

Education 325-3

MEASUREMENT AND EVALUATION IN TEACHING

*To: Marv. Weiden*

*F.Y.I. outline &*

Intercession 1980

Instructor: Stan Shapson

Monday, Wednesday, 12:30 p.m. - 3:30 p.m.

*criteria for analysis  
in Educ. 325 this  
summer.*  
*[Signature]*

Calendar Description:

Basic principles of test theory applied to the use of measures in education; construction and use of classroom tools for measuring achievement of educational objectives, including observation methods, standardized tests and overview of contemporary, local and provincial evaluation programs.

Pre-requisites:

Education 220 or equivalent; Math 101 or Psyc. 210 recommended. Students with credit for Education 421 may not take this course for additional credit.

Topics:

The main topics to be covered in the course include:

- Overview of measurement and evaluation in teaching
- Basic principles of measurement theory
- Types of measurement devices for classroom use (standardized tests, scales/questionnaires, systematic observation)
- Selection and development of measurement devices
- Evaluation of programs and school systems

Required Text:

C. D. Hopkins & R. L. Antes, Classroom Measurement and Evaluation (R. E. Peacock, 1978).

Faculty of Education

Education 325-3

Instructor: Dr. Stan Shapson

Measurement and Evaluation in Teaching

1. Course Assignments

<u>Course Assignments</u>	<u>% of Final Grade</u>
Presentation of Evaluation Issue (see attached guidelines)	20
Demonstration of an Evaluation Method (see attached guidelines)	40
Exam	30
Class Participation	10

2. Reserve Materials

To supplement the text book the following materials have been placed on reserve:

a) Book List

Aiken, L. R. Psychological Testing and Assessment, 3rd edition, Allyn & Bacon, 1979.

Beggs, D. L.; Lewis, E. L. Measurement and Evaluation in the Schools, Boston: Houghton-Mifflin, 1975.

Hayman, J. L.; Napier, R. N. Evaluation in the Schools: A Human Process for Renewal, Belmont, Cal.: Wadsworth, 1975.

Mager, R. F. Measuring Instructional Intent, Belmont, California: Fearon Publishers.

Mehrens, W. A.; Lehmann, I. J. Standardized Tests in Education, 2nd edition, Toronto: Holt, Rinehart & Winston, 1975.

Noll, V. H.; Scannel, D. P.; Noll, R.P. Intro Readings on Educ. Measurement, Houghton-Mifflin, 1972.

Scannel, D. P.; Tracy, D.B. Testing and Measurement in the Classroom, Boston: Houghton-Mifflin Co., 1975.

b) Xerox reserve list - check this list for articles, especially as they pertain to the assignments you selected.

**Guidelines: Demonstration of an Evaluation Method (40% of Grade)**

For this assignment you will be expected to (a) describe and critique and (b) apply one of the main evaluation methods used to collect data in education.

The following steps should be followed:

**I. Selection of an Evaluation Method**

Choose one evaluation method from the following main categories: (1) systematic observation, (2) standardized tests (achievement or aptitude), (3) attitudinal scales/questionnaires (for measures in the affective domain, e.g., attitudes, interests, self-concept).

**II. Description/Critique of the Evaluation Method (25%)**

For the one evaluation method you have selected proceed as follows:

**A. Description**

1. Indicate the questions for which this method is generally used to collect data in education.
2. Outline the procedures generally followed in using this Evaluation method (i.e., "how" is it used).

**B. Critique**

3. Identify the strengths of this evaluation method
4. Identify the weaknesses of this evaluation method

**III. Application of Evaluation Method (15%)**

1. Identify a question for which you would like to systematically collect data using this evaluation method.
2. Select a specific measurement instrument which is representative of this evaluation method (in the odd case, you may want or need to develop this instrument).
3. Administer the instrument to the target audience (Note for systematic observation, data might be collected from existing video tapes of classrooms).
4. Summarize and discuss the results you have obtained as well as your personal experience using this instrument.

**SOURCES TO READ ON THE THREE EVALUATION METHODS:**

1. Follow references cited in textbook
2. Books on reserve list, eg. Mehrens & Lehmann; Noll, Scannel & Noll; Scannel & Tracey.
3. Additions to Xerox reserve list  
for Systematic Observation - Medley, "Measuring Classroom Behaviour by Systematic Observation"  
for Scales/Questionnaires - Khan, "The Teaching of Affective Responses"  
- Bloom "Evaluation Technique for Affective Objectives"

EDUCATION 325: Measurement and Evaluation in Teaching

- Dr. S. M. Shapson

Guidelines: Presentation of an Evaluation Issue (20% of Grade)

Responsibility

Each student will be responsible for an oral presentation in class on one topic to be selected from the following:

1. Psychological Effects of Testing
2. The Decline of Standardized Test Scores
3. The Use of Ability Measures in Education
4. Report Cards/Communicating Results of Pupil Progress
5. Minimum Competency Testing

Scheduling

A presentation for each student will be scheduled to take place between January 31 and March 21.

Preparation

1. Some reading of the research or viewpoints of education on the selected topic is required and should be clearly reported in the presentation.
2. An annotated bibliography of at least four items should be prepared and circulated to members of the tutorial.

