

1997 Annual Report

Office of Planning and Institutional Improvement

MISSION

To develop, integrate, and continuously improve institutional planning, implementation strategies, evaluation, and improvement activities at IUPUI

GOALS

To work with campus and school administrators, faculty, students, and community representatives to:

1. Clarify, prioritize, and communicate broadly the institution's vision, mission and goals.
2. Connect to each goal implementation strategies to be conducted by units across the campus.
3. Link appropriate evaluative mechanisms to implementation strategies.
4. Collect and disseminate information about the quality of processes and outcomes that is needed for campus decision-making.
5. Derive key indicators of institutional effectiveness and provide periodic reports to internal and external constituents.

Derive, prioritize, recommend, and assist in implementing improvements based on evaluative findings.

COMPONENTS OF THE OFFICE

This Office includes the Vice Chancellor's immediate staff, the Office of Information Management and Institutional Research (IMIR), the Testing Center (TC), the IUPUI Economic Model Office (EMOD) and the Office of General Education. Personnel in all five units contribute to the achievement of the overall mission and goals of the Office.

[Information Management and Institutional Research \(IMIR\)](#)

(See Appendix K for 1997 Annual Report)

The mission of the Office of Information Management and Institutional Research (IMIR) is to provide and coordinate information support for planning, administering, and evaluating academic and administrative programs in ways that will continuously improve

IUPUI. IMIR provides fundamental support for IUPUI campus, school, and program planning and evaluation activities by:

- developing for academic deans and other campus administrators a series of management reports and analyses that integrate information from a variety of institutional and external data sources;
- providing academic and administrative managers with information needed to address *ad hoc* problems and issues;
- creating organized, documented, and accessible data resources based on institutional, survey, and external databases;
- conducting survey research to assess the expectations, satisfaction, and outcomes of students, faculty, staff, alumni, employers, and other stakeholders;
- providing direct support to specific campus, school, and program evaluation and planning activities;
- developing computer network-based systems for collecting, accessing, and analyzing information in a more timely and cost effective manner;
- helping staff from other academic and administrative units to conduct institutional research, reporting, and analysis.

Testing Center (TC)

(See Appendix L for 1997 Annual Report)

The mission of the Testing Center (TC) is to provide assessment and evaluation support through the collection and processing of test data, creation of assessment instruments, and the lending of measurement expertise to constituencies throughout the campus community. Its vision is to provide integrated assessment and evaluation information in ways that will continuously improve IUPUI. The TC supports this role through the implementation of programs and services in the following areas: placement testing, credit-by-examination, state and national testing, computerized adaptive testing, test scoring and analysis, course instructor surveys, contracted research and grants, and publications.

IUPUI Economic Model Office (EMOD)

(See Appendix M for 1997 Annual Report)

The mission of the Economic Model Office (EMOD) is to assist deans and directors, faculty, and staff in reaching their unit goals through the application of financial planning and cost/revenue assessment tools. The economic model is a desktop computer-based

decision support tool that uses activity-based costing techniques to analyze the costs of a unit's activities such as degree programs, research projects, and service activities.

EMOD provides the following services to its clients:

- defining unit outcomes (programs, activities, services),
- identifying costs associated with unit outcomes,
- developing a cost model using activity-based costing methods,
- developing a revenue model focusing on financial analysis,
- developing a financial planning system linking cost and revenue factors,
- training staff and personnel in using the model, and
- providing group presentations on the model's concepts.

The Economic Model helps administrators:

- identify customers and the products, services, or outcomes provided for each;
- identify costs associated with these outcomes;
- determine the effects of funding increases or decreases by examining the potential effect of these changes on outcomes;
- identify tasks and activities that are duplicative or unnecessary; and
- improve the efficiency and effectiveness of their activities.
- **Office of General Education (OGE)**
- *See Appendix N for 1997 Annual Report)*

The purpose of the Office of General Education is to assist faculty of the schools at IUPUI with the development of a coherent general education program. The office will:

- facilitate communication among the schools about curriculum development and assessment activities in general education;
- coordinate the development of a coherent articulation of the Principles of Undergraduate Learning for the campus;
- serve as a clearinghouse for information about faculty development, curriculum development, regional and national conferences, publications, and other resources regarding general education; and
- be pro-active in working for the continued integration of the educational experience of all IUPUI undergraduates.

1997 Activities

The Office of Planning and Institutional Improvement (PAII) made progress toward all six of its principal goals during 1997. For the purposes of this report, the six goals will be grouped under the three major activity headings: Planning, Assessment/Evaluation, and Improvement, and a narrative will be developed to show progress on the implementation strategies set for the office at the beginning of 1997. (See the summary document, "*1997 Goals, Implementation Strategies, and Performance Indicators for*

PAII" in Appendix A).

PLANNING

Goal 1. Clarify, prioritize, and communicate broadly the institution's vision, mission and goals.

Strategy 1.1 Revise IUPUI's planning document following the 1997 planning/budgeting reviews for academic and support units.

During Fall 1996 members of the Chancellor's staff worked together to restructure the annual budget hearings to include more emphasis on planning. Vice chancellors, deans, and directors provided their annual reports in a new format that included goals for the future--linked to IUPUI aspirations and goals and thus to Indiana University's Strategic Initiatives--implementation strategies, resources to be utilized, measures of goal attainment, and evidence of progress toward, or achievement of, the goals. Following the newly-restructured planning/budgeting reviews in February and March 1997, PAII staff recorded the information from deans' and vice chancellors' narrative reports in spreadsheet format (see Appendix B for an example) and returned the spreadsheets to the responsible administrators for their review and approval. In December 1997 the spreadsheets were returned to the administrators on diskettes so that they could easily update them in preparation for the 1998 planning/budgeting reviews.

Having unit goals and achievements in the electronic format, and linked to IUPUI aspirations and goals, greatly facilitated the production by PAII staff of the **1996 IUPUI Performance Report** (see [Appendix C](#)). The planning/budgeting reviews and consideration of campus goals at a subsequent retreat of the Chancellor's staff resulted in a revision of the IUPUI planning document entitled, [Mission, Vision, Values, Aspirations, Goals, and Strategic Initiatives- 5-22-97 Draft](#) (Appendix D).

Strategy 1.2 Continue to develop environmental scanning as a component of the campus planning process.

Borden and Manlove developed a review of current literature and methods as a context-setting piece for environmental scanning activities such as the following that were carried out by IMIR staff during 1997:

- Developed the architecture for a website that will bring together resources for use in environmental scanning.
- Participated in the Urban Public University Student Affairs Data Exchange. This yielded comparative retention data that were reported to the campus in a **Research Brief** and used to prepare testimony for Chancellor Bepko on the contributions of urban universities to their communities.

