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ABSTRACT

The history of the Project for Area Concentration Achievement Testing (PACAT), a university based national curriculum assessment project, is described in this report. The project performs surveys of academic curricula by content area, collects examination items from the faculty of participating departments, and constructs, distributes, and scores the Area Concentration Achievement Test (ACAT). PACAT serves academic departments by providing the results of the national curriculum surveys which permit them to compare their requirements to those of other institutions. It also furnishes exit examinations intended to provide enhanced feedback about student performance and curriculum. To date more than 1,300 tests have been administered at public and private postsecondary institutions in several states. PACAT is responding to a need within the academic community for new assessment models intended for outcomes assessment where both students and curricula are being evaluated. Preliminary data collected by the project indicate strong support from the academic community for the curriculum surveys and a three-fold increase in 2 years in the number of ACATs administered. (SM)

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## AASCU/ERIC Model Programs Inventory Project

The AASCU/ERIC Model Programs Inventory is a two-year project seeking to establish and test a model system for collecting and disseminating information on model programs at AASCU-member institutions--375 of the public four-year colleges and universities in the United States.

The four objectives of the project are:

- o To increase the information on model programs available to all institutions through the ERIC system
- o To encourage the use of the ERIC system by AASCU institutions
- o To improve AASCU's ability to know about, and share information on, activities at member institutions, and
- o To test a model for collaboration with ERIC that other national organizations might adopt.

The AASCU/ERIC Model Programs Inventory Project is funded with a grant from the Fund for the Improvement of Postsecondary Education to the American Association of State Colleges and Universities, in collaboration with the ERIC Clearinghouse on Higher Education at The George Washington University.

## Abstract

The Project for Area Concentration Achievement Testing (PACAT), funded by the U.S. Department of Education Fund for the Improvement of Post Secondary Education, is a national project which performs surveys of academic curricula by content area, collects examination items from the faculty of participating departments, and constructs, distributes, and scores the Area Concentration Achievement Test (ACAT). PACAT is responding to a need within the academic community for new assessment models intended for outcomes assessment where both students and curricula are being evaluated. In order that they might better reflect academic diversity, versions of the ACAT are constructed which conform as closely as possible to the different content area emphases identified by the surveys. Preliminary data collected by the project indicate strong support from the academic community for the curriculum surveys and a three-fold increase in 2 years in the number of ACATs administered.

### Introduction

This document describes the history and philosophy of the Project for Area Concentration Achievement Testing (PACAT), a university based national curriculum assessment project. Through a series of surveys, PACAT determines patterns of curricular offerings and requirements for a range of academic areas. Based upon this information, the project solicits test items in a variety of formats from the faculty of participating institutions, using them to construct exit examinations which conform to the curricular emphases identified through the surveys. These Area Concentration Achievement Tests (ACAT) are provided by PACAT at nominal cost which includes scoring, and assistance with interpretation. PACAT serves academic departments in two ways. The first is by providing the results of the national curriculum surveys which permit departments to compare their requirements to those of other institutions. The second is to furnish exit examinations intended to provide enhanced feedback both about student performance and curriculum.

### Background

In 1979, the American Association of State Colleges and Universities (AASCU), supported by the Fund for the Improvement of Post Secondary Education (FIPSE), began the Academic Program Evaluation Project (APEP). In the same year, the Tennessee Higher Education Commission introduced a performance funding formula to encourage the evaluation and improvement of academic programs. A 1984 report from the National Institute of Education

supported the use of assessment to determine whether or not educational goals were being met. In 1986, the AASCU Conference on Legislative Action and Assessment summarized APEP and introduced additional models, including the ACAT, developed at non-APEP institutions. According to the Bulletin of the American Association for Higher Education (March 1987), 67% of the states have or are considering assessment mandates or initiatives. Because the outcomes assessment movement combines the measurement of student learning with the evaluation of institutional priorities and curricula, it has created a need for specialized measurement models and instruments.

In attempting to meet assessment mandates originating from a variety of sources, many institutions have found that the available resources, including national examinations, do not meet their needs. Intended for special groups, these tests are inappropriate for a more general population and typically provide only summary scores which are poorly suited to curriculum evaluation. Because an instrument intended to evaluate both students and curricula must reflect the goals of the individual department, standardized tests with fixed content have proven to be unsatisfactory to many faculty. Departments are unable to make meaningful comparisons of their performance to that of departments with similar orientations, funding, and student populations. Departments are also unable to determine the level at which material is being learned. For example, students may perform well with factual information but poorly with analysis or abstract problem solving. Finally, institutions with large

numbers of transfer students are unable to determine whether scores on a test reflect their courses or courses taken at another institution. APEP illustrated the need for assessment models adapted to individual institutional missions and goals. Inflexible standardized tests introduce the very real risk that, rather than the curriculum determining the content of the instrument, the instrument will dictate the content of the curriculum.

