An NCME Instructional Module on

Guidelines for the Development of Item Banks

Annie W. Ward
The Techné Group, Inc.
Mildred Murray-Ward
California Lutheran University and The Techné Group, Inc.

Use of item banking technology can provide much relief for the chores associated with preparing assessments; it may also enhance the quality of the items and improve the quality of the assessments. Item banking programs provide for item entry and storage, item retrieval and test creation, and maintenance of the item history. Some programs also provide companion programs for scoring, analysis, and reporting. There are many item banking programs that may be purchased or leased, and there are banks of items available for purchase. This module is designed to help those who develop assessments of any kind to understand the process of item banking, to analyze their needs, and to find or develop programs and materials that meet those needs. It should be useful to teachers at all levels of education and to school-district test directors who are responsible for developing district-wide tests. It may also provide some useful information for those who are responsible for large-scale assessment programs of all types.

An item bank is a collection of test items that may be easily accessed for use in preparing examinations. Use of an item bank and of good item banking software is a solution to the effort and expense of preparing new items for each administration of an assessment, whether the test is used by a teacher of a small class; a university lecturer who has several large sections; or the director of multifaceted programs for certification, licensing, accountability, or norm-referenced survey testing.

When care is taken to see that all items are initially of high quality, and when the items are easily retrievable for editing and updating, the item bank will be more functional and item quality will be maintained.

The widespread availability of computers makes it possible to automate much of the effort of preparing assessments, as well as to use the computer capability to enhance the quality of the items and to improve the overall quality of examinations. Unfortunately, the automation is easier to achieve than the quality enhancement. The latter still requires personal, professional intervention and monitoring. All items, whether purchased in an item bank, developed for a specific program, or computer-generated, must be carefully edited and tried out. Computer technology does facilitate the indexing, storage, and retrieval of items, and it is necessary for the analyses that are an essential part of evaluating and monitoring test development. The computer can assist in item writing by handling much of the repetitious work involved in item writing, freeing the item developers to attend to more important aspects of the items.

Baker's (1989) chapter in *Educational Measurement* and Roid's (1989) article in *Educational Measurement: Issues and Practice* provide an overview of the whole field of the use of computer technology in testing. Anyone who is inexperienced in this field will find these materials very useful in understanding the potential of the technology for all aspects of testing.

Before the advent of desktop computers, the most common item bank was a box of index cards, each containing a single item. Teachers could select the items wanted for a test, tape them to a sheet of paper, and use the copier to make sufficient copies of the examination. If more than one version were needed, items could simply be rearranged. Instructors who were truly enterprising could record such item statistics as the percentage who answered the item correctly (p value) and the number selecting each option on the back of the item card for future reference. Large testing programs kept files of items in hard copy and manually entered data about item performance.

At the present time, large, sophisticated testing programs maintain computer files of items from which assessments are prepared. Items are updated periodically, and statistics about item performance are readily available. Some of the testing programs use these files to provide for computer administration of *tailored tests,* in which the items actually taken by an examinee are selected for difficulty according to how the examinee performs on earlier items.

The technology for managing these programs is readily

available; it can be used by classroom teachers at all levels of education as well as by large licensing and certification agencies. Anyone who needs to prepare assessments for whatever purpose can profit from learning how to set up and use an item bank.

Who Should Use an Item Bank?

Anyone whose responsibilities involve preparing assessments on a regular basis will find item banking technology very useful. In education, this group includes all classroom teachers, university instructors, directors of system-wide testing programs, directors of state testing programs, and evaluators of special projects. Personnel in licensing and certification agencies and test publishers may also find some of the information useful.

The needs of these people vary greatly, and there are many options available, so that individuals can find the kind of help that is right for them.

What Can an Item Bank Do?