- Shared information with an Urban 13 group and a consortium of these institutions supported by a PEW grant.
- Participated in a benchmarking study sponsored by the American Productivity and Quality Council (APQC) in Houston. This study, entitled "Measuring Institutional Performance Outcomes," enabled IUPUI to compare its activities in this area with those of other institutions considered to be doing this work well. In the course of this study, IUPUI was selected one of seven organizations world-wide setting the standard in measuring institutional performance outcomes (see Appendix E for press reports).
- Participated for the third year in the University of Delaware Institutional Productivity Study.
- Responded to 27 requests from other colleges and universities for comparative data. Often these responses yield comparative data summaries compiled by others that can be used at IUPUI.

Strategy 1.3 Communicate broadly the campus vision, mission, aspirations and goals.

The new planning/budgeting review format drew attention of administrators in every unit to the need to align unit goals and implementation strategies with those of the campus. Continuing and newly-formed planning/budgeting committees in the academic units were invited to a workshop in late November at which IUPUI's planning goals were shared, along with the message that campus and unit plans should be linked and resource allocations should be linked to unit plans.

The revised IUPUI planning document (see Appendix D) was shared with the Faculty Council Planning Committee early in the Fall. Members were asked to study the document during 1997-98 and provide reactions and recommendations for further revision.

The **1996 IUPUI Performance Report** in [Appendix C](#) was developed to show progress toward the campus aspirations, goals, and objectives. This document was distributed to selected faculty, staff, and students on campus and to the IUPUI Board of Advisors and others in the Indianapolis community who receive the [Chancellor's Newsletter](#).

The Office of General Education continued development of its website and initiated a printed *General Education Newsletter* that was distributed to all faculty.

PAII staff published a fourth book in five years, contributed a chapter to a book that will be published in Brazil in Portuguese, and edited a bi-monthly periodical on assessment that has over 1000 subscribers. Other dissemination efforts included an international assessment conference in July that attracted 118 participants from 25 countries and a national conference in November attended by 252 people from 29 states, Puerto Rico and Canada. Borden developed and hosted on campus an *Association for*

Institutional Research Information Technology Institute that received the highest participant ratings of any AIR institute ever conducted.

In 1997 Banta gave invited addresses at two regional conferences, five national conferences, and two international conferences. In addition 15 refereed papers were given by PAII staff at regional and national meetings. The APQC meeting in Houston in November gave PAII staff an opportunity to explain our planning, assessment, and evaluation activities in depth to a national audience. Banta accepted invitations from campuses in nine states to serve as an assessment consultant.

Strategy 1.4 Continue to assist others in their planning activities.

Appendix F provides a summary of all services, including planning assistance, provided to other IUPUI units by PAII staff during 1997. The activities of each of the five PAII offices are listed separately.

The November workshop for school planning/budgeting committee members (see 1.3 above) offered planning assistance for the broadest cross-section of the campus. In addition, PAII staff provided leadership for development of a comprehensive enrollment planning strategy, coordinated the annual planning/budgeting reviews, co-chaired the Council on Undergraduate Learning, and periodically brought together groups of deans to plan strategy related to IUPUI in the community, multi-disciplinary collaboration on campus, and student scholarship policy. Banta also served on the Strategic Planning Committee for the Children's Museum.

EMOD staff have assisted in planning activities for the School of Education, the Office of Admissions, the Vice Chancellor for Administration and Finance, the Testing Center, PAII, the office of the Register, and the School of Nursing. IMIR staff have provided several workshops for deans and department chairs on uses of program cost and student satisfaction and performance data in planning and evaluation.

Goal 2. Connect to each goal implementation strategies to be conducted by units across the campus.

Strategy 2.1 Increase congruence between campus implementation strategies and those of academic and support units.

Following the 1997 planning/budgeting reviews, a matrix was created to identify implementation strategies related to each of IUPUI's five aspirations that were being used by two or more schools. The matrix (see Appendix G) was distributed to the deans for their information and use.

Materials supplied by deans and directors also were used to develop the revised series of implementation strategies that appears in the 1997 version of IUPUI's planning document (see Appendix D). The eventual goal is to effect the most appropriate and useful alignment possible between unit-specific and campus-wide goals and implementation strategies.

In August Banta assumed from Gene Tempel the chairmanship of the Enrollment Management Group (EMG), which brings faculty and staff together to discuss enrollment planning and implementation at IUPUI. Borden serves on the EMG leadership team and Shermis is an EMG member. By year's end the EMG had constructed the outline of an enrollment plan for the campus and presented this for discussion at December meetings of the Chancellor's staff and deans.

Strategy 2.2 Develop a short list of campus priorities for strategic investment.

At a half-day retreat of the Chancellor's staff in April each vice chancellor identified planning priorities for 1997 within each of IUPUI's five aspirations. This list (see Appendix H) was subsequently shared with the deans and Faculty Council leaders, discussed in Chancellor's staff meetings throughout the year, and used as the organizational framework for progress reports at a second staff retreat in November. In addition, an attempt was made to align campus expenditures with this set of priorities. More work is needed to improve this process.

ASSESSMENT/EVALUATION

<p><i>Goal 3. Link appropriate evaluative mechanisms to implementation strategies.</i></p>

Strategy 3.1 Continue to develop the comprehensive academic program review process as a means of assessing student learning in the context of faculty, curricular, and departmental development.

During 1997 program reviews were conducted for the departments of Communication Studies, English, Geology, Psychology, and the Herron School of Art. Follow-up meetings with deans and department chairs were held in late 1997 for Communication Studies, English, and Psychology. IMIR staff continued to improve the standard and ad hoc reports provided to departments to assist faculty in developing their self-studies. Special emphasis in the reviews is placed on data related to student and alumni outcomes. IMIR staff met several times with Herron faculty and administration to assist them in defining the scope and focus of their program review and in collecting and interpreting appropriate data for the self-study.

Strategy 3.2 Assist an increasing number of campus units with their own assessment and evaluation plans, particularly in the area of general education.

The table in Appendix F gives a comprehensive overview of the services, including assessment and evaluation consultation, that PAII staff have provided to academic and administrative units during 1997. Some highlights are described below.

