Office of Institutional Effectiveness Evaluation Report for Financial Action Plan

In the current landscape of higher education, no single university can be found without an institutional research office (IRO). Why? The reason is simple. Every institution needs a high-performing IRO that plays a critical role in providing services and information in order to meet reporting requirements as well as to drive campus-wide decision-making and planning. Here at Adams State University, the Office of Institutional Effectiveness is relatively young — 1.8 years to be exact — but we have made a lot of significant progress on many fronts. Throughout this report, we will holistically present our contributions and articulate our functions from three perspectives on mission critically and essentiality, cost and benefit, and quality of outcomes.

1) Mission Criticality & Essentiality

When the current personnel joined ASU in 2016, the office was known as the "Office of Institutional Reporting" with a limited scope of support services and products. With an in-depth understanding of potential impacts of an IRO, the new personnel rebranded the unit as the "Office of Institutional Effectiveness" (OIE) and redefined its mission statement as the following:

> The mission of the Office of Institutional Effectiveness is to take an active role in advancing the institutional goal to become the university community of choice for diverse, historically underserved groups by providing leadership, guidance and service in the fields of research, assessment, accreditation, planning and data management.

As stated in this new mission, the unit's line of support services was significantly expanded to cover five key areas — not just reporting. Specifically, we strive to help achieve ASU's mission and enhance the quality of its programs, services, operations and processes by

- Providing accurate, unbiased and timely information that is accessible to internal and external constituencies
- Collecting, analyzing and distributing high caliber analytics
- Facilitating processes to secure accreditation
- Coordinating and guiding the assessment of student learning outcomes
- Integrating actionable information into institutional decision making, policy development and planning processes

1.1 Reporting and Data Management

The OIE is responsible for about **30** areas of *external* reporting requirements, most of which satisfy a legal or regulatory requirement for the university. Included in this set of tasks are two of our most critical of duties:

the Integrated Postsecondary Education Data System (IPEDS) Federal reporting and the Student Unit Record Data System (SURDS) State reporting, both of which ensure Adams State University's continued eligibility to participate in the Federal Student Aid (Title IV) program and other funding opportunities. Similarly, we are tasked with two reporting requirements for the National Collegiate Athletic Association (NCAA), annually providing data for the American Association of University Professors (AAUP) Compensation Survey, and regularly work with academic departments by providing required data. Recent examples include working with Teacher Education on their Reauthorization with the Colorado Department of Education; Counselor Education in their completion of annual reporting for the Council for Accreditation of Counseling & Related Educational Program (CACREP) authorization; and the Music Department for the annual Higher Education Arts Data Services (HEADS) Data Survey, a requirement as a National Association of Schools of Music (NASM) member.

At the same time, we provide data and guidance for more than **120** *internal* requests each year. While the OIE compiles the Common Data Set and fulfills other requirements that generate standard data for use university-wide, we also respond to ad hoc and regular requests from other offices across the campus for quantitative evidence otherwise not captured. Additionally, the OIE chairs the Data Integrity Steering Committee (DISC) and undertakes significant projects such as the Data Dictionary and the Standards Manual. Still in draft form and being compiled, these documents are intended to be used widely as a resource to understand active coding schema in Banner, provide standard guidelines for data entries, etc. The OIE is also in the process of founding a Survey Oversight and Coordination Committee to coordinate campus-wide survey projects, provide guidance on best practices, and to guard against "survey fatigue."

1.2 Analytics and Research

The OIE has collected advanced analytics and conducted several research projects to support institutional efforts related to recruitment, retention, enrollment management and financial aid. One of the first important projects was the identification of twenty-three peer institutions that are similar to ASU in role, scope and mission using the hierarchical cluster and discriminant analyses. This list has allowed us to set benchmarks, identify our position and guide our strategic actions to stay competitive and relevant within the marketplace. By tracking students in the National Student Clearinghouse, the OIE has identified different kinds of peer institutions such as competitors, destination institutions and feeder schools for our student population. To support retention and recruitment initiatives, we have spent significant amount of time building predictive models and flagged students who are more likely to enroll and drop out. Every fall, the OIE also compiles a list of stop-out students who are a few credits shy of graduating.

These data-driven tools have been thoroughly explained and the relevant actionable strategies have been widely shared with the Board of Trustees and the Recruitment & Retention (R&R) Committee. The OIE has even taken several steps further by providing in-depth consultations to the Admissions and Enrollment Management offices and producing several documents such as social media strategy, student profile optimization and recruitment strategy. We have also carried out an extensive research project on financial aid packaging practice, calculated discount rates and monetized investment return on our students. This project has helped the institution understand what the context of our aid packaging policy looks like and how we can use it as a lever to effectively shape our class.

