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INTRODUCTION

The Wisconsin Technical College System Office has implemented the use of a business intelligence software called Tableau to allow student success advocates easy and effective access to student success analytics. Tableau is user friendly through its data visualization capabilities and intuitive design. The data presented in the College-wide Student Success Dashboard is drawn from the WTCS Client Reporting System. If you are interested in analysis beyond what is presented within the College-wide Student Success Dashboard, please connect with your college Institutional Research department.

The College-wide Student Success Dashboard provides a high-level summary of system- and college-wide student performance for key performance indicators (e.g., fall to spring retention, GPA of 2.0 or greater, credit momentum) that research identified as highly correlated with student program completion. This information is disaggregated by student populations (e.g., race/ethnicity, disability, economic disadvantage) to help identify and track equity gaps in student outcomes. College benchmarking is available for best practice sharing across the WTCS community in an effort to promote local and statewide student success.

The most recent academic year of data for each tab within the College-wide Student Success Dashboard will be updated on a varying basis depending on the closing of the respective source WTCS data system. The below table provides examples for accessing academic year 2017 data or data for cohorts that begin in academic year 2017. It is important to consider that the most recent academic year of data is not final until after the below dates for each dashboard tab. In addition, program completion is a cohort assessment that analyzes program completion across a series of academic years (i.e., program completion within three academic years or eight academic years). It is important that enough academic years of data has accumulated before making a final assessment of program completion.

<table>
<thead>
<tr