

Grand Challenges in Higher Education Assessment 2021-2026 Strategic Plan Produce actionable and visible assessment findings that drive innovation and improvement

Introduction

The field of assessment has shifted from conducting assessment to demonstrate compliance towards producing actionable assessment findings to drive innovative learning improvement and informed decision making (Blaich & Wise, 2018; Pasquerella, 2018). To effectively drive innovation, it is essential to improve assessment methodology so that assessment findings inform our understanding of the outcomes associated with innovative practices. We must identify the causes of gaps in student learning and success, identify evidence-based solutions, determine whether selected interventions are implemented correctly, and measure the extent to which interventions drive improvements (Eubanks, 2017; Fulcher, Smith, Sanchez, Ames, & Meixner, 2017). To move towards an innovative, visible, and actionable model of assessment, institutions must develop institutional frameworks of integrated institutional effectiveness (IIE). IIE requires the purposeful coordination and integration of institutional functions and processes that support institutional performance, quality, and efficiency (AHEE, 2021). As can be seen in Figure 1, within the triad of teaching and learning, discovery, and engagement, there must be integration between strategic and operational planning, outcomes assessment, institutional research, regional and specialized accreditation, and program/unit review. Integrated institutional effectiveness will encompass all that an institution does and tie it directly to its mission.

Frequently, assessment is only seen through the academic lens when it has the potential to address the academic, co-curricular, extra-curricular *and* administrative aspects of the institution. An expanded view of assessment sets the stage for integrated planning, collaborative governance, and change agility informed by data. Under this evolved strategy, innovative processes tie in well with braver and safer spaces to discuss the data which allows institutions to: Foster collaboration across campus units to become a mission-driven and data informed; Provide opportunity for members of the campus community to craft programs that advance academic excellence, discovery and engagement, and foster student learning and development; Use institutional performance measures to link student learning outcomes data to institutional planning and budgeting, resource allocation, and priority setting; Monitor environmental trends that extend the distinctive competitive advantage of institutions while attending to internal challenges and external threats; Model collaboration and transparency in the use of institutional performance data, and; Promote a campus culture of continuous improvement to ensure institutional vitality and operational excellence (Seymour & Bourgeois, 2018).

Plan Structure

Goal 1: Advance innovative approaches to institutional excellence

Objective 1.1: Improve integrated planning skills in senior leadership, faculty, and staff

Objective 1.2: Increase the use of integrated planning

Objective 1.3: Share innovative models of assessments used to guide resource allocation

Objective 1.4: Create brave and safe spaces to promote an innovative culture (policy, planning, collecting, reporting)

Objective 1.5: Create opportunities to experiment with alternative approaches to teaching

Goal 2: Advance innovative approaches to making institutional findings actionable

Objective 2.1: Improve quality of data by improving planning

Objective 2.2: Improve data collection by adding implementation fidelity descriptors

Objective 2.3: Improve data interpretation by increasing stakeholder engagement in the interpretation of findings

Goal 3: Advance innovative approaches to making institutional findings visible

Objective 3.1: Create and disseminate data visualization and data story resources

Objective 3.2: Increase use of data visualizations

Objective 3.3: Increase use of data storytelling

Full Plan

Goal 1: Advance innovative approaches to institutional excellence

Challenges have emerged in higher education since the mid 1990's, including politicization of higher education, decreased student enrollment, and COVID-19 (Klor de Alva & Christensen, 2020; Lesane II, 2020). These stressors and catalysts of change render a commitment to changes in institutional effectiveness a national priority (Metz, 2020). Linking integrated planning (IP) to the work of institutional effectiveness (IE) is key to creating mission-driven institutional improvements. IP is an innovative and sustainable approach to planning that builds relationships, aligns the organization, and emphasizes preparedness for change (Santilli, 2018).

