



ipas

Indiana Project on Academic Success

Research-based inquiry for
enhancing academic success

IPAS RESOURCE GUIDE

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Introduction

The Indiana Project on Academic Success (IPAS) is a partnership between Indiana University (IU) and other colleges and universities in the state. The project is supported by the Lumina Foundation and IU.

IPAS was designed to promote improvement in:

Academic preparation and access to public and private colleges and universities in Indiana.

Opportunities for dual enrollment and transfer between two-year and four-year programs offered by colleges.

Retention and degree attainment for students enrolled in Indiana's public colleges and universities.

The project is organized in a three-year process that tests a new research-based approach to academic improvement and reform. The project has four stages:

Stage 1 Assessment

Analyses of academic preparation, enrollment, major choice, and persistence by Indiana college students, supplemented by campus level analyses, provide a basis for campus level assessment. Campuses identify specific challenges they will address during the project.

Stage 2 Organizing

Campuses appoint workgroups to address critical challenges. The IPAS project team organizes support for statewide efforts and campus inquiry.

Stage 3 Action Inquiry

The workgroups on each campus develop action plans to address critical challenges, pilot test solutions, and collaborate on evaluations. The IPAS project team provides support for campus change processes.

Stage 4 Evaluation

The IPAS project team and the campuses collaborate on the design and completion of evaluations of the interventions.

The IPAS Project Team at Indiana University includes the project director, Ed St. John, and two associate directors, Jeff McKinney, for technical assistance and project coordination, and Glenda Musoba, for analysis and evaluation. Chung-Geun Chung is the senior statistician on the project. Three graduate assistants—Pauline Reynolds, Tina Tuttle, and Ontario Wooden—work with Jeff on providing technical support to campuses. In addition, other graduate students support data analysis and provide liaisons with partner colleges. Sarah Martin is the project's publications coordinator.

Colleges and universities that collaborate on the project engage in reform activities that involve:

IPAS Campus Coordinating Teams

A coordinating group on each campus will be responsible for conducting assessment, coordinating workgroups, communicating with administration, and participating in planning and budgeting on campus.

IPAS Workgroups

Each campus should have two or three workgroups of faculty and administrators in 2004-05 to engage in action inquiry aimed at addressing challenges considered critical on the campus.

Collaboration on Planning, Budgeting, and Evaluation

The IPAS project team provides technical support for institutional research and other project activities, including numerous training sessions and workshops. The campuses are responsible for coordinating with the IPAS project team for planning, budgeting, and institutional research on the campus.

The project involves a comprehensive set of activities, as outlined in Figure 1. Workshops and technical support are provided to partner campuses as needed to support their reform effort

Figure 1
Overview of the Stages in the IPAS Process

<p>Stage 1 Assessment</p>	<ul style="list-style-type: none"> • Compare campus assessment information to statewide assessment results; identify possible challenges. • Collect additional information from campus sources, such as prior reports and studies and focus group interviews. • Organize teams of administrators, faculty, professional staff, and students to identify critical challenges on the campus. • Prioritize the challenges, identifying two or three that merit special attention at a campus level.
<p>Stage 2 Organizing</p>	<ul style="list-style-type: none"> • Coordinate the assessment and inquiry process with campus-level planning and budgeting; integrate the challenges with strategic plans; coordinate budgeting to provide necessary support. • Appoint workgroups to address critical, campus-wide challenges; consider providing release time to team leaders to work on tasks for the campus. • Coordinate the inquiry process (activities of the workgroups) with campus planning and budgeting.