Banta co-chairs the Council on Undergraduate Learning (CUL) and supports Associate Dean Raima Larter as she leads the campus toward a more integrated general education curriculum with associated assessment of student achievements. During 1997 Larter collected information from all schools on strategies for implementing general education principles (Principles of Undergraduate Learning or PULs) on writing and critical thinking and posted these to a new website. Larter's General Education Advisory Council proposed to condense the nine PULs to five and provided brief definitions to accompany these (see Appendix I). All schools were asked to post to the website by May 1998 their strategies for implementing and assessing all of the Principles of Undergraduate Learning. Strategic Directions funds were awarded to support faculty proposals for integrating the Principles in courses and curricula. The grant competition had been concluded by year's end and grant recipients were to be announced in January 1998.

Banta and Borden have continued to serve as national and campus resource persons for use of the AAHE-sponsored Flashlight item bank for evaluating the effectiveness of instructional technology. Questionnaires derived from the item bank have been used by IUPUI faculty to assess the impact of technology on instruction in Chemistry, Early Childhood Education, English, and Nursing.

Banta conducted the external evaluation for an innovative freshman course in engineering that was supported by FIPSE funds. She worked with the advisory board for the SDC-funded Health Performance Assessment Center based in the School of Medicine as the Center planned its initial grant competition and subsequent workshops. She met with external reviewers assessing the NSF-supported course development project in mathematics. She chaired the Academic Support committee of President Brand's system-wide Task force on Efficiency and Cost Reduction. And she chaired a group that is planning a broad-based study of campus climate at IUPUI. Banta and K. Black served on three evaluation committees of the United Way's Community Services Council.

Borden carried out a post hoc evaluation of academic support programs utilized by the Undergraduate Education Center and published a **Research Brief** summarizing the findings that has been widely distributed on campus and has even attracted some national attention. A study of the impact of large sections in undergraduate courses has also proven to be of interest to numbers of faculty.

Strategy 3.3 Provide faculty development workshops/consultation on assessment and evaluation plans.

PAII staff worked on assessment particularly with faculty in the Schools of Liberal Arts and Science during 1997. General education assessment was the topic for an extended meeting with Sociology faculty, and interest in assessment in the major prompted the request for a presentation in the Department of History. Presentations in the School of Science were made to the dean and department chairs during their retreat and later to the standing Committee on Teaching.

PAII staff are frequently invited to share their expertise in assessment and evaluation with state, regional, and national audiences. In 1997 Banta was asked to serve on the state-wide Task Force on Remediation convened by the Indiana Commission on Higher Education. Borden was elected President of the Indiana Association for Institutional Research at the annual meeting of the Association, and Banta and Black made invited and refereed paper presentations. Borden served as a faculty member for the IU Summer Institute and designed and hosted the Association for Institutional Research Institute on Technology. Borden, Shermis, Black, J. Lambert, H. Mzumara, and Banta again offered sessions at the national assessment conference held in Indianapolis annually since 1992; IUPUI faculty, staff, and students can and do take advantage of having this conference on campus. In July 1997 the international assessment conference Banta has co-sponsored since 1989 was also held in Indianapolis. Banta conducted workshops for the National Association of College Student Personnel Administrators in Maine in September and for a similar gathering at James Madison University in Virginia in May.

Strategy 3.4 Continue to develop IUPUI's survey programs. Implement new surveys for staff and entering students.

The 1997 Staff Survey was administered and attracted a gratifying response rate of 58%. Results were summarized in a **Research Brief** that was circulated in draft form for review in December. This publication will be disseminated campus-wide in early 1998.

IMIR and Testing Center staff implemented a computer-based survey for entering students that is administered at the time students take placement tests. Preliminary findings from this survey were shared in a presentation to the Program Review and Assessment Committee in December.

IMIR staff analyzed the results of an academic advising survey administered in 1996 and provided a written summary for the campus. This office also continued its annual surveys of continuing students and recent alumni and made the reports available in the aggregate for the campus and in disaggregated form for schools and for departments developing self-studies for program review.

Strategy 3.5 Continue to develop IUPUI's placement testing and course evaluation programs.

Computerized reading and writing placement tests are now in place (writing samples are composed at the computer, then transmitted electronically to graders in the

Department of English). A new computer-adaptive math placement test has produced an improvement in the validity of that test. Improved directions for the reading test and permitting students to type--and thus transmit to graders electronically--their English essay were among the factors contributing to improved validities for the placement tests in reading and writing, respectively.

A new NCS image scanner has enhanced the Testing Center's capability to summarize students' written responses on course evaluations. Reprogramming the Student Evaluation of Teaching has made it easier, faster, and more flexible, and has made longitudinal tracking possible.

Support from an SDC grant has enabled Shermis to extend pilot work on information kiosk technology done at Pike High School to five other area high schools. High school sophomores and juniors can now take IUPUI placement tests for practice in their own schools. Seniors can enroll at IUPUI as well as take their required placement tests.

Strategy 3.6 Continue to deploy activity-based costing as a planning and evaluation tool in academic and support units.

According to schedule, the IUPUI Economic Model Office (EMOD) became self-supporting in 1997. Sufficient revenues to offset expenses, including Johnson's salary, were generated from fees charged to units requesting assistance with activity-based costing and program planning. New work was initiated with IUPUI's School of Continuing Studies and with the Offices of Admissions and Financial Aids. Extensive work, including goal-setting and program planning consultation, was completed in the units of the Vice Chancellor for Administration and Finance. See the EMOD annual report for a complete listing of clients.

Strategy 3.7 Complete the first campus-wide program cost study and integrate in campus planning.

IMIR staff, working with Patrick Rooney, completed a trend-setting program cost study that will be difficult to duplicate on any other campus in the country until data such as those from IUPUI's faculty productivity studies and responsibility-centered budgeting process become available elsewhere. Detailed presentations on the program cost study were provided for the Chancellor's staff and the deans, then individualized presentations were made at three schools. At year's end deans and vice chancellors were given a Planning/Budgeting Data Book compiled jointly by IMIR and Budget Office staff that contains program cost and faculty productivity data as well as information about enrollment trends and student and alumni satisfaction.

Goal 4. Collect and disseminate information about the quality of processes and outcomes that is needed for campus decision-making

Strategy 4.1 Ensure that program review findings and recommendations are collected and disseminated.

Changes were made in the evaluative questionnaire given to all reviewers of IUPUI programs and a new check-list was developed to enable the reviewers to assess quickly and easily the components of the self-study prepared by the department. We hope to use the information gleaned from this new instrument to provide guidance for departments developing self-studies for future reviews. While overall ratings of the review process continue to be quite positive, a few changes have been implemented during 1997 on the basis of reviewers' ratings and recommendations. A couple of sessions with campus support personnel have been eliminated and an interview with the Dean of University College was instituted for units offering undergraduate programs. Appendix J contains the new and revised evaluation forms and a summary of reviewers' recommendations about the academic units they reviewed.