The organizational alignment, fundamental to IP must occur both within and between units, so that staff and faculty work in collaboration to meet their institution's mission and goals, by displaying proactive long-term planning and operational agility. IP promotes and sustains institutional effectiveness and excellence. In view of this, IE offices should be situated in and inform strategic and operational integrated planning (see Figure 1).

Objective 1.1. Improve integrated planning skills in senior leadership, faculty, and staff

Successful innovations require integrated planning across an institution. Operationalizing IP requires cross-functional teams and boundary-spanning leadership that link strategy and implementation within and between domains and develop skills across units. To actualize these goals, IE professionals must be prepared to function at the nexus of strategic, tactical, and departmental planning and IE offices should serve as a "command center" within an institution's infrastructure and work in concert with senior leadership to conduct the internal and external analyses that inform strategic, tactical, and departmental plans.

Year	National Tactics	Local Tactics
1	Develop IP communications toolkit for use by leadership - Work with organizations to define roles for IE and IR, describe how IP and IE work differs from IR, assessment, and accreditation	Provide resources for linking budget/resource allocation to goals and assessment findings
2	Develop a toolkit for use in IP - Include templates for environmental scans, structural, personnel, and process changes.; see SCUP models; Create tools to assess the quality and quantity of IP	Improve resources for IP - invest in SCUP, Bryson, and other similar organizations
3	Promote national training opportunities through organizations for IE and IR to develop IP skills (see Appendix B)	Train administrators, faculty, and staff in IP
4	Encourage national organizations to support development of IE training network - Establish partnerships (AIR, SAAL, AALHE, NASPA, SCUP, ACPA) to define IP and IE in student affairs and co-curricular areas; create IP strategies for IE in these contexts	Integrate student affairs and co-curricular/experiential learning into IP
5	Create mechanisms for recognizing best practices in use of IP , such as a Baldrige Award or special journal issues; Secure funding and establish award criteria; create IE certifications	Apply for an IP award to recognize campus accomplishment; articulate how award recipients have defined (or re-defined) IE and/or IP in their institutional context

Costs: content developers, marketing plans aligned with the programs, communications, graphics, funding for awards

Performance Outcome: By 2026 there will be a national consensus on best practices for IP and training will be readily available to support high quality IP at institutions of higher education. Each subsequent year a higher proportion of institutional staff and leadership will be trained in IP.

Institutions trying to increase the speed of improvements through IP lack guidance regarding the skills needed to successfully integrate planning. Strategic alliances and a cohesive plan must be developed to encourage momentum within the assessment and higher education community. Agreement around the skills needed and the practices that should be followed to accomplish IP will help institutions of higher education more effectively drive innovations and improvements.

Year	National Tactics	Local Tactics
1	Develop national framework for IE – describe IE and how IE relates to IR; Create IE badges or micro-credentials; Create certification programs to recognize skilled IE professionals capable of IP	Create IE offices that are part of institutional leadership and oversee all aspects of planning, assessment, and related activities; advocate for sufficient staffing – See data at https://www.cupahr.org/
2	Develop software to integrate information from multiple units –learning management and student information systems, financial aid, co-curricular, alumni, admissions, graduate student application, and support services	Incorporate institutional effectiveness badges or micro-credentials in educational leadership and higher education degree programs
3	Advocate for participation in national system assigning individual K-12+ ID numbers that travel with students from kindergarten through graduate study - Professional organizations can advocate for State and federal agencies to tie financial incentives to establishment of individual ID numbers	Unify assessment, planning, program review, and research - Provide professional development to support integration
4	Create mechanisms for sharing information on data integrity, veracity in reporting, and data governance	Improve access to data for IP and improving student learning - identify barriers and implement strategies
	Develop templates for RFPs for purchasing software for managing, integrating, and extracting data	Implement data sharing practices - Identify and train management team; develop implementation plan; build confidence and awareness
5	Conduct research on the effectiveness of IE and IP - Determine metrics to assess institutional IP efficacy. Encourage research via special calls	Adopt systems for documenting student learning over time - consider a comprehensive learner record; disseminate to prominent vendors the critical capabilities required of software used for integrated assessment and planning.