As part of research on student success, OIE has developed and proposed an innovative metric called "Successful Learning Rate," which is achievement of an academic credential or progression towards the credential within six years among students who have transferred prior to degree attainment or are still enrolled at our institution. This definition effectively captures the diversity of our at-risk student population, their enrollment patterns, and the role ASU played in the transfer process. Based on these data, OIE has mapped student cohorts. These maps gave us an in-depth understanding of how students flow through our institution over a six-year period. In addition to these significant projects, the OIE has routinely tracked retention and graduation rate, produced yearly reports and made them publicly available on our website. These reports were created with detailed breakdowns not just on student type and socioeconomic indicators but also on specific academic majors and levels. Moreover, we have utilized Tableau and created online interactive dashboards so that campus-wide constituents can access key analytics on student population and get answers to their questions on their own.

1.3 Assessment, Accreditation and Planning

Although the OIE has devoted most of its time and energy to reporting, data management and research, it has made many significant contributions to assessment, accreditation and planning. Last summer, the OIE has launched formal assessment procedures and activities within the Student Services (SS) Division. We have not only put together an assessment handbook but also conducted training sessions and held one-on-one meetings with SS offices to make sure they could establish robust assessment plans and data collection methodologies. The OIE has recently joined the General Education and Assessment Team to attend the upcoming Association of American Colleges & Universities (AAC&U) summer institute and will play an important role in furthering the development of programs, curricula and pedagogies that focus on general education and integrated learning. The OIE has also conducted the NSSE survey every other year, analyzed data, shared important findings with senior administrators from the Academic Affairs Office, the Student Services Office, and the Center for Teaching, Research and Innovation.

As for accreditation, the OIE has served on the Higher Learning Commission (HLC) steering committee. Specifically, we co-wrote a portion of the assurance document and provided requested data for all sections within the document. The OIE also plays a key role in compiling an extensive amount of data for program review by the Department of Education. Although we typically deal with student and financial aid data, we go beyond our scope of work and facilitate data needs related to cash management, finance and account receivables. Even more than with IPEDS, a successful response to the Department of Education's Program Review is vital to the well-being of the university, financial or otherwise.

Last but not least, the OIE has made critical contributions to the budget contingency planning process of the institution. We have worked closely with offices from different divisions and produced important metrics for their narratives. Particularly for the academic departments, we have compiled the past 10-years of data on enrollment and created Induced Course Load Matrices (ICLMs) to shed light on the interdependence of departments in educating the entire student population. Given the aggressive timeline of planning process, we have worked diligently to take care of additional data requests and responded to data questions in a timely fashion.

Summary

Despite the relatively short tenure on campus, the high-performing team in the OIE play a critical role in advancing the mission of ASU in many ways. Our reporting work enables the university to not just successfully meet legal and regulatory requirements but also seamlessly integrate data in campus-wide decision-making and planning process. We have helped enhance student success through our innovative research on recruitment and retention as well as the formulation of strategies for enrollment management and tuition discounting practices. A plethora of other significant contributions to the institution can be found through our work on assessment, accreditation and planning. Whether through broad requirements such as IPEDS or the granular tasks such as the production of ICLMs and responses to individual ad hoc requests, it would be difficult, if not impossible, to find an office in the university that has not benefited, implicitly or explicitly, from some product of the OIE.

2) Costs & Benefits

While the Office of Institutional Effectiveness is neither a revenue-generating office nor a student-serving office, we are making indirect significant impacts on cost savings and revenue streams. The 2-person team efficiently runs the OIE with a modest office budget. Through our research and analytics, we have developed and offered advanced tools and techniques to senior administrators that have significant impacts on recruitment and retention of our students. We make sure that institution meets mandatory requirements to be able to continue our participation in Federal Student Aid and avoid hefty fines. We also provide extensive data support to the revenue-generating streams of the institution via the Office of Alumni Relations, the Office of Sponsored Programs, the Title V Office and others.