<p>Stage 3 Action Inquiry</p>	<p>Each campus workgroup engages in a process to:</p> <ol style="list-style-type: none"> 1. <i>Build an Understanding of the Challenge:</i> Consider why the challenge exists. What solutions have been tried in the past, and how well did they work? What aspects of the challenge have not been adequately addressed? What aspects of the challenge require more study? Develop hypotheses about the causes for the challenges using data to test the hypotheses. Do the explanations hold up to the evidence? What more preparation might help students in your major programs? 2. <i>Look Internally and Externally for Solutions:</i> Talk with people on campus about how they have addressed related challenges. Consider best practices for retention and how they might be adapted to meet local needs. Visit other campuses that have tried out different approaches to the problem. How well would these alternatives address the challenge at your campus? 3. <i>Assess Possible Solutions:</i> Consider alternatives in relation to the understanding of the problem developed in Stage 3, step 1. Will the solutions address the challenge at your campus? How can the solution be pilot tested? If you tried out the solution, how would you know if it worked? What information would you need to know how well it worked? 4. <i>Develop Action Plans:</i> Action plans should address the implementation of solutions that should be pilot tested. Consider solutions that can be implemented by current staff. If there are additional costs, develop budgets for consideration internally and externally. (Remember, seeking additional funds can slow down the change process.) Develop action plans with time frames for implementation and evaluation. 5. <i>Implement Pilot Test and Evaluate:</i> Provide feedback to workgroups and campus coordinating team. Use evaluation results to refine the solution. Also, evaluation can be used as a basis for seeking additional funding from internal and external sources, if needed.
<p>Stage 4 Evaluation</p>	<p>The campus coordinating teams:</p> <ul style="list-style-type: none"> • Coordinate implementation and evaluation, review plans, encourage presentations to campus planning groups, and help coordinate the inquiry process with campus planning. • Coordinate evaluation support of pilot tests with the IPAS project team and campus groups.

Stage 1 Assessment

Campus teams are responsible for coordinating the assessment process on campus. This process involves:

Briefings

Provide briefings on IPAS process, using the Resource Guide and other information. PowerPoint presentations are available from the IPAS project team. Also, members of the campus coordinating teams and workgroups can conduct site visits to provide briefings.

Coordination of Research

At the initial workshop, campus coordinating team members discussed critical issues on their campuses and talked to representatives of other campuses about shared concerns.

Coordination of Assessment

Engage academic units and service units in a review of state-level and campus-level assessment results. Make sure to provide each group with results of National Survey of Student Engagement (NSSE) and other assessment information.

When reviewing the results of a logistic regression, remember:

An odds ratio of below 1 means this variable reduces the odds compared to the dummy (comparison) variable (if the variable is significant).

An odds ratio above 1 means that this variable improves the odds of the outcome, a positive association (if the variable is significant).

If you need more information to help interpret results, call the IPAS project office. A project team member can visit your campus and discuss results in person or attend your meetings by teleconference.

The assessment process should involve diverse groups on each campus. At the conclusion of the assessment process, it is crucial that campus coordinating teams communicate the membership of workgroups to the IPAS project coordinator, Jeff McKinney. The roles and responsibilities of various campus administration units on campus are summarized in Figure 2.

Figure 2
The IPAS Assessment Process
Roles and Responsibilities in Campus Assessment

Roles	Responsibilities
Institutional Research Offices	<p>Possible activities in support of assessment process:</p> <ul style="list-style-type: none"> • Provide reports related to issues being considered in the IPAS process. • Conduct special studies addressing issues in depth.
Academic Units (departments, schools, faculty committees)	<p>Review results of statewide analyses of major choice, persistence, and persistence within majors. Consider implications for the campus programs.</p> <ol style="list-style-type: none"> 1. What academic programs face critical challenges considering the numbers of majors and/or persistence? 2. What role does academic preparation play in the choice of majors? 3. How do students in your department compare to students in the state with similar majors? 4. How well do students in your major programs persist compared to students statewide? 5. How well are the freshmen in your program prepared academically? 6. How does academic preparation influence persistence by students in your major? 7. Do remedial courses enable your students to perform better? 8. What additional preparation might help the students in your major programs? 9. What do students say about your major? Does it meet their expectations? Do they see employment opportunities? 10. Based on these results, are there alternative academic strategies (courses, course sequences, field experiences) that should be considered by the faculty in your program?

