

A New Organization to Meet the Expanding Role of Institutional Research

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Overview

- Changing role of Institutional Research
- Organizational structures for IR
- Case Study: University of Central Florida
 - Needs analysis
 - Organizational design
 - Transition and implementation
 - Roadblocks and challenges
- Practice and promise

Role of Institutional Research

- Institutional Research
 - “Research leading to improved understanding, planning and operating of institutions of postsecondary education” [AIR, in Peterson, 1999]
- Reporting and accountability
- Policy development
 - Descriptive--external
 - Analysis--internal
- Operational practice
 - Assessment and improvement
 - Operational excellence

[*New Directions in IR*, No. 104, 1999]

New Organization for IR

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Changing Role of IR

- Adaptation [Peterson, 1999]
- Postsecondary Knowledge Industry Analyst--new role for 21st Century
 - Monitoring social and industry conditions
 - Reviewing strategic options
 - Monitoring the periphery
 - Assessing and reviewing programs
 - Changing institutional assessment
- Institutional redesign

Existing Organizational Structures for IR

- Functions

- data administration and reporting
- research and analysis
- assessment
- survey support
- planning (e.g., enrollment and strategic)
- environmental scanning
- exploratory analysis
- data warehouse

[Website review of 43 institutions--Pet-Armacost, Armacost and Young, 2000]

Organizational Structures for IR

- Reporting
 - Academic
 - Administrative
 - President (few)
- Names--
 - vary widely
 - Tend to include “planning and analysis”
- Leadership--Coordinator to Director to Vice-Provost
- Move toward integrated approach
 - Include data warehouse
 - Link to planning and analysis

Case Study: University of Central Florida

- UCF established in 1963 located just outside Orlando
 - Metropolitan Research University
- Grown from 2,600 to 36,000 students in 38 years
 - 30,000 undergraduates and 6,000 graduates
- Doctoral intensive
 - 76 Bachelors, 57 Masters, 3 Specialist, and 19 PhD programs
- Second largest undergraduate enrollment in the state
- Approximately 1000+ faculty and 3500 staff members
- Five colleges
 - Arts and Sciences, Business Administration, Education, Engineering and Computer Science, and Health and Public Affairs

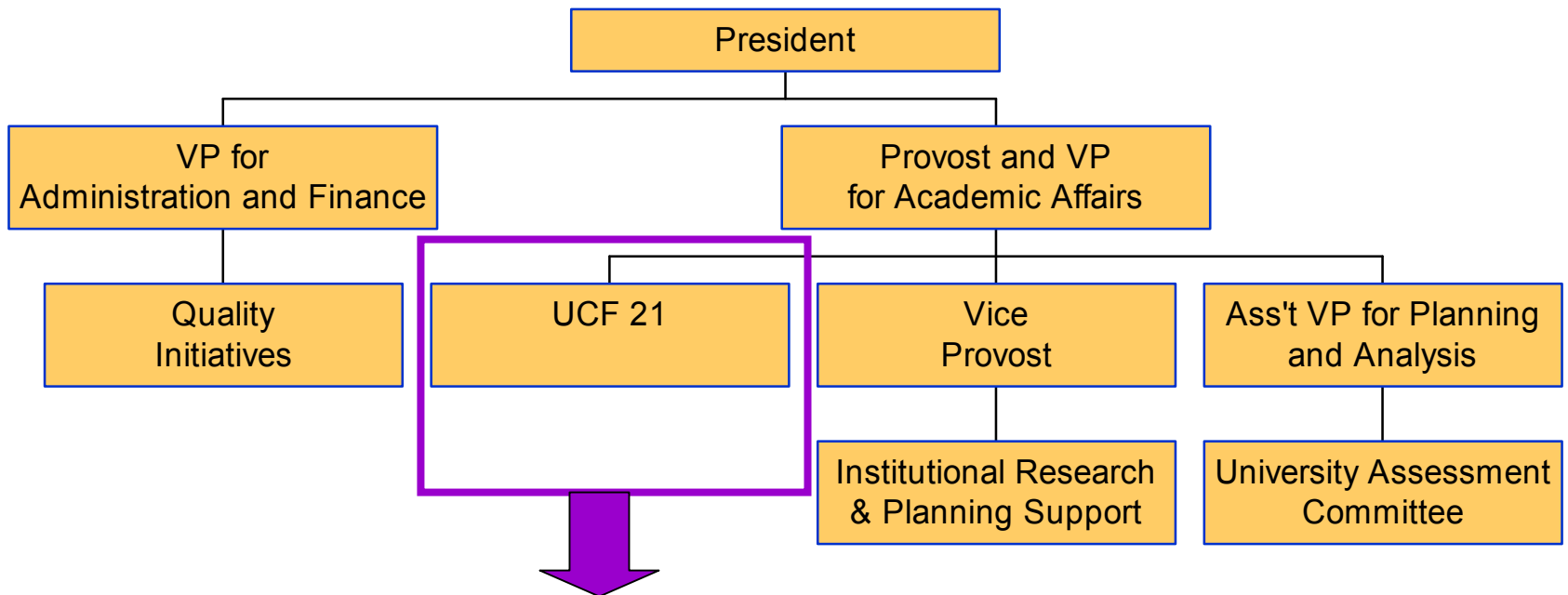
The University of Central Florida— IR-related Organizations in 1999