2.1 Return on Staff Compensation and Office Budget

According to the 2015 national survey of institutional research offices by the Association for Institutional Research (AIR), OIRs commonly consist of 3.6 full-time equivalent (FTE) — a full-time director and 2.6 professional staff members. Here at ASU, our office runs with 2 FTE only. We are able to do this because of our willingness to go well beyond the scope of our defined job duties with strong work ethics and professionalism. Actually, two FTE in the OIE have more than 18 years of combined work experiences in admissions, financial aid, enrollment management, assessment, research and planning. This high level of elective knowledge and expertise allows us to cross over to many areas of university operations and provide not just data support and consultations but also facilitate successful implementation of critical projects. The wide range of our activities and services explained in earlier section will not simply take place at other institutions that have a traditional office of institutional reporting. On the other hand, our office budget is modest at $12,000. Last year, we spent a small amount of budget on expenses such as assessment fees, survey fees, travels, software and educational supplies. A majority of budget remained unused. For 2017-18 fiscal year, we have also pledged $5,000 to help cover shortfall in general funds. Overall, beside staff compensations, it costs ASU very little to run the OIE. The return on institutional money can be easily demonstrated by the high caliber of our work and the extensive range of our services provided to the campus-wide community.

2.2 Cost Savings through Reporting

The importance of ensuring that IPEDS and SURDS surveys are submitted on time and as accurately as possible cannot be overstated. Failure to complete IPEDS surveys (there are 12 surveys in total, broken into three submission batches) may result in fines of $35,000 for each violation and compromised ability to participate in Federal Student Aid (Title IV). The completion is mandated by 20 USC 1094, Section 487(a)(17). Moreover, because a large portion of our student body, both undergraduate and graduate, rely on Title IV, the loss or limitation of ASU's ability to participate would be untenable for students and the university. Similarly, the regular submission of SURDS data reported to the Colorado Department of Higher Education (CDHE) is similarly critical. Throughout the year, there are a dozen requirements to demonstrate enrollment, degrees granted, participation in and completion of the Teacher Education program, and undergraduate applications and assessment. These data contribute to the funding model, to the state-wide higher education master plan, and, in the case of the Educator Preparation file, the data is used by CDHE to prepare reports for the House and Senate Education Committees. In August 2017, our office worked with Computing Services and the Office of Financial Aid (OFA) to submit the SURDS Financial Aid file, and, going forward, OIE, in collaboration with OFA, will be responsible for this reporting requirement. Like IPEDS, failure to submit this part of SURDS on time or at all would compromise state-funded aid. Consequences include a reduced allocation or ineligibility for an allocation of Colorado funds in the subsequent year.

2.3 Revenue through Recruitment and Retention Research

Because of our strong expertise in enrollment management, financial aid and statistics, we have been able to develop and offer several data-driven and strategy-driven tools and techniques that could significantly help out the institution with its recruitment and retention initiatives. Particularly, identification of peer institutions allow us to understand who our competitors are and how to develop our advantages in order to beat the competition. The advanced predictive models allow us to do targeted recruitment on students who are more likely to enroll at ASU and as well as targeted retention on those more likely to drop out from fall to fall. These tools alone could help the institution laser focus its efforts on smaller population and gain far better return on its investments. In addition, the identification of the stop-out students who are very close to graduation present another great opportunity for us to recruit those students and push our graduation rate higher, which would translate into a higher level of state funding. Through our research project on financial aid awards, we have also computed tuition discount rates and suggested ways to improve return on investment by restructuring our financial aid packaging practice. In light of the findings, we have also formulated recommendations to help the institution recruit more students with less institutional spending. In terms of campus service, we have actively contributed to the conversations around tuition pricing and fee implications through research and data support. The OIE has also served on the Recruitment and Retention (R&R) Committee and presented findings and analytics on a continual basis.

2.4 Support for Revenue-Generating Streams

As mentioned earlier, the OIE compiles the Common Data Set and fulfills other requirements that generate standard data for use university-wide, and responds to ad hoc and regular request from offices throughout the university for quantitative evidence otherwise not captured. This broad and pin-pointed production of data supports key funding initiatives through the university.

Many of the internal requests received by our office have multiple parts, and provide support to offices seeking or maintaining grants and other outside sources of funding. Examples include, but are not limited to, providing student and employee demographic data to the Office of Sponsored Programs, providing enrollment of students from the San Luis Valley to secure scholarship funding through the Office of Alumni Relations, and providing majors-specific enrollment information to the Colorado Alliance for Minority Participation in STEM (CO-AMP) grant site coordinator. Additionally, the OIE has facilitated program evaluation and data support for other major initiatives on campus such as Title V projects, Colorado Challenge and CAMP Program so that all of these programs could continue their operations, bring in external funding and help enhance student success.