Follow-up meetings with deans and department chairs involved in reviews revealed that program reviews do make a difference. Department chairs are nearly unanimous in concluding that conducting the self-study has had a significant positive impact within the department. Deans report that they feel much better informed as they set priorities for faculty hiring. A number of departments are pursuing new planning initiatives, new academic program proposals, and new areas of scholarship in accordance with reviewers' recommendations. Several units are reaching out to other units to increase their cross-disciplinary collaboration. And most departments are approaching outcomes assessment with more motivation than was apparent prior to the review.

Strategy 4.2 Continue to collect and disseminate data about the quality of academic programs and student services; monitor client satisfaction with data provided.

IMIR staff produced and disseminated **Research Briefs** on student retention, effectiveness of academic support programs, student performance in large sections, academic advising, and the Fall enrollment analysis. Delivering the Planning/Budgeting Data Book, including program cost study data, to the deans in December was a significant achievement. In addition, IMIR staff responded to 139 ad hoc requests for data on the quality of academic programs and student services, including 2 from staff at the Sagamore, and 12 from other students. The ability to estimate the time (and thus the cost) of responding to each request has improved significantly since 1994 and continues for a second year to be almost perfectly accurate.

Presentations on data from the continuing student and alumni surveys were made at meetings of the Chancellor's staff, Faculty Council, Staff Council, Enrollment Management Group, Program Review and Assessment Committee and at several school faculty meetings.

A series of questions designed to evaluate user satisfaction was sent late in 1996 to seven deans and directors who had contracted for assistance from the Economic Model

Office. The questionnaire included some forced-choice responses as well as open-ended items and thus provided both formative and summative information. In general, clients were pleased with the services they received, but expressed needs for staff training in spreadsheet application use, more support in using the FIS, easier interface with the FIS, and increased ability to control and project general fund cost allocations.

Strategy 4.3 Continue to collect and disseminate data related to the quality of IUPUI's placement tests.

Placement test validities continue to improve and student satisfaction with testing and the services they receive in the Microcomputing Testing Facility remains high. Approximately 90 percent of the students find the instructions given with the tests quite understandable and 97 percent say they feel at ease taking computerized tests. Only 2 percent of those taking the tests report having no prior experience with a computer.

Strategy 4.4 Continue to collect and disseminate management information.

In 1997 IMIR staff recorded responses to a record 139 ad hoc requests for management information from 42 campus units, including 24 academic units, 11 academic support units, 5 administrative support units, and 2 student support units.

IMIR staff continued work on the capacity model to document faculty teaching productivity and on an automated Instructional Effort Report. Borden and K. Burton support university-wide management information development through participation and leadership roles on such committees as the Administrative Computing Advisory Committee, the Committee of Data Stewards, and the new Human Resource System development groups.

IMIR staff continue to enhance the website that will serve in the future as the primary location for office reports, analysis, and information resources.

Goal 5. Derive key indicators of institutional effectiveness and provide periodic reports to internal and external constituents.

Strategy 5.1 Refine significantly the current extensive list of key indicators of institutional effectiveness.

The 80+ pages of indicators related to IU's 30 Strategic Directions produced from information in deans' and directors' budget materials in 1996 were honed substantially in 1997 to fit IUPUI's reporting needs. The product of this process is the **1996 IUPUI Performance Report** in [Appendix C](#). This is considered a very preliminary version of

an annual report; the indicators now included will be refined and the number of indicators will increase gradually over time.

Strategy 5.2 Expand and improve the process of reporting to the public on IUPUI's indicators.

The **1996 IUPUI Performance Report** was distributed to the IUPUI Board of (community) Advisors and to others on a list of 2500 community representatives who regularly receive the [*Chancellor's Newsletter*](#). IMIR staff responded to six ad hoc requests during the year from the offices of the Chancellor and Communications and Public Relations that were designed to provide information to the public about IUPUI's performance. In addition, they completed 60 questionnaires and more limited queries from commercial publishers and external agencies that represent colleges and universities to the general public.

Early in 1997 all Marion County superintendents were invited to a presentation on the first-year performance of Marion county high school graduates at IUPUI. Each superintendent or his representative received an individualized report on the performance of graduates from his system. The superintendents uniformly expressed appreciation for this information. In 1998 those reports will be compiled for the eight-county Central Indiana region and the introductory presentation will be provided for superintendents of districts outside Marion County.

Strategy 5.3 Continue to develop internal (PAII) indicators of quality in daily work.

The chart below provides information on PAII indicators of quality in daily work for 1996 and 1997. We regard this listing as preliminary and hope to refine it in the years to come.

Indicator	1996	1997
Reviewers' ratings of the process of program review	NA	3.57 overall out of 4.0 (4.0 = excellent)
Evidence of significant unit/campus improvements made as a result of program review	See 1996 Annual Report	See Appendix J
Number of ad hoc requests to which IMIR staff respond	139 (internal) 68 (external) 207 total	200 (includes internal and external)
Accuracy of estimates of time needed to respond to an ad hoc request (keeping accuracy level at 1.0)	1.0 accuracy level. Ratio of time estimated to time to complete	1.0 accuracy level. Ratio of time estimated to time to complete
Response rate on mailed surveys (keeping it over 50%)	Alumni - over 50% Cont Student - over 50% Faculty - over 50%	Alumni - 46% Cont Student - 46% Staff - 58%
Student satisfaction with placement testing in the Microcomputer Testing Facility (keeping this near 95%)	97% reported that using computers to take placement exams was alright or very easy	97% reported that using computers to take placement exams was alright or very easy

Placement test validities	Math .23 Reading .14 English near 0	Math .30 Reading .22 English mid-teens
User satisfaction with PAII services such as IMIR Management Reports and economic model strategies	72% of occasional/often faculty users rated the quality of the Testing Center and IMIR's services as good or excellent	6 of 7 units responding report that they will use economic model data for planning
Number of participants and number of states/countries represented at the national and international conferences sponsored by PAII	International 200 participants, 35 countries November 415 participants, 39 states	International 118 participants, countries November 252 participants, 25 states, plus Puerto Rico and Canada
Number of invited presentations and refereed papers	37	24
Number of articles published	19	10
Number of subscribers to Assessment Update (keeping it above 1,000)	1042 (June 1996)	1087 (December 1997)
Number of information requests (about planning and assessment)	88	82
Percentage of faculty satisfied or very satisfied with their understanding of the campus plan	46.5% (40% Nationally)	Collect every other year. Will collect Spring 1998
Percentage of staff rating the clarity of objectives and plans for the next few years at IUPUI good or excellent	NA	66%

NA = Not available

IMPROVEMENT

Goal 6. Derive, prioritize, recommend, and assist in implementing improvements based on evaluative findings.