- Institutional Research and Planning Support (5 FTE)
 - Office providing official reporting to external agencies, development of all official University data reports, data support for strategic planning, program review, and accountability, faculty activity reporting, and other traditional IR tasks
- Quality Initiatives (4.5 FTE)
 - Office focused on training for continuous improvement
- University Customer Focus for the 21st Century (UCF 21)
 - Research project conducting a systems study of student services
- University Assessment Committee
 - Committee assigned to serve as quality assurance for assessment process

The UCF 21 Project: A Catalyst for Change

- Established by Provost as a Strategic Planning Initiative in 1997
- Examined student services
 - Inventory of services
 - Quality of services
 - Reviewed surveys and existing studies
 - Quality of information
- Made several recommendations in 1998 and 1999 to Provost and President in bi-monthly meetings
 - Information office for students
 - Operational Excellence office to support surveys and process analysis studies

Organizational Relationships (1999)



**Charged to Propose
a New Organization**

New Organization for IR

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UCF 21 Analysis Plan

- 12/99: Conduct needs analysis of senior administrators (Department chairs to President)
 - Information needs
 - Support needs
- 3/00: Review other organizations
- 6/00: Make recommendation to President and Provost

Opportunities Meet Plans

- Serendipity: Impending vacancies in leadership positions
 - IRPS Director announces intent to leave in 9/99
 - QI Director announces intent to leave in 1/00
- Created opportunity
 - Development of new vision
 - New position description for IR Director
 - Definition of new support functions
 - Re-alignment of organizational functions
- UCF 21 asked to accelerate study

UCF Administrative Information Needs Analysis [UCF 21, Fall 1999]

- Focus groups and senior executive interviews
- Additional information needs:
 - Student-related data and information (official and operational)
 - Survey information useful to programs and units
 - Planning data
 - University facts (official and operational)
 - Employee data
 - Budget and finance data
 - Research data
 - Accountability measures
 - Facilities data

