

# DEVELOPING AND MAINTAINING AN ITEM BANK

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## Introduction

An item bank is a collection of test items that can be readily accessed for use in preparing examinations. It is normally computerized for ease of item storage and to facilitate the generation of new tests. Each item in the item bank is coded according to competency area and instructional objective, as well as empirically derived data such as measures of item difficulty and discrimination, the date each item was created or last used on an examination, and a quality rating. Anyone whose responsibilities involve assessment on a regular basis will find item-banking technology very useful.

## Planning and implementing an item bank

The most crucial step in developing an item bank is planning. Everyone involved in the process must thoroughly understand the purpose, scope, and benefits of creating an item bank. Some formal training is usually required to initiate the process. An association can provide this training using in-house personnel or consultants. Successful item banking also requires the availability of senior level personnel to answer technical questions that will inevitably arise and computing personnel capable of establishing and maintaining the data base system. In addition, personnel must be available who can critically evaluate test items for technical quality, instructional match, unidimensionality, and potential bias.

Once an item bank has been established, two activities are involved in running the item bank – making deposits (of items) and withdrawing items to develop a test. Deposits can come from an existing item bank (hence a “large deposit”), or be made on an incremental basis as items are written and validated (“small deposits”). Whatever method is utilized, potential entries must be evaluated for technical quality, curriculum match, and potential bias. It is important to remember at all times that the usefulness of the item bank will be directly related to the quality of the items in the item bank.

## Advantages/disadvantages of item banking

Item banks offer a convenient way of depositing and storing items. The process affords a substantial savings of time and energy over conventional test development methodology. A well-calibrated item bank also offers a system for storing important item information. When utilizing a well-developed item bank, items meeting specified criteria can be conveniently retrieved and new tests with predictable characteristics can be readily constructed.

The development of an item bank requires considerable effort. Care must be taken to assure that only quality items enter the item bank. Items must be carefully written, field-tested, and appropriate statistical data collected and stored for each item. The item information should be updated periodically as more information is acquired about each item.

## Conclusion

Establishing, maintaining, and utilizing an item bank requires appropriate computing software and the cooperative efforts and expertise of instructional, testing, and computing personnel. In doing so, professional associations can enhance the process of building meaningful certification tests. We can help you create and maintain an item bank using state-of-art software.