VI. ANALYSIS OF DISCUSSION PRESENTATION

The following sections of Rishel's book should also be read at this point:

- What Does an Evaluator Evaluate?
- The Essence of Good Teaching

The first step in assessing a teaching assistant's performance involves the ability to solve homework problems in front the class. Examples of this sort include several word problems on maxima and minima from the most recent version of the current Mathematics 9 text

Larson – Hostetler – Edwards, *Calculus with Analytic Geometry*, Seventh Edition

that are listed below:

| Page(s) | Problem(s) |
|---------|----------------|
| 150 | 20 |
| 182 | 63 |
| 190 | 68 |
| 216 | 18 |
| 218–219 | 37, 49 |
| 917–918 | 9, 13 |
| 928 | 37, 39, 42, 43 |

Here are some criteria that an evaluator might consider when viewing such a presentation and deciding on the placement of a TA (*e.g.*, requirement to take a developmental English course, assignment to a discussion section, or assignment to teach a regular section of some course). Each item might be graded with a score of 1 to 5, with 1 denoting total disagreement and 5 denoting total agreement.

Explanation of problem

- 1. Presentation is consistent with development in the text.
- 2. Solution is well organized, and the source of each statement is clear.
- 3. The explanation was clear and comprehensible.
- 4. Speech is understandable, fluent and delivered at a reasonable rate.

Blackboard and presentation technique

- 5. Writes legibly, not too small or too big. Does not stand in front of work too much.
- 6. Leaves sufficient space. Starts at a student friendly place (*e.g.*, at the top left). Does not erase prematurely.
- 7. Does not omit important steps. Writes steps in logical order. Writes sufficiently complete statements.
- 8. Uses symbolism consistent with textbook.

Responses to questions

- 9. Understands questions.
- 10. Gives complete answers.

The next step in assessing student performance involves the ability to present new material in front the class. The list below give several typical examples of suitable material from the current Mathematics 3 and 5 text:

Dugopolski, College Algebra and Trigonometry, Third Edition

- Section 4.3 Theory and one example (chosen, not worked out).
- Section 5.6 Theory and one example (chosen, not worked out).
- Section 6.3 Derive $\alpha s (\alpha + \beta)$
- Section 6.3 Use the latter to find $\sin(\alpha + \beta)$ and give one example (chosen, not worked out).
- Section 6.4 Theory and one example (chosen, not worked out).
- Section 6.6 Theory and one example (chosen, not worked out).
- Section 7.2 Theory and one example (chosen, not worked out).
- Section 8.4 Theory and one example (chosen, not worked out).
- Section 11.3 Theory and one example (chosen, not worked out).
- Section 11.3 Sums of sequences and series and one example (chosen, not worked out).

On the next page there is a more detailed form that could be used for evaluating a classroom visit, with each item rated on a scale of VG (very good), G (good), AD (adequate), P (poor), VP (very poor). The purpose of including this and the previous list is to provide some guidelines to consider when preparing the discussion presentations.

| 1. Content | |
|-----------------------------------|----------------------|
| correctness | VG - G - AD - P - VP |
| preparedness | VG - G - AD - P - VP |
| consistency with textbook | VG - G - AD - P - VP |
| use of diagrams | VG - G - AD - P - VP |
| presentation: clarity | VG - G - AD - P - VP |
| presentation: level | VG - G - AD - P - VP |
| presentation: pace | VG - G - AD - P - VP |
| other: | VG - G - AD - P - VP |
| other: | VG - G - AD - P - VP |
| 2. Use of the blackboard | |
| legibility | VG - G - AD - P - VP |
| use of space/timely erasing | VG - G - AD - P - VP |
| other: | VG - G - AD - P - VP |
| other: | VG - G - AD - P - VP |
| 3. Communication | |
| facing the class/eye contact | VG - G - AD - P - VP |
| speech: loudness | VG - G - AD - P - VP |
| speech: clarity | VG - G - AD - P - VP |
| speech: speed | VG - G - AD - P - VP |
| speech: mannerism | VG - G - AD - P - VP |
| gives opportunities for questions | VG - G - AD - P - VP |
| asks questions | VG - G - AD - P - VP |
| understands questions | VG - G - AD - P - VP |
| answers questions | VG - G - AD - P - VP |
| can rephrase questions | VG - G - AD - P - VP |
| other: | VG - G - AD - P - VP |
| other: | VG - G - AD - P - VP |
| 4. Atmosphere | |
| motivating students | VG - G - AD - P - VP |
| student involvement | VG - G - AD - P - VP |
| attention | VG - G - AD - P - VP |
| other: | VG - G - AD - P - VP |
| other: | VG - G - AD - P - VP |
| | |

On the form from which this was taken, there are also questions whether a followup visit is needed and whether the TA is ready to move to the next higher level of assignment (*e.g.*, own class or large lecture), and space is also left for written comments and constructive suggestions.