Strategy 6.1 Sponsor and support quality improvement efforts.

Quality improvement (QI) concepts and strategies are employed in all PAII offices. Teams and QI principles also guide the work of the Enrollment Management Group under its new leadership team. Banta, Borden, and Johnson worked with members of the Staff Council and Human Resources staff to develop an SDC proposal that would have supported QI training for all staff. Unfortunately, this important project was not funded.

In October 1997 Banta was invited to a meeting in Chicago of universities and corporate partners interested in helping to advance QI principles in universities. The meeting was designed to plan the future of university-corporate partnerships in this arena.

Contact was established with an individual at Georgia Tech who is planning an office with objectives similar to those of EMOD.

Strategy 6.2 Implement improvements suggested by data collected within various units.

Each year PAII staff meet with deans and department chairs of programs scheduled for review in the coming year to discuss the process, launch the self-study, and offer help with data-collection and other details. In past years this meeting was scheduled in February for programs eligible for review the following fall and spring. In 1997 this meeting was held in October instead to give every unit maximum time to plan and engage in self-study.

Henceforth the Program Review and Assessment Committee will meet with department chairs and/or faculty three to four years following their program reviews to learn how the review continues to influence the development of the department over the longer term. We hope these debriefings will help us structure the second round of IUPUI program reviews to provide maximum advantage to departments and schools.

With SDC funding the availability of web-based placement testing has been expanded from one to six area high schools.

The school data profiles provided to deans and Budgetary Affairs Committee members for their use in preparing annual reports have been revised, refined, and expanded. All deans said they appreciated the new format when asked about it during the planning/budgeting reviews.

Strategy 6.3 Implement suggestions that emerge through the planning process.

In deans' meetings during the year several topics emerged that seemed to merit further discussion. Accordingly Banta set up meetings to permit additional exploration in three areas: student scholarships, cross-disciplinary collaboration, and community partnerships.

Banta continued to coordinate developments in the emerging IUPUI collaboration with Citizens Gas and Methodist Hospital in UNWA. The schools of Education, Nursing, and Social Work combined forces to write an SDC proposal for a full-service school in UNWA. The project was funded and is proceeding. The Methodist-Citizens partnership has recently provided a letter of support for another UNWA-related project proposed for funding by Lilly Endowment by the Center on Urban Policy and the Environment.

Joint activities with Pike Township Schools included further refinement of the placement- testing-via-the-web technology and meetings of Pike and IUPUI faculty to discuss student performance. Dorothy Webb, chair of Communication Studies, involved some Pike Middle School students in a national play-writing competition she sponsors.

Through the Office of General Education and the Council on Undergraduate Learning small but deliberate steps are being taken to establish a coherent campus-wide

interpretation of general education based on agreed-upon Principles of Undergraduate Learning.

Strategy 6.4 Improve access to staff development opportunities.

The Office of Faculty Development added to its responsibilities the development of "senior professional staff." The Campus Climate Study will include a staff perspective. And facilitators working with Vice Chancellor Martin's staff to plan for a more coordinated set of administrative functions have provided developmental experiences for that staff contingent. But with the failure to gain support for the Staff Council's quality improvement training initiative described in 6.1 above, little beyond the work with Student Enrollment Support Services has been achieved with respect to improving broad-based access to staff development opportunities aimed at continuous improvement of programs and services.

PAII staff attend meetings and workshops on campus and at regional and national conferences that extend and enrich their professional competence. All senior staff teach courses and most middle managers are graduate students or teach courses themselves.

Strategy 6.5 Contribute to planning, budgeting, and evaluation efforts across the campus that are designed to improve programs and services.

Much of the foregoing content of this report addresses the progress made with regard to implementing this strategy. In addition, IMIR staff have carried out research related to revising IUPUI admissions criteria, analyzing faculty workload, supporting a faculty pay equity study, and developing IUPUI's Lilly retention grant proposal.

Black and Banta received SDC funds in 1997 to carry out a three-year study of program review on all IU campuses. A review of literature has been conducted, two planning meetings were held in Indianapolis, and a full description of program review processes on all campuses has been compiled. A meeting to share best practices is planned for April 1998.

Teaching, Research and Service Highlights

Teaching

Professors Banta, Borden, Shermis and Assistant Director Howard Mzumara taught a total of seven graduate and undergraduate classes during 1997. These classes include courses on outcome assessment, clinical rehabilitation psychology assessment, and statistics and research methods. Banta and Borden also supervise two graduate students

who work in their offices. In addition Banta and Shermis served on six doctoral committees during 1997.

Research

Banta, Borden, Shermis, Black, Lambert, Mzumara, Kiger, and Burton have been involved in a variety of scholarly activities during 1997 (see table at the end of this section). In addition to publications and presentations, Banta edits the bi-monthly periodical, **Assessment Update**, Black serves as managing editor and Lambert is the editorial assistant. Banta is a consulting editor for the **Journal of General Education** published at Penn State and the British journal **Assessment and Evaluation in Higher Education**. In addition, she edited an issue of **New Directions for Higher Education**.

Banta and PAII staff planned and coordinated the Ninth International Conference on Assessing Quality in Higher Education held in July and the Sixth Annual Assessment Conference in November. Both conferences were held in Indianapolis in 1997. Borden and Shermis offered pre-conference workshops in conjunction with the conferences. Black and Lambert also made presentations at the November conference.

Borden hosted, co-directed and taught at the first Information Technology Institute offered by the Association for Institutional Research (AIR). This sold-out institute received the highest ratings of any institute ever offered by AIR. Shermis and Testing Center staff maintain a web page designed for the National Council on Measurement in Education (NCME). This Web Site displays information about NCME activities and members.

Service

- **Committees**

National and State: Banta was solicited to serve as a member of the national Higher Education Colloquium and serves on the Indiana Higher Education Commission's Task Force on Remediation. Borden is an elected member of the Association for Institutional Research and serves on a variety of subcommittees for this national organization. In addition, he is president of the Indiana Association for Institutional Research. Shermis chairs the American Psychological Association Continuing Education Committee.

