Data Tools
2023

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Data Tools 2023

Introduction

NMSU has invested in numerous data tools that can inform faculty and staff efforts to support students in their academic journey. These tools include NMSU Analytics, a robust report and analytics engine tied to Banner; EAB's Navigate, which supports academic analytics and evaluation of interventions; plus related functions in tools like Slate and Canvas. But use of these tools is blocked by barriers such as lack of awareness, access, and lack of understanding how to use the tools.

To address this concern, the Office of the Vice President for Student Success partnered with Information and Communication Technologies and the Doña Ana Community College to create Data Tools 2023, a hands-on workshop for department heads, academic program directors, associate deans, deans, faculty, and staff who work with programs that support enrollment and retention, The objectives of this workshop were to:
1. Understand what data is available through enterprise data tools;
2. Use that data to influence decisions that affect students and their success at NMSU; and
3. Influence the future of data resources at NMSU.

Data Tools was announced in One Data Point, a January 2023 Leadership Insights by Renay Scott (Appendix A), and it included a link with more information and registration. The Leadership Insights series was distributed to all employees of the NMSU system during the administration of Chancellor Arvizu.

Agenda

The morning sessions included hands-on workshops on NMSU Analytics and Navigate, both enterprise data tools with rich reporting and analysis features (Appendix B). These workshops helped participants understand:
1. Who are our students?
2. How do students journey through NMSU: enrollment patterns, course demand, success indicators, and retention factors?
3. What patterns and trends affect academic programs?

Afternoon sessions included:
1. Lunch
2. Panel and discussion sessions on:
   a) What sources can you use for what data?
   b) What do you envision for NMSU's data future?
3. Social Hour @ Pete's Patio

Attendees

Data Tools 2023 attracted 50 attendees from the NMSU system, split evenly between academic departments and staff support (Appendix C). Among these were 25 representatives of academics, 17 representatives from Las Cruces staff, and 8 attendees from community colleges.
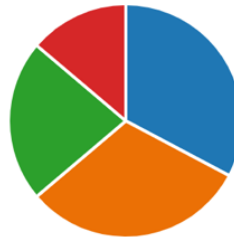
Feedback

All Data Tools 2023 participants were asked for comments and feedback. Of the 19 people who responded, 19 of 19 considered the workshop on NMSU Analytics to be a good use of their time, and 18 of 19 considered the Navigate workshop to be a good use of their time. 100% of the respondents reported that they were likely to use NMSU Analytics or Navigate Analytics in the future.

1. We hope that the morning workshops, afternoon discussions, and casual events (lunch and Pete's Patio Social) were of value to you. Select the items below that were a good use of your time.
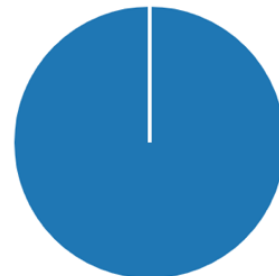
More Details

🔵	NMSU Analytics Workshop	19
🟠	Navigate Workshop	18
🟢	Afternoon discussions	13
🔴	Casual events	8

2. Are you likely to use NMSU Analytics or Navigate Analytics in the future?

More Details

🔵	Yes	19
🟠	No	0
🟢	Maybe	0

Comments

We received excellent feedback from respondents to the survey (Appendix D). These comments addressed the following topics.

- **Data processes:** How data is obtained, used, categorized, validated, and deployed.
- **Training and communication:** Training material availability, training workshop coordination among data producers and data users, and communication about updates to systems.
- **Access:** Ability to access information appropriate to a specific role and job expectations.
- **Technical capacity:** IT functionality requiring modifications to data hardware, software, or both.
- **Staffing and other resources:** need for additional people or financial investment.
- **Community of practice:** Ongoing conversations among data producers and users about data and its use to improve student outcomes.

Next Steps
Although Data Tools 2023 had limited advertising, we had a surprising number of participants. Most registrants actually attended, and they stayed for the entire day even though we had expected fewer in the afternoon than the morning. We discovered that there is a great appetite for the workshops we held in the morning and high interest in shaping the future of data at NMSU.

