A Course-Level Student Success Dashboard for Faculty

Presented to the WWU Department Chairs, 2/16/23

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Vision

We believe that giving faculty easy access to information on their own grading patterns and student success rates could support faculty in improving instruction, leading to durable and widespread improvements in outcomes for all students.
Objectives

Support faculty in answering questions about your own courses:

• How is student success changing over time?
• Does student success relate to student identities?
• How do success rates in my course compare with those in all sections of the same course?
Defining Student Success

We defined ‘success’ as **earning a grade that counts toward GUR or major requirements**. This includes:

- Letter grades A, B, and C
- Satisfactory grade S
- Exceptional circumstance (COVID) grade EP (exceptional pass)

Grade modes with no grades that count toward GUR or major requirements – such as pass/no pass – are excluded from analysis.
Audience

Faculty members can see:

• Grade distributions and success rates for courses you taught
• Aggregated grade distributions and success rates for all sections of those courses

Administrators can see:

• Nothing. This tool supports faculty improvement of your own courses, it is not a tool for evaluation of faculty.
Tooling

DATA SOURCES
- Student demographics
- Human resources
- Course details
- Grades

DATA MODELING

AGGREGATION

REPORTING & AUTHENTICATION
- Microsoft SQL Server
- Python
- Power BI
Faculty will access the dashboard via Web4U 'Faculty Services'.
Faculty Access

To view this report, please sign in again

Sign-in

RELEASE: 8.5.3
## Dashboard – Grades by Course

### Office of Institutional Effectiveness

**John Krieg**

This table shows a complete distribution of grades awarded in the courses for which you were primary instructor. On subsequent tabs, the data are filtered to exclude grade modes not used for advancement in a GUR or major, and categorized by the initial letter, eliminating + and -. 

### Grades Earned in Your Courses

<table>
<thead>
<tr>
<th>Subject</th>
<th>Course number</th>
<th>Grade mode</th>
<th>Letter</th>
<th>Audit</th>
<th>Exceptional (COVID)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Academic year</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>ECON</td>
<td>207</td>
<td>2013-2014</td>
<td>9</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2014-2015</td>
<td>5</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2015-2016</td>
<td>3</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2016-2017</td>
<td>3</td>
<td>4</td>
<td>1</td>
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<tr>
<td></td>
<td></td>
<td>2017-2018</td>
<td>11</td>
<td>14</td>
<td>19</td>
</tr>
<tr>
<td>311</td>
<td></td>
<td>2013-2014</td>
<td>3</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>375</td>
<td></td>
<td>2011-2012</td>
<td>6</td>
<td>3</td>
<td>9</td>
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<td>2</td>
<td>5</td>
<td>4</td>
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<td>2015-2016</td>
<td>14</td>
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<td>14</td>
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<td>2011-2012</td>
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<td>2012-2013</td>
<td>2</td>
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<td></td>
<td></td>
<td>2013-2014</td>
<td>1</td>
<td></td>
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<tr>
<td></td>
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<td>2018-2019</td>
<td>3</td>
<td></td>
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<td></td>
<td></td>
<td>2019-2020</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>406</td>
<td></td>
<td>2011-2012</td>
<td>8</td>
<td>2</td>
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<td>2012-2013</td>
<td>3</td>
<td>4</td>
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<td>2013-2014</td>
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<td>6</td>
<td>4</td>
</tr>
<tr>
<td>445</td>
<td></td>
<td>2014-2015</td>
<td>5</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
Dashboard – Grades by Student Attribute

**OFFICE OF INSTITUTIONAL EFFECTIVENESS**

**John Krieg**

How do grade distributions differ based on student attribute?

**GRADES BY STUDENT ATTRIBUTE**

- All Students
- Freshmen
- Junior
- Masters
- Non-Matric
- Post Bac
- Senior
- Sophomore
- First-year
- Graduate
- Part-time
- Transfer
- First generation
- Not applicable
- Not first generation
- Unknown first generation...
- HS GPA < 3.3
- HS GPA >= 3.3
- Major declared
- No declared major
- Not Pell eligible
- Pell eligible
- Not person of color/unknown

Have questions or feedback? Send us an email.
Dashboard – Grades by Student Attribute

John Krieg

How do grade distributions differ based on student attribute?

- First generation
- High school GPA
- Major declared
- Pell eligible
- Person of color
- Residency
- Sex
- Student level
- Underrepresented race

Multiple selections

Academic year
- All

Course number level
- All

Have questions or feedback? Send us an email.
Dashboard – Success Rates over Time

OFFICE OF INSTITUTIONAL EFFECTIVENESS

John Krieg

Are success rates changing over time?
Use the radio button below to slice success rates by student attribute.

Success Rates Over Time

Student attribute: All Students

Percent Success

80%  85%  90%  95%  100%


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Dashboard – Success Rates over Time

Instructions
Grades by Course
Grades by Student Attr...
Success Rates Over Ti...
Compare with All Instr...
Data Dictionary

John Krieg

Are success rates changing over time?
Use the radio button below to slice success rates by student attribute.

Office of Institutional Effectiveness

SUCCESS RATES OVER TIME

Student attribute: First generation • Not applicable • Not first generation

<table>
<thead>
<tr>
<th>Academic year</th>
<th>Percent success</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-2014</td>
<td>72%</td>
</tr>
<tr>
<td>2014-2015</td>
<td>87%</td>
</tr>
<tr>
<td>2015-2016</td>
<td>81%</td>
</tr>
<tr>
<td>2016-2017</td>
<td>67%</td>
</tr>
<tr>
<td>2017-2018</td>
<td>80%</td>
</tr>
</tbody>
</table>

Have questions or feedback? Send us an email.

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FERPA Concerns

• Could a faculty member deduce demographic identifying information for a student based on the information in the dashboard?
  • Yes, particularly in courses where enrollments are small

• Suppress dashboard data when:
  • the count of a grade earned is equal to the total number of that grade earned in the class. For example, 5 first-gen earned As and there were 5 total in that class.
  • for the GPA tab, values are suppressed for classes with fewer than 10 students.
Implementation, First Steps

• Presented to all faculty in the first-year curriculum at start of fall term.
• Dashboard will go live on Web4U next week.
• November summit on inclusive student success will highlight this as an important element of our toolbox.
• Ongoing collaboration with faculty to improve the dashboard
Project Team

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