

Framework for Strategic Analysis in Higher Education

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ABSTRACT

Higher education institutions have a plethora of analytical needs. However, the irregular and inconsistent practices in connecting those needs with appropriate analytical delivery systems has resulted in a patchwork that sometimes overlaps unnecessarily and sometimes exposes unaddressed gaps. The purpose of this paper is to examine a framework of components for addressing institutional analytical needs while leveraging existing institutional strengths, in order to maximize analytical goal attainment most effectively and efficiently. The core of this paper is a focused review of components for attaining greater analytical strength and goal attainment in the institution.

INTRODUCTION

Higher education institutions have a plethora of analytical needs. However, the irregular and inconsistent practices in connecting those needs with appropriate analytical delivery systems has resulted in a patchwork that sometimes overlaps unnecessarily and sometimes exposes unaddressed gaps.

The purpose of this paper is to examine a framework of components for addressing institutional analytical needs while leveraging existing institutional strengths, in order to maximize analytical goal attainment most effectively and efficiently.

The current fiscal climate demands that all higher education institutions strive for optimal effectiveness and deliver the greatest efficiency possible in the use of resources. The deployment of a sound overall strategy for addressing the analytical needs of the institution will pay dividends in better decision making, more efficient use of resources, and gains in institutional effectiveness. These advantages are both significant and timely, given the increasing complexity of demands and costs, as well as the concomitant steady erosion of fiscal support for postsecondary education.

Focusing upon the clarification of components for attaining greater analytical strength and goal attainment in the institution will yield gains in more effective allocation of resources and in improved collaboration in the use of resources.

DEVELOPING A FRAMEWORK FOR STRATEGIC ANALYSIS IN HIGHER EDUCATION

Within the context of higher education institutions, there is a need to develop information and analyses, to help decision makers to see the institution more clearly, to understand the institution more strongly, and, consequently, to make better decisions regarding the operation of the institution. Development of information and analyses provides integral components for a variety of institutional functions, including the following:

- Institutional research
- Assessment / evaluation
- Planning
- Institutional effectiveness
- Decision support
- Accreditation
- Policy analysis
- Quality improvement

At the core, however, are the institutional needs for pertinent information and analyses. In higher education institutions, some fundamental, broad, institutional categories for which there are needs for

information and analyses are the following:

- Students

What are students' backgrounds, aptitudes, experiences, and areas of competence?

What are students' needs (academic, social, and other)?

How are students performing and making progress toward a successful collegiate experience?

- Faculty and Staff

What are the credentials, expertise, experience, and areas of competence of the faculty and staff?

What are the expectations and needs related to the compensation that is needed to attract and retain faculty and staff?

What are the professional needs of faculty and staff?

- Infrastructure – Physical and Digital Resources

Capacity

Operation and maintenance

Renewal and replacement

Space management and utilization

- Finance

Revenue sources and amounts

Internal allocation of funds

Expenditures

Efficient use of funds

Effective use of funds

- Mission and Purpose

Why does the institution exist?

What purpose does it serve?

What is the mission of the institution?

Is the institution effective in progressing toward the achievement of the mission?

Is the mission evolving?

Is the mission pertinent?

From the above broader categories and questions come more specific types of information and realms of inquiry. The following are some example categories and sub-items.

Enrollment

Enrollment analysis, including enrollment modeling and enrollment projection

Admission / student recruitment analysis

By instructional site

By instructional mode and format (digital/online versus traditional/on-ground)

Instructional Effectiveness

Including instructional mode, techniques, and other aspects

Students

Demographic characteristics

Student success

Progression toward degree completion

Persistence / Retention

Graduation rates

Finance

Cost analyses

Instructional

Administrative

Institutional

Cost containment

Appropriate allocation of resources to where needed for operation and innovation, for standard operation and for incentive/reward for performance improvement

Financial effectiveness of investments (return on investments) in new ventures (new programs, centers, techniques, software, and more)

Programmatic effectiveness of investments (return on investments) in new ventures (new programs, centers, techniques, software and more)

Economic impact analysis -- upon local or regional economy

Human Resources

Employee / human resource information

Instructional faculty -- including tenure and promotion

Human resource planning, including faculty, administrator, and staff projections

Faculty salary equity -- to be equitable to all faculty and competitive (in recruitment and retention of faculty) in the market place

Administrative salary equity -- to be equitable to all administrators and competitive (in recruitment and retention of administrators) in the market place

Interinstitutional Comparisons

Benchmarking versus selected comparison institutions or groups of institutions

University Advancement / Development / Fundraising

Finding prospective donor targets (individuals and organizations)

Decision Support

Support of decision making and strategic planning, in support of:

