



OLD DOMINION  
UNIVERSITY

# Using Advising Analytics Software to track Impact and Value of Library Resources on Student Achievement

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Librarian*

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Concordia University Library Research Forum  
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# Introduction





# Analytics and Higher Education





# Analytics and Libraries

" ... until libraries know that **student #5 with major A** has downloaded **B number of articles** from **database C**, checked out **D number of books**, participated in **E workshops and online tutorials**, and completed **courses F, G, and H**, libraries cannot correlate any of those student information behaviors with attainment of other outcomes. **Until librarians do that, they will be blocked in many of their efforts to demonstrate value.**"

Megan Oakleaf (2010)

The Value of Academic Libraries

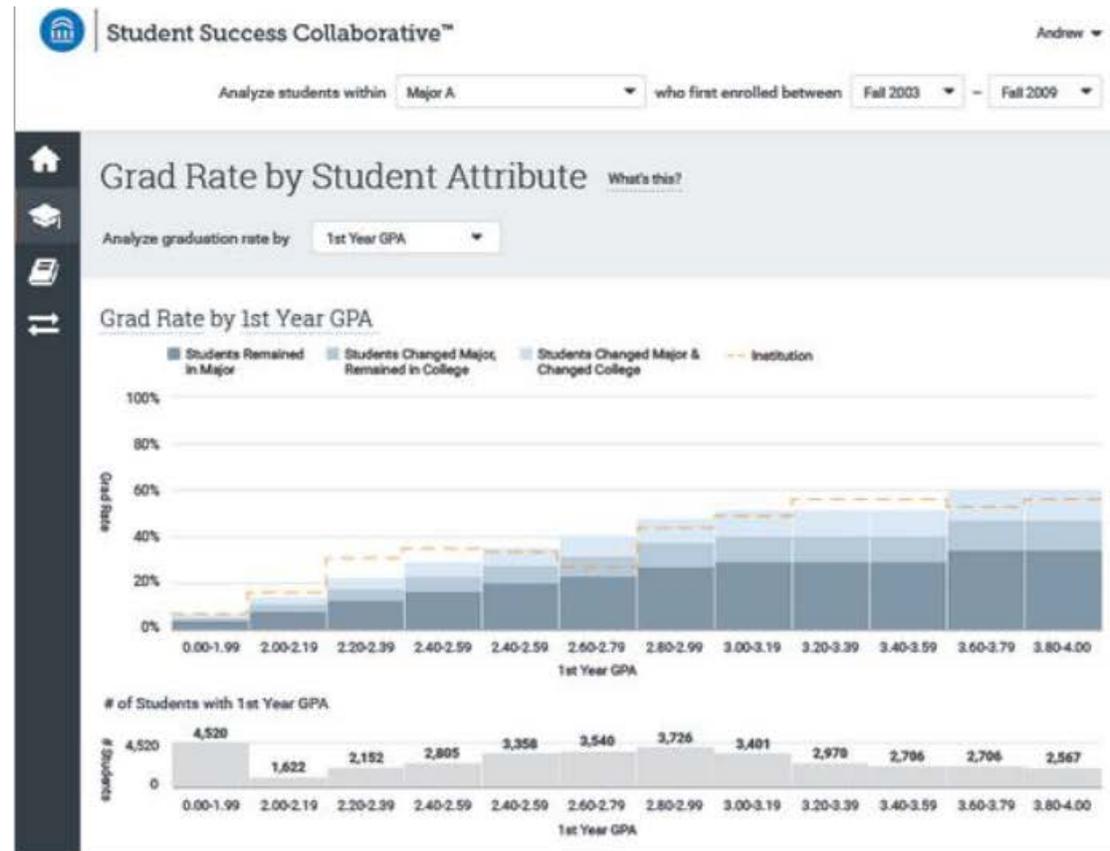


# Risks

- Cybersecurity
- Misuse of data
- Predictive analytics -> self-fulfilling prophecy?