There are three major functions that may be served by an item bank:

1. Item entry and storage
2. Item retrieval for reviewing items, formatting test forms, and editing and updating items
3. Maintenance of item history

In addition, two other functions are provided by computer technology. Some commercially available programs include these as a part of the item banking package; other vendors provide the other functions as a separate package. These functions are (a) scoring and item analysis and (b) preparation of records and reports, including *Gradebook*.

What Are the Options for Setting up an Item Bank?

The possibilities for establishing an item bank range from use of a *canned* item bank, from which multiple forms of tests can be created, to programs that generate items from algorithms and create tests to specifications, with every variation imaginable. Users have very different needs and concerns, depending on their situations.

A classroom teacher, for example, who is interested only in working with a small item bank to produce classroom tests, has a situation that is very different from that of the coordinator of a professional licensing bureau that manages and produces dozens of examinations in the course of a year. Licensing agencies are concerned with problems such as sharing of the bank while maintaining the security of the items and often with preparing alternate forms of examinations. They are also interested in interfacing the scoring and analysis information with the item entry process. The classroom teacher may be more concerned with programs that assist in the item writing process and that operate on an available computer system.

There are three basic options for establishing an item bank. These options are discussed in what follows, along with the advantages and disadvantages of each.

Purchase of a Bank of Items, Along With the Software to Operate it

The advantage of this option is that the labor of developing items and the software is eliminated. Also, some of the item banks provide items that have been carefully developed and evaluated, and the programs are generally easy to operate.

The major disadvantage is that much of the savings in developing items is offset by the necessity to check the items against the objectives or test blueprint. Also, many of the items may turn out to be flawed and have to be replaced. Furthermore, the constraints of the software limit what can be done about customizing the item bank. You may be limited to a single item type, for example, and editing or replacing items may be very difficult.

Some proponents of item banks have suggested the possibility that eventually there might be a gigantic item bank in commonly tested areas that can be accessed by any legitimate user to prepare examinations, without the effort and expense of writing items. Already there are several item banks that school systems can purchase, and there are also a few banks of items for some occupations (Ward, 1990).

However, purchase of an item bank saves only a part of the labor of preparing items. It is still essential that the coverage of an assessment be carefully specified. This is usually done through a curriculum guide, a list of objectives, or a test blueprint. Each item in the bank must be reviewed to determine whether it fits the desired coverage and, if so, where it fits. It often happens that a large proportion of the items must be discarded, either because they do not fit or because they do not meet commonly accepted standards.

Purchase or Leasing of Item Banking Software With Local Development of Items

The advantage of this option is that it offers the possibility of maximum flexibility while requiring a minimum of computer know-how. The disadvantage is that selection of software packages requires a careful analysis of the user's needs and of the features of each software package. It also requires that the items, item entry procedures, and formatting be adapted to fit the capability of the selected program, and these capabilities vary widely from one program to another.

Item banking programs are supplied by many different vendors, and the programs vary greatly as to the functions performed and the sophistication with which these functions are handled. Most item banking programs were originally designed to be used by classroom teachers and university instructors to construct classroom examinations. Some have been adapted to serve the needs of large-scale testing agencies, and many provide for use by multiple data operators and for networking. Many vendors offer not a single program, but a set of programs, sometimes but not always functioning in conjunction with one another. Some vendors sell their programs, whereas others lease theirs. Some offer both options.

The intended use should govern the kinds of capabilities the user looks for in purchasing an item banking program. It would be foolish to purchase or lease a program with every available option if the only use is for teachers to produce classroom examinations. On the other hand, a large testing agency would become very frustrated trying to manage dozens of very large item banks with a program that has many limitations. Some of these agencies have opted to use a word processing program for item entry and revision and a database-management program to format the examination forms (see Option 3 below). Scoring and analysis functions are handled by a different set of programs.

Furthermore, users typically prefer to have a program that is as simple to operate as possible, so long as it has the capability to do the necessary work. Therefore, it is important for the user to be very clear as to what capability is necessary and to look for the program(s) that meet these needs in a way that is easy to manage.