President, Vice Presidents

Cabinet Members

Deans, Department Chairpersons, and others

Analysis for Improving Student Success

Improving advisement through analysis of successful paths, successful course sequences, successful combinations of an array of variables – demographic and entrance characteristics, as well as contextual student instructional engagement and collegiate experience engagement, with perhaps opportunities for in-depth analysis

Assessment of Learning

Learning

Pedagogical/instructional goals

Departmental goals

Accreditation compliance

Student Financial Aid

Scholarship management analysis

Student financial aid utilization and effectiveness analysis, overall and by type of aid (grant, loan, and work study)

Research Consultation

With other units, regarding:

Research method

Research design

Sampling

Instrumentation

Analysis

Development and use of results

Clearly, institutional needs for information and analyses are *extensive*.

Leimer and Terkla (2009) studied how to organize and develop staffing for conducting institutional research, and they reported that appropriate staffing is critical to effective institutional research. However, they also reported that most institutional research offices are chronically understaffed.

If higher education institutions have substantial needs for information and analyses, and many institutions are chronically understaffed to develop the necessary information and analyses, then how are institutions to survive this challenge?

To address the extensive institutional needs for information and analyses, institutional clarification of the following components is crucial.

1. Clarifying the Analytical Targets

What should be analyzed, and what will be analyzed? How do we determine what is most important to analyze?

2. Clarifying the Collaborations

Who will analyze? Why will certain institutional entities (such as Institutional Research, Fiscal Affairs, Human Resource Services, Academic Affairs, or Student Affairs) be considered? Who will be selected to conduct analyses or perform analytical tasks and why? Who will collaborate and why?

- What units, subunits, teams, or task forces will be selected to conduct analyses and why?
- What is the role of a centralized analytical function or team in an organized system of institutions, such as a state system of community colleges or a system of universities?
- How can interinstitutional partnerships and collaborations be encouraged and utilized to reinforce the sharing of successful analytical practices, the elimination of duplicated or overlapping analytical resources, and the avoidance of duplicated activity and effort (such as “reinventing the wheel”)?
- Are the existing analytical deployments efficient and effective?
- Under what conditions will external consultants be used, and why?

3. Clarifying the Methods and Tools

What analytical tools, software, philosophical framework, and methods will be used? And why?

What guides the selection of methods and tools? Is it efficiencies? Is it generalizability to various projects? Is it economical/affordable pricing of methods and tools?

4. Clarifying the Focus Upon Cost and Benefit

What is the payment for analytical goal attainment?

Who will pay? How much will it cost? How much should be invested in obtaining/accruing analytical end products? How do we know if the result was cost-effective, worthwhile, and actually meaningful?

CONCLUSION

Each higher education institution should seek to analyze (a) a selected set of higher-order operational targets for that type of institution, within the situational context of that institution, and use (b) an appropriately matched array of strategies, techniques, and tools.

Different higher education institutions will have varying resources that can be applied to strategic analysis and improvement of strategic analytical capabilities. For example, in the Carnegie Classification of Higher Education Institutions, the research intensive doctoral universities typically will have greater resource strength and latitude in the deployment of resources to address analytical needs than will a community college. Therefore, the standardized template for a strategic analytical framework will be different for these two types of institutions, reflecting differences in staffing, expertise, analytical tools, and other resources. Research intensive doctoral universities generally will utilize a specified set of approaches that leverages the institutional strengths of adequate staffing, research expertise, advanced software, and other technological and human resource advantages. In contrast, community colleges generally will use a different set of strategies, relying upon careful selection of analytical targets, pooling interinstitutional expertise with colleagues, and collaborating with other institutions, including four-year institutions, or centralized higher education system support, when feasible.

Ultimately, each institution must seek to explore the four clarification components outlined above and to

determine how to use staffing and resources to address fundamental analytical needs in the most effective and efficient way.

Each institution must seek to identify and clarify the prioritized analytical targets, the collaborations that will be used to address those targets, and the methods and tools to conduct analyses and develop information for institutional use, all the while keeping cost/benefit requirements within an affordable and useful range. Achieving this balance will best ensure that information and analyses are being conducted optimally, to the benefit of the institution and its students, faculty, staff, and other stakeholders. Finally, as the demand for pertinent information continues to grow in global culture, including higher education institutions, the savvy utilization of effective collaboration will be crucial to the successful development of information and analyses.

REFERENCE

Leimer, C. & D. G. Terkla. (2009). Laying the foundation: Institutional research office organization, staffing, and career development. In C. Leimer (Ed.), *Imagining the Future of Institutional Research. New Directions for Institutional Research*, no.143 (pp. 34-58). San Francisco: Jossey-Bass.

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