



The Handbook for Institutional Research

Outline

Introduction

1. Intent of the book
2. Overview of the organization and content of the Handbook
3. How the Handbook content was identified and developed
4. The authors – general discussion of how authors were selected and their qualifications

A. Institutional Research: The profession and its role in the academy and on campus

Section 1: The Theory and Practice of Institutional Research

Institutional research is a relatively new administrative component of higher education. It can be argued that the practice of institutional research has evolved into a professional activity over the past 50 years. In this section, the profession is described in terms of its history, the professionals that practice institutional research, the skills and knowledge that define the profession, and the roles and functions that IR offices play on campuses, systems, and national organizations.

1. What is Institutional Research?
 - a. Institutional Research – What is it?
 - b. The characteristics of Institutional Research
 - c. How Institutional Research supports primary Higher Education functions
 - d. Institutional Research and Scholarship – Are they conflicting or parallel activities?
2. History of Institutional Research
 - a. Institutional Research: The Evolution of the Profession (tie to growing demands on the academy, technology, and social change)
 - b. Association for Institutional Research: A Professional Organization Supporting the Profession
 - c. State, Regional Institutional Research Associations, and Related Higher Education Professional Associations
 - d. International Development of Institutional Research
 - e. The Impact of Demands for Accountability from State and Federal Agencies and Accrediting Bodies
3. Doing Institutional Research
 - a. Roles of Institutional Research Offices and Functions on Campuses
 - b. Distribution of Functions: The Relationship of Institutional Research to Other Offices
 - c. Location and Organization of Office
 - d. Characteristics of Successful Institutional Researchers
 - i. Academic Training and Education
 - e. Characteristics of Successful Institutional Research Offices
 - f. Overview of Major Tools Used in Institutional Research (Bernie Sheehan's Three Hat Theory)
 - i. Technology
 - ii. Learning
 - iii. Management
4. Skills for the Practice of Institutional Research
 - a. Ethics
 - b. Standards of Professional Practice

- c. Institutional Research Training/Education and Professional Development
 - d. Relation of Skills to Type of Institution and Location of Institutional Research
 - e. Political, Managerial, Technical, Analytic, and Communication Skills
5. High Service with High Touch – The Role of the Internal Consultant

Section 2: Policy and Collaborations

The focus of this section is on issues that go beyond the campus, including accountability of individual institutions to external publics and multi-institutional collaborations. These comprise learning consortia and articulation agreements, system-level issues and activities, and public policy related to higher education. Topics include accreditation; data exchanges and national data resources; system, state and federal higher education policy; multi-institution cooperative projects and arrangements; and international projects and comparisons.

- 1. IPEDS and Other Data Sources
 - a. IPEDS
 - b. Common Data Set (CDS)
 - c. Student Clearing House – tracking students outside your institution
 - d. “Accountability Reporting” VSA, UCAN, Ed. Trust, GuideStar, CSF
 - e. Ratings and Rankings, US News, NRC Research Rankings, Peterson’s Guide, Barron’s, etc.
 - f. Using National Data Sources for Comparison Analyses
 - g. Data Exchanges: CUPA, CSRDE, Delaware, Community College Benchmark Study, HEDS, AAUDE, SCUP, etc.
 - h. Accreditation Demands – Overview
 - i. Sustainability
 - j. NPEC
- 2. System- and State-level Data Collection Issues/Practices
 - a. Data Quality Campaign
 - b. K-20 Databases
- 3. Accountability, Accessibility and Affordability
 - a. The Consumer Movement
 - b. Higher Education Opportunity Act
 - c. Demonstrating Learning
 - d. State Scorecards, Measuring Up, etc.
- 4. International Issues in Higher Education
- 5. FERPA/IRB
 - a. Legal Issues with Students
 - b. Protection of Research Subjects
 - c. Protection of Researchers and Institution

Section 3: IR Tools & Techniques

Presented in this section are discussions that focus on the methodologies of institutional research; addressing such issues as organizational, ethical, methodological, and technological aspects of the profession. Topics include organizing and evaluating IR offices and functions; statistics, research, reporting methods; quality and management tools, computer and information technologies for IR work; and data administration and warehousing.