Summary

Given the extensive portfolio of our expertise and services, we believe that ASU is getting one of the biggest proverbial bangs on its institutional buck from the OIE. We, the 2-person team with more than 18 years of combined experience in various fields of higher education, run the office efficiently on a modest budget. Through reporting work, the OIE makes it possible for the institution to avoid hefty fines and keep participating in the federal and state student financial aid programs. Findings on our recruitment and retention research have serious budgetary implications for the institutions as the admissions, financial aid and enrollment management offices can utilize them to effectively increase enrollment, retain more students and shape incoming class with less institutional spending. We have also contributed to the various grant applications through the Office of Sponsored Programs as well as the successful continuation of other revenue-generating streams through Title V, CAMP, STEM grant, Colorado Challenge and others.

3) Quality of Outcomes

There is limited amount of literature on quality of outcomes in an institutional research office. However, we will use the most popular effectiveness model for an institutional research office developed by William Knight (Figure 1).[1] According to this model, the outcomes of an OIE could be evaluated in ten areas grouped into three general components — engagement, planning and improvement, and personal and professional. We will apply this model to ourselves, evaluate the overall program and explain the high quality of our outcomes.

3.1 Understanding Institution and Perspectives of Constituents

Even though we have been at ASU for less than 2 years, we have quickly learned and gained an in-depth understanding of how things get done here. This understanding has enabled us to implement projects and provide quality services efficiently and effectively. We have also managed to connect with our constituents and further understand their varied perspectives. This has been facilitated through our active and voluntary participation in multiple committees such as HLC-steering, DISC, Professional Administrative Staff Council

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[1] William Knight, "In Their Words: Effectiveness in Institutional Research," *AIR Professional File*, no 115 (Spring 2010): 1-18.

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(PASC) and R&R. The efficiency of the OIE would not have been optimal without our high-level contextual understanding of ASU.
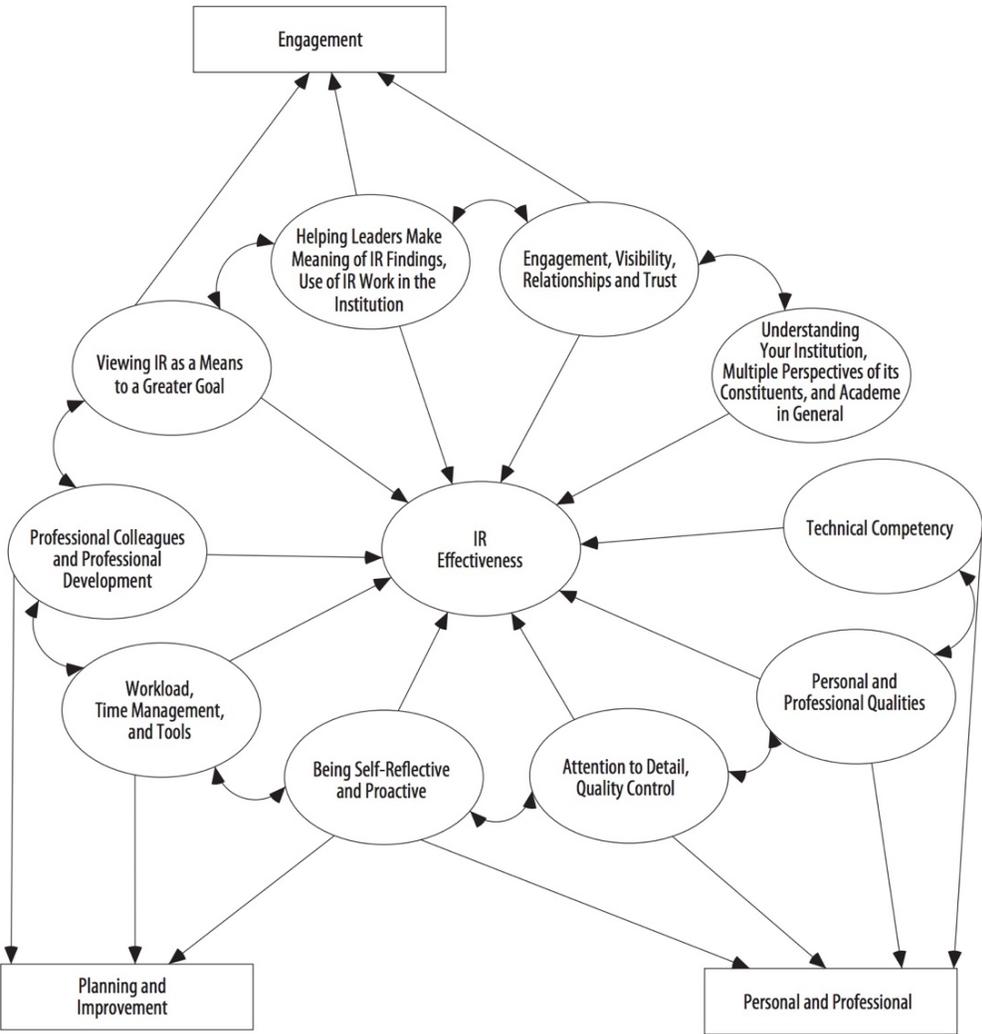