Produce actionable and visible assessment findings that drive innovation and improvement



Costs: Communication; develop and provide certification and badges; Funds to pay designers and provide technological support;

Possible Sources of Support: Start up fees from a source like LUMINA, Educause, or AALHE; Partner organizations or new non-profit (or for-profit); Continued funding could come from organizations using the services; Consult with Lumina Foundation, NASPA, and AACRAO to support comprehensive learner record; Work with National ClearingHouse to integrate platform for a comprehensive learning record (CLR); IMS Global are creating CLR technology standards

Performance Outcome: By 2026 there will be agreement around the skills needed to accomplish institutional IP. As awareness of needed skills increases, more institutions of higher education will engage in effective IP.

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Objective 1.3. Share innovative models of assessments used to guide resource allocation

By strategically dedicating resources to innovations that are causing improvements, institutions will make more rapid progress towards their mission and vision. However, integrating budgeting decisions with assessment and planning has been difficult. Many institutions allocate resources based on past funding histories with little alignment to institutional goals and little consideration of findings from the assessment of student learning, academic program reviews, or administrative program reviews. As institutions embrace new models of IE, it is important to find ways to improve alignment between institutional goals, resource allocation decisions, and performance data, especially data on student success.

Year	National Tactics	Local Tactics
1	Develop training on budget/resource allocation and IP - Offer workshops at conferences and online training	Send staff to receive training to integrate resource allocation with integrated planning
2	Present information on establishing IP budget processes to higher education leadership - Host workshops/webinars to train leaders on establishment of procedures to support alignment of budget with assessments and planning	Anchor budgetary decisions to IE data with the understanding that improvement may require long time frames – attend training offered at national conferences

Costs: Money to create programs; spaces to hold training programs; people to lead the programs; payment for speakers/instructors

Performance Outcome: By 2026 training on the integration of budget decisions with institutional goals and assessment results will be readily available. As awareness grows, more institutional leaders will receive training and establish procedures to support the alignment of budget with assessments and planning

Framing strategic and assessment discussions as opportunities for learning creates *brave and safe spaces* for transparency and growth. A complete review of *all* assessment evidence can help faculty and administration identify aspects of programs that are working well and where students and other stakeholders struggle (Tucker & Stanny, 2021). A full consideration of failures as well as successes is required for institutional improvements. Therefore, it is necessary to create norms, practices and structures that allow honest accounting of the data -- “the good, the bad, and the ugly” -- to senior leadership without fear of reprisal.

**Note about local tactics: We need to value incremental change, which can be transformative over time (usually takes 3-5 years for incremental change to produce significant changes in institutional culture).*

Performance Outcome: By 2026 assessment discussions will take place at more institutions and be viewed as opportunities to examine successes and failures to make future improvements.

Produce actionable and visible assessment findings that drive innovation and improvement



Objective 1.5. Create opportunities to experiment with alternative approaches to teaching

Innovation and improvement require the safety to try new techniques. In ‘brave spaces’ faculty can experiment with innovative teaching strategies, course structures, and assignments without fear of negative consequences for early efforts that do not function as expected. Policies that allow faculty to note innovative strategies in promotion and tenure discussions by adding additional points for trial strategies or allowing faculty members to exclude one semester of course evaluation data from high-stakes decision processes may create a safe zone for exploration of new curriculum and teaching models.