IUPUI: PAII staff members serve on six campus committees including Faculty Council, the Black Faculty and Staff Council, the Program Review

and Assessment Committee, Enrollment Management Group, Academic Affairs, and the Commission on Women. In addition, Banta has consulted with eleven schools and centers on the IUPUI campus to provide assistance with planning and assessment activities. IMIR staff members serve on seven campus and five university committees including the Enrollment Management Group, the Academic Policies and Procedures Committee, the Computer Technical Support Team, the Commission on Women, and the University Information Systems Task Force. Testing Center staff serve seven committees including Academic Affairs, the Academic Policies and Procedures Committee, Administrative Council, and UEC Staff Group. Economic Model staff member Johnson co-chairs the Administration and Finance Re-engineering team (ADFI) and has provided facilitation for the Enrollment Management Group.

- **Review of Manuscripts/Proposals**

Banta reviews manuscripts for the **Journal of General Education**, **Assessment & Evaluation in Higher Education**, and the **Journal of Higher Education**. In addition, she reviewed proposals for the Association for Institutional Research, the American Educational Research Association, the Association for the Study of Higher Education, and the American Association for Higher Education Assessment Forum. Shermis reviews manuscripts for **Educational Measurement: Issues and Practice** and **Archives of Physical Medicine and Rehabilitation**, and has reviewed conference papers for the American Educational Research Association and the National Council on Measurement in Education.

- **Service to campus community**

PAII staff are involved in numerous service activities sponsored by the IUPUI campus. Five staff members volunteered for Team IUPUI and for the United Way Day of Caring. One staff member participated in the Volunteer Income Tax Assistance program. Staff from IMIR, the Testing Center, and the Economic Model office also volunteer for Team IUPUI.

Service to local community

PAII staff members serve as vice chair of the United Way Program Evaluation Committee, and board members of the Red Cross, United Way Community Service Council, and the Ruth Lilly Health Education Center. Staff also serve on the Indianapolis Children's Museum Strategic Planning Committee and volunteer with Black Expo. One student staff member developed a pre-release program that transitions students from a correctional facility back into the community as part of a Service Learning Project. Many staff members are active in local churches and youth groups, and serve on Parent-Teacher Associations at local schools.

Johnson from the Economic Model Office has provided facilitation for the Indianapolis Public School Strategic Planning Committee for the Gifted and Talented Program to help them develop a mission and vision statement and initiate planning activities.

The following table represents the cumulative teaching, research and professional service activities for 1997 of three faculty (Banta, Borden, Shermis) and seven professional staff (Black, Burton, Johnson, Kiger, Lambert, Mzumara, Wince) for 1997. Details follow in the activity reports of the individuals involved.

Teaching:	
Courses taught	7
(Courses designed)	(1)
Doctoral committees	6
Research/Scholarship:	
Articles/Chapters/Books Published	10
Unpublished Reports	6
Invited Addresses/Refereed Papers/Panels Presented	24
Grants Received	3
Grants In Progress	2
Professional Service:	
Workshops Presented	16
Consulting	14
Proposals/Manuscripts Reviewed	15
Editorial Board for Professional Journals	3
Professional Associations	18
University Committees	7
Campus Committees	31
Campus/Community Service	29*
Awards/Recognition:	5

* Note: This item includes the activities of all staff members from the four constituent offices of Planning and Institutional Improvement.

1997 Teaching, Research, Scholarship and Service Report for TRUDY W. BANTA

Teaching:

Courses taught - 1

Doctoral committees - 5

Research/Scholarship:

Articles

Banta, T. W. (1997). Concentric circles and quality assessment worldwide. Quality in Higher Education, 6(9), 3.

de Winter Hebron, C., & Banta, T. W. (1997). Editorial. Assessment & Evaluation in Higher Education, 22(2), 109-110.

Chapters

Banta, T. W. (1997). Outcomes assessment: A faculty perspective on its present status and likely future. In Proceedings of the 1996 Environmental Engineering Education Conference (pp. 113-117). Annapolis, MD: American Academy of Environmental Engineers.

Banta, T. W. (1997). Defining outcomes assessment - past, present, and future. In Ability-Based Social Work Education (pp. 33-43). Cleveland, OH: Mandel School of Applied Social Sciences, Case Western Reserve University.

Banta, T. W. (1997). Moving assessment forward: Enabling conditions and stumbling blocks. In P.J. Gray & T. W. Banta (Eds.), The campus-level impact of assessment: Progress, problems, and possibilities. New Directions for Higher Education, No. 100, (pp. 79-91). San Francisco: Jossey-Bass.

Book

Gray, P. J., & Banta, T. W. (Eds.) (1997). The campus-level impact of assessment: Progress, problems, and possibilities. New Directions for Higher Education, No. 100, (pp. 79-91). San Francisco: Jossey-Bass.

Unpublished Report

Banta, T. W. (Ed.) (1997). Assessment Update: The first nine years. Indianapolis, IN: IUPUI Office of Planning & Institutional Improvement.

Invited Addresses

Banta, T. W. (February, 1997). The active (in assessment) community college: Setting the standard in higher education. Keynote address, Twelfth Annual Conference for Northwest Community Colleges, Portland, OR.

Angelo, T. A., Banta, T. W., & Palomba, C. (March, 1997). But how will it play in middletown? Panel discussion at 11th Annual Conference of the Indiana Association for Institutional Research, Nashville, IN.

Refereed Papers/Panels

Banta, T. W., Erwin, T. D., Olsen, D., & Pascarella, E. T. (March, 1997). Why aren't more higher education scholars engaged in assessment? Paper presented at the American Educational Research Association annual meeting, Chicago, IL.

Banta, T. W., Olsen, D., Dooris, M. J., & Huba, M. (June, 1997). How can we involve faculty in assessment? Presentation at the American Association for Higher Education Conference on Assessment and Quality, Miami, FL.

Kuh, G. D., & Banta, T. W. (June, 1997). A missing link in assessment: Collaboration between academic and student affairs. Presentation at the American Association for Higher Education Conference on Assessment and Quality, Miami, FL.

Wright, B. D., Banta, T. W., & Farmer, D. (June, 1997). Administrative disasters in assessment and how to avoid them. Presentation at the American Association for Higher Education Conference on Assessment and Quality, Miami, FL.

Schilling, K. M., Schilling, K. L., Banta, T. W., Evenbeck, S., & Olsen, D. (June, 1997). Increasing expectations for student academic effort. Presentation at the American Association for Higher Education Conference on Assessment and Quality, Miami, FL.

Banta, T. W., & Lovrinic, J. G. (July, 1997). Adding activity-based costing to the planner's tool kit. Presentation at the Society for College and University Planning Conference, Chicago, IL.

