An Education About Education Data: Embedded Librarians, Education Students, and a Data Odyssey

Chris F. Neuhaus

Jim Kelly

University of Northern Iowa

See next page for additional authors

Let us know how access to this document benefits you

Copyright ©2019 Chris Neuhaus, Jim Kelly, and Chris Opsal

Follow this and additional works at: https://scholarworks.uni.edu/libdocuments

Part of the Library and Information Science Commons

Recommended Citation

Neuhaus, Chris F.; Kelly, Jim; and Opsal, Chris, "An Education About Education Data: Embedded Librarians, Education Students, and a Data Odyssey" (2019). Rod Library Documents. 48.
https://scholarworks.uni.edu/libdocuments/48

This Slideshow is brought to you for free and open access by the Rod Library at UNI ScholarWorks. It has been accepted for inclusion in Rod Library Documents by an authorized administrator of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.
An Education About Education Data: Embedded Librarians, Education Students, and a Data Odyssey

Chris Neuhaus, Jim Kelly, and Chris Opsal
University of Northern Iowa
Rod Library and Department of Ed Psych and Foundations
Agenda

• Instructor’s goals for the course & How did this collaboration get started?

• First session - introduction to advanced Google searching, Google Scholar, ERIC

• Subsequent research days focused on:
  ■ locating local data state and district level data for Iowa
  ■ locating national and state-by-state level data
  ■ locating relevant research articles
  ■ allowing for failure (what if our topic doesn’t work?)
  ■ lots of consulting with librarian and primary professor throughout

• Consulting with other experts (on campus and off)

• Takeaways
Among the instructor’s goals for the course and project:

- Students will become skilled at locating and assessing both archived education data and research about current educational topics. They will become familiar with quality sources of educational information such as ERIC, NCES, the Iowa State Department of Education, and the Iowa State Data Center.

- Students will understand the imperfect nature of secondary research in education, including unavailable, outdated, or incomplete information.

- Students will learn how knowledge about education in the U.S. and Iowa is created, contribute to what is known, and identify opportunities for further inquiry.
Why the collaboration with librarians?

- Lots of students playing with lots of information.
- Topics and questions needed a lot of real-time refining.
- Statistics are trouble! Data likes to hide!
- Having enough veteran researchers on hand to offer alternative approaches and encouragement.
- Librarians help model non-linear, flexible, and iterative research approaches.
That first session. Showing off the free tools of the trade.

- Google - how and why to focus?
- Google Scholar - techniques for finding relevant/current research.
- ERIC - a focused alternative for education research.
- These are some of the only databases they graduate with.
Research Days - Students Explored/Researched the following factors

Class generated a list of possible factors that might correlate with low dropout rates, including:

<table>
<thead>
<tr>
<th><strong>Personal Characteristics of Students:</strong></th>
<th><strong>Community/School Characteristics</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>● Disability</td>
<td>● Crime Rate</td>
</tr>
<tr>
<td>● Mental Health</td>
<td>● Community Size</td>
</tr>
<tr>
<td>● Gender, Ethnicity</td>
<td>● Teacher Pay</td>
</tr>
<tr>
<td>● Teen Pregnancy</td>
<td>● Teacher Preparation</td>
</tr>
<tr>
<td>● Academic Achievement</td>
<td>● Summer Reading Programs</td>
</tr>
<tr>
<td>● Substance Abuse</td>
<td>● Alternative Schools</td>
</tr>
<tr>
<td>● School Attendance</td>
<td></td>
</tr>
<tr>
<td>● Socioeconomic Status</td>
<td></td>
</tr>
<tr>
<td>● Student Engagement</td>
<td></td>
</tr>
</tbody>
</table>
Research Days - Locating Local Data (District and State of Iowa)
Research Days - Data difficulties encountered:

Iowa school districts and Iowa counties don’t correspond.
Graduation Rates and Dropout Rates

This webpage provides data including four- and five-year graduation rates and dropout rates for Iowa public schools.

Graduation Rate News

Graduation rate edges up to all-time high (2019-03-13)


Contact(s)

Kim Wilson
515-281-3757
kim.wilson@iowa.gov
List of school districts in Iowa

This is a list of school districts in Iowa.

Adair County
- Nodaway Valley Community School District
- Orient-Macksburg Community School District

Adams County
- Corning Community School District
- Prescott Community School District

Allamakee County
- Allamakee Community School District
- Eastern Allamakee Community School District
- Postville Community School District

See also: Category:School districts in Iowa
Research Days - Locating National and State-by-State Data

Figure 1. Adjusted cohort graduation rate (ACGR) for public high school students, by state: 2015-16

U.S. average ACGR: 84 percent

- Reporting standards not met (1)
- Less than 70 percent (1)
- 70 percent to less than 80 percent (11)
- 80 percent to less than 90 percent (36)
- 90 percent or higher (2)
Research Days - Difficulties encountered at the national level

- Different states have different reporting conventions.
- Some states simply don’t record or report certain variables.
- Iowa and New Jersey have very similar graduation/dropout rates - but how similar are these two states?
Research Days - Finding research

- Being able to actually limit to empirical studies (ERIC vs Google Scholar)

- Some topics lack extensive research:
  - summer reading programs
  - teacher preparation
  - student engagement
Research Days - Allowing for failure

What happens if our topic doesn’t work?

- determining topic viability before too many weeks go by (based on lots of professor-student feedback)
- if topic failed - documenting methods and what WAS found
- drawing conclusions if possible about why there isn’t much research
- providing team with a new (easier) topic
Research Days - lots of consulting with librarian and primary professor.

Both librarians attended ten 75 minute in-class research sessions each semester.

Librarians were also available outside of class for research consultations and email reference questions.
Research Days - Consulting with other experts (on campus and off).

- Consulting with other education professors

- Visiting public schools to learn more about special programs (e.g., alternative education programs)

- Calls to school districts and the State Dept. of Education

- Q&A with guest speakers. (e.g., questions about special ed funding posed to guest speaker on state education policy)
Takeaways

• Helping students to come to terms with uncertainty/messiness in the world. Learning to live with complexity. No easy answers. Standards for data collection vary over time and from state to state.

• Questioning those in authority (or those who are seeking power) who oversimplify challenges in education.

• Developing some facility with finding higher quality, publicly available information and the infrastructure that gathers this information/data (NCES, Census, BLS, CDC, etc.) [.gov vs. .com]

• Developing skills with and knowledge that will help them in later classes and education (Research Methods, graduate school, etc.)


Thank You!
Questions? Comments?