<p>Service Units (admissions, student aid, retention, etc.)</p>	<p>Examine assessment campus and state results to discern what they tell you about the challenges facing students.</p> <ol style="list-style-type: none"> 1. How do the students on your campus compare to the statewide information? 2. From the statewide assessment and campus information, how would you describe the profile of your students? 3. What factors appear important in attracting students to similar campuses? 4. What variables related to programs, academic achievement, and student aid are related to persistence on your campus? How do the campus results compare to the statewide results? 5. What additional information do you need to know about your students? Are reports already available? Are there reports that can be provided by your campus IR office or IPAS? 6. What are the most critical challenges facing your campus with respect to recruitment and/or retention? 7. What do students tell you (in surveys and focus groups) about their engagement on campus (e.g., NSSE)? Does this information square with the assessment results? 8. What additional information would you like?
<p>Campus Conversation (facilitated by campus coordinating team)</p>	<p>After initial assessment activities, form groups representing academic units, student services, and institutional research to discuss what you have learned.</p> <p>Based on reflections about both academic and student support, identify one to three challenges that are cross cutting, problematic, and merit sustained attention by teams of faculty and staff.</p>

Stage 2 Organizing

The organizing stage of the IPAS process is a time for developing organizational strategies on the campus to address the critical challenges identified by the campus in the assessment process.

The organizing process includes four key tasks:

- Task 1 Develop a campus strategy for coordinating IPAS.
- Task 2 Organize *IPAS workgroups* for each critical challenge.
- Task 3 Appoint *IPAS fellows* to support the campus and coordinate with the IPAS project team.
- Task 4 Establish a procedure for coordinating workgroups with campus planning and budgeting.

Each campus must develop its own, unique organizational strategy. The purpose of the IPAS project is to provide support—through research and opportunities for professional development and collaboration—that enables and facilitates campus development. Given this purpose, each partner campus should tailor a strategy for IPAS that complements its organizational strategy.

Organizing Task 1

Develop IPAS Project Campus Coordination Strategy

A team of four people from the campus were invited to participate in the initial IPAS workshop. They were introduced to the IPAS organizational strategy and encouraged to coordinate a process of buy-in and assessment. Members of this team could form the core of a coordinating committee for the campus, but there are other alternatives, including using a campus planning group.

However the campus decides to organize to address the critical challenges, it needs to have a strategy for coordinating its campus change process with the university governance process.

There are several key issues to consider in the development of a strategy for coordination.

It is crucial that members of the IPAS campus coordinating team be familiar with members of the IU IPAS project team and with the methods used in the project. If the membership of the coordinating group changes, a workshop should be requested with the IPAS project team to introduce IPAS methods to the new members of the team.

The members of the team should have linkages to the campus governance structure, including planning and budgeting processes, student services, academic units, and so forth. While not all units on a campus can participate in the coordinating team, it is critical that members of the coordinating team be aware of the timeframes for the planning and budgeting process on campus, campus decision processes for academic programs, and so forth. This type of connectivity will enable the coordinating committee to guide an integration of the IPAS inquiry process with the campus governance process.

The members of the campus coordinating team should be familiar with the action inquiry process used in IPAS (see text of Stage 3 that follows). They are encouraged to attend workshops. However, if due to scheduling problems they can not attend, a member of the IU IPAS project team can conduct briefings on the inquiry process, or people who have attended workshops can provide these briefings. At the very least, it is important to build a shared understanding among workgroups and the coordinating team members about the role of action inquiry.

The IPAS coordinating team should establish a plan for coordinating the activities of workgroups with other campus governance processes. Efforts should be made to inform planning groups and budgeting committees about the progress of the IPAS workgroups

The IPAS project is scheduled for a three-year period. The campus coordinating team for IPAS should plan to work together during the majority of the project period. It is possible that there is a central group that could take on this responsibility. Some campuses may have groups currently coordinating innovative strategies that might be able to take on the IPAS project as an integral part of their responsibility.

Whether a new group is formed—and the four people that attended the workshop continue in their role—or another campus coordinating group takes responsibility for the project, it is crucial that the IPAS team:

Meet periodically, probably at least four times a year, to review the progress of work groups.

Maintain communication with the IU IPAS project team, using the IPAS webpage and information dissemination as resources and by distributing information from IPAS to interested faculty, staff, and students.

Facilitate the inquiry process of workgroups on campus, checking frequently to see if they have met, if they face challenges that might require outside support, and so forth.

Facilitate involvement of campus members (faculty, professional staff, and students) who might be interested in professional development opportunities provided by the IPAS team, partner campuses in IPAS, and other opportunities that can strengthen your campus' capacity to address critical challenges related to improving campus success.

Help find funding, if needed, for action experiments (pilot testing new ideas) by workgroups.