In selecting programs for item banking and test processing, the potential user should identify those features that are most important for the situation and consider several questions. The checklist provided suggests some questions to be addressed. The answers to these questions will clarify the features that are important to that particular user. Features that are not important will also be identified.

A final consideration will be the type of hardware required to run each program. In most cases, the user will want to secure item banking programs that will run on the hardware already available. This should be no problem, because most of the

available programs run on IBM or compatibles and the rest run either on the Apple or the Macintosh. Some have versions for both IBM and Apple II or Macintosh. At least one program has a version for the Commodore.

If the user plans to purchase new hardware, the availability of item banking programs may be a consideration in the purchase.

Local Development of Software Programs and Items

The advantage of this option is that the programs may be tailored to provide the specific characteristics the test developer wants, so it is the obvious choice for a test developer who has access to the necessary computer know-how. The obvious disadvantage is that development of item banking software requires a level of computer sophistication beyond that of most test developers. However, if the test is to consist entirely of a single type of item, if the user has a good word processing program, and if time permits each test to be hand-formatted with the items hand selected, much of this disadvantage is lost.

Moderately sophisticated users may use a word processing program to input items into files, one item per file, then use a database-management program such as D-Base to format tests and prepare the item map. The possibilities are limited only by the skill of the programming staff.

What Are the Steps in Item Banking?

The steps in item banking are listed and discussed below.

Item Entry and Storage

Method of item entry. There are several processes by which items may be entered into an item bank. They can be entered by keying in on a computer keyboard; they can be purchased already entered into an item bank that runs on the program; they can be entered by reading a disk or tape that has been created using a word processing program; they can be entered from hard copy by use of a document reader; or the item banking program may provide algorithms that create items. Some programs provide only one method of item entry, whereas others offer many of these alternatives.

The method of item entry will depend on the source of the item and on the capabilities of the program being used. Newly developed items will usually be keyed in at the computer console. Computer files of existing item banks may be read into the bank and then edited as necessary. Printed copies of items may be read by a document reader and edited by keyboard entry. If the program does not have either of these capabilities, the items will have to be hand entered, just as if they are new items.

Graphics and special characters. In some testing programs, such as those in mathematics, science, and occupational skills, the handling of graphics is very important. Many of the available programs do not have the capability of handling graphics within the item file; they must be in a separate file, either computerized or in hard copy. Also, some of the programs are limited as to the extent to which they will handle special characters, such as mathematics symbols, foreign alphabets, accents, and so forth. These limitations may not be important for some testing programs, but they may be crucial for others.

Text limitations. Some programs are limited as to how many lines of text are permitted in either the stimulus or option, or both; and many programs limit the number of items that may be stored in a given bank. Also, some programs do not provide for such information as author, reviewers, reference, or source. Potential item bank users should check that those features they desire are available in the program being considered.

Size of item bank. Some programs will handle a limited number of items—usually those on a single disk. Others will use multiple disks or an auxiliary storage unit.

Type(s) of items used. Some programs permit only four- or five-choice multiple-choice items, whereas others provide for true-false, multiple true-false, and constructed response items (completion, essay, fill-in). The program must handle the types of items to be used on the test.

Ease of editing or adding new items to the bank. Many of the same considerations as for item entry apply here. However, if changes in the item bank are made frequently, the ease of entering and editing items becomes of even greater importance.

Classification/coding. Regardless of how the items are initially entered, there must be a capability to retrieve the items as necessary to make revisions or to create a test. It is essential that the items be coded in some fashion, and that certain information be readily available. Programs differ greatly in the number of codes available and in the types of coding permitted.

The primary reason for coding is to simplify the task of item retrieval so that tests may be assembled to fit the desired coverage of the assessment. The item code usually indicates content, skill level, and assessment type. Content codes may be based on a content outline or on key words, or objectives. The skill code may be based on a formal taxonomy or it may be a simple 2 or 3 level code to differentiate between *memory* and *application* and/or *problem solving.* If more than one type of assessment is to be used, then a code to indicate the type of assessment should be provided. For example, the item code, *Ac2M* might indicate that the item covers *Topic A, Subtopic c, Skill Level 2,* and that it is a *Multiple-choice* item.