Figure 1. Heuristic Model of Outcome Quality in Institutional Effectiveness

3.2 Engagement, Visibility, Relationships and Trust

As we understand that our data will not be used without trust and a sound relationship, we have managed to project a high level of visibility, establish and maintain strong relationships and build trust with offices across the campus. Specifically, the OIE has given talks and presentations at the Board of Trustees' meetings, faculty and staff meetings and various training sessions. We have also collaborated with various office to improve data stewardship, therefore shoring up data integrity and reliability. We have strategically established both formal and informal contacts throughout the institution from Academic Affairs to Student Life to Alumni Relations. As a result of our engagement work, the majority of the constituents on campus take our office seriously, utilize our data in their decision-making, and seek our guidance on a host of topics.

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3.3 Helping Leaders Make Meaning of Findings

To help administrators understand the implication of data, the OIE has taken an educational approach as part of our operational ethos from the very beginning. For example, when we return data though emails, we put labels, footnotes and details as much as possible so that the viewers can understand data and draw appropriate conclusions. We always make ourselves available for further conversations and work one-on-one with departments and offices. For significant research projects, we have written up detailed reports and presented findings at important meetings. The Data Dictionary and Standards Manual is another key major step we have taken to raise awareness and understanding of data used at our institution.

3.4 IE as a Means to Greater Goal

We simply do not want to be known as the office filling out the IPEDS forms or taking care of data only. Essentially, we strive to help fulfill ASU's mission, turn ASU into a more effective institution and make a difference in the lives of our students. To this end, we have done extensive research on and developed tools for recruitment, retention and financial aid initiatives. We had spearheaded assessment activities within the Student Services Division (and the Academic Affairs soon) in the hopes of enhancing curricular and co-curricular learning, pedagogies and student success. As explained before, we have also facilitated extensive self-evaluation as part of accreditation and budget contingency planning processes, which would lead to the higher level of institutional effectiveness for ASU.

3.5 Professional Colleagues and Professional Development

We have actively cultivated a network of professional colleagues and embraced professional development opportunities to stay current with the latest developments in the field of institutional effectiveness. Particularly, we are a member of Data Analyst Group organized by CDHE and participate in quarterly phone calls. We have attended IPEDS workshops and networked with IR professionals from other institutions. We have been members of the Association for Institutional Research, the Association for the Assessment of Learning in Higher Education and the Society for College and University Planning.

3.6 Workload, Time Management and Tools

In order to effectively deal with heavy reporting and research lines, the OIE operates 9 hours a day and 6 days a week for most weeks. Almost all data requests receive a response within days — some within mere minutes. In several cases, we also reach out to appropriate offices in anticipation of regular requests before the offices even begin their projects. Even though we see that serving on various committees as a way to nurture relationships, we make strategic decisions as to which memberships to pursue. We are also in the perceptual learning mode; we always try to stay up to date with news related to higher education, attend online webinars and read books on institutional research and assessment of student learning.

3.7 Being Self-Reflective and Proactive

We pride ourselves in being self-reflective and proactive. Solely based on our own strong initiative without external encouragement, our office was rebranded as the OIE with an expanded scope of work. We see every challenge as an opportunity to tackle and learn new things from. This perspective has allowed us to take on

and facilitate impactful projects and data services that are beyond scope of a typical OIE. We also listen actively, turn conversations into questions, and carry out extensive research. This could be seen throughout our research projects, reports, presentations, and responses to various issues on campus.

3.8 Attention to Detail and Quality Control

Over the past 1.8 years, we have not made glaring errors in our reports and the products we provide accurately reflects data available about the institution. That is because we pay close attention to details and exercise quality control with critical eyes for consistency and integrity. Specifically, we run queries multiple times and double-check our data before it is sent out or submitted. We also compare data from different timeframes and probe into possible discrepancies whenever we feel data looks dubious. Even though data quality is actually determined by coding and data entered into Banner, we always strive to minimize errors on our end.