Coordinate communication of evaluation results of experimental activities with campus planning groups as a means of promoting informed planning, budgeting, and development activities on campus.

Organizing Task 2

Organize IPAS Workgroups for Each Critical Challenge

Each of the challenge areas identified by the campus should be related to a recurrent issue that involves multiple units on the campus.

The challenge areas should be:

Issues that are of concern to more than one unit on campus and may crosscut the responsibilities of academic, student services, and auxiliary units (such as housing).

Issues that require local action and for which an “off the shelf” solution does not appear adequate.

Topics which draw sufficient interest for a sustained commitment to action inquiry focused on designing local experiments to address the challenge.

The *IPAS workgroup* for each challenge may be an existing task force or workgroup on campus, an entirely new group, or even a subcommittee of a campus-wide committee, task force, or workgroup.

Each workgroup should include:

Individuals who are familiar with the challenge and are members of units (academic or service) that might be involved in addressing the issue.

One or more faculty members who are interested in the challenge as an academic interest, out of concern for college students, and/or because the students in their program are confronted by these challenges.

One or more student services personnel who have frequent contact with students and bring a first-hand understanding of the issue to the group.

One or more students who are actively engaged in student affairs and who might be able to use their experience in the project for course credit (service learning or internships).

One or more members of administration or faculty who are familiar with the interpretation of research, have an understanding of IR on the campus, and have an interest in research on college students.

The campuses should coordinate the appointment and organization of IPAS workgroups with the organizational structure of the campus. It is important to consider how to work within existing structures as well as how to work across structures. Therefore in some instances a workgroup might include representatives from the campus as a whole, forming a group with a campus-wide focus. In other instances a workgroup might include members from an organizational unit (e.g., a professional school within a larger university).

Example 1 Large University Campus

For example, it might be possible for a campus (like Indiana University-Bloomington) to use its retention task force as its coordinating team, but to have subcommittees focus on specific issues, such as retention of students in upper division and/or retention of minority students. A professional school facing a critical challenge that requires collaboration across the campus and even off campus might use this model.

For example, a school of education at a large university might decide to focus on the recruitment and retention of students in high school education programs (especially math education). To address this challenge, the campus might form a workgroup composed of representatives from the school (faculty, professional staff, and students) and representatives from affiliated units (professional development schools and the university math faculty).

Example 2 Community College

A community college campus in Indiana might choose to address the challenges of developing support services for students; creating professional development opportunities for faculty and profession staff; and providing support for transfer to and from four-year colleges, possibly through joint enrollment. Each of these teams would need to be constructed differently.

If the campus is rapidly developing, it might lack an established pattern of committees and workgroups. In this case, an effort might need to be made to form new groups drawing members from the committee.

Example 3 Small College

Many small colleges have leadership teams that coordinate with planning and budgeting groups. These campuses may already coordinate strategic planning efforts. As a part of strategic planning, campuses organize to address issues of central importance to the campus. The challenge areas of IPAS should be closely linked to the strategic planning process at such a campus.

The IPAS process should provide support (in the form of research and professional development) that is organized to facilitate change and improvement in areas related to recruitment and retention, professional development and faculty, and collaboration with other colleges and universities in Indiana. One or more challenges related to these topics are the focus for workgroups. In some instances, current workgroups might want to use the IPAS action inquiry process to address particularly critical challenges.

Organizing Task 3 Appoint IPAS Fellows

In the proposal for IPAS, an option was created to provide an opportunity for one or two people from each campus to work in collaboration with the IPAS team at Indiana University on the IPAS project, conducting studies or collaborating on projects that will support their own campus.

Faculty members and/or professional staff from collaborating campuses are invited to participate with the IPAS team as colleagues concerned about improving academic success in Indiana higher education and as contributors to the academic and professional literature in this field.

As part of the appointment, fellows will have the opportunity to engage in a range of activities.

Work with the databases assembled for the IPAS project, conducting studies that would be of interest to their campus.

Develop student surveys or focus groups on critical issues at the campus in collaboration with the campus IR office and the IPAS project team.

Develop databases that can be used in support of planning and budgeting on the campus in collaboration with the campus IR office and the IPAS project.

Collaborate with members of the IPAS project team and/or faculty at IUPUI on professional development workshops for their campus and/or IPAS partner campuses.