Banta, T. W. (August, 1997). Using activity-based costing as a strategic planning tool. Paper presented at the 19th Annual Forum of the European Association for Institutional Research, Coventry, United Kingdom.

Grants in Progress

Black, K. E., & Banta, T. W. (1997). Assessing the effectiveness of IU's academic program review process. Second year funding secured under Indiana University's Strategic Directions Charter.

Professional Service:

Conferences/Workshops

Banta, T. W., & Sivo, S. (May, 1997). Teaming to assess student knowledge and skills. Presentation at 1997 Student Learning Institute, James Madison University, Harrisonburg, VA.

Banta, T. W. (May, 1997). Making a difference with assessment. Facilitated panel discussion at 1997 Student Learning Institute, James Madison University, Harrisonburg, VA.

Banta, T. W., & Kuh, G. (May, 1997). Assessing good practice in academic and student affairs. Presentation at 1997 Student Learning Institute, James Madison University, Harrisonburg, VA.

Banta, T.W. (July, 1997). Convenor of the Ninth International Conference on Assessing

Quality in Higher Education, Indianapolis, IN.

Warner, J., Banta, T. W., & Hanson, G. (September, 1997). The broader issues affecting assessment. Panel presented at NASPA National Workshop: Assessment in Student Affairs, Portland, ME.

Banta, T. W. (September, 1997). Assessment methods/designs - Parts I and II. Workshops conducted at NASPA National Workshop: Assessment in Student Affairs, Portland, ME.

Hanson, G., & Banta, T. W. (September, 1997). Reporting assessment results: Translating data into decision making. Workshop conducted at NASPA National Workshop: Assessment in Student Affairs, Portland, ME.

Banta, T. W., Black, K. E., & Lambert, J. L. (November, 1997). Best practices in program review. Workshop conducted at the 1997 November Assessment Conference in Indianapolis, IN.

Consulting

Banta, T. W. Consultation on assessment with faculty from Portland State University, February 6, 1997.

Banta, T. W. Member of peer review panel to review grant proposals and scholarship applications, Association for Institutional Research for Management Research, Policy Analysis, and Planning: Improving Institutional Research in Postsecondary Educational Institutions, March 9-11, 1997.

Banta, T. W. Member of reaffirmation of accreditation team, Middle States Association of Colleges and Schools, University of Maryland at College Park, College Park, MD. April 6-9, 1997.

Banta, T. W. Member of North Central Association's accreditation team, University of Nebraska, Lincoln, NE. April 14-16, 1997.

Banta, T. W. Member of Assessment Center for Health Professions Education Advisory Team, Baylor College of Dentistry, Dallas, TX. August 1-3, 1997.

Banta, T. W. Evaluation of institutional research and institutional effectiveness functions, Our Lady of the Lake College, Baton Rouge, LA. August 13-15, 1997.

Banta, T. W. Review of assessment report and conducted assessment workshop, Martin University, Indianapolis, IN. September 5, 1997.

Banta, T. W. Evaluation of institutional effectiveness plan and processes, Flagler College, St. Augustine, FL. September 12, 1997.

Banta, T. W. Workshop for faculty on outcomes assessment, University of Illinois, Urbana-Champaign, IL. October 16, 1997.

Banta, T. W. AAHE Assessment Forum Strand Leader.

Proposals/Manuscripts Reviewed

<u>Research in Higher Education</u> - 1	<u>Assessment & Evaluation in Higher Education</u> - 3
<u>Journal of Higher Education</u> - 1	AERA proposals - 6
<u>Journal of General Education</u> - 4	ASHE proposals - 6

Editorial Boards

Assessment Update - Editor
Journal of General Education - Board
Assessment & Evaluation in Higher Education - Board

Professional Associations

AERA AAHE SCUP ASHE EAIR Phi Beta Kappa

University Committees

Task Force on Efficiency and Cost Reduction
UITs Evaluation Committee

Campus Committees

CUL (Co-Chair) Faculty Council Planning Committee
EMG (Chair) Chancellor's Staff
PRAC (Staff) Council of Deans
IUPUI Board of Advisors School of Education Evaluation Committee
Campus Climate Planning Committee (Chair) Deans' Committee on Community Partnerships
Health Performance Assessment Center Advisory Committee Deans' Committee on Planning and Budgeting (Co-Chair)
NCAA Self-study Committee (Co-Chair)

Campus/Community Service

Team IUPUI United Way Community Service Council: Board Evaluation Committee
Ruth Lilly Center for Health Education: Board
Executive Committee Overall evaluation subcommittee
Secretary
Day of Caring Volunteer
Clarian Health Community Benefits Committee Consortium for Urban Education (CUE) Deans
Children's Museum Strategic Planning Committee

Awards/Recognition:

Selected for membership in the national Higher Education Colloquium.
Selected by the American Productivity and Quality Center as one of the seven most effective organizations in the world in measuring institutional performance.
Invited to contribute a chapter on assessment for a book to be published in Brazil in Portuguese.
Invited to contribute a chapter on assessment for a book to be published in South Africa.
Invited to contribute the essay on assessment for a comprehensive treatment of higher education issues in a reader to be published by the Association for the Study of Higher Education.

1997 Teaching, Research, and Service for IMIR

Activities

Borden, V. M. H. (1997) Analysis of postsecondary degrees conferred to minorities. *Black Issues in Higher Education*, Vol. 14, No. 10. p. 38+.

Borden, V. M. H. (1997). 100 top associate degree producers. *Community College Week*, Vol. 9, No. 25. pp. 8+.

Borden, V. (May, 1997). Defining and documenting faculty work: A modular approach. Paper presented at the 37th Annual Forum of the Association for Institutional Research, Orlando, FL.

Borden, V. (May, 1997). Strategies for deploying a survey of faculty attitudes and opinions. Paper presented at the 37th Annual Forum of the Association for Institutional Research, Orlando, FL.

Zuniga, R., Borden, V., & Johnson, J. (May, 1997). The Flashlight Project: Developing tools for local evaluation of education uses of technology. Panel presented at the 37th Annual Forum of the Association for Institutional Research, Orlando, FL.

Thomas, T., Borden, V., Burton, K. (May, 1997). Changing the way we do business: The World Wide Web as a reporting mechanism for institutional information. Demonstration at the 37th Annual Forum of the Association for Institutional Research, Orlando, FL.

Borden, V. (May, 1997). A vision of what is possible. Presentation at the Indiana University Summer Institute, Indianapolis, Indiana.