Other codes, called *referral codes,* are used to identify *cross-linked items,* that is, items for which the text of one item "gives away" the answer to another, and items that must be grouped together because they use a common stimulus, such as reading comprehension items based on a single passage of material. In addition, a "readability index" is important for some tests. The most frequently used codes are listed in Table 1.

The codes must be specified in advance so they may be entered into the files at the time the items are entered. Once a coding scheme is set up, there should be no modification in the coding scheme unless the entire bank is recoded. Each item must also have a unique identification number that may be a simple accession number or perhaps an accession number within the content classification scheme.

Other information, such as author, reviewers, date of revisions, and references, may be entered into the item bank. At some point the item history should be added. This includes the date of each use, the difficulty (p value), discrimination index (BIS or PBIS), distractor analysis (N and percentage choosing each option), and the readability index, if it is used. Items should also be assigned an *item number.*

Item Retrieval

Review and updating of items. Item review is an essential part of an assessment development program. For classroom tests, items may be reviewed using a screen display. However, for larger testing programs with a formal review, copies of each item being reviewed will need to be printed. As a minimum, the review copies should contain the following information: Codes for the Item, Key, Reference, and Item Text. In addition, the item history should be made available, either as a part of the review copy or in a separate document.

As a result of the review process, or after an item has been used, or when events cause an item to become out of date, it is sometimes necessary to revise the item. The item codes and number are used to retrieve the item, and the editing process is similar to that of the original entry. The date of the revision should be a part of the item information. Whether the old version of the item is retained in the bank or discarded is a matter of policy. However, if the old version is retained, it should be clearly marked that it is obsolete. The authors' recommendation is to delete the old item from the bank, along

Table 1
Frequently Used Codes for Items

Blueprint codes		Other codes
Content codes	Skill level	Referral codes
Topic/subtopic	Recognition	Cross-linked items
Key words	Application	Items with a
Objectives/skills	Problem solving	common
	OR	stimulus
Type of assessment	Literal knowledge	Code for graphics
Written test	Inferential	Items with special
Multiple choice	knowledge	conditions
Constructed	Analysis	Readability index
response	Evaluation	
Performance test	Problem Solving	
Product evaluation		
Observation		

with all item statistics for that item. This is especially important if computer-selection of items is used. The alternative is to transfer the text and all information about obsolete items to an inactive file.

Formatting and printing tests; preparing an item map. Some programs were designed to present items for computer administration, whereas others produce printed forms. Some programs will produce tests in either form, and some of the programs for computer administration permit *tailored testing;* that is, items are selected in accordance with the examinee's performance on previous items. For other computer-administered programs, items are selected in the same way that items are selected for printed forms.

Printed test forms may be assembled either by the computer or by the operator. Commercially prepared item banking programs differ as to the automatic features available for formatting. Some programs permit a variety of methods of item selection, whereas others allow only one or two possibilities. When the computer assembles the tests, items may be selected randomly from the entire bank, or they may be selected randomly within specified categories.

With operator-selection, some programs permit on-screen viewing and selection, with great variation in the amount and kind of information provided to the operator. Other programs require that the operator use hard copies of the item and item information and make the selection on the basis of an item number. Still others allow the operator to specify categories of items, to view the items and item data, and to select from the computer console.

Some of these options are obviously better for some situations than others. The point is that the program should have the capability that the test developer needs and wants. As a minimum, a program should print stored general directions and it should number items and pages automatically. Also, it is essential that the program does not insert a page break within an item, and it is highly desirable that the program provides for a two-column format.

The program should produce an item map, indicating the codes and key for each item. Also, if the test is reformatted, or if multiple forms of the test are produced, a new item map should be produced for each form.