Take courses at IU, completing a post-Master's certificate in institutional research, post-doctoral courses, or courses that are related to sabbatical and/or professional interest.

Participate in and contribute to the research-based dialogue about strategies for improving academic success, the core and central concern of the IPAS project.

Fellows will have space to work at IU Bloomington and possibly at IUPUI if their interests focus on professional development. In addition, fellows will work directly with members of the IPAS project team, but in support of other projects for their own campus.

The primary criteria for selecting IPAS fellows are that they be:

Faculty members or professional staff who can benefit from an intensive period of professional development and who have an interest in college students and higher education.

Individuals who are aware of the strategies being used for IPAS on the campus and have ideas about projects they might undertake that would be supportive of their campus' efforts to address critical challenges.

Members of campus IPAS workgroups who may conduct research in support of their campuses.

Individuals who are eligible to take courses at Indiana University in the higher education program, but individual arrangements should be made with the university to make this possible. (The IPAS project team can help facilitate these arrangements.)

Organizing Task 4

Coordinate Workgroups with Campus Planning and Budgeting

If the IPAS project is successful on your campus, then workgroups will engage in intensive study of critical challenges by trying out new approaches to address those challenges. The underlying methodology of the project involves creating structures and processes that promote organizational learning through ongoing improvement and professional development. As noted above, it is crucial that your campus establish a mechanism to support and learn from the inquiry process.

The workgroups should be trying new solutions to old problems, enabling new forms of practices to be tested on campus. We hope that new strategies evolve for each campus that are distinctive and merit ongoing support. There are three general types of successful outcomes from the action inquiry process:

Workgroups might try out new approaches to teaching or service that can be integrated into academic programs and student services at little additional cost to the campus, such as innovations that involve changes in practice and culture.

Workgroups might try out an approach that will merit a redirection of funding, changing a current strategy at the campus—an approach that may involve providing professional development opportunities for existing personnel or even hiring some new personnel (a level of funding that can be realized through careful budgeting, possibly coupled with strategic incentives in the budgeting process).

Workgroups may come up with tested ideas for fundamentally new approaches or major new initiatives that merit consideration by trustees and external funding agencies, or that may merit inclusion in the campus development campaigns.

It is expected that initiatives recommended by workgroups will have been tested through pilot testing solutions, at least in an initial “try out,” to see if the idea holds up at your campus. However, when bold new ideas emerge, the campus administration needs to be prepared to work on strategies for funding. If this requires new internal budget allocations, or if external funds are needed, then it is important that this process be followed with active interest by the IPAS campus coordinating team and that periodic updates be given to central planning and budget groups.

Stage 3 Action Inquiry

The IPAS workshops on the action inquiry process introduce members of the team to the stages of inquiry and provide opportunities to explore the meaning of core elements in the action inquiry process. This section of the IPAS Resource Guide provides an overview of the action inquiry process and addresses related organizational issues.

Action inquiry should be conducted by workgroups organized to address challenges.

Workgroups are comprised of faculty, professionals, and students who have an interest in addressing a critical challenge of common concern. Some members of each team may have professional responsibilities in organizational units that are involved in addressing the challenges. Others will have knowledge and skills that relate to the specific challenge area.

Each of the five tasks in the action inquiry process is introduced below, with examples to illustrate the use of the methodology.

Inquiry Task 1

Build an Understanding of the Challenge

Why does the challenge exist? What solutions have been tried in the past and how well did they work? What aspects of the challenge have not been adequately addressed? What aspects of the challenge require more study? Develop hypotheses about the causes for the challenges using data to test the hypotheses. (Do the explanations hold up to the evidence?)

It is often assumed that once a challenge is identified it is relatively easy to come up with a solution. In fact, some members of your committee may believe they know the best solution to the challenges your campus faces based on their experience on your campus or elsewhere, or based on their understanding of best practices or research literature. However, we issue the following alerts:

Beware of jumping to conclusions too soon. If a problem is system-wide, then it has existed for a long time and may be resistant to commonly accepted solutions.

If your workgroup has been given a major challenge, it is best to start by analyzing the problem. Why did the challenge emerge in the first place?

The solutions that are most likely to address the challenges facing your campus will tackle the underlying problems or causes.