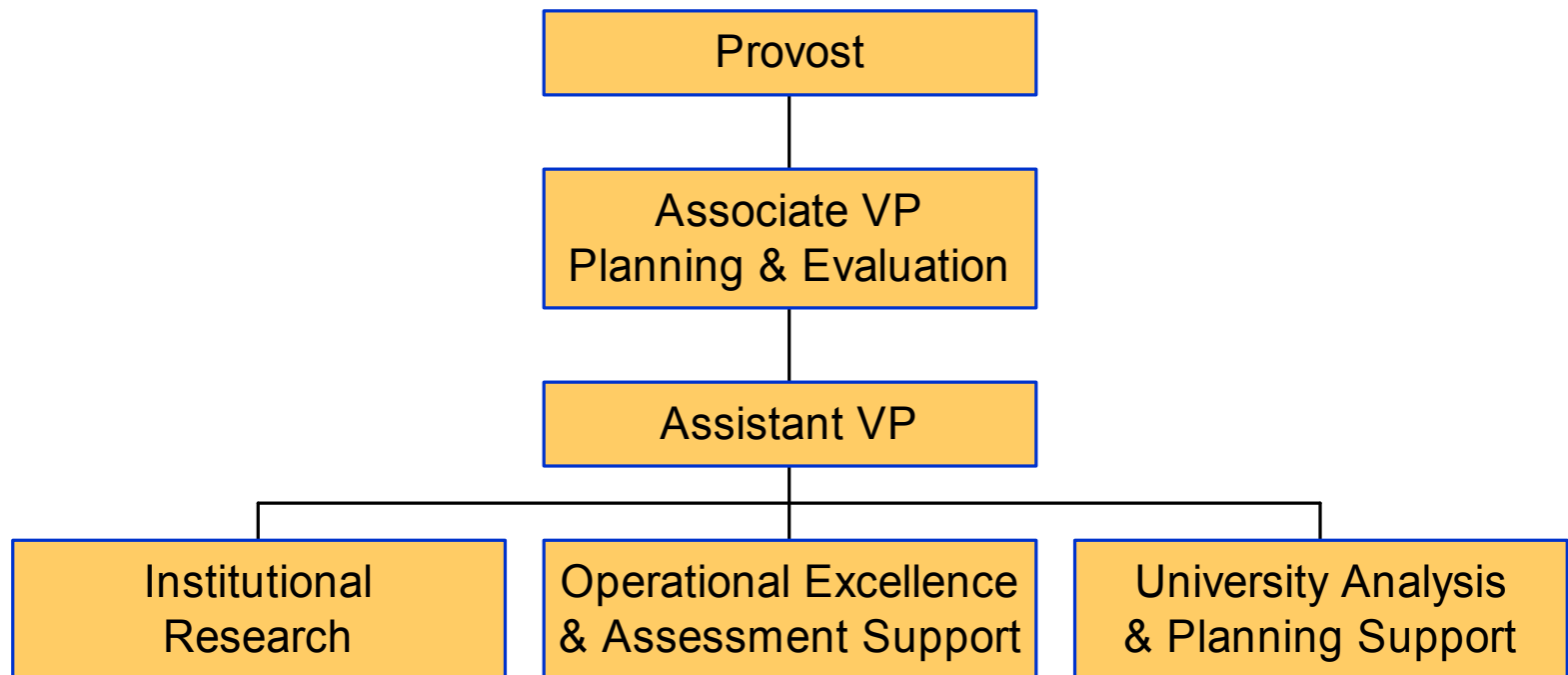
UCF Administrative Information Needs Analysis [UCF 21, Fall 1999]

- Needed capabilities
 - Walk-in service
 - Management reports
 - Special studies and analysis capability
 - Modeling support
 - Survey design and analysis support
 - Research and exploratory analysis capability
 - University database access and knowledge
 - Planning and accountability support
 - Assessment training
 - External surveys

Other Needs [UCF 21, Fall 1999]

- Assessment support for regional and program accreditation and program reviews
 - Central repository of unit assessments and systems view of assessment results
 - Survey design assistance
 - Survey analysis support
 - Mechanism for documenting use of results
 - Change in “attitude” about assessment
- Information to support strategic planning, accountability and performance measurement

Proposed Reorganization (January 2000)



An Experiment: P&E Functions Implemented March 2000

Planning and Evaluation

Office of Institutional Research

- BOR Reporting
- Data Warehouse (P&E)
- Regular Data Files (Electronic)
- Regular Standard Management Reports (Paper and/or Electronic)
- Training and Access Control to Databases
- All External Reporting
- All Surveys from External Agencies
- Maintains Knowledge and Access to Relevant External Databases
- Walk-in Support for Data Requests