Borden, V., (June, 1997). Know thy students: Using institutional research in curricular and pedagogical planning. Presented at the AAHE Conference on Assessment and Quality, Miami, FL.

Thomas, T., Borden, V., & Burton, K. (March, 1997). Changing the way we do business: The World Wide Web as a reporting mechanism for institutional information. Demonstration at the 11th Annual Conference of the Indiana Association for Institutional Research, Nashville, IN.

Borden, V. (1997). Measuring student persistence across different types of colleges and universities. Program for the Study of Urban and Metropolitan Universities, Coalition of Urban and Metropolitan Universities. Award \$5,000, June 1997 - May 1998.

Borden, V., & Thomas, T. (1997). Assessing and fulfilling end-user needs for IPEDS data. Improving Institutional Research in Postsecondary Educational Institutions, Sponsored by the National Center for Education Statistics (NCES), the National Science Foundation (NSF) and administered by the Association for Institutional Research (AIR). Award \$19,419, July 1997 - June 1998.

1997 Teaching, Research, and Service For the Testing Center

Mark Shermis designed and taught two courses for the Department of Psychology: Clinical Rehabilitation Psychology Assessment I (Psych I664) and Clinical Rehabilitation Psychology Assessment II (Psych I669). Howard Mzumara taught three graduate courses for the School of Education during Spring and Fall of 1997 -- Introduction to Computer Analysis of Educational Data (Y500), Intermediate Statistics Applied to Education (Y502), and Qualitative Inquiry in Education (Y611).
(*Articles*)

Shermis, M. D., & Chang, S. H. (1997). The use of IRT to investigate the hierarchical nature of a college mathematics curriculum. Educational and Psychological Measurement, 57(3), 450-458.

Shermis, M. D., & Lombard, D. (1997). Effects of Computer-Based Test Administrations on Test Anxiety and Performance. Computers in Human Behavior, 14, 111-123.

Shermis, M. D., & Lombard, D. (in press). A comparison of survey data collected by self-completed mail questionnaire and electronic mail. Journal of Business and Psychology.

Shermis, M. D., Webb, P. M., & Mzumara, H. R. (in press). An assessment of the concurrent validity and reliability of the Merkle Style Preference Inventory (MSPI). Journal of Career Assessment.

(*Articles Under Review*)

Harrington, S., Shermis, M. D., & Rollins, A. (1997). The influence of word processing on English placement test results. Manuscript submitted to the Journal of Writing

Research.

Mzumara, H. R., Shermis, M. D., Wimer, D. G. (1997). Use of examinee's previous math background in computerized adaptive math placement testing. Manuscript in preparation.

Printz, B., Shermis, M. D., & Webb, P. M. (1996). Stress buffering factors related to adolescent coping: A path analysis. Manuscript submitted to Adolescence.

Shermis, M. D. (1995). Using computerized adaptive testing for college mathematics. Manuscript submitted to the Journal of Mathematical Behavior.

Shermis, M. D., Mzumara, H. R., Bublit, S. T. (1997). Controlling testing and computer anxiety: Test performance under CAT and SAT conditions. Manuscript submitted to Applied Measurement in Education.

(Reports)

Mzumara, H. R., Shermis, M. D., & Dossinger, K., & Olson, J. J. (1997, November). Validity of the IUPUI placement test scores for course placement: 1996-1997. Indianapolis, IN: IUPUI Testing Center.

Shermis, M. D., Mzumara, H. R., Kiger, B., & Marsiglio, C. (1997, January). The Testing Center Annual Report 1996. Indianapolis, IN: IUPUI Testing Center.

(Presentations)

Shermis, M. D. (1997, February). Psychology Review. Presentation given for the Association for Advancement of the Behavioral Sciences, Atlanta, GA.

Shermis, M. D. (1997, April). Recent developments in college placement testing: Assessments via the World Wide Web. Presentation made at the annual meeting of the American Educational Research Association, Chicago, IL.

Shermis, M. D. (1997, May). Using LXR Test for assessment. Presentation given to School of Nursing faculty, Indianapolis, IN.

Shermis, M. D. (1997, July) Presentation power: Extending the limits of the written word. Presentation given at the Information Technology Institute (AIR), Indianapolis, IN.

Shermis, M. D. (1997, October). Electronic portfolios. Presentation given to School of Education faculty, Indianapolis, IN.

Shermis, M. D. (1997, December). Assessments in the major. Presentation given to the IUPUI Department of Psychology, Indianapolis, IN.

Shermis, M. D. (1997, December). Electronic portfolios. Presentation given to

School of Social Work faculty, Indianapolis, IN.

Shermis, M. D., Harrington, S., Watt, J. X., Wolting, M. (1997, April). Recent developments in placement testing at IUPUI. Presentation given to the Council on Undergraduate Learning, Indianapolis, IN.

Shermis, M. D., & Marsiglio, C. (1997, January). Computerized adaptive testing using the Internet. Presentation given to the faculty of Pike High School, Indianapolis, IN.

Shermis, M. D., & Marsiglio, C. (1997, July). Computerized adaptive testing using the Internet. Presentation given to the faculty of Carmel High School, Indianapolis, IN.

Shermis, M. D., & Mzumara, H. R. (1997, November). Assessment technology support. Workshop given at the sixth annual Assessment Conference, Indianapolis, IN.

Shermis, M. D., Mzumara, H. R., Bublit, S. T. (1997, April). Controlling testing and computer anxiety: Test performance under CAT and SAT conditions. Paper presented at the annual meetings of the National Council on Measurement in Education, Chicago, IL.

Shermis, M. D., Mzumara, H. R., Lillig, C., & Brown, M. (1997, August). Computerized adaptive testing through the World Wide Web. Paper presented at the annual meetings of the American Psychological Association, Chicago, IL.

Howard Mzumara was a participant in the Instrument Fair conducted at the 1997 Assessment Conference in Indianapolis, IN.

(Grant Applications)

Shermis, M. D., & Mzumara, H. R. (1997). College Placement Testing Through the World Wide Web: Preparing Students for Post-Secondary Education. Grant submitted under the auspices of the Strategic Directions Charter of Indiana University (\$63,333).
Service

Consultant Presentations

Mark Shermis consulted for the Leona Group, Lansing, MI, which creates educational software administered through the Internet.

Howard Mzumara provided professional support to the Testing Center's Optical and Image scanning operations (particularly in application development, data processing and report generation, project management, and supervision of personnel) and statistical consultancy to external clients of the Testing Center.

[1998 Goals, Implementaion Strategies and Performance Indicators for PAII](#)