Maintenance of Item History

Most of the analysis programs are separate from the item entry and test formatting program(s). Some vendors have a package that includes scoring and analysis programs, and some of these

provide for an interface with the item bank program. Information from the analyses should be incorporated as a part of each item file.

Usually, the item history includes the date of each administration and the following item data for each administration:

> *Multiple-choice items:* Difficulty (percentage answering correctly, *p*-value); Percentage selecting each option; Discrimination index (BIS or PBIS).

> *Open-ended (constructed response) items:* Distribution of scores on the item; Reliability of the scoring.

Some commercial item banking programs include these analyses. However, in many cases, the analyses are carried out independently, and the data must be interfaced with the item text files or hand entered. Some programs have the capability to interface with the scoring/analysis program to update the item history. Other programs do not have this capability, so the item history must be updated by manual entry.

For many large testing programs, Item Response Theory statistics are also desirable. It is very desirable that the item history program provide for accumulation of data over time and calculate cumulative statistics. And, for some programs, a measure of differences in the performance of different ethnic/gender groups is required. In addition, some of the commercial programs permit the user to add other analyses.

Scoring and Item Analysis

Computer administration. When tests are administered by computer, the scoring is usually, but not always, handled immediately. Some programs calculate a scaled score and produce an immediate report. Other programs accumulate examinees' performance and calculate examination statistics and the examinees' scores based on a given administration.

Printed test forms. When printed examinations are administered, the scoring and analysis is usually a separate process.

Some of the item banking programs have a companion program that provides statistics for the test and for individual items. A few programs collect cumulative data and keep item data current. These programs are almost always separate from the item banking programs, but a few have the capability of interfacing with them.

Although scoring, item analysis, and reporting are not really a part of the item banking process, some of the analysis programs also cover the preparation of several kinds of reports. Tests may be scored by hand or by the use of desktop scanners that generate a record to be processed by the computer. Data for hand-scored items must be hand entered.

Scanning and scoring programs and equipment range from a simple desktop scanner that prints raw scores on the answer sheet to a sophisticated machine that reads answer sheets in variable formats and creates a tape or disk record that can be processed to yield any desired type of analysis and to produce a wide variety of reports.

Records and Reports

Many vendors provide programs to prepare both group and individual reports, including *Gradebook (Record keeping)* programs for one or more classes. Such programs keep a record of various measures, multiply each measure by a specified weight, and compute totals and/or averages.

Questions to be Addressed in Deciding Whether to Purchase, Lease, or Develop Item Banking Software

Item Entry and Editing

Do you already have a set of items to be entered into the bank? Y N
  If Yes:
    Are the items already on tape or disk? Y N
    What form are they in? Computer disk_____
        Hard copy _____   Other _____

Do the items involve graphics? Y N
Do the items involve special symbols? Y N
How many items must the bank accommodate? ____
How long is the longest item stem? ____ words
What type(s) of items are used? M–C____
    Open-ended ____ T–F ____ Other ____
If No:
What kind of items will you use?   ·
How often will new items be entered into the bank?
How often will items be edited?
What variables will be used to code, sort, and select items?
    Content ____ Skill ____ Difficulty ____ Refer-
    rals ____
    Reading level ____ Other (List):
How much on-screen assistance will the item entry person-
nel need? ____

Test Assembly/Administration
How will the test be administered?
By computer? Y N
If Yes:
    How should items be selected? Randomly____
        Tailored ____
    How should scoring be done? No. Right____
        R–W ____ Other ____
By printed copies of the test? Y N
If Yes:
    Are multiple forms used for each administration? Y N
    How are items to be selected for each test form?
    How are items to be arranged on a form? On a page?

Scoring, Reporting, Analysis
When will the test be scored?
At the time of administration ____ Later ____
What kind of data should be reported?
    For individuals? Raw score ____ Scaled score____
        Pass-fail ____
    For items? p value ____ BIS/PBIS ____ logit____
        DIF ____ Other ____
    For the total test? Mean ____ *SD* ____ KR20 ____
    For part scores? Mean ____ *SD* ____ KR20 ____
In what form should the reports be prepared?

