Operational efficiency in academic operations

WENDY KILGORE, PH.D.
Senior Director of Research, AACRAO
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Academic operations in higher education are essential to improving learner outcomes and helping them pursue academic and professional goals. These operations encompass policy, practice, technology and human resources.

The purpose of operational efficiency in higher education is to achieve objectives with the fewest resources possible. The goal is to use resources efficiently to improve results. Proficient, efficient academic operations contribute to the success, persistence and education completion of a learner.

This report focuses on operational efficiency in academic operations.

Academic operations covers a number of functions, including curriculum management, catalog management, classroom-space management, class scheduling, credential audit and completion processing, class registration and institutional and/or programmatic accreditation. These functions are supported by effective leadership, institutional policies, data analysis and meaningful stakeholder engagement.

In October, 2023, AACRAO collaborated with Ad Astra to conduct a survey that forms the basis of this report. AACRAO’s primary contacts across institutions in the United States and Canada were asked to participate in the survey. A total of 347 responses were received from 48 U.S. states, the District of Columbia, Guam, Puerto Rico and six Canadian provinces. The majority of responses, 94%, were from U.S. institutions, which provides a representative sample of degree-granting institutions eligible for Title IV in the United States.

Institutions that participated in the survey varied in size, type, control and governance. When based on the level of education provided, they were categorized as follows:

- **70%** serve both undergraduate and graduate and/or professional learners
- **21%** cater exclusively to undergraduate learners
- **9%** focus solely on graduate and/or professional learners

These data will help shape the forthcoming book from AACRAO Academic Operations: The Role of the Registrar, slated for publication in time for the 2024 annual meeting in April 2024.
Key data

After analyzing survey results, key data points became evident.

- There is broad alignment and consensus regarding the components and functions encompassed within the term “academic operations.”
- No statistical differences in opinions about academic operations were identified when data were disaggregated by institutional size, type or control.

97% of respondents believe operational efficiency is important for academic operations.

NEARLY FOUR OUT OF FIVE respondents rate their level of operational efficiency in academic operations as moderate or below.

The following were associated with increased efficiency:
- Collaboration
- Application of technology
- Communication
- Reduction in manual processes

53% of responding institutions have implemented new technology in the last year to support academic operations.

The following functions were reported as most improved through technology:
- Curriculum management
- Degree audit/completion certification
- Class registration oversight and administration
- Catalog management
- Transcript oversight

THE TOP TIME-CONSUMING FUNCTIONS OF ACADEMIC OPERATIONS ARE:
- Class-schedule building
- Curriculum management
- Degree audit/completion certification
- Class registration oversight
- Administration catalog management
Functions identified as academic operations

AACRAO has been actively engaged in defining the term academic operations. AACRAO’s goal is to categorize and understand a range of functional areas crucial for enrollment at educational institutions. These areas are distinct from administrative services, financial services, information technology and similar sectors.
Data from the survey revealed the following:

- A small percentage (4%) of respondents believe their institution lacks a clear, operational definition of “academic operations.” Figure 1.
- The majority of participants confirmed the functional areas provided as response options resonated with their institution’s understanding and conceptualization of academic operations. Figure 1.

Data indicates a broad alignment and consensus regarding the components and functions encompassed within the scope of academic operations, despite a few institutions lacking a formalized definition.

Eight percent of respondents noted their institution includes additional functions in academic operations not included in Figure 1. Additional functions were identified through an analysis of open-ended responses in the survey and are as follows:

- Enrollment management
- Academic advising and academic support
- Academic-records management and academic-progress monitoring
- Institutional reporting and analysis
- Veteran affairs (VA) processing and administration
- Compliance and regulatory reporting
- Pedagogy and faculty development

**FIGURE 1: Functions considered part of academic operations**

- Class scheduling: 92%
- Curriculum management: 90%
- Catalog administration: 88%
- Class registration: 85%
- Classroom-space management: 83%
- Institutional and/or programmatic accreditation: 66%
- No working definition of the term academic operations (exclusive choice): 4%
- Other: 8%
Operational efficiency in academic operations
Importance of operational efficiency

Respondents were asked to consider how important operational efficiency is in the success of their department’s work. Figure 2 summarizes their responses.