Office of Operational Excellence and Assessment Support

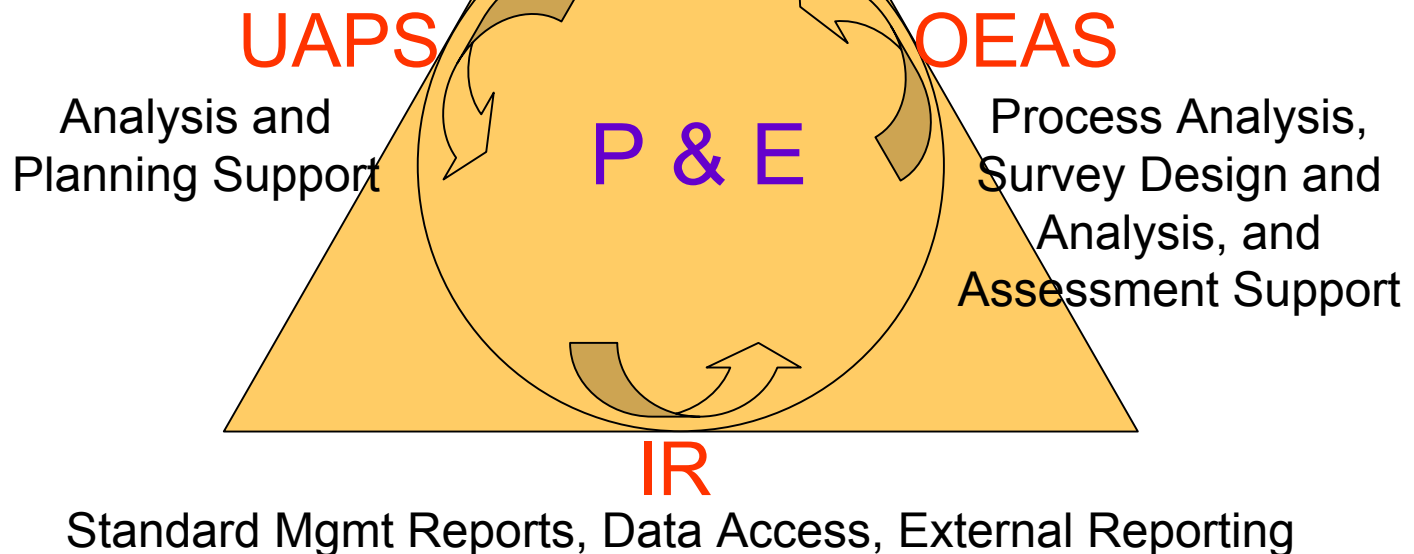
- Institutional Effectiveness Support
- Program Accreditation Support
- Accountability Measures
- Strategic Plan (implementation and monitoring)
- Program Reviews Support
- Coordination of SSITs
- University-level Surveys (SSI, IE Surveys)
- Within unit-level analyses
- Development and Analysis Support for Surveys
- Clearinghouse for Internal Surveys
- Process Analysis Support
- Walk-in Support for Survey and Process Analysis
- Training on Assessment and Process Analysis

Office of University Analysis and Planning Support

- Enrollment Projections
- Enrollment Planning Support
- Model Development Support
- Management Models
- Planning Support for New Programs
- Benchmarking Analysis for Administrative and Academic Units
- Marketing Analysis Support
- Short-term Analyses to Support Special Requests and inquiries (e.g., BOR and Legislature changes)
- Proactive What-If Analyses
- Strategic Plan Development
- Environmental Scanning
- Exploratory Data Analysis (Ah Ha Support)
- Policy Analysis Support (TIP/PEP)
- Evaluation of Data Needs
- Walk-in Support for Analysis

Planning and Evaluation Unit Roles

**INFORMATION, KNOWLEDGE,
SUPPORT, FACILITATION**



Institutional Research: Original Functions

- Provide official reporting to external agencies and develop all official University data reports
- Provide data support for strategic planning, program review, and accountability
- Facilitate faculty activity reporting
- Develop fact books, website, and provide walk-in support for data requests

Institutional Research: A New Focus

- Ensure that high quality, useful and timely data and information are provided that support the decision-making process and planning needs at all levels
- Ensure that the university has the type and quality data needed to evaluate and improve the instruction, research and public service functions
- Provide easy access to data, information, and knowledge

**Two focal points: data administration and reporting
information management**

IR Initial Activities: Refocus Efforts and Add Technical Capability

- IR mission changed March 2000
- Initial efforts
 - Hiring, hiring, and hiring
 - Relocation to new space
 - Initiate projects
 - Dynamic data access
 - Data warehouse and data marts
 - Improved external reporting