It may take several attempts to “try out” possible solutions before your workgroup has a well-grounded understanding of the problem, why it is a problem, and how academic and service units can best organize their programs to address the challenge.

We issue these alerts to let you know that the inquiry process is not simple. It involves hard work, reflection, and collaboration. The goal of the inquiry process is to build a shared understanding of why the problem exists in the first place. We suggest a four-step process, as outlined in Figure 3.1.

Figure 3.1 Inquiry Task 1
Build an Understanding of the Challenge

Questions To Organize Inquiry	Information Sources	Strategies
<p>Step 1</p> <p>Why does the challenge exist in the first place?</p>	<ul style="list-style-type: none"> • Campus studies and reports • Reflections and observations (yours and others') • Analyses by your IR office • Analyses by IPAS project team 	<ul style="list-style-type: none"> • Review of available evidence: Compile studies and reports that relate to the possible explanations for the challenge. • Brainstorming: Early in the process the workgroup should brainstorm possible answers to the question. After freely listing possible answers, consider how they relate to the evidence. • Focus groups or interviews, as needed.
<p>Step 2</p> <p>What solutions have been tried in the past? How well did they work?</p>	<ul style="list-style-type: none"> • Existing programs and practices (documents, interviews) • Review of evaluations • Conducting evaluations 	<p>If the challenge you face is a long-standing problem, there probably have been previous attempts to address the challenge.</p> <p>When reviewing current and past practices, consider:</p> <ul style="list-style-type: none"> • How did this program get started? • Did it work well in the past? • What aspects of the program currently work well and which ones do not? <p>There may be a great deal of information available for your workgroup to review. After a review of the evidence, consult with your IR office and/or the IPAS project team at IU about getting assistance with evaluation processes.</p>

<p>Step 3</p> <p>What aspects of the challenge have not been adequately addressed, and why?</p>	<ul style="list-style-type: none"> • Interviews and/or surveys on campus which ask the tough questions in respectful ways • Workgroup's analysis of the data and reflections on possible explanations (from Step 2) 	<p>The workgroup should go through the data, assembling a workable explanation for the problem.</p> <ul style="list-style-type: none"> • How has the definition of the challenge changed over time? • How have past interventions influenced the understanding of the problem? • What aspects of the challenge are currently being addressed? • Which aspects are not being addressed? • What should be addressed? • How should the explanations for the underlying reasons for the challenge be reformulated?
<p>Step 4</p> <p>What aspects of the challenge require more study?</p>	<ul style="list-style-type: none"> • Additional data collection • Workgroup's deliberations and reflections 	<ul style="list-style-type: none"> • Identify solutions being used elsewhere (other campuses) and in different places on campus. • Identify alternatives that you would like to learn more about. • Develop hypotheses about the causes of the challenge and how it might be addressed. • Develop a plan for investigating possible solutions

Often the tough issues on a campus have been extensively studied in the past. Often too, there will have been past efforts to address the challenge. The goal of the process outlined above is to build a grounded understanding of the problem, as situated on your campus. At this point your workgroup should be ready to explore new options, learning from the experiences of others.

Inquiry Task 2

Look Internally and Externally for Solutions

Talk with people on campus about how they have addressed related challenges. Consider best practices related to the challenge and how they might be adapted to meet local needs. Visit other campuses that have tried out different approaches to the problem. How well will these alternatives address the challenge at your campus?

Faculty and professional staff are frequently involved in professional organizations that study issues related to access, retention, professional development, and other critical challenges facing college and universities. There is extensive descriptive information available on best practices and a few studies that actually test the results of these studies.

As part of the process of building an understanding of the challenge, the workgroup will have developed a shared understanding of the campus' historical experience with the problem, how it has been approached in the past, and how it might be approached in the future.

With this common understanding, the team is ready to look at the literature on best practices and related research literature, with an explicit focus on what practices are likely to address the challenges that appear central to your campus.

The process to identify alternative practices is outlined in Figure 3.2.