Year	National Tactics	Local Tactics
1	Create best practices that encourage faculty to innovate and protect them from negative consequences - Consider reappointment, promotion, and tenure guidelines	Revise policy and practices to encourage innovation - Create proposal for exemption from review or temporary exclusion of course evaluations in tenure and promotion; Create processes for small and complex innovations
2	Disseminate best practices	Establish a grant for innovative teaching strategies - Determine budget ‘buckets’ based on cost for approvals; Establish a proposal submission process
3	Gather case studies of campuses following best practices	Draft proposals for alternative teaching assignments - Consider submission timeframes (annual/other), review process, Approval process, Publication of approved proposals
4	Disseminate case studies	Track implementation of projects - Identify successes and challenges; hold mid- and endpoint meetings to monitor implementation; Gather data
5		Determine success of innovation strategies and make revisions - Analysis of data; Stakeholder discussion of results; Close loop - modify or continue strategy

Costs: Time for creation of best practices and gathering case studies, dissemination costs

Performance Outcome: By 2026 there will be national awareness of best practices for encouraging faculty to try new teaching techniques. As the best practices become well know, increasing number of institutions will create policies to support faculty innovation.

Produce actionable and visible assessment findings that drive innovation and improvement



Goal 2: Advance innovative approaches to making institutional findings actionable

Rapid progress towards improvement requires integrated planning using high quality data. Each stage of the assessment process can be improved in ways that will make assessment findings more robust, more valid, and more reliable. We must create conditions that foster equitable participation, carefully select evidence for analysis, and ensure that appropriate stakeholders are included in planning, data collection, and reporting. Actionable assessment findings that lead to improvement are presented with relevant information to make data-informed decisions which includes information about what contributed to the outcome, how well a program or policy was implemented (implementation fidelity) and a complete presentation of successes as well as failures.

Objective 2.1 Improve quality of data by improving planning

The first step towards improving assessment data is creating assessment plans that consider all aspects of success. Including relevant stakeholders in the planning phase of the assessment process ensures that assessed outcomes will be useful. Consult internal stakeholders from your institution, external stakeholders interested in the performance of your institution, and peer colleagues in similar fields. Unit level assessment outcomes should be selected with a focus on effectiveness, efficiency, and quality of unit performance. Effectiveness outcomes explain how well a unit provided services (including assessment of student learning outcomes). Efficiency outcomes add time and cost valuations to the performance of a unit. Quality outcomes captures the satisfaction with the performance and monitors the balance between effectiveness, efficiency, and satisfaction.

Year	National Tactics	Local Tactics
1	Create guidelines for effectiveness, efficiency, and quality assessment outcomes through discussions with internal and external stakeholders	Audit existing assessment plans - determine which plans include measures of effectiveness, efficiency, and quality
2	Disseminate Guidelines	Create institutional plan to improve assessment plans with input from stakeholders
4-5	Gather and disseminate examples of effective use of guidelines to improve assessments and increase stakeholder engagement	Improve assessment plans - Engage representative groups of stakeholders in plan revisions

Costs: Time for creation of guidelines and gathering case studies, dissemination costs

Performance Outcome: By 2026 there will be national awareness of best practices for creating quality outcomes with input from internal and external stakeholders that balance effectiveness, efficiency, and satisfaction. As the best practices become well know, increasing number of institutions will create policies to support faculty innovation.

Assessment results, presented in a way that captures the full story of the success or failure of the intended outcome, can capture the “why” of what happened in the implementation of the strategy. These stories help capture whether the success (or failure) resulted from the delivery of the initiative (implementation fidelity) or another reason. (Smith, Finney, & Fulcher, 2017).

Performance Outcome: By 2026 there will be increased national awareness of best practices for including implementation fidelity into assessments. As the best practices become well know, increasing number of institutions will create assessment protocols that include implementation fidelity.

Produce actionable and visible assessment findings that drive innovation and improvement



2.3. Improve data interpretation by increasing stakeholder engagement in the interpretation of findings

To drive innovation and improvement we must create spaces for stakeholders to discuss assessment findings. The intentional sharing of data from the unit level to the institution connects micro-level reporting with institutional (macro-level) decision makers, increasing the usefulness of the data. Intentional collaboration between data stakeholders, including academic affairs, student affairs, finance, enrollment, students, and governance bodies, is necessary to identify, understand, and encourage improvements (Moreno & Song, 2021). To accomplish this, a comprehensive communications and knowledge translation plan is essential.