IR Staff Timeline

| | | |
|---|--|-----------------------------|
| <p>September 1999 Former Director Left 5.25 FTE</p> | <p>Lost Coord., Computer Applications Added Sr. Statistician March 2001 6.50 FTE</p> | <p>Current 11.5 FTE</p> |
|---|--|-----------------------------|

| | | |
|---|--|--|
| <p>Director Assistant Director Computer Programmer Analyst Office Manager Coordinator of Computer Applications Work study student</p> | <p>New Director Appointed November 2000 6.50 FTE</p> | <p>Director Assistant Director (2) Coordinators, Statistical Rsh (2) Coordinators, Computer Applications Computer Programmer Analyst Senior Statistician Administrative Asst. (3) Graduate Student Assistants (3) Work Study Students Office Manager</p> |
|---|--|--|

Data Administration and Reporting

- Director of IR is designated as University Data Administrator
- State (BOR) files and data requests
- Other external reporting (e.g., surveys)
 - Wintergreen Orchard House
 - US News
 - Petersen's
 - Plus 30 more
- Internal standard management reports
 - Program reviews

Information Management

- Developed web-based prototype SAS dynamic data capability
 - Added functionality (maps)
- Developed a web-based SAS dataset for a “Course Registration Tracking”
- PeopleSoft
 - LEAP Standards, LEAP Steering, Team Leads, Academic Workgroup, Workgroup to evaluate faculty activity components in PeopleSoft

Committees, Workgroups/Teams and Assistance Provided

- Course Planning Workgroup
- External survey review process (working with OEAS)
- Provided consultation on Retention study for science, math and engineering students
- Assisted with interpreting retention programs and making improvements

Primary Challenges in Getting Started

- Staffing timeline and length of the hiring process
- New demands and expectations versus time required for re-tooling and training
- PeopleSoft implementation
- Unanticipated events

Future Issues and Directions

- Build the Information Management capability
 - Develop capability to provide internal (specialized) reports on demand
 - Create a greater web presence (static and dynamic access to data)
 - Develop Operational Data Store (ODS), Datamarts, and Data warehouse
 - Move toward knowledge management

University Analysis and Planning Support: Mission

- Enhance the management capability within the University by providing timely analysis and research support across a broad spectrum of management responsibilities, ranging from strategic planning to detailed program management
- Develop a capability to creatively identify data for those models that is accessible, relevant, and meaningful
- Ensure that models and data access provide direct support as well as empower academic and administrative units to utilize analysis and research results and models.

UAPS Initial Activities: Establishment of New Office

- UAPS established March 2000
- Initial efforts
 - Established OEAS and UAPS office infrastructure
 - Established new lines
 - Initiated projects
 - Strategic Planning support
 - Systems Analysis and Enrollment Planning
 - Special Studies

Strategic Planning

- Developed Strategic Plan Revision process structure
- Provide facilitation support
 - SPC Executive Committee meetings and SPC focus groups
- Presentation support (developed/presented)
 - President, Deans, Chairs, Vice-Presidents
- Develop guidelines and consultation
 - Academic and Administrative strategic reviews

Systems Analysis and Enrollment Planning

- Developed UCF system enrollment projection and allocation model
 - Main campus and branch campus projections
 - Basis for enrollment growth allocation by BOR
- Revised University enrollment model
 - Embedded optimization model
 - Integrated Excel spreadsheet implementation
- Prototype graduate student enrollment model

Special Studies

- Environmental scanning for metropolitan universities
- Initial capability for geographic information system (GIS) analyses—potential for analyzing student demands by geographic area and modeling area campuses
- Salary Equity study
 - Major data investigation (EEO-6 data file)
 - Data cleaning
 - Statistical and comparative analyses
 - Regression tests for assessment of equity
 - Develop model for routine analysis

Other Activities

- Management models and analyses
 - SDES course planning team
 - Enrollment analyses
- Consultation on data issues
 - University committees and administrative units
- Professional involvement
 - AIR, SAIR, FAIR, Best Assessment Processes IV, INFORMS, SACS, PSHEUG, ASEE

Primary Challenges in Getting Started

- UAPS was considered an experiment
 - Limited staffing levels (2.5 FTE)
 - Not in main budget
- Logistics of setting up a new office (facilities, space, budget, personnel)
- Ensuring the foci of support activities are aligned with office mission
 - The very heavy time commitment to strategic planning takes away from other support areas