1. Institutional Data/Information Management
 - a. Standardizing data
 - b. Data warehouses, data marts, Census (snapshot)
 - c. Reporting tools and Business Intelligence
2. Strategic Tools: Market Matrices, TOWS, Scanning, Gap Analysis, Benchmarking, KPI Reports, Dashboards, Balanced Score Cards, Key Success Factors
3. Quality Tools: 6 sigma, CQI, TQM, Root Cause Analysis
4. Measuring Opinion and Behavior
 - a. Surveys and questionnaires
 - b. Interviews
 - c. Focus Groups
 - d. Non-Obtrusive research
5. Analytical Methods
 - a. Research Designs
 - b. Quantitative (Parametric and Non-parametric)
 - c. Advanced (Logistic, Survival, HLM, Data Mining)
 - d. Qualitative (Case method, observation, field studies)
 - e. Mixed Methods (Grounded theory, nested case, etc.)
 - f. Projection Techniques
6. Presenting Results
 - a. Graphs
 - b. Tables
 - c. Web
 - d. Software (GIS, Tableau, etc.)
7. Sustainability
 - a. Background – Talloires Agreement, AASHE
 - b. Measurements – STARS, GSI, LEEDS Certification
 - c. Environmental, Economic, and Social aspects
8. Tools for Measuring Effectiveness
 - a. The Checklist
 - b. The Consultant
 - c. Customer Evaluation
 - d. Process Benchmarking
 - e. Performance Benchmarking

B. Institutional Research: Planning and Decision Support

Section 4: Student Life

This section covers institutional research related to student personal and student social development, student demographic and economic issues, campus and community engagement, non-traditional students, student satisfaction with their higher education experience. Topics include student profiles, student diversity, patterns of student behavior in college, student expectations and satisfaction, participation in campus activities; the campus climate for students; and serving students with special needs.

1. Student Affairs – Evaluation and research (examples of studies that have been conducted on various components of student affairs – rec. centers, housing, Greek organizations, etc.)
2. Socially Responsible Learning/Leadership and mission management
 - a. Analysis of implications of mission
 - b. Civic leadership and social responsibility
 - c. Defining Socially Responsible Leadership
 - d. Assessment of Leadership Development
 - e. Managing and measuring values
3. Programs for Engagement and Enhancement
 - a. Social Engagement – First Year Programs
 - b. Academic skills (test taking, note taking, etc.)
 - c. Time management
 - d. Personal value development
 - e. Career selection
 - f. Life-long learning
4. Assessing Student Development (holistic aspects)
5. Defining a campus climate for diversity (minority, international, multiculturalism)
 - a. Accountability-Reporting (Including IPEDS)
 - b. Identifying groups of interest
 - c. Managing Student Life programming
 - d. Measuring the institution’s success in adapting to their needs
6. Unique Student Populations: Measuring and meeting their specific needs
 - a. Transfers
 - b. Dual enrollment
 - c. Part-time students,
 - d. working students
 - e. Single parents
 - f. Under-represented Minorities
 - g. Need-based Financial Aid, etc.

7. Athletics
 - a. Academic progress rule
 - b. NCAA Self Study
 - c. Measuring student success

Section 5: Student Learning

This section focuses on the role of institutional research in support of assessment of student learning on our campuses. Assessment is examined in the context of the major field of study, general/liberal education, developmental education, and other areas; including cooperative education and internships, study abroad, dual enrollment/advanced placement programs, graduate education, co-curricular experiences, service- and community-based learning, and workforce development and technical training. Topics include the role and impact of technology in learning, national studies of student learning, student learning standards in the accreditation process, program improvement resulting from assessment, and ties between assessment, institutional effectiveness, and institutional research.

1. Accreditation Standards for Learning and Assessment (Regional, Professional, International)
2. Core Education
 - a. Developmental/Remedial Education
 - b. Liberal Studies/General Education
 - c. Internationalism/Study Abroad
 - d. Advanced Placement/Accelerated Programs
3. Discipline Based Outcomes (AAC&U VALUE project)
 - a. UG Professional Programs
 - b. STEM Fields
 - c. Liberal Arts
 - d. Life Experiences
 - e. Creative and Performing Arts Fields
4. Graduate programs and students
 - a. Graduate
 - b. Professional
 - c. Postdoctoral Programs
 - d. Time-to-Degree
 - e. Cost/Stipend Issues

5. Indirect Evidence of Student Learning
 - a. Incoming Freshman Assessments, (such as CIRP)
 - b. First-year Experience Surveys (such as YFCY)
 - c. Engagement Surveys (such as NSSE and CCSSE)
 - d. Satisfaction Surveys of College Offices and Services (such as Noel-Levitz or PSOL for online learners)
 - e. Early Leaver Surveys
 - f. Exit Surveys
 - g. Alumni Surveys

6. Assessing the Role and Impact of Technology in Learning
 - a. Distance Education
 - b. Classroom Management Systems
 - c. Libraries
 - d. Social Networks
 - e. Impact of Classroom Capture Systems (Smart Classrooms)

7. Service and Community Based Student Learning
 - a. Co-op and Internship Programs
 - b. Service-learning

8. Workforce and Technical Skill Learning

9. Learning and National Data Surveys
 - a. CLA, MAPP, CAPP, etc.
 - b. HS&B, NELS, etc.
 - c. Graduate Record Examination