Year	National Tactics	Local Tactics
1	Create templates, resources, and best practices for communications and knowledge translation plans that will engage stakeholders in the interpretation of assessment findings	Adopt a stakeholder engagement framework - Identify groups of stakeholders; select engagement framework; Create implementation plan; Engage in dialogue with stakeholders regarding their understanding and developing expertise; Post engagement framework (hard copy and electronic); use it in decision-making.
2	Pilot template and resource use at institutions - Train institutions on sharing reports and provide template/resources; Help institutions outline internal and external subject matter experts	Share micro-level (unit) assessments at the institutional level - follow your stakeholder engagement framework to solicit broad feedback and discussion
3	Revise templates and resources - use feedback to make improvements	Increase inter-unit communications by encouraging expert subject matter reviews of academic programs and support services effectiveness reports
4+	Reward/recognition programs for stakeholder engagement “Best practice or Good Practice” documents	Increase micro-to-macro level communication - encourage discussions of assessment findings by governance bodies; create policies to encourage review of assessment findings prior to decisions

Costs: creation of materials and dissemination costs

Performance Outcome: By 2026 higher education leadership will be aware of the need to have a comprehensive communications and knowledge translation plans for assessment findings. As awareness grows, more institutions will engage broad groups of stakeholders in discussions of assessment findings and these findings will be used to make institutional decisions with greater frequency.

Goal 3: Advance innovative approaches to making findings visible

As IP serves as connective tissue among disparate institutional efforts, integrated data collection provides the information systems that inform coordinated, campus-wide initiatives to increase IE. To ensure institutions improve, promote equity, and facilitate student growth, a culture of integrated data collection, use, and governance must be established to make findings visible. This includes making key information available in a timely manner to students, staff, faculty, administrators, and stakeholders on and off campus. The third goal focuses on making findings fully visible so that discussions of results can drive improvements. We assert that a “one stop shop,” for accessing analytics tools and information, should be established. Additionally, when telling assessment or data stories, it is vital to add explanatory context.

Objective 3.1. Create and disseminate data visualization and data story resources

. This requires better tracking of students after graduation and integration among learning management software, data warehouses, and external sources such as state coordinating boards. Trusting relationships and consistent communications among database administrators, database managers, other IT professionals, compliance administrators, IR staff, assessment experts, and others, such as a senior enterprise architect, will be essential to this process (Ekowo & Palmer, 2017).

Year	National Tactics	Local Tactics
1-5	Create resources for best practices in data visualization and storytelling - develop a resource repository to share information on data visualization tools, preparing visualizations, data storytelling, ethical considerations, and professional development opportunities.	Identify data champions and work with them to create internal resources on data visualization and storytelling and share back to the toolkit.
1-5	Disseminate resources for best practices in data visualization and storytelling - Share this information by facilitating sessions at conferences, offering keynote addresses at meetings, leading webinar trainings, and submitting publications to journals and publishing toolkit resources online.	Network with institutional colleagues who are doing or are interested in data visualization work - share appreciable resources and encourage attendance to professional development opportunities.

Costs: None; utilize existing Grand Challenges website and institutional resources for information dissemination.

Performance Outcome: By 2026 there will be more tools and resources available to create data visualizations and data stories.

Produce actionable and visible assessment findings that drive innovation and improvement

Objective 3.2. Increase use of data visualizations

The point of any data presented to an external stakeholder is to illustrate the assessment findings in a way that can be easily understood. Proper data visualization can communicate findings quickly so that stakeholders can focus on implementation strategies rather than understanding the data. When stakeholders engage fully with assessment data, they are more likely to use the findings to guide resource allocations and decisions. Faculty, staff, and administration will need support in using data visualization tools. Professional development and accessible online resources encourage the use of data visualization and assessment storytelling.