Future Issues and Directions

- Continued strategic planning support
 - Develop objectives and measures
- Models
 - Expanded enrollment models with a strong link to program interests and activities
 - Pro-active planning support
- Performance and accountability
 - Develop meaningful measures for management
 - Develop appropriate measures for reporting
 - Benchmarking support
 - Develop basis for Integrated Performance Review system

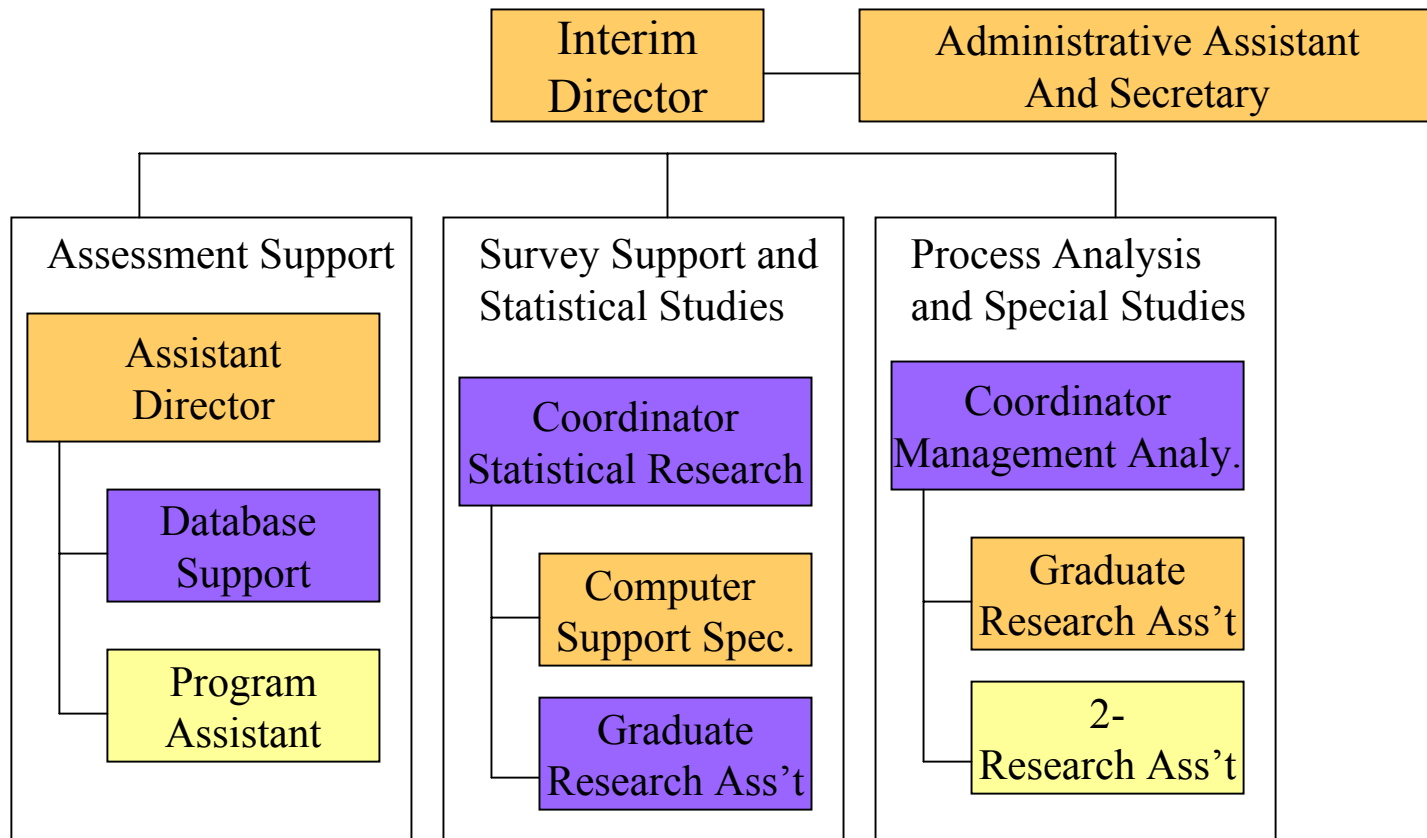
Operational Excellence and Assessment Support: Mission

- Improve the quality of University operations and academic programs by providing support to administrative and academic units in a broad range of activities, spanning from preparing for regional and program accreditation to conducting and analyzing surveys
- Have the capability to identify who requires assistance, understand their specific needs, and provide the needed support in a timely fashion.
- Provide assessment support, survey design and statistical analysis support; and conduct process analyses, environmental scanning, specialized training, and special studies.