Figure 3.2 Inquiry Task 2
Identify Alternative Solutions

Steps	Strategies	Deliberations
<p>Step 1</p> <p>Identify solutions that you would like to learn more about.</p>	<ul style="list-style-type: none"> • Review the literature. • Call colleagues. • Search the Web. • Talk with IPAS partner colleges. 	<p>Build an understanding of the solutions that merit consideration and the strategies that might address the challenge.</p>
<p>Step 2</p> <p>Identify places where these solutions are being tried, or literature describing where they have been done in the past.</p>	<ul style="list-style-type: none"> • Develop a list of questions to ask. • Identify a list of campuses to visit or call. 	<p>Learn all you can about alternative solutions. What will meet local needs?</p>

<p>Step 3</p> <p>Conduct campus visits or telephone interviews to learn more about the options.</p>	<ul style="list-style-type: none"> • Review how well alternatives have worked elsewhere. • Make campus visits and/or call other campuses. • Share what has been learned. 	<p>Consider these questions:</p> <ul style="list-style-type: none"> • What are the key features of these solutions? • How are the features aligned with the challenge as you define it? • Will any of these solutions address the problem your campus faces?
<p>Step 4</p> <p>Identify ideas for possible solutions internally, reflecting on what you have learned from other campuses, your own experience, and the literature.</p>	<ul style="list-style-type: none"> • Share what you have learned with others on campus. • Seek input into the workgroup’s preliminary solutions, and consider how they might be tailored to meet local needs. 	<p>Critical challenges can be addressed by adapting current practices and/or modifying current practices.</p> <p>Based on what you have learned, as a workgroup, consider alternative related changes in current practices and alternative practices that you might adopt from elsewhere.</p>

This stage in the inquiry process involves looking at what works elsewhere, but using your insiders’ knowledge—and especially your shared understanding of the problem—to make informed judgments about possible next steps.

Inquiry Task 3

Assess Possible Solutions

Consider alternatives in relation to the understanding of the problem developed in Task 1. Will the solutions address the challenge at your campus? Do you need more data? How can the solution be pilot tested? If you tried out the solution, how would you know if it worked? What information would you need to collect to know how well it worked?

As a result of studying campus history and looking for possible solutions, your workgroups should identify a small set of possible solutions. On a large university campus, many different solutions can be adopted by academic and service units, providing a “cafeteria” of services for students. However, on small campuses, each solution requires careful thought, especially if funding for innovations is limited. In either environment, it is important to filter through possible solutions, using available information to analyze what might work. The goal is to identify a few options that merit further study, testing in practice. Figure 3.3 provides an overview of the steps in this process.

Figure 3.3 Inquiry Task 3
Assess Alternative Solutions

Steps	Strategies	Deliberations
<p>Step 1</p> <p>Consider solutions (in relation to your understanding of the challenge).</p>	<ul style="list-style-type: none"> • Assemble information on alternatives from multiple sources (visits, calls, and the literature). • Develop a systematic approach for assessing links between features of solutions to your understanding of the challenge. 	<p>Consider these questions:</p> <ul style="list-style-type: none"> • Did the solutions link to the challenges in the ways that you had hypothesized? • Did the solutions actually address the problem in the cases studied? • Is there research literature to support your conclusion?
<p>Step 2</p> <p>Will the solutions address the local challenge?</p>	<ul style="list-style-type: none"> • Summarize the evidence. • Reach a shared understanding in the workgroup about how the solutions relate to the problem. • Present analyses of alternatives to IPAS campus coordinating group. • Consider how well evidence addresses the questions asked by external groups. 	<p>The workgroup should assess how well the alternative solutions might address the solution.</p> <p>Presenting the analysis to other groups on campus, including the campus coordinating group, provides further insight into your understanding of the problem and the workgroup’s analysis.</p> <p>Based on feedback, it may be appropriate to reanalyze the solutions or even consider other solutions.</p>