Year	National Tactics	Local Tactics
1-2	Disseminate resources on creating data visualizations and share applied examples by facilitating sessions at conferences, offering keynote addresses at meetings, leading webinar trainings, and submitting publications to journals and publishing toolkit resources online.	Create professional learning communities to share best practices.
		Highlight faculty and staff through recognition programs who are doing great work in data visualization.
3-5	Promote training opportunities through listservs, organizational groups, and conferences.	Provide resources to assist faculty and staff in their data visualization endeavors - this includes professional development support as well as software to prepare visualizations.
3-5		Encourage data visualization needs assessments - engage with stakeholders to determine data projects that would be enhanced with data visualizations and revise those projects. Publish visualizations externally.

Costs: Conference registrations, potential cost to recognize individuals doing outstanding data visualization work.

Performance Outcome: By 2026 individuals who oversee assessment data will utilize more data visualizations in their reporting to stakeholders.

Produce actionable and visible assessment findings that drive innovation and improvement



Objective 3.3. Increase use of data storytelling

Data storytelling uses narratives and illustrations along with numbers to effectively share analyses of data with a broad audience. Data stories are easily transferred from a compliance-style report onto post-lets (mini-posters) that can be displayed throughout the institution to share findings with a wide audience. By increasing the use of data stories, we will increase the extent to which assessment findings are visible to stakeholders and can be used to direct progress towards institutional improvements.

Year	National Tactics	Local Tactics
1	Promote training opportunities through listservs and organizational groups.	Provide resources to assist faculty and staff in their data visualization endeavors - this includes professional development support as well as software to prepare visualizations.
2	Disseminate resources on data storytelling and share applied examples by facilitating sessions at conferences, offering keynote addresses at meetings, leading webinar trainings, and submitting publications to journals, and publishing toolkit resources online.	Create professional learning communities to share best practices. Highlight faculty and staff through recognition programs who are doing exemplary work in data storytelling.
3	Submit applied examples of data story projects to journals, organizations, and websites focused on the promotion of data storytelling.	Highlight data stories in newsletters or annual reports.
4-5		Identify internal data projects that would benefit from refinement by using data storytelling techniques and revise those projects. Track the implementation of data storytelling projects and measure their impact.