Because people are interested in such workshops, we plan to continue to offer these on a rotating basis. One option is to do workshops on fundamentals each fall and advanced workshops in the spring.
- Fall fundamentals: NMSU Analytics, Navigate Analytics
- Spring advanced workshop: Advanced topics from NMSU Analytics, Navigate Analytics, plus Canvas and other applications.

Planning for Data Tools Fundamentals 2023 is currently underway.

Appendices

Appendix A: One Data Point

NMSU Home (https://nmsu.edu/index.html) ✔ One Data Point

One data point

"You can have data without information, but you cannot have information without data." — Daniel Keys Moran

One data point: Enrollment on the NMSU main campus for fall 2022 was 14,268 students. This data point is a metaphorical onion. The closer you look, the more complex it becomes.

For example, that number of 14,268 students includes 2,328 first-time freshmen, 631 undergraduate transfer students and 771 new graduate students. Each of these students new to NMSU brings a unique academic history of test scores, GPAs, experiences and institutional transcripts, plus records of dual credit and advanced placement courses from high school. Each of those students needs an academic path to graduation based on that academic history and their degree plan. That one data point of 14,268 students holds literally millions of options for class schedules to earn those degrees.

From this data, we can learn about course sequencing and which courses are barriers to persistence. We can learn about teaching practices that get results and how changing majors affects time to degree (https://nam10.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnmsu.us14.list-manage.com%2Ftrack%2Fclick%3Fu%3D5559a66ba9234044320c2b72b%26id%3D59121b3ecb%26e%3Dc1e0578a71&data=05%7C01%7Cmmunsonm%40nmsu.edu% our students. We can examine the academic persistence of students with declining GPAs.

For decades, higher education has been using data-collecting tools that can yield powerful insights into factors that promote student achievement. It is only in the recent past that analytics software has started to make that data usable to people without a data science background. Over the next few years, our challenge is to use those tools and learn from that data to transform higher education.

Our students need this transformation. Increasingly, they face academic challenges that have been exacerbated by the pandemic. They deal with financial challenges and mental health concerns. Education remains one of the best options for a brighter future for students and their families. And NMSU must use those powerful data insights to make this future possible.

On April 14, the Division of Student Success, ICT and Doña Ana Community College will host Data Tools 2023. This day will provide an opportunity for department heads, academic program directors, associate deans, deans, faculty and staff who work with programs that support enrollment and retention to:
1. Understand what data is available through NMSU's enterprise data tools;
2. Use that data to influence decisions that affect students and their success at NMSU; and
3. Influence the future of data resources at NMSU.

You can learn more and register for this event (https://nam10.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnmsu.us14.list-manage.com%2Ftrack%2Fclick%3Fu%3D5559a66ba9234044320c2b72b%26id%3Da1f7bbafdc%26e%3Dc1e0578a71&data=05%7C01%7Cmmunsonm%40nmsu.edu%7 or send questions to vpss@nmsu.edu (mailto:vpss@nmsu.edu).

DIVISION OF STUDENT SUCCESS

Corbett Center Student Union, Room 207
International Mall, Las Cruces, NM 88003
(575) 646-1722
vpss@nmsu.edu (mailto:)

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(https://www.facebook.com/nmsudos/) (https://twitter.com/DosNmsu) (https://www.youtube.com/user/NewMexicoStateU)

(https://www.instagram.com/dosnmsu/)

Request Information (https://admissions.nmsu.edu/info/)

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Appendix B: Agenda

Morning: Hands-on workshops with Enterprise Data Tools (Group assignments)

Time	Group	Topic	Presenter Resource	Location
8:30	A	Navigate (Presentation)	Renay Scott Marissa Fowler	HJULC Room 206
	B	NMSU Analytics (Presentation)	Lori Montoya James McAteer	Business Complex 115
10:00				
10:15	A	NMSU Analytics (Presentation)	Lori Montoya James McAteer	HJULC Room 206
	B	Navigate (Presentation)	Renay Scott Rosa de la Torre Burmeister Kelsey Kurupas	Business Complex 115

Afternoon: Enterprise Data Discussion: Hardman Jacobs Undergraduate Learning Center Room 230

12:00 Lunch

12:30 Afternoon overview, Renay Scott

12:45 The Why of Data, Renay Scott

1:00 Panel: When to use what?