# EAB: Student Success Collaborative





# Our Study

- Data--Administrative Perspectives
- More detailed description of adaptation
- Study Rationale
- Current focus on information literacy



# Study Parameters

- Data Mining
- Correlational Aspects
- Longitudinal & Comparative Aspects



# The Institutional Review Board (IRB)

- IRB Application/Challenges
- Partnership with IRB Liaison
- Working with Registrar



# IRB Informed Consent

- Distribution
- Time Constraints
- Logistics



# IRB Consent Form

## APPENDIX D

### INFORMED CONSENT DOCUMENT OLD DOMINION UNIVERSITY

**PROJECT TITLE:** Library Impacts on Student Success, Retention, and Graduate Rates: Using the EAB Advising System to Demonstrate the Impact of Library Services on Student Success and Student Learning.

#### INTRODUCTION

The purposes of this form are to give you information that may affect your decision whether to say YES or NO to participation in this research, and to record the consent of those who say YES. Library Impacts on Student Success, Retention, and Graduate Rates: Using the EAB Advising System to Demonstrate the Impact of Library Services on Student Success and Student Learning will be conducted within the Old Dominion University Libraries, including the Learning Commons and Library Instruction Room (L1306), and potentially within campus classrooms, should a Librarian visit your class in its regular location.

#### RESEARCHERS

Joleen McInnis, Health and Life Sciences Librarian, MLIS, MFA, Old Dominion University Libraries  
Lucinda Rush, Instructional Services Librarian, MLIS, MME  
Leo Lo, Associate University Librarian for Information Services, MSIS, MFA

#### DESCRIPTION OF RESEARCH STUDY

Several studies have been conducted looking into the subject of impact of library instruction on student success in individual courses, but few of them have explained the relationship to student library use of resources and services and student outcomes including grade point averages, course grades, retention and graduation rates.

If you decide to participate, then you will join a study involving research using student grade point averages, course grades for classes in which you receive librarian-led instruction, in addition to your normal course of study, retention rates, and graduate rates. We will access your grades, GPA, advisor correspondence, and graduation information using the online advising system (EAB) in current use at Old Dominion University. We will collect additional demographic data including UIN, major, status (e.g., first year, second year, etc.). If you say YES, then your participation will last for the duration of your undergraduate studies at Old Dominion University. You are, of course, free to change your mind and withdraw from the study at any time without any penalty.

#### EXCLUSIONARY CRITERIA

There are no criteria for exclusion.

#### RISKS AND BENEFITS

**RISKS:** If you decide to participate in this study, then you may face a risk of release of personally identifiable information such as grades and GPAs. The researchers will attempt to reduce these risks by removing all linking identifiers from the data they will collect prior to reporting. And, as with any research, there is some possibility that you may be subject to risks that have not yet been identified.

**BENEFITS:** There are no direct benefits to subjects. Others may benefit from this research by informing changes or improvements to services available at Old Dominion Libraries, and educate other library professionals working in similar environments to understand and improve the impact of library services on their student populations' academic success.

#### COSTS AND PAYMENTS

The researchers are unable to give you any payment for participating in this study.

#### NEW INFORMATION

If the researchers find new information during this study that would reasonably change your decision about participating, then they will give it to you.

#### CONFIDENTIALITY

The researchers will take reasonable steps to keep private information, such as grades, GPAs, and correspondence, confidential. The researcher will remove identifiers from the information prior to reporting. Subject UINs will be blacked out from the signed consent forms immediately after the attendance at library instruction record has been entered into the EAB system. The results of this study may be used in reports, presentations, and publications; but the researcher will not identify you. Of course, your records may be subpoenaed by court order or inspected by government bodies with oversight authority.

#### WITHDRAWAL PRIVILEGE

It is OK for you to say NO. Even if you say YES now, you are free to say NO later, and walk away or withdraw from the study -- at any time. Your decision will not affect your relationship with Old Dominion University, or otherwise cause a loss of benefits to which you might otherwise be entitled.

#### COMPENSATION FOR ILLNESS AND INJURY

If you say YES, then your consent in this document does not waive any of your legal rights. However, in the event of harm arising from this study, neither Old Dominion University nor the researchers are able to give you any money, insurance coverage, free medical care, or any other compensation for such injury. In the event that you suffer injury as a result of participation in any research project, you may contact the investigators, Joleen McInnis at 757-683-5908, Lucinda Rush at 757-683-5909, Leo Lo at 757-683-4159 or Dr. Tancy Vandecar-Burdin the current IRB chair at 757-683-3802 at Old Dominion University, or the Old Dominion University Office of Research at 757-683-3460 who will be glad to review the matter with you.

