evaluation of an area in which the individual feels the needs work. The individual will monitor daily progress by using stated criteria, observable and measurable terms as well as self-evaluation. Evidence to support any claims must be presented both written and verbally. (OBJECTIVES: (5), (6), (8))

**INTERVIEW NEXT WEEK**:
The upcoming interview is to provide experience in interview situations. The purpose of this interview is to provide a verbal discussion of self-evaluation with a T.A. and to reach a mutual agreement as to your self-evaluation. (OBJECTIVE: (7))
What did you think about the "perfect circle" example & the Dr. Woods interview?

What went wrong?

**Perfect Circle:**
- Instructions should be defined clearly so that both parties are in agreement & understand what the outcome should be. Lack of specifications. Lack of questioning.
- Excessive put down is really unnecessary. It just makes the recipient of the put down defensive, upset & perhaps unwilling to be enthused or try hard the next time.
- Other alternatives weren't explored.
- Criteria should have been stated.

**Bad Self Evaluation**

**Dr. Woods Interview:**
- Interviewer was great in approach. He got his point across that Dr. Woods was a good worker, but his project was completely on the wrong topic. He didn't put Dr. Woods on the defensive.
- Dr. Woods was a bit too enthusiastic about the time he had at the job, i.e. "IT WAS AWESOME!"
<table>
<thead>
<tr>
<th>Subgoals</th>
<th>Yet N.</th>
<th>Revised Subgoal</th>
<th>Revised Subgoal</th>
<th>Measurable Criterion</th>
</tr>
</thead>
</table>
| Locate the cap of the toothpaste tube, ribbed cap. | N      | OK              | The cap of the toothpaste is ribbed, locate it. | Once you have your hands
| On the counter top, place the cap.              |        |                 |                  |                     |
| Unwrap the cap of the toothpaste.               | N      | OK              | The cap is not the cap.                  |                     |
| Pick up toothbrush and hold in your left hand.  | N      | OK              | The toothbrush is held in your right hand. |                     |
| In your right hand hold the toothpaste gently.  | N      | OK              | The toothpaste is held in your right hand. |                     |
| Where the cap is located, position the toothbrush gently so that the bristles at either end of the tube. | N      | OK              | The toothpaste position is placed toward the center. |                     |
| Place the toothpaste tube down gently.          | N      | OK              | The toothpaste tube is placed down gently. |                     |
| Cover the bristles end to end.                  | N      | OK              | The bristles end to end.                  |                     |
| Move the toothbrush under the cold water to wet it. | N      | OK              | Move the toothbrush under the cold water stream to just wet the bristles and toothpaste. |                     |

**Worksheet 300**

**84-17**
Worksheet 16-3 continued.

8. What is the best method for making acetic acid from acetaldehyde?

9. What is the quickest route from McMaster University to your home?

10. Are you hungry?

11. Who in this group is most likely to succeed?

12. Should I work on the plant improvement project or on the expansion of the ethylbenzene project?

13. What is the most imaginative idea?
EVALUATION

Worksheet 16-2: Identifying Well-stated Goals

Circle the appropriate answer to identify whether or not the goal is unambiguous and observable. Can you observe Joe achieving the goal? Is there any room for disagreement or misunderstanding between an observer and Joe? Can you measure Joe's success?

Joe's Goal: ________________________

Unambiguous and observable: ________________________

1. "to know calculus" [Denny, define. What do we mean?]
   Yes No

2. "to become aware of what a chemical engineer does"
   Yes No

3. "to select the longest string" [You must have a unique set of conditions, its rules should be known?]
   Yes No

4. "to be creative" [What creative is to one person isn't necessarily creative for the other?]
   Yes No

5. "to be able to think in terms of thermodynamics"
   Yes No

6. "to write down three causes for the malfunction"
   Yes No

7. "to write down three good causes for the malfunction"
   Yes No

* IF WE SAY "to become aware" does this mean even more?