**FIGURE 2: Importance of operational efficiency to academic operations**

- 55% extremely important
- 37% very important
- 5% moderately important
- 3% slightly important
- 0% not at all important
Ratings of operational efficiency

Respondents were also asked to rate the level of operational efficiency of their institutions.

FIGURE 3: Rating of the operational efficiency of academic operations

- **5%** not efficient
- **13%** slightly efficient
- **60%** moderately efficient
- **19%** very efficient
- **2%** extremely efficient

Rationale for operational efficiency rating

Participants were asked to provide rationale for their response choice in Figure 3. Open-ended responses were examined to identify key themes associated with the perceived level of efficiency in academic operations. They are summarized below.

**Not Efficient**
Among respondents who perceived their academic operations to be “not efficient,” the overarching sentiment is that operational efficiencies are outdated due to technological infrastructures, lack of cohesive leadership and suboptimal collaboration mechanisms. Modernization, strategic clarity and a more integrated, responsive, adaptable operational model are needed to meet contemporary academic-operations demands and efficiencies.

**Slightly to Moderately Efficient**
Those who perceived their academic operations to be “slightly efficient” or “moderately efficient” recognize the existence of ongoing improvements and remaining existing challenges. The interconnectedness of technology, processes, people and continuous improvement in achieving operational excellence highlight the multifaceted nature of efficiency in academic operations.
Key themes related to inefficiency in academic operations

TECHNOLOGICAL INFRASTRUCTURE
- Many responses cite the causes of inefficiency. These include the use of antiquated systems, lack of necessary tools and outdated technology.
- There are issues related to software integration, lack of coordination of multiple systems and nonaligned technologies.
- Institutions are at various stages of implementing or upgrading systems; some are in the early stages of technological change.

RESOURCES AND STAFFING
- Many respondents cite limited resources, including staffing and technological resources, as problem areas.
- Staff shortages, under resourcing and over reliance on limited staff for academic operations were also cited as complications.

PROCESS AND OPERATIONAL OPTIMIZATION
- A lack of consistency, standard processes and best practices across operations are common difficulties.
- There is a need for ongoing improvements; review and enhancement of processes may achieve better efficiency.

Our systems, or lack thereof, lead many processes to be manual in nature. This results in processes being very time consuming and subject to inaccuracies.
MANUAL PROCESSES

▪ Heavy reliance on manual work causes processes to be slow, cumbersome and prone to inaccuracies.
▪ There is a need for more automated processes to improve efficiency and to reduce processing time and errors.

GOVERNANCE, DECISION MAKING AND COMMUNICATION

▪ At some institutions, there appears to be a disconnect between high-level administration and operational realities, which affects decision making and policy.
▪ A lack of clear responsibilities, coordination and communication among departments and roles can be a challenge.
▪ Coordination and communication among different departments, offices and decision makers are common issues.
▪ There are challenges in engaging relevant stakeholders, such as faculties and registrars, in essential conversations and decisions.

CHANGE MANAGEMENT

▪ Institutions vary in openness to change; some are experiencing cultural and resistance challenges.
▪ Institutions are in various stages of implementing changes and face various issues in transitioning and adapting to new procedures and systems.

ASSESSMENT AND EVALUATION

▪ The need for more data-driven strategies and approaches is necessary for improved efficiency in academic operations.
▪ Continuous evaluation of academic operations is needed to find improvement.

Many of the systems used to manage operations do not speak to one another or influence one another.
Key themes related to efficient academic operations

**Very to Extremely Efficient**
Among those respondents who perceive academic operations at their institution to be “very efficient” or “extremely efficient,” there is an emphasis on hard work, collaboration and improvements made in technology and processes. However, existing challenges and areas needing improvement suggest there is still an opportunity to reach a higher level of operational efficiency at these institutions. Points from these data are highlighted below.

