ABSTRACT
        This document contains a number of processes and
criteria levels with which the progressive test writer should be
familiar in order to measure more than cognitive success. These
processes allow test writers to examine existing paper and pencil
examinations in order to sound out implications for performance
testing. Hands-on performance testing is referred to as
criterion-referenced testing (CRT) in the psychomotor or performance
domain. This is one step beyond paper and pencil tests (PPT) which
function mainly in the cognitive or knowledge domain and hardly ever
at all in the performance domain of practical application. It should
be sufficient for the typical test writer to work through these
processes and criteria levels with two or three examples in order to
derive maximum benefit. This experience will sharpen the purposes,
yardsticks, and repertories of experienced test writers enough to
enable automatic application of these processes and criteria level
without the necessity of constantly referring back to this procedures
manual. This document is intended to help develop better hands-on
performance evaluation instruments. (Author/DEP)

TITLE

NINE PERFORMANCE PROCEDURE COMPETENCIES WITH WHICH TO ANALYZE, ORGANIZE, AND
DEVELOP HANDS-ON PERFORMANCE EVALUATION

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KNOWLEDGE OBJECTIVE   This material will help a teacher develop
                             a format for psychomotor performance testing.

PERFORMANCE OBJECTIVE   The guidelines contained herein will help a
                             teacher apply performance testing in a
                             variety of settings.

ATTITUDE OBJECTIVE   This material will draw out the best in a
                             teacher's repertoire in a form that can be
                             utilized elsewhere.

INTRODUCTION

This short document contains a number of processes and criteria
levels with which the progressive test writer should be familiar in
order to measure more than cognitive success. These processes allow
test writers to examine existing paper and pencil examinations in order
to sound out implications for performance testing. Hands-on performance
testing is referred to as criterion-referenced testing (CRT) in the
psychomotor or performance domain. This is one step beyond paper and
pencil tests (PPT) which function mainly in the cognitive or knowledge
domain and hardly ever at all in the performance domain of practical
application.

It should be sufficient for the typical test writer to work through
these processes and criteria levels with two or three examples in order
to derive maximum benefit. This experience will sharpen the purposes,
yardsticks, and repertoires of experienced test writers enough to enable
automatic application of these processes and criteria level without the
necessity of constantly referring back to this procedures manual.

This document is intended to help develop better hands-on performance
evaluation instruments.

The following page summarizes the path to CRT as herein presented.

The following nine procedures should be examined carefully in order to
preview and overview the process of developing CRT items appropriate to
"hands-on" observation, testing, and evaluation in the performance or
psychomotor domain.

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PERFORMANCE (CRITERION-REFERENCED) TESTING "HANDS-ON" WORK SESSIONS

(The Path from Content-Referenced to Criterion-Reference)

Performance

1. Examine (a) sources such as ERIC microfiche, Armed Forces,
                State agencies, commercial outlets, and others
                where these performance tests may be found
          (b) examples of performance tests

2. Analyze the format of typical performance tests

3. Develop performance test items

4. Evaluate test items already developed to see if these
        items meet performance test criteria

5. Relate steps 1, 2, 3, and 4 above to self-paced
        learner progress

6. Foresee specific difficulties in apply performance
        testing in the classroom and in the lab or shop

7. Make sure criterion values are in line with
        course objectives

8. Document learner success toward prespecified objectives

9. Exchange successful practices with colleagues

The above procedure performances should be kept in mind while reading, filling in, and discussing the following pages. The reason for writing responses is to provide a concrete basis for interaction with professional colleagues.

Followup samples of how the above nine procedures have been used by occupational educators are available to individuals submitting original responses to the questions on the following pages. For maximum benefit, this sample followup material should be read only after an individual educator has gone through all nine procedures. This stress on independent responses is intended to stress creativity more than imitation.

PERFORMANCE 1

----------------------------PERSPECTIVE----------------------------

A. SUBJECT MATTER: Examples and sources of performance
                               tests

B. TASK 1:   Examine (a) sources such as ERIC
                               microfiche, Armed Forces, State
                               agencies, commercial outlets, and
                               others where these performance tests
                               may be found; (b) examples of
                               performance tests

STEP 1:   Identify one source of performance
                               tests and obtain a sample.

                               Which source was identified? _____

                               _____

                               _____

STEP 2:   Look at one example of a performance
                               test.

                               Which example was examined? _____

                               _____

                               _____

STEP 3:   Evaluate the usability of this
                               performance test.

                               How usable is it? _____

                               _____

                               _____

STEP 4:   Keep on repeating steps 1, 2, 3, above
                               until a usable sample performance test
                               is obtained.

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-------------------------------PERSPECTIVE------------------------------------

A. SUBJECT MATTER: Analysis of typical criterion-referenced
                                    test (CRT)

B. TASK 2:   Analyze the format of typical
                                    performance tests

STEP 1:   Pinpoint one test item for analysis.

                                    Reproduce (or attach) the test item
                                    under analysis:

                                    _____

                                    _____

                                    _____

STEP 2:   Analyze one test item to determine which
                                    objective (or criterion) is being
                                    evaluated.

                                    _____

                                    _____

                                    _____

                                    Which criteria are specified? _____

                                    _____

                                    _____

STEP 3:   Verify the answer key, scoring directions,
                                    or evaluation process.

                                    Reproduce (or attach) the answer key,
                                    scoring directions, or evaluation process:

                                    _____

                                    _____

                                    _____

PERFORMANCE 3

----------------------------PEi SPECTIVE-------------------------------------

A. SUBJECT MATTER: Development of C-R test items

B. TASK 3:   Develop performance test items

STEP 1:   Pinpoint an important course outcome.