Refer also to TABLE E.2
### Evaluation: Problem Solving

**Stated Goal:** Revision of Joes Goals (corresponding to 301)

<table>
<thead>
<tr>
<th>Subgoals</th>
<th>Year</th>
<th>Revised Subgoal</th>
<th>Revised Subgoal</th>
<th>Measurable Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>To know calculus</strong></td>
<td>N</td>
<td>To understand the material in 2nd math text book</td>
<td></td>
<td>Exam</td>
</tr>
<tr>
<td>2. <strong>To become aware of what a chemical engineer does</strong></td>
<td>N</td>
<td>To learn an accepted definition of chemical engineer and two specific jobs of a chemical engineer</td>
<td></td>
<td>Consult a dictionary or panel of chemical engineers</td>
</tr>
<tr>
<td>3. <strong>To select the longest string</strong></td>
<td>N</td>
<td>To physically point to the string of longest length end to end without misreading the given string</td>
<td></td>
<td>A measuring device to determine longest length</td>
</tr>
<tr>
<td>4. <strong>To be creative</strong></td>
<td>N</td>
<td>Show some creativity in solving problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. <strong>To be able to think in terms of thermodynamics</strong></td>
<td>N</td>
<td>Be able to write down the solutions used in thermodynamics</td>
<td></td>
<td>Ask prof. of thermodynamics to agree with the written equations</td>
</tr>
<tr>
<td>6. <strong>To write down three causes for the malfunction</strong></td>
<td>N</td>
<td>Write down the three causes for the malfunction of the TV set</td>
<td></td>
<td>Have some observe the three possible causes being written down</td>
</tr>
<tr>
<td>7. <strong>To write down three good causes for the malfunction</strong></td>
<td>N</td>
<td>Write down the three good causes for the malfunction of the TV set</td>
<td></td>
<td>Ask prof. what was discussed in student notes</td>
</tr>
</tbody>
</table>

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**Table E.1**
**Table 16-7: Skills Background Worksheet**

<table>
<thead>
<tr>
<th>Job or Activity Title</th>
<th>Supervisor</th>
<th>Date</th>
<th>Work</th>
<th>Spare</th>
<th>School</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-School Bible School</strong></td>
<td></td>
<td><strong>SUDDERS</strong></td>
<td>90/1/93</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**What you did**
- 45 minute sessions with 10 pre-schoolers
- More artwork/eating than discussion
- Basic discussion
- Free time/snack time
- Clean up
- Played piano at beginning and end of session

**What you enjoyed**
- The kids
- Thinking of new ideas for projects

**What you learned**
- 10 pre-schoolers require constant supervision!
- 10 pre-schoolers can make quite a mess

**What achieved**
- A lot of time during our sessions
- Explaining Bible stories at a very basic level

**What commended for**
- People skills needed
- Good relationship with the kids

**Descriptors**
- Anticipating
- Arranging
- Compiling
- Controlling (10 kids)
- Coordinating
- Creating
- Entertaining
- Explaining
- Interpreting
- Listening
- Meeting with public
- Organizing
- Planning
- Preparing
- Reading
- Setting up
- Speaking
- Supervising
- Talking
- Teaching
- Tolerating (at times)
### TABLE 16-7: Skills Inventory