#### VOLUNTARY CONSENT

By signing this form, you are saying several things. You are saying that you have read this form or have had it read to you, that you are satisfied that you understand this form, the research study, and its risks and benefits. The researchers should have answered any questions you may have had about the research. If you have any questions later on, then the researchers should be able to answer them:

Joleen McInnis: 757-683-5908  
Lucinda Rush: 757-683-5909  
Leo Lo: 757-683-4159

If at any time you feel pressured to participate, or if you have any questions about your rights or this form, then you should call Dr. Tancy Vandecar-Burdin, the current IRB chair, at 757-683-3802, or the Old Dominion University Office of Research, at 757-683-3460.

And importantly, by signing below, you are telling the researcher YES, that you agree to participate in this study. The researcher should give you a copy of this form for your records.

<b>Subject's Printed Name &amp; Signature</b>	<b>Date</b>
Subject's UIN	

#### INVESTIGATOR'S STATEMENT

I certify that I have explained to this subject the nature and purpose of this research, including benefits, risks, costs, and any experimental procedures. I have described the rights and protections afforded to human subjects and have done nothing to pressure, coerce, or falsely entice this subject into participating. I am aware of my obligations under state and federal laws, and promise compliance. I have answered the subject's questions and have encouraged him/her to ask additional questions at any time during the course of this study. I have witnessed the above signature(s) on this consent form.

<b>Investigator's Printed Name &amp; Signature</b>	<b>Date</b>
----------------------------------------------------	-------------