Sources of Information About Item Banking Programs

With the large numbers of item banking programs available, it is difficult for a potential user to secure the kind of information needed to make an informed selection. The references at the end of this module provide information about some of the programs. The bulletin prepared by the senior author (Ward, 1990) summarizes information from a large number of sources to assist potential users in the preliminary investigation of different programs by reviewing points to be considered in selecting item banking systems and providing as much informa-tion as possible, along with addresses and contact persons. This information may be used to identify possibilities, then the vendor may be contacted to secure brochures and/or a demon-stration of the most likely programs. The name of the contact person is supplied when it is available.

Self-Test

1. What are the advantages of using an item bank?
    a. For classroom assessment?
    b. For large-scale assessments?
2. What does an item banking program do?

3. Where do you get the software for item banking?
4. How do you set up and use an item bank?
5. Why are items coded?
6. Where can you get information about the purchase of item banks?

Answers to Self-Test

1a. The major advantage is that the teacher does not have to write new items for every examination. In addition, the item bank can be much more complete in covering the domain than will tests written on an *ad hoc* basis. Also, items can be edited and corrected periodically, so that items in the bank are usually of much better quality than those written hurriedly just for a single test. Of course, the teacher has to be careful that individual items are not used so frequently that students memorize the answers without having to think about them. This means that the item bank should have a large number of items for each course objective.

    Other advantages are that it is easy to put an examination together, and, if the program provides, to get the scoring and analyses done quickly.

1b. The advantages for a large-scale testing program are very much the same as those for the classroom teacher. However, the large programs often have needs with which classroom teachers are not concerned, such as, for example, providing alternate forms, seeing that subsequent forms of an examination are equivalent, and maintaining the quality of the examination. All of these are facilitated by the use of item banks.

2. The item banking program may do any or all of the following:
    a. Store items
    b. Facilitate retrieval of items for:
        Reviewing items
        Formatting test forms
        Editing items
        Updating items
    c. Maintain item history:
        Date of each administration
        Reliability of scores
        For M–C items:
            Difficulty levels
            Discrimination Index (BIS)
        For other items:
            Distribution of scores on the item
            Reliability of scoring
    d. Score and analyze the items
    e. Prepare records and reports.
3. Some users develop their own software, using a word processing program for item entry and a database program to format and print the test forms.

    However, there are many commercially prepared programs available, each with some distinct features. Also, some universities and state testing agencies have made their programs available to qualified users. Ward, 1990, presents the results of a survey of vendors of programs, along with comments and annotations about the programs.
4. The first step is to secure an item banking program— whether it is locally developed or purchased from a vendor. Next, the items must be entered into the bank, either by writing items, purchasing an item bank, or copying items that have already been developed. Finally, one must learn how to operate the program to perform the tasks that need to be done.

5. Item codes facilitate selection of items to fit a given test blueprint or area of content. The codes also help to get the desired balance between different skill levels. Finally, the codes insure that items have the graphics or other stimuli they need and that one item does not "give away" the answer to one or more other items.

6. Many testing agencies have made banks of items available for purchase. Unfortunately, some of these items may not fit the curriculum of the school system. Also, some universities have developed banks of items in various curriculum areas.

These items vary greatly as to quality and coverage, so anyone who purchases an item bank must expect to do a lot of analysis and review of the items before trying to use them in test development.

Ward, 1990, presents the results of a survey of vendors of programs, along with comments and annotations about the nature of the item banks. This bulletin may be used to locate vendors to check out the suitability of the item banks.

Annotated References

Arter, J. A., & Estes, G. D. (1984). *Item banking for local test development.* Portland, OR: Northwest Regional Educational Laboratory.

> Addresses many aspects of item banking. Numerous forms and checklists to guide users in the selection of item banks. Appendix includes summaries of information about computer software. Practitioner oriented.