### **Description of the Project**

In 1983, Dr. Anthony Golden of Austin Peay State University developed a model for major field assessment for a consortium of Tennessee Psychology departments. By 1987, the model had been extended to serve additional consortia in Social Work and Political Science. Since its inception, the Area Concentration Achievement Test (ACAT) has gained widespread acceptance as a result of its ability to meet differing departmental needs, provide curriculum specific feedback and assistance with interpretation, and its cost-effectiveness. In August of 1988, the Project for Area Concentration Achievement Testing (PACAT) was formed with a grant, renewable for up to 3 years, from the U.S. Department of Education Fund for the Improvement of Post Secondary Education (FIPSE). To date, over 1,300 tests have been administered at public and private post-secondary institutions in Tennessee, Kentucky, North Dakota, Missouri, North Carolina, and Georgia.

Directed by Dr. Golden, PACAT is surveying curricula and developing examinations in a number of academic disciplines. The project first conducts a two phase national survey of undergraduate curricula in a variety of disciplines. The first phase ascertains the content areas required by the individual departments for a major. The results of this survey are used to isolate common patterns of curricular offerings and requirements, identified by content area rather than course. The second phase survey, sent to those departments which return the first, is more specific and is used to determine the points of content emphasis within curricular structures. The results of these surveys are distributed to those departments which request them.

On the assumption that the faculty who teach a discipline are those best suited to determine what a student should learn from the major, the results of the surveys are used to solicit examination items from faculty at participating institutions. Participants are asked to submit from 5 to 15 objective items which reflect material that they consider to be of primary importance to their area of expertise. Moreover, the items should reflect the cognitive level at which the student is expected to manipulate the material. Supplementary materials are available to aid in the construction of these items. The item pool developed in this manner, with contributions from a large number of faculty at different institutions, is assumed to be representative of the educational goals of the participating departments. PACAT also attempts to accommodate essay or "open ended" items when necessary to a particular discipline and will



assist in the development of scoring guidelines for the items. The use of these items, however, requires that faculty continue their participation in the role of readers when the items are administered.

Items collected in this manner are used to construct examinations which closely fit the content area profiles constructed using the survey data. These Area Concentration Achievement Tests (ACAT) are then provided to the participating institutions for a nominal fee which includes test booklets, answer sheets, scoring, score reports, and assistance with interpretation. A variety of score reporting formats are available to meet various institutional needs. The examinations are revised periodically using items which are pretested in earlier versions of the test. Multiple parallel forms are used to increase the overall amount of material sampled within a department and also reduce the opportunity for cheating. Summary demographic information, collected at the time of administration, is provided with the score reports.

At the present time, the item pool for the ACAT in Psychology consists of over 2,300 items contributed by participating departments. The pools for Political Science and Social Work currently contain approximately 850 items each. By 1990, ACATs also are planned for Criminal Justice, Geology, History, Mass Communication, and Public Administration.

## Preliminary Results

### Surveys

Since October of 1988, 3,200 PACAT surveys have been mailed to departments in eight different academic disciplines located in 24 states and the District of Columbia. In excess of a 50% rate of return was experienced for the first 900 surveys sent. A preliminary analysis of the data indicates that, for each discipline, a core of content areas can be isolated which applies to a majority of the respondents. Further analyses are being conducted to isolate content area cores for more groups of departments. Clusters of content areas also are being identified which comprise the options within each identified major.

#### Areas Included in 1988-89 Surveys:

Criminal Justice, Geology, History, Mass  
Communication, Political Science, Psychology,  
Public Administration, and Social Work

#### States Included in 1988-89 Surveys:

Alabama, Arizona, Arkansas, Florida, Georgia,  
Illinois, Indiana, Iowa, Kansas, Kentucky,  
Louisiana, Maryland, Michigan, Mississippi,  
Missouri, North Carolina, Ohio, Oklahoma, South  
Carolina, Tennessee, Texas, Virginia, West  
Virginia, and Wisconsin

### Examinations

For the existing versions of the ACAT, several studies are in progress to determine the degree to which the test is sensitive to the educational progress of the examinee. For the Psychology ACAT, preliminary data indicate that students who are completing their first introductory level course in Psychology (N=380) produce overall scores between the 7th and 15th %'iles

while those graduating with a major in Psychology (N=412) score at the 50th %'ile and those who have entered a graduate program in Psychology (N=10) score at the 70th %'ile. These data suggest that the ACAT in Psychology is sensitive to a range of proficiency levels. Similar investigations are planned for ACATs in other disciplines. Factor analyses conducted on the ACAT subtest scores indicate that factors appear for individual departmental data which correspond roughly to the tracks through their major. However, when the data are combined from all participating departments they collapse into a single factor suggesting that a variety of possible tracks are all being represented within the data.

#### Conclusions

Because PACAT has achieved national status only recently, conclusions are difficult to reach on the basis of the available data. An informal indication of the worth of the survey portion of the project can be seen in the high rate of return obtained to date and in the observation that positive comments returned with the surveys have outnumbered negative comments by approximately 50 to 1. The project has received numerous inquiries concerning both the surveys and the examinations, with approximately 60% of the respondents requesting a copy of the survey results. The number of ACATs administered annually has increased by 300% in the past 2 years, with participating institutions being added in 4 states.