OEAS Initial Activities: Establishment of New Office

- OEAS established March 2000
- Initial efforts
 - Retrain QI staff and established new lines
 - From 4.5 FTE to 9.75 FTE (14 staff members)
 - Initiate projects:
 - Assessment support
 - Program review support
 - Survey support
 - Process analysis support and special studies

Staffing Upgrades in Three Phases (March, October, January)



Assessment Support

- Revised the Institutional Effectiveness process
 - Annual submission and review of assessment plans
 - Annual submission and review of assessment results
- Central repository for assessment documentation
- Coordinate the collection and review process (101 administrative units and 163 academic programs)
- Develop review templates and submission templates
- Develop IE guidelines, instructions, etc.
- Conduct workshops and assessment clinics

Program Review Support

- Developed vision document with UAPS on the integrated performance review process
- Developed pilot review for Engineering Technology
 - One of the pilot Program Reviews in Spring 2000
- Participated in and facilitated the design of UCF's new academic program review process
- Develop academic program review templates
- Work with IR in developing institutional data for the academic program reviews

Survey Support: Institutional

- Developed in-house capability to design, generate, and analyze Scantron surveys
 - Faster turn-around and more relevant analyses
- Revised Graduating Senior Survey (Scantron forms)
 - Review and revision of over 25 program-specific surveys
 - Data to programs and units to support IE
- Assist with administration and analysis of surveys
 - CSXQ freshmen, CSXQ parents, CSXQ faculty/staff, CIRP freshmen, YFCY first year, CORE alcohol and drug use
- Conduct regular institutional surveys
 - Graduating seniors, graduating MS/PhD, alumni, parents, clients, employers, SSI, IPS

Survey Support: Program/Unit

- Design and analyze surveys for special studies
 - K-12 mentoring activities
 - Student profile for UCF Downtown Academic Center
- Design surveys for administrative units
 - Judicial programs, ITR, Health Center, Advising offices, Travel department
- Design surveys for academic programs
 - 20 questions in Graduating Senior Survey
- Conduct workshops on developing surveys
- Provide consultations with units and programs
- Examine quality of surveys submitted with assessment plans and proactively assist units to improve surveys

Process Analysis Support

- Conduct process analyses (methods analysis, time studies, facility layout, organization, simulation, process flow)
 - Undergraduate Admissions Office operations
 - UCF Travel Department
 - Hiring process
 - Housing customer service function
- Conduct special studies
 - How UCF Ranks
 - Internal and External Partnerships
 - President's Commission on Racial and Ethnic Minorities
 - UCF's response to external surveys