3.9 Personal and Professional Qualities

The OIE exhibits a wide array of personal and professional qualities. We endeavor to be objective, creative, responsive, timely and collaborative. We listen actively and look at challenges from a broad perspective. We have functioned well under various pressures. These qualities and traits can be found in many projects we have implemented so far – the most recent and extensive one is the data needs for the Department of Education's Program review. In addition to handling financial data we have never seen before, this project requires tactical collaboration on our part with internal entities (Financial Aid, Student Business Services, and the Office of Finance and Administration) and external entities (BankMobile and First Southwest Bank). Without strong leadership and teamwork skills, a project of this magnitude will not have been streamlined successfully through an OIE.

3.10 Technical Competency

We have a very strong set of technical and analytical skills. We can analyze problems critically and come up with logical solutions, which is demonstrated in implementation of our various research projects and reports. We know how to effectively utilize various tools such as SQL and Python for data query, R and SPSS for data analysis and Tableau and Excel for data presentation. We are also well-versed in research approaches, statistical methodologies, and assessment techniques.

Summary

The Office of Institutional Effectiveness is holistic in its qualities and approaches to our work. With an eye for technical and analytical needs of the university and individual components therein, we extend ourselves to do more and provide more than plain report building and information dissemination. As part of our everyday operations, we seek to foster relationships university-wide; build foundations for data understanding, integrity and usage; serve the campus within and outside of our official capacity; and redefine ourselves and our work to better meet the evolving needs of the institution. We accomplish these outcomes by understanding the needs of the university and constituents, engaging with the community formally and informally through many avenues, remaining introspective and circumspective, maintaining and improving our technical competencies, and pursuing professional development opportunities.

Conclusion

A robust Office of Institutional Effectiveness is a necessity rather than a luxury for the well-being of any institution of higher education, fulfilling legal and regulatory reporting requirements for the university, while also providing data internally to steer decision-making and planning. At Adams State University, the Office of Institutional Effectiveness plays this critical role by fulfilling all of these areas. Over the last two years, we have worked diligently and relentlessly in the spirit of service, meeting our mission goals to provide accurate, timely and unbiased information; to collect, analyses and distribute high caliber analytics; to facilitate process to secure accreditation; to coordinate and guide assessment process; and to integrate actionable information into institutional decision making. We have also extended beyond our mission guidelines to provide education and consultations regarding data integrity, stewardship and usage, to foster professional relationships university-wide, and to serve the campus in various committees. In doing all of this, the OIE had become an indispensable component of the university.

With cost savings through reporting, generating revenue through support of recruitment and retention, and through support of other revenue-generating streams, the OIE's services benefit the university as a whole, as well as benefitting discrete offices therein in their support to the university. Moreover, the work often extends beyond the expected tasks and standard IPOs of the jobs, as well as the standard compensation associated with the work. Additionally, the office has operated in a fiscally conservative manner, able this year to pledge a return of $5000 to the general fund to help ease the budget shortfall. Although the purchase of a new data warehouse platform had been planned, and would have provided greater efficiency in OIE's duties, it could not come to fruition in light of broader budget concerns. The office made do with resources already available, and will continue to do so until ASU is in a better situation to support such improvements.

Beyond the cost benefits of a centralized office for reporting, assessment, data compilation and dissemination, the OIE had contributed to ASU by fostering greater trust and integrity of the institutional data, building strong relationships with constituents throughout the university, incorporating individual and combined expertise in administrative areas, assessment, recruiting, statistical analysis, and technical know-how. Particularly, beyond the mere fulfillment of reporting requirements and the production of standard data, we strive to build context and meaning into all reports that we provide and to act as an education and consulting resource for constituents using our products. This multifaceted role played by our office would not have been possible without an extensive portfolio of expertise that we bring to the OIE.

In a larger perspective, ASU is truly a special institution because of its unique mission to serve the underserved students and its status as the oldest HSI in the state and an economic hub for the San Luis Valley, one of Colorado's poorest and most remote areas. We joined ASU in 2016 primarily because its institutional values strongly resonate with us at many personal levels. We are grateful for the opportunity to be able to help advance ASU's mission, improve institutional effectiveness and enhance our students' success. Not a day goes by that we have not witnessed both tangible and intangible impacts of our work on the operations of our institution. We look forward to carrying this beacon of knowledge and expertise and leaving ASU a more effective and successful campus than we initially found it.