<table>
<thead>
<tr>
<th>How much you enjoy using this skill (10=tops)</th>
<th>Name of Skill</th>
<th>Name of Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>PRESC.-SCHOOL</td>
</tr>
<tr>
<td>5</td>
<td>ANTICIPATING</td>
<td>X</td>
</tr>
<tr>
<td>9</td>
<td>ARRANGING</td>
<td>X</td>
</tr>
<tr>
<td>7</td>
<td>BUDGETING</td>
<td>X</td>
</tr>
<tr>
<td>5</td>
<td>COLLECTING</td>
<td>X</td>
</tr>
<tr>
<td>6</td>
<td>COMPILING</td>
<td>X</td>
</tr>
<tr>
<td>9</td>
<td>COORDINATING</td>
<td>X</td>
</tr>
<tr>
<td>9</td>
<td>CREATING</td>
<td>X</td>
</tr>
<tr>
<td>8</td>
<td>INTERPRETING</td>
<td>X</td>
</tr>
<tr>
<td>9</td>
<td>LISTENING</td>
<td>X</td>
</tr>
<tr>
<td>9</td>
<td>ORGANIZING</td>
<td>X</td>
</tr>
<tr>
<td>7</td>
<td>PLANNING</td>
<td>X</td>
</tr>
<tr>
<td>7</td>
<td>PREPARING</td>
<td>X</td>
</tr>
<tr>
<td>7</td>
<td>QUESTIONING</td>
<td>X</td>
</tr>
<tr>
<td>6</td>
<td>RECORD KEEPING</td>
<td>X</td>
</tr>
<tr>
<td>8</td>
<td>REMEMBERING</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>SPEAKING</td>
<td>X</td>
</tr>
<tr>
<td>9</td>
<td>SUPERVISING</td>
<td>X</td>
</tr>
<tr>
<td>8</td>
<td>TALKING</td>
<td>X</td>
</tr>
<tr>
<td>10</td>
<td>TEACHING</td>
<td>X</td>
</tr>
<tr>
<td>8</td>
<td>TIMING</td>
<td>X</td>
</tr>
<tr>
<td>7</td>
<td>MEETING WITH PUBLIC</td>
<td>X</td>
</tr>
</tbody>
</table>
Week 31 Course Chem Eng

What I learned about PS from the assignment exercises & problems this week:

Assignment: CHEM 204 Assignment #4 - Due October 21, 1993. Chapter 4 in Fosdick and Prussin, #22, #24, #42, #43, #53, and #58. For this assignment I completed numbers 22 and 42. For the assignment I worked very hard, and made careful notes because I knew how to answer these questions correctly. I worked on two problems per night, sometimes I felt that completing a problem and I extended the problem solving to the next day. This worked out to my best advantage, as if I had left the assignment to the last minute I would be panicking. So, from all of this, I isolated this fact that time was my real enemy and worked around it. I completed this assignment on time, was not too stressed over it, and felt the understanding of material was good. I'm just tickled!

As I've said before, when doing 204 assignment problems, often I just get stuck in the explore stage. But, upon reflecting, there were two questions whereby my problem definition was incorrect, resulting in an incorrect flow diagram, leading to frustration in the explore stage. It's the recycle-type problem that is a problem area for me. My diagram is never 100% correct. I went back in the text, read the section pertaining to recycle, read the examples, and then worked through the examples step by step. I determined where the problem lay and now am much more confident when I see a problem is a recycle-type problem. I am, however, a little confused as to how you can create observable and measurable criteria for a 204 problem unless you were to actually build the process unit yourself. I am pleased that I took the extra time to find out the true problem and not take the approach "I know what the answer, I'll just get it from there later." Rather, I now know that, on my own, I can solve a recycle-type problem.

Experience Factors I learned & will memorize:

Use SI units. Most economic fluid velocity through a pipeline: 1 m/s.

Avogadro's number: 6.02x10^23 molecules/gmol of species

Molar concentration: (g/cm^3)(lbm/ft)^3,(kg/m^3)

18.02g/mol H2O \text{ C}_8\text{H}_8(\text{ethane}) \rightarrow 30.07g/mol \text{ C}_8\text{H}_8

\text{p}_{\text{H}_2}\text{O} = \text{p}_{\text{C}_8\text{H}_8} = \text{p}_{\text{C}_8\text{H}_8}
Observations & Evidence from Application to ChE 2D4, other courses (red) and to everyday events (green).

**SELF ASSESSMENT**

Title: ________________________ Date: ________________________

Name: ________________________

Green sheet for the week is attached. Discussion of this evidence:

I found myself being more aware of my own personal evaluation of problems solving skills. This week I was particularly tired with myself for taking extra time to work on regular problems. Though it took a big chunk of time out of my week, I knew it will save me time in the long run (it’s for the 2D4 lab). I can practice regular problems instead of facing a problem when the book as well as I am pleased that I didn’t panic. A final solution, this was sounding corny, but I felt so happy when the light came on.