10. Assessing Impact of Curriculum-Related Interventions
 - a. Learning communities
 - b. First Year Experience seminars
 - c. Undergraduate Research Programs
 - d. Use of response technologies
 - e. Use of small group learning techniques
 - f. Using case study approaches

11. Student Success
 - a. Defining Student Success
 - b. Advising (academic, career, personnel, and financial)
 - c. Understanding Retention, Persistence and Graduation
 - d. Life-long Learning

Section 6: Faculty/Staff Issues

People (faculty and staff) are the single largest investment our institutions make. In this section, the role of institutional research in analyzing and evaluating various aspects of faculty and staff issues is explored. Topics include the academic governance within various types of institutions; faculty employment, evaluation, and experiences; workload analysis; faculty roles in the new learning environment; faculty and staff salary research; academic and administrative program review; legal issues related to faculty and staff members; and the role of institutional research in supporting planning and decision making within these areas.

1. Program Review
 - a. Data Sources
 - b. Interfacing with the Department Head and Faculty
 - c. Comparative Information
 - d. Using Academic Reviewers

2. Recruitment, Development, and Evaluation of Academic Staff
 - a. Faculty and Staff Surveys (NSOF, campus surveys, FSSE, HERI, etc.)
 - b. Forecasting /Modeling Retirement and Other Types of Turnover
 - c. Faculty and Staff Unions
 - d. Orientation Programs and Their Impact
 - e. Faculty Transformation (the deconstruction of the instruction function)

3. Measuring and Evaluating Faculty Workload
 - a. Instruction
 - b. Research
 - c. Service
 - d. COACHE (academic careers, Harvard) and HERI
 - e. Scholarly Productivity Databases: e.g., Thomson-Reuters (ISI) and Elsevier (Vic)
 - f. Delaware Study of Productivity
 - g. Kansas Study of Community College Instructional Costs and Productivity
 - h. National Community College Benchmark Project

4. Staffing and Evaluating Administrative Functions and Processes
 - a. Comparable Staffing
 - b. Administrative Salaries and Compensation
 - c. Faculty and staff Modeling
 - d. Assessing Administrative Units

5. Legal/HR issues
 - a. Faculty and Staff Diversity Issues
 - b. Unions and Faculty Contracts
 - c. Discrimination in Treatment : Pay and Promotion

6. Shared Governance and Institutional Research Support
 - a. Faculty Governance Structure
 - b. Traditional Shared Responsibilities
 - c. The Use and Costs of Committees and Workgroups
 - d. Differences by Type of Institution

Section 7: Planning and Resource Management

This section focuses on campus-level planning, evaluation, and management. Discussions address the types of information and analyses that would be of primary interest to senior campus-level administrators for campus-wide planning and improvement. Topics include the role institutional research can play in support of enrollment management (including retention studies); quality improvement; strategic planning; fiscal, physical, and human resources (and their allocation); campus information systems; campus policy formulation; and organizational management and change.

1. Planning, Management, and Budgeting
 - a. Strategic Planning
 - b. Budgeting
 - c. Costing and Managerial Accounting
 - d. Change Management
 - e. Transformative Change
2. Managing Academics, Service, and Research: Provost and Academic Vice President
 - a. Departments, Schools, and Colleges: The Balancing Act
 - b. Research
 - c. Extension and Outreach
 - d. Academic Support
3. Enrollment Management
 - a. Branding, Marketing, and Recruiting
 - b. Financial Aid (merit and need-based)
 - c. Types of Students to include the non-traditional students (dual enrollment, older, part-time, CC (training) vs. 4-year, Veterans)
 - d. Student flow and Enrollment Modeling
 - e. Cohort Tracking (technical issues and NSCH) (might be two chapters)
 - f. Student Records and the Registrar
4. Facilities
 - a. Space Management Systems
 - b. Deferred Maintenance
 - c. Facilities Planning
 - d. Classroom Utilization
 - e. Other Space Utilization

5. Executive Functions
 - a. Board of Regents/Trustees
 - b. President's Office
 - c. Public Relations
 - d. Development
 - e. Alumni
6. Risk Management and Legal Compliance
7. Sustainability
 - a. Background – Talloires Agreement, AASHE
 - b. Measurements – STARS, GSI, LEEDS Certification
 - c. Environmental, Economic, and Social aspects
8. Managing Technology and IS
9. Managing Diversity
 - a. Affirmative Action Planning
 - b. Supporting Diversity Across the Institution

Section 8: Conclusion

1. Issues, Challenges, and Opportunities
 - a. Political
 - b. Social
 - c. Economic
 - d. Technology