Costs: None

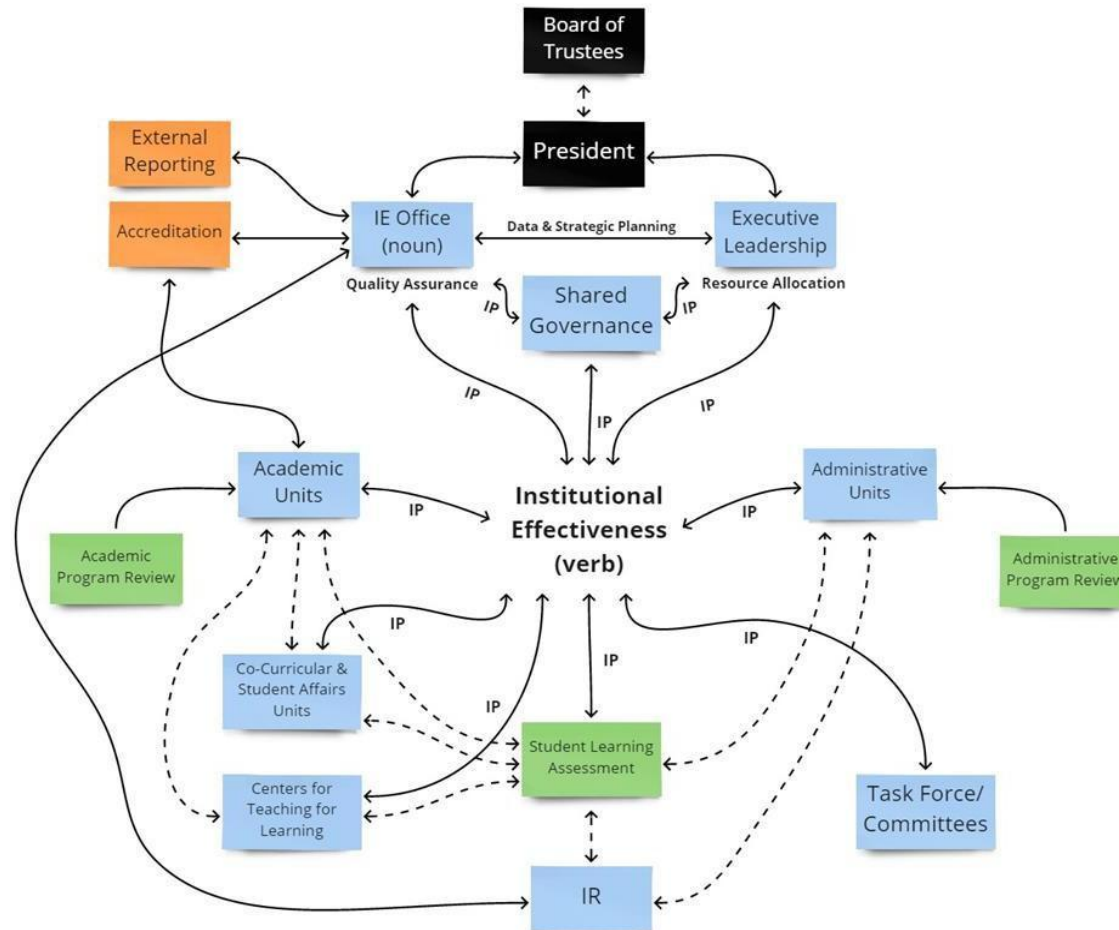
Performance Outcome: By 2026 individuals who oversee assessment data will utilize more data storytelling in their reporting to stakeholders.

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Appendix A - Figure 1

A Model of Institutional Effectiveness as both a Noun and Verb through Integrated Planning



Note. This figure demonstrates the function of IE as both a noun and a verb in the broad institutional context. Black and blue boxes denote official university personnel and functions. Orange boxes denote external regulatory entities and functions. Green boxes denote mechanisms for gathering and using institutional data. Solid lines represent data collaboration to support integrated planning. Dotted lines represent data collaboration to support work at unit levels.



Appendix B - CORE Staffing for an IE Office

At a *minimum*, these skill sets should be assumed among four or more staff within the IE office. As noted previously, IE staff should work in partnership with stakeholders from many other units, including the president's office, the provost's senior leadership team/college deans, financial aid, admissions, student affairs, information technology, records and registration, finance, and student support.

- 1) Leader of IE Office (Associate Provost or Associate Vice President)
- 2) IE Data Analysts (Managing 3-4 large scale projects annually, including forecasting, business intelligence, and required reporting for IPEDS)
- 3) IE Programmer (Expert in extracting data, writing SQL code, creating reports, managing survey software such as Qualtrics)
- 4) IE Data warehouse expert (working on faculty files, FTE, data for annual reports)
- 5) IE Director of Assessment
- 6) IE Accreditation Liaison/Supervisor of Program Reviews
- 7) IE Budget Analyst
- 8) IE Data Visualization Expert (Tableau or Power BI)

Close Partnerships/Crossover: If your core IE group does not have skill sets in the domains listed below, then additional institution staff from other areas should be dedicated to the required roles.

- 1) Strategic Analysis/Enrollment Planner. Enrollment management, recruitment, transfer student's assimilation, retention, and graduation are all inextricable facets of IE.
- 2) Policy or Compliance Officer.
- 3) Student Affairs Assessment Expert
 - Timeline: 1-5 years
 - Assessment plan: development of a HR plan to cover all areas above along with hiring plans and justifications
 - Metrics of advancement: development of the plan; filling of positions
 - Fiscal, human, or other required resources: budget to allow hiring of essential staff



Appendix C - References

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