Classtime

Approximately 25 minutes

Presentation Style

1. Information given should be clear and well organized.
2. Interest can be generated either by use of visual aids (e.g. graphs, sketches) or where necessary by bringing in a measurement instrument for the class to examine or in some cases by reports of personal visits to schools or interviews with educators in the Vancouver area.

EDUCATION 325: Measurement and Evaluation in Teaching

Some suggested sources for assignment:

Presentation of an Evaluation Issue

For each topic, follow references presented in textbook by C.D. Hopkins & R.L. Antes (eg. see references on p. 5 of text on Report Cards/Communicating Results)

Other suggested sources:

Psychological Effects of Testing

M.C. Kirkland. The effects of tests on students and schools. Review of Education Research, 1971, 41, (#4) pp. 303 -.

R. Ebel. The social consequence of education testing in Noll, Scannel & Noll. Intro Readings on Education measurement (1972 - Reserve Book).

The Decline of Standardized Test Scores

V. R. Rogers & J. Baron. Declining Scores: a humanistic explanation. Phi Delta Kappan, 1976, 58 (#4), pp. 311 - (on xerox reserve).

R. L. Ebel. Declining Scores: a conservative explanation. Phi Delta Kappan, 1976, 58 (#4) pp. 306 - (on xerox reserve).

The Use of Ability Measures in Education

Section #5. Intelligence, Aptitudes, Creativity. In Noll, Scannel & Noll. Intro Readings in Education Measurement (1972 - Reserve Book).

Chapter 3. Standardized Aptitude Measures. In Mehrens & Lehmann. Standardized Tests in Education (1975 - Reserve Book).

Grading/Communicating Results of Pupil Progress

Section 7. Reporting & Using Results. In Noll, Scannel & Noll. Intro Readings in Education Measurement (1972 - Reserve Book).

Chapter 9. Grading & Reporting. In Scannel & Tracey. Testing and Measurement in the Classroom (1975 - Reserve Book).

## COURSE OUTLINE

Course: Education 325-3 Measurement and Evaluation in Teaching

Summer Session  
(M+W 9:30-12:30) MPX 8633

Calendar Description: Basic principles of test theory applied to the use of measures in education; construction and use of classroom tools for measuring achievement of educational objectives, including observation methods, standardized tests and overview of contemporary, local and provincial evaluation programs.

Pre-requisites: Education 220 or equivalent; Math 101 or Psyc. 210 recommended. Students with credit for Education 421 may not take this course for additional credit.

### Course Information:

Instructor - Dr. G. Halpern  
Day - Monday and Wednesday  
Time - 0930 to 1230

Topics: The major topics to be considered in the course include:

- Overview of measurement and evaluation in education
- Basic principles of measurement theory
- Assessment, prediction and evaluation
- Types of measures (tests, inventories, questionnaires, observation)
- Selection and/or development of required measures
- School program evaluation

### Readings:

Required Text: Beggs, D.L. & Lewis, E.L. Measurement & Evaluation in the Schools (Houghton Mifflin, 1975)

Recommended Text: Mehrens, W.A. & Lehman Standardized Tests in Education (2nd Ed., Holt, Rinehart & Winston, 1975)

BOOK RESERVES  
Education 325-3, Summer 1979  
G. Halpern

- Beggs, D.L. & Lewis, E.L. Measurement and Evaluation in the Schools. Houghton Mifflin. 1975.
- Canadian Education Association. Educational Research and Policy Formation, CEA, Toronto, 1978.
- College Entrance Examination Board. Research Guidelines for High School Counselors. Princeton, New Jersey, 1966.
- Cronbach, L.J. Essentials of Psychological Testing. Harper and Row, 1970.
- Fox, D.J. The Research Process in Education. Holt, Rinehart & Winston, 1969.
- Greenfield, T.B. Developing Accountability in School Systems, Education Canada, 12, 21-29, 1972.
- Lyman, H.B. Test Scores and What They Mean, Prentice-Hall, 1963.
- Mehrens, W.A. and Lehmann, I.J. Standardized Tests in Education. Holt, Rinehart & Winston, 1969.
- Nunnally, J.C. Jr. Tests and Measurements. McGraw-Hill, 1959.

## COURSE OUTLINE

Course: Education 325-3 Measurement and Evaluation in Teaching

Semester: Spring, 1979

Calendar Description: Basic principles of test theory applied to the use of measures in education; construction and use of classroom tools for measuring achievement of educational objectives, including observation methods, standardized tests and overview of contemporary, local and provincial evaluation programs.

Pre-requisites: Education 220 or equivalent; Math 101 or Psyc. 210 recommended. Students with credit for Education 421 may not take this course for additional credit.

### Course Information:

Instructor - Dr. S. Shapson

Day - Wednesday

Time - 4:00 to 7:00 PM

Topics: The main topics to be covered in the course include:

- Overview of measurement and evaluation in teaching
- Basic principles of measurement theory
- Measurement devices for classroom use (standardized tests, scales/questionnaires, systematic observation)
- External vs. Internal measurement devices
- Evaluation of Programs and School Systems

### Readings:

Required Text: Beggs, D.L. & Lewis, E.L. Measurement & Evaluation in the Schools (Houghton Mifflin, 1975)

Recommended Text: Mehrens, W.A. & Lehman Standardized Tests in Education (2nd Ed., Holt, Rinehart & Winston, 1975)

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