<p>Step 3</p> <p>What solutions merit testing on campus?</p>	<p>Based on the evidence, pick a solution or a few solutions to pilot test.</p>	<p>Given the central role of the workgroup in testing solutions, it is crucial that they select alternatives they would like to try out.</p> <p>Based on feedback from presenting their ideas, they should consider the types of evidence they would need to confirm or disconfirm the workability of the solution.</p>
<p>Step 4</p> <p>What can be tested?</p>	<p>Design experiments (local tests of the solution, possibly with a control group).</p> <p>In the design of the experiment, consider how the solution relates to the challenge.</p>	<p>The pilot tests of alternative solutions need to be carefully planned.</p> <p><i>Example:</i> Alternative approaches to instruction can be tried out in some classes and compared to others.</p>
<p>Step 5</p> <p>What information would you and others need to know if the solutions addressed the challenge?</p>	<p>The design of the experiment should include collection of information that can be used for evaluation.</p> <p>Consult with the IPAS project team, as appropriate and needed, on designs of experiments and evaluations.</p>	<p>When planning for an experiment, consider:</p> <ul style="list-style-type: none"> • Information routinely collected by the campus • Additional information needs (surveys and other sources)

Action research involves experiments in actionable situations. Rather than moving from intervention to intervention, the purpose of action experiments is to build a deeper understanding of professional practice and to engage faculty and professional staff in the process of experimenting in practice, as a means of professional development and community building.

The design of action experiments is a critical aspect of the action inquiry process. Well- designed action experiments can be documented in ways that enable practitioners to communicate their findings to potential funding agencies, both internal and external to the institution. Therefore it is critical that plans for action experiments include designs for evaluations, along with plans for the pilot test.

Inquiry Task 4

Develop Action Plans

Action plans should address the implementation (trying out) of solutions that should be pilot tested. Consider solutions that can be implemented by current staff. If there are additional costs, develop budgets for consideration internally and externally. (Remember, seeking additional funds can slow down the change process.) Develop action plans with time frames for implementation and evaluation.

The pilot testing of potential innovations is the core element of action research. Well-designed experiments can be published in journals on teaching in all fields of inquiry. Engaging faculty and professionals in the process of testing alternative solutions through action experiments can enhance the level and quality of discourse in departments and professional units.

The action plan for an experiment may require review within the organization, not only for human subjects approval (an important step if the workgroup members seek to publish the results), but also by campus administrative groups, if additional funding is needed. Guidelines for action planning are presented in Figure 3.4

Figure 3.4 Inquiry Task 4
Develop Action Plan for Experiment

Steps	Strategies	Deliberations
<p>Step 1</p> <p>Identify solutions that can be tested.</p>	<p>Develop an experimental (or quasi-experimental) design for a pilot test, involving practitioners who will try out the solution.</p> <p>Find collaborators for research (e.g., IR office, IPAS team, faculty on campus).</p>	<p>Consider how the experiment will be conducted, whether there is a “control” group.</p> <p>Those engaged in the experiment should develop designs for review by the entire workgroup and the campus coordinating team.</p> <p>Evaluation should be integral to the design (and coordinated with the IU IPAS project team to ensure adequacy and communication of results).</p>
<p>Step 2</p> <p>Develop budget proposal if additional funds are needed.</p>	<p>If additional funding is needed, develop a budget plan for approval.</p> <p>In the organizing process, the campus coordinating team and campus budget authorities should have established funding parameters.</p>	<p>Finding means of supporting faculty and other professionals represents an important issue.</p> <p>External funding should be sought in advance if internal university funding is not available.</p>

<p>Step 3</p> <p>Finalize action plan.</p>	<p>Depending on the timing of the action inquiry process, pilot tests can be undertaken in the 2004-05 or 2005-06 academic years.</p> <p>A schedule should be developed for implementation of each pilot test and for the evaluation of the interventions.</p>	<p>Consider the time frames for implementation, including coordination with other administrative processes, along with the collaboration of external evaluators.</p>
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Each campus should develop a review process for experiments. It is important to build a professional development culture among professional staff and faculty that supports innovation. Action experiments represent an integral part of creating a culture of innovation.

It is important to communicate about the results of action experiments within the administrative structure of the college and university. The IPAS coordinating team should be integrally involved in the review of action plans, seeking funds for experiments as needed, and communicating results within the institution, especially as they can inform institutional planning, research funding, and development campaigns.

Inquiry Task 5

Implement Pilot Test and Evaluate

Provide feedback to workgroups and campus coordinating team. Use evaluation results to refine the solution. Also, evaluation can be used as a basis for seeking additional funding from internal and external sources, to the extent that additional revenues are needed to fully implement the solution.

The workgroups should use the results of experiments as a basis for communicating within the university about strategies for institutional improvement.