- Moderator: Thomas Bunton Panelists: Lori Montoya, Robbie Grant, Renay Scott, BJ Maestas

1:45 Academic success and our data future: Incoming Provost Alan Shoho (Presentation)

2:00 Breakout Groups: Data Needs

- 15-20 minutes, groups of 4-6: What do you need to move to the next steps in working with data?

2:30 Report out

2:45 Question and Answer, Assessment and Next Steps (Assessment Link)

3:15 Pete's Patio

Data Tools 2023 is sponsored by the NMSU's Division of Student Success, ICT, and Doña Ana Community College.

Appendix C: Attendees

Representatives of Academics	Las Cruces Staff	Community College Staff
Alan Shoho, Provost and Chief Academic Officer	Alex Bernal, Instituitional Analysis	Forrest Kaatz, Institutional Analysis NMSU-Alamogordo
Amanda Barrier, College of Arts and Sciences	Andrea Jimenez, Financial Aid	Greg Hillis, C&T Division NMSU-Alamogordo
Cecelia Carrasco, College of Business, MBA Program	BJ Maestas, ICT	Jennifer Hodges, Academic Affairs DACC
David Jauregui, Office of Engineering Academics	Dacia Sedillo, Student Records	Kelsey Kurupas, Academic Advising Center DACC
Dr.Carrie Shaver, Public Health Sciences	Ermelinda Quintela, Strategic System Services	Pablo Reyes, Instituitional Analysis DACC
Enrico Pontelli, Arts & Sciences	Lori Montoya, Analytics & Decision Support	Rita Gonzalez, Mathematics DACC
Greg Armfield, Communication Studies	Marissa Fowler, CAASS	Roseanne Bensley, Academic Advising DACC
Hansuk Sohn, Industrial Engineering	Melody Munson-McGee, Division of Student Success	Xiaojing Wei, OIA DACC
James McAteer, Provost's Office	Randey Bamford, ICT	
Jimi Ickes, College of Engineering	Renay Scott, Division of Student Success	
Joe Lakey, Arts and Sciences College	Robbie Grant, Academic Technology/Digital Learning	
Joseph Holles, Chemical and Materials Engineering	Rosa De La Torre-Burmeister, CAASS	
Kevin Comerford, Library	Shay McGee, Human Resources	
Margo Trevino-Torres, College of HEST	Shelly Stovall, Institutional Effectiveness	
Mari Langford, Computer Science	Tony Marin, Student Engagement	
Mark Lawrence, Engineering Technology	Victoria Banuelos, CAASS	
Michele Shuster, Biology and COAS	Virginia Tucker, FInancial Aid	
Patricia Sullivan, College of Engineering, Office of Outreach and Recruitment		
Patrick Turner, Student Success Initiatives		
Phillip Post, College of HEST		
Rebecca Campbell, Honors College		
Sashidhar Chintalapati, College of Engineering		
Steve Stochaj, Electrical and Computer Engineering		
Yesenia Palma, College of ACES		
Yvonne Mendoza, College of Business		

Appendix D: Summary and Comments

Feedback from Data Tools 2023, April 14, 2023

Item	Initial lead	Data processes	Training & communication	Access	Technical capacity	Staffing & fiscal resources	Community of practice
		Item will strengthen					
Clean data		X	X		X	X	X
Universal definitions, shared		X	X		X	X	X
Graduate/undergraduate attribute in dashboards		X			X	X	X
Navigate graduate student module		X			X		X
Acronyms include descriptors when cursor hovers		X	X		X		X
Add satisfactory and unsatisfactory to independent study		X			X	X	X
Analytics include graduate students and cc students							
Enterprise staff paid at market rates, and more of them		X	X	X		X	X
Staff to review and analyze data		X	X			X	X
Prioritization: Consistent		X					
Access instructions and training			X	X		X	X
Map of data user roles with access levels		X	X	X	X	X	X
Role-based access rather than in-the-know based*							X
Onboarding for data by roles		X	X	X			X
Communication plan			X	X			X
Training on data roles			X	X			X
Training on what is available			X	X			X
Training on what does data mean		X	X	X			X
Data conferences			X	X			X
ID Data Strategy Team			X				X
Summary of learning about our data: what have we learned? What is working? What needs tweaking?			X				X