# Privacy

- Protecting student data
- Warehousing data



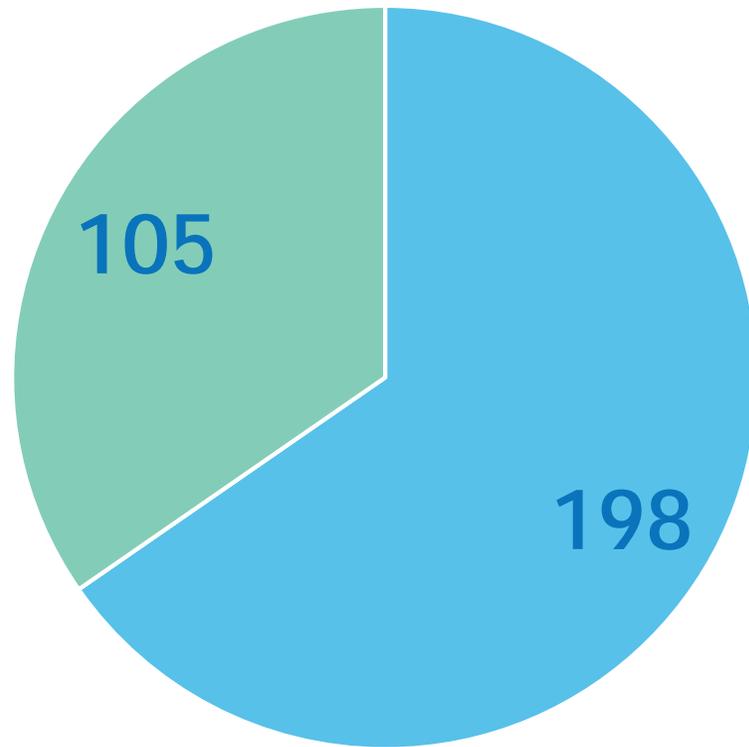
# Participants

- Established Program Focus
- New Program Focus



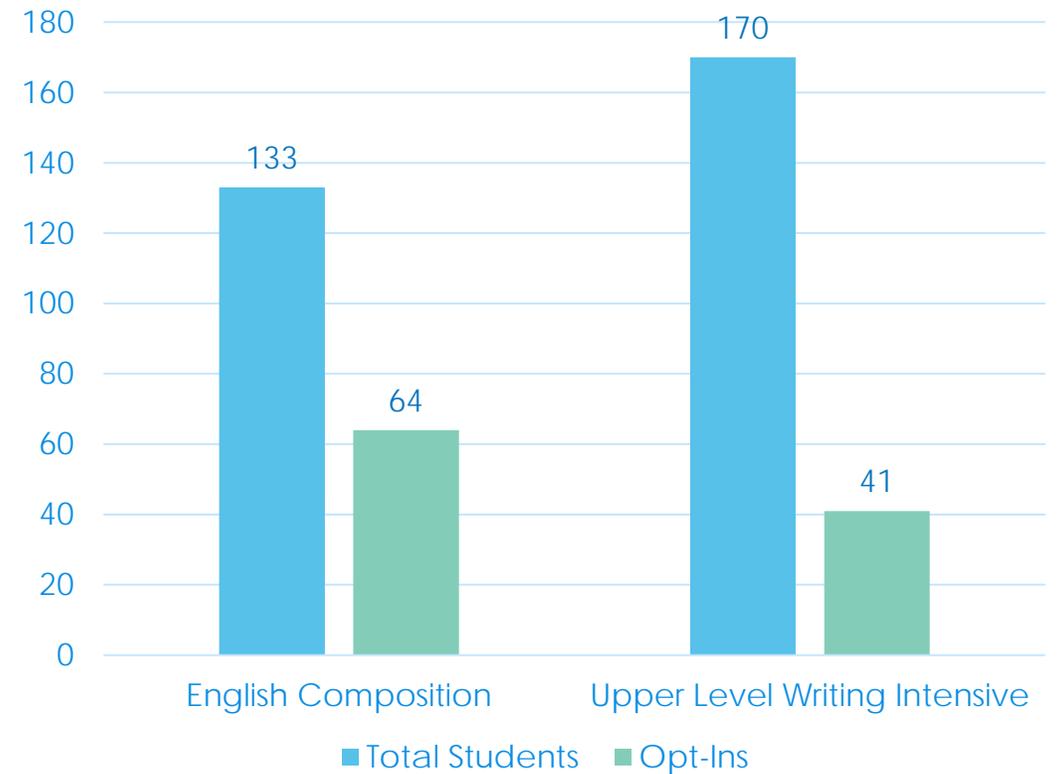
# Participants, Pilot Semester Spring 2018

## Total Students VS Study Participants



■ Total Students Taught ■ Total Students Opting In

## Participants By Class





# Pilot Study Challenges





# Future Actions

- Incorporate Librarian Research Consultations
- Include ALL teaching librarians in consultation process
- Identify funds to hire a student assistant
- Data warehousing (Identified campus partner)



# Future Actions

- Data Analysis begin at culmination of Spring 2019 semester
- Collaborate with other campus units
- Develop data literacy learning modules for students
- Identify ways to improve the consent process



# Selected References

- Butler, Kathy and Jason Byrd. "Research Consultation Assessment: Perceptions of Students and Librarians." *The Journal of Academic Librarianship*, vol. 42, no. 1, January 2016, pp. 83-86. *ScienceDirect*, <http://dx.doi.org/10.1016/j.acalib.2015.10.011>. Accessed 29 June 2017.
- Haddow, Gaby. "Academic Library Use and Student Retention: A Quantitative Analysis." *Library & Information Research*, vol. 35, no. 2, April 2013, pp.127-136. <http://dx.doi.org/10.1016/j.lisr.2012.12.002>. Accessed 7 July 2017.
- Matthews, Joseph R. "Assessing Library Contributions to University Outcomes: The Need for Individual Student Level Data." *Library Management*, vol. 33, no. 6/7, Spring 2012, pp. 389-402. *EmeraldInsight*, <https://doi.org/10.1108/0143512121166203>. Accessed 31 October 2017.
- Mezick, Elizabeth M. "Relationship of Library Assessment to Student Retention." *The Journal of Academic Librarianship*, vol. 41, no. 1, January 2015, pp. 31-36. *ScienceDirect*, <http://doi.org/10.1016/j.acalib.2014.10.011>. Accessed 15 January 2018.
- Soria, Krista M., et al. "Library Use and Undergraduate Student Outcomes: New Evidence for Students' Retention and Academic Success." *portal: Libraries and the Academy*, vol. 13, no. 2, April 2013, pp.147-164. *Project Muse*, <https://doi.org/10.10353/pla.2013.0010>. Accessed 31 October 2017.
- Thorpe, Angie, et al. "The Impact of the Academic Library on Student Success: Connecting the Dots." *portal: Libraries and the Academy*, vol. 16, no. 2, April 2016. pp. 373-392. *Project Muse*, <http://muse.jhu.edu/article/613847>. Accessed 29 June 2017.



# THANK YOU!

## Comments or Questions?

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