**COLLABORATION AND TEAMWORK**
- Multiple departments, such as student services, IT and the registrar’s office, work together collaboratively to improve operational efficiency.
- Teams that are dedicated and work well together often communicate well across various departments.

**TECHNOLOGY AND DIGITIZATION**
- A shift toward digitization, such as the adoption of electronic workflows and a move away from paper and manual processes, is a consistent theme.
- To enhance efficiency, various technological tools, such as class-scheduling software and curriculum-management systems, have been adopted or are in the process of being implemented.

**CONTINUOUS IMPROVEMENT AND ADAPTABILITY**
- A strong culture of continuous improvement and adaptability is evident, with an openness to finding new ways to improve and to adapt to new technologies.

**STUDENT-CENTRIC FOCUS**
- A priority is to keep operations running smoothly and seamlessly to allow students to concentrate on their academics.
- Processes are in place to ensure the learner experience, such as registration, is smooth and efficient.
Figure 4 highlights the most time-consuming functions associated with academic operations among the response choices in the survey.

**FIGURE 4: The most time-consuming functions during the academic year among those related to academic operations (all that apply)**

- **Class-schedule building**: 70%
- **Curriculum management**: 67%
- **Degree audit/completion certification**: 55%
- **Class registration oversight and administration**: 55%
- **Catalog management**: 52%
- **Managing technology**: 51%
- **Reporting/data analysis**: 48%
- **Managing people**: 35%
- **Answering learners’ questions through other means than in person**: 30%
- **Answering learners’ questions in person**: 9%
- **Transcript oversight**: 8%
- **Other**: 4%

We have good teams in place that work well together to make our academic operations efficient. We are always looking for ways to make improvements that will benefit our students.
In the past year, some institutions have made changes to enhance the efficiency of their academic operations through the implementation of new technology. Below is a breakdown of some of the changes that institutions have made:

Our office has made substantial moves to make all processes electronic and are leveraging the systems we use to make this happen.
For institutions that incorporated new technology in the last year:

- Half reported that the use of pre-existing technology remained constant, indicating no change in usage patterns despite introduction of new systems or tools.

- A third cited an increase in the use of existing technology suggesting that the introduction of new tools may have complemented or boosted the use of older systems.

- Conversely, 17% experienced a reduction in the use of older technologies, implying that the new implementations may have partially replaced or decreased reliance on previous systems or tools.
Implications for practice

This report benchmarks current perceptions about academic operations and provides data to use to build a common definition and functional scope for the term academic operations. In addition, it provides insights into ways to enhance academic operations through strategic technological investments, foster collaborative environments, cultivate continuous improvement cultures and ensure operations are aligned with promoting an enriched learner experience. By embracing these strategies, institutions can navigate toward a future marked by operational excellence, enhanced stakeholder satisfaction and robust learner success and outcomes.

For those seeking to improve the operational efficiency of academic operations at their institution, consider the following:

**STRATEGIC TECHNOLOGICAL INVESTMENT**
Institutions should be strategic in technological investments, ensuring technological acquisitions and upgrades are aligned with broader operational goals and enhancement strategies.

**FOSTERING COLLABORATIVE ECOSYSTEMS**
Encouraging and nurturing collaborative ecosystems that foster cross-departmental synergy, communication and shared vision can be pivotal in advancing efficiency in academic operations.

**PROMOTING A CONTINUOUS IMPROVEMENT ETHOS**
Cultivating a culture resonating with continuous improvement, innovation and adaptability can enhance responsiveness to evolving operational landscapes and stakeholder needs.

**LEARNER-CENTRIC OPERATIONAL DESIGN**
Designing academic operations with a learner-centric lens, ensuring operational processes and strategies support and enhance the learner experience.
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American Association of Collegiate Registrars and Admissions Officers

1108 16th St. NW, Suite 400
Washington, D.C. 20036

Tel: (202) 293–9161 | Fax: (202) 872–8857

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