How will you use these tools in the future?	Do you have any other comments about Data Tools 23?
It looked like a great resource. It would be even more amazing if DACC data was available in there too.	Community College data was not accessible and as one university it is important to be able to look at everything that has a connection with NMSU
to support the success of students	This type of data tools summit needs to occur on a regular basis to keep the energy and momentum going. Thank you!
Trends in student success.	You know I would love for you all to hand me, this is how in my specific application to use these tools. There is so many options and uses you could not provide that type of specific training. So I think the overview of what is available and letting us know who we can seek help from was excellent.
Use NMSU Analytics everyday. Will use Navigate more for planning and for bigger picture	Very useful. Would love to learn more
monitoring pass rates by race/ethnicity/gender in key intro courses (to make sure we are not backsliding from recent overall gains and reductions in disparities)	I really appreciate being granted access to monitor key student success outcomes in my course, and potentially others (pending a grant). I understand that OIA is the official data source, but they are so understaffed and overwhelmed and overworked, that their data can often be rate-limiting in proposals etc. So the ability to do spot-checking and have a sense of the data narrative in the interim is critical. I still have concerns that folks don't have easy/universal access to this data, and that in the absence of support, one wouldn't even know what to request. I am honestly looking forward to continued discussions/conversations.
Research for sure, hopefully in a faculty development or liaison role.	Maybe more small group interaction?
For monitoring student performance and taking action to assist students improve.	Data Tools 23 provided a general overview. Future training should go into much more detail. Perhaps this could be done through development of a CANVAS short course with modules covering different tool in Navigate and Analytics.
daily tasks	It was good to see the academic department users learning what tools/data are available.
I will use them daily	It would be great to offer to departmental administrative assistants
Student support services. Collecting data to find best practices, and to find areas that need improvement.	More advanced workshops would be great!
I will use Navigate data tools to reach out to struggling students during their first year at NMSU. I will also use the data tool to help with college initiatives around student success. I currently use NMSU Analytics but will use the drill-down functions to better assess student success in HEST courses.	It would be nice to have short how-to videos for system users at NMSU. While individuals can play around with the system, it might be helpful to have "common search or uses for department heads." A five to ten-minute video for different users might help users on campus take advantage of the various tools.
To gather specific statistics like course d/f/w, enrollments, retention data by course etc	This is very helpful. It would be great if you can provide a special session on breakdown on individual types of data available and how can one make use of the specifics.
Preparation of reports and creating dashboards	Will assist with greater buy-in for forward movement in data strategy.
Navigate will be used to look at historic enrollment trends for certain cohorts of students, and navigate will continue to be part of my daily work flow.	It would have been nice if during the group discussions there was a little more interaction with people who had not been part of the same morning group. Great training, and insight into where data can be heading at NMSU.
To identify students that meet criteria for certain programs. Also to review departmental progress.	
Use the Navigate Analytics tools to explore equity gaps while we continue to build/get access to dashboards in other tools such as NMSU Analytics, Power BI, and Tableau.	
Navigate analytics enables access to information I had to gather separately through cognos analytics and navigate search. That will definitely make it easier to answer some questions.	The tools presented will be very helpful for addressing questions of retention of students beyond the first year. So far I see them as less useful for students in the first year, where we need to enhance our ability to identify quickly students who are not making the right decisions necessary to succeed. But it sounds like there will be enhanced ability if advisors can access Canvas. If we could get reports on first-time students who have not accessed, or have minimally accessed Canvas in the first two weeks, that create an opportunity take corrective actions in these cases.

I really appreciate the hard work the Data Tools team has done to get us to this point. |