                                What is this important course outcome?

                                _____

                                _____

                                _____

STEP 2:   Describe how success on this important
                                course outcome is measured and by which
                                yardsticks?

                                Which yardsticks are used as criteria?

                                _____

                                _____

                                _____

STEP 3:   Perform performance 2 on the above
                                criteria and measuring instruments.

NOTE: At this point, is is just as important to
                                test out ideas as it is to write out
                                practical suggestions.

-------------------------------PERSPECTIVE----------------------------------

A. SUBJECT MATTER: Feedback and self-evaluation

B. TASK 4:   Evaluate test items already developed
                                   to see if these items meet performance
                                   test criteria

STEP 1:   Choose a format for CRT that is
                                   meaningful and relevant to local
                                   teachers and learners.

                                   Describe this format in a few words:

                                   _____

                                   _____

                                   _____

STEP 2:   Justify the specific format selected.

                                   What is the most outstanding feature
                                   of the format chosen?

                                   _____

                                   _____

                                   _____

STEP 3:   Incorporate learner reactions to the
                                   format.

                                   How was the final format improved through
                                   the use of learner recommendations?

                                   _____

                                   _____

                                   _____

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---------------------------------PERS PECTIVE-------------------------------------

A. SUBJECT MATTER: Systems development

B. TASK 5:   <u>Relate</u> steps 1, 2, 3, and 4 to
                                   self-paced learner progress

- -

STEP 1:   <u>Measure</u> productivity in terms of
                                   learner success and satisfaction.

                                   What should be looked for in trying
                                   to document learner achievement and
                                   learner growth?

                                   _____

                                   _____

                                   _____

STEP 2:   <u>Reward</u> all attempts at individual progress.

                                   When must individual gains scores, no
                                   matter how small, be given priority over
                                   productivity as measured by professional
                                   standards?

                                   _____

                                   _____

                                   _____

STEP 3:   <u>Foster</u> productivity standards among
                                   learners in realistic settings.

                                   When must productivity be stressed with
                                   successful, but slow achieving learners?

                                   _____

                                   _____

                                   _____

-------------------------------PERSPECTIVE----------------------------------

A. SUBJECT MATTER: Planning specifications

B. TASK 6:   Foresee specific difficulties in
                                 applying performance testing in the
                                 classroom and in the lab or shop.

STEP 1:   Measure the highest level of
                                 complexity upon which mastery is judged.

                                 What is the highest level of mastery
                                 in the test item under development?

                                 _____

                                 _____

                                 _____

STEP 2:   Set up a scale of benchmarks from the
                                 first taste of mastery (for a beginner)
                                 to the highest mastery (for experts).

                                 What is the first sign of success that
                                 can normally be expected from a slow
                                 beginner?

                                 _____

                                 _____

                                 _____

STEP 3:   Simulate the typical difficulties
                                 encountered by most learners before
                                 achieving mastery.

                                 Where do most learners have difficulty?

                                 _____

                                 _____

                                 _____

----------------------------PERSPECTIVE-------------------------------------

A. SUBJECT MATTER: Areas for self-evaluation

B. TASK 7:   <u>Make</u> <u>sure</u> criterion values are in line with
                             course objectives of learners

STEP 1:   <u>Define</u> success.

                             Write a short definition of success.

                             _____

                             _____

STEP 2:   <u>Document</u> successful learners in terms of
                             non-cognitive achievements.

                             What have the most successful learners done
                             career-wise with acquired skills?

                             _____

                             _____

STEP 3:   <u>Tie</u> career objectives together for learner
                             consumption and progress.

                             What have ordinary, but successful learners
                             done career-wise with acquired skills?

                             _____

                             _____

STEP 4:   <u>Recognize</u> success on all levels of competency.

                             What have unsuccessful learners done career-
                             wise with one or two skills acquired in this
                             area?

                             _____

                             _____

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PERFORMANCE 8

-------------------------------PERSPECTIVE-------------------------------------

A. SUBJECT MATTER: Learner gains scores

B. TASK 8:   <u>Document</u> learner success toward prespecified
                                objectives

STEP 1:   <u>Pinpoint</u> prerequisites necessary for learners
                                before beginning attempts at mastering a
                                specific objective.

                                What is the objective to be mastered?

                                _____

                                _____

                                What are the prerequisites required of any
                                beginner?

                                _____

                                _____

STEP 2:   <u>Provide</u> two or three alternatives for learners
                                in need of remediation.

                                What are some inexpensive and currently
                                available forms of remediation?

                                _____

                                _____

STEP 3:   <u>Evaluate</u> the learner's transition from lack
                                of necessary preparation to readiness for a
                                prespecified objective.

                                What are some simple evaluation tools that
                                tell the difference between the prepared
                                and unprepared learner?

                                _____

                                _____

----------------------------------PERSPECTIVE-------------------------------------

A. SUBJECT MATTER: Dissemination of practical techniques.

B. TASK 9:   Exchange successful practices with
                                       colleagues

STEP 1:   Stress the most important evaluation
                                       techniques for practical daily usage.

                                       What is the most important piece of
                                       advice that should be given to a teacher
                                       who is beginning to develop performance
                                       testing?

                                       _____

                                       _____

                                       _____

STEP 2:   Pinpoint one or two of the most urgent
                                       and unsolved problems that arise when
                                       dealing with performance evaluation.

                                       What is the most urgent and unsolved
                                       problem in dealing with performance
                                       testing?

                                       _____

                                       _____

                                       _____

STEP 3:   Pick up helpful suggestions from co-workers.

                                       What is a practical suggestion that has
                                       been encountered from colleagues during
                                       this working session?

                                       _____

                                       _____

                                       _____