Baker, F. B. (1989). Computer technology in test construction and processing. In R. L. Linn (Ed.), *Educational measurement* (3rd ed., pp. 409–428). New York: Macmillan.

> Systems approach to computer-assisted testing. Describes hardware, software, and testing systems now available. Covers use of computers for item writing, item banking, test construction, test scanning and scoring, and reporting results.

Brzezinski, E. J., & Hiscox, M. D. (Eds.). (1984). Special issue on microcomputers in educational measurement. *Educational Measurement: Issues and Practice, 3*(2).

> Eight papers on the use of computers in developing tests, administering tests, and assessing achievement. Opposing viewpoints presented on each topic.

Hiscox, M. D., & Brzezinski, E. K. (1980). *A guide to item banking in education.* Portland, OR: Northwest Regional Educational Laboratory. (ERIC Document Reproduction Service No. ED 196 945) (Updated in 1984).

> Results of item bank telephone survey to ascertain the use of item banks in statewide assessment programs of all 50 states. Discussion of the importance of adopting and optimizing an item classification system.

Hsu, T-C., & Nitko, A. J. (1983). Microcomputer testing software teachers can use. *Educational Measurement: Issues and Practice, 2*(4), 15–18, 23–30.

> Identification of classroom testing tasks that can be computerized, identification of available software, summary of 56 testing software packages.

Millman, J., & Westman, R. S. (1989). Computer-assisted writing of achievement test items: Toward a future technology. *Journal of Educational Measurement, 26*(2), 177–190.

> Expository discussion of methods for individualizing testing, including item banking and adaptive, computer-administered tests.

Roid, G. H. (1989). Item writing and item banking by microcomputer: An update. *Educational Measurement: Issues and Practice, 8*(3), 17–20, 38.

> Reviews available item-writing, item-banking, and test-generation software. Critical review of three packages. Offers caveats about the use of all software.

Ward, A. W. (1990). *Item banking and item banks.* Daytona Beach, FL: The Techné Group.

> A discussion of item banking, with suggestions for selecting and using item-banking programs. Annotated list of more than 40 item-banking programs from 22 vendors and 77 item banks.

Call for Comments on the AERA/APA/NCME *Standards for Educational and Psychological Testing*

The *Standards for Educational and Psychological Testing* have become the definitive guidelines for the development and use of educational and psychological tests. The American Educational Research Association (AERA), the American Psychological Association (APA), and the National Council on Measurement in Education (NCME) have collaborated for almost 30 years in producing these standards, which are widely accepted by professionals from various disciplines. Separate standards were first issued by APA in 1954, and by AERA and NCME in 1955. The three associations collaborated on subsequent revisions, released in 1966, 1974, and 1985.

Recognizing many recent advances in testing and evaluation, AERA, APA, and NCME recently established a Joint Committee to undertake a revision of the *Standards.* The presidents of the three sponsoring organizations have appointed Eva Baker and Charles D. Spielberger as co-chairs of the Joint Committee that will include 14 additional committee members appointed via consensus of the presidents of the three sponsoring organizations. The Joint Committee welcomes your input in regard to the overall scope and content of the current *Standards,* as well as specific suggestions for modifications or additions.

To facilitate the Joint Committee's review of recommendations, comments must (a) refer to specific existing standards from the 1985 edition [except in those cases where new standards or sections have been proposed]; (b) propose specific wording for new standards or modifications to existing standards; and (c) include a rationale for each proposed modification or addition. Please forward your comments to: Testing Standards Revision Project, Science Directorate, American Psychological Association, 750 First Street, NE, Washington, DC 20002-4242, Internet: SCI.APA@EMAIL.APA.ORG, 202-336-6000, FAX 202-336-5953. Comments must be received by **July 1, 1994,** for consideration by the Joint Committee. Copies of the 1985 *Standards* can be purchased from the APA Order Department at 202-336-5510.