And I discovered what exactly my problem was. Reflecting, I utilized a problem solving scheme and was rewarded in the end. Still, however, the only measurable criteria I can think of is if the final answer, either it’s right or wrong.

(Objectives: 1, 2, 3, 4, 5, 6)

Additional applications:

Math 246 - Assignment due Monday October 25/93. As usual weekends are hectic. Usually I like to allot either Friday or Saturday night as "me time." So I have to plan my school work around 2 days. But because this is homecoming week, and being part of my hall exec being present at all the events is a boost for hall spirit and more girls come out, so I knew I’d only have part of Friday and Sunday to work. I tried to complete the majority of the assignment on Thursday when classes were minimal. As it turns out, I completed 10 of the 13 problems Thursday. This eliminated much anxiety Sunday. Time management was the key. I’m finding though that I still have a bit of difficulty with modelling problems. I usually go through the problem, if it just takes so long. As in 2D4, these modelling problems get stuck in the explore stage. I know what the problem is asking but how to set up the equation is the difficult part. I know I have to keep plugging away at this. I’ll either eventually get the hang of modelling or at least I’ll have the personal knowledge that I tried my best and that’s all I ask of myself.

(Objectives: 1, 2, 3) very important!

Italian 126 - Monday Oct 18. I had to write an Italian composition in class. At first I doubted my ability to do well. Since my vocabulary includes only a few key words, phrases and verbs. However, I took a step back. I went through our text book, jotting down all the topics we covered and possible topics the professor could ask for the composition. I then wrote out 50 word paragraphs for each topic and semi-memorized them. When I got to class, one of the topics I had prepared for ("nell’aula") was my topic! I wrote down my paragraph and added a few extra sentences. I was done in 15 mins. When 45 had been allotted, that was such a great experience. The end result – an A+ – got around my original anxiety by preparing for certain possible questions. This "Winston Churchil" doesn’t happen very often but when it does - be happy. This problem solving method worked extremely well in this particular case.

(Objectives: 1, 2, 3)
**Title:** SELF ASSESSMENT  
**Name:**  
**Date:** OCT. 25/93

### Other Evidence & discussion:

For this coming week I had to look way ahead and plan. I'm going home for an appointment with my orthopedic surgeon on Wednesday. This means I have to complete the 20A assignment due Thursday by Wednesday as well. I had to complete an organic lab scheduled for this Friday the previous Friday. I also have to pack - this may sound trivial but it takes time to complete. So, I sat down, wrote out all the things I had to complete before Wednesday. I must admit I feel very pressed for time but I know if I pace myself, it'll get done. My measurable criteria for these tasks are the finished products. (objectives: 1, 2, 3, 4)

### Conclusions:

Overall, after this unit especially, I feel I am very aware of my problem-solving skills. I also feel confident with my ability to evaluate my self-progress and my problem-solving skills. I found that after this unit I was so much more confident with my ability to break a goal into a series of subgoals. As well, the idea of "measurable and observable" criteria is now clear.

I think the greatest improvement came with objective 3. I didn't really realize how apprehensive I was about my resume until I was sitting in the workshop and Dr. Woods mentioned the word. My mind immediately went into panic mode: "I've never really worked before." "You've never written a resume." "It's going to be blank." etc. However, this workshop made me realize that I can indeed feel positive about my resume. I have evidence to back up skills that I say I have. This is a load off my mind.

I'm rather looking forward to the interview because I am aware that I need to work on discussing my self-evaluation with others. I need to learn to accept negative feedback and turn this negative feedback into positive feedback. All the objectives were achieved but a bit of work is still needed on 3 and 4. 7 has to be worked on big time.

### Progress in Achieving Objectives:

<table>
<thead>
<tr>
<th>Date: OCT. 25/93</th>
<th></th>
<th></th>
<th></th>
<th>80%</th>
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