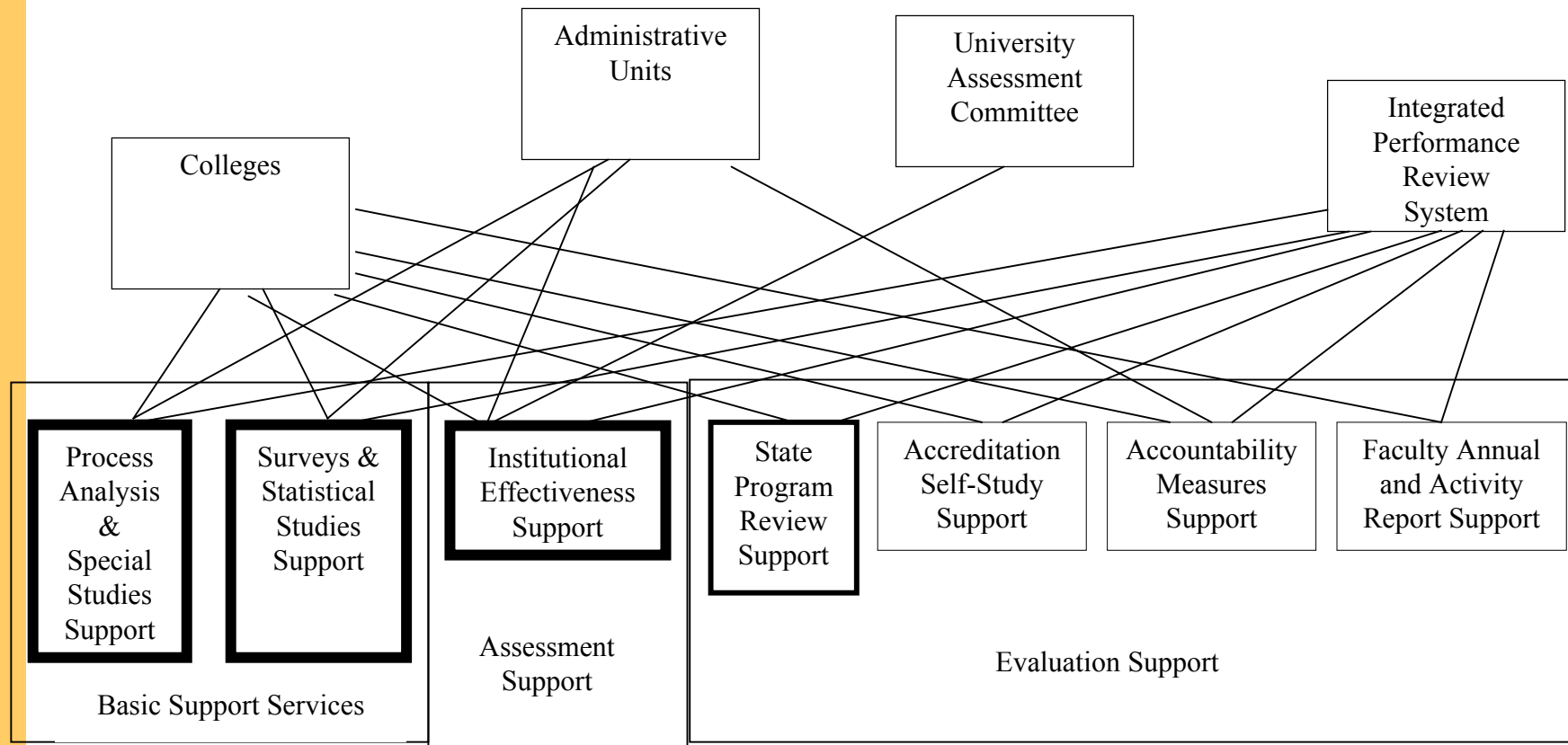
Other Professional Involvements and Activities

- Prepare assessment plans for research proposals (e.g., NSF)
- Provide consultations to other universities on assessment
- Professional society involvement
 - INFORMS, IIE, AAHE, ASEE, AIR, SAIR, PSHEUG, and FAIR
- Conduct conference presentations and workshops
 - ASEE, SAIR, Best Assessment Processes IV, AAHE, INFORMS, and SACS

Primary Challenges in Getting Started

- Retraining staff from Quality Initiatives
- Trying to do too much too quickly
 - making promises and not being able to deliver in a timely fashion
- Maintaining perspective
 - The possible versus the perfect
- Logistics of setting up a new office (facilities, space, budget, personnel)
- Documenting and demonstrating the value of the new office

Vision for Future OEAS Support Functions



Primary Challenges Related to All Three Units

- Communication
 - Among units and with senior decision makers
- DATA...DATA...DATA
 - Accessibility
 - Accuracy
 - Integrity
- Increased emphasis on accountability
- Benchmarking and performance
- Knowledge management
- Shrinking budget coupled with increased demand and expectations

University Commitment

- 137.5% increase in “IR-related” staff
 - 10.0 FTE in 1999 to 23.75 FTE in 2001
- Over 130% increase in budget
- Continuing positive support from President and Provost

Lessons Learned from the UCF Experience

- Planning and vision are essential
- Building support at the top is a lengthy process and takes patience
- Finding the right people is difficult
- Hiring new staff is better/easier than retraining
- Serendipity can create both opportunities and challenges
- Change takes time (training, staffing, facilities, etc.)
- Results cannot be immediate and new enterprises must help “manage expectations”

Discussion

Presentation will be available at
<http://pegasus.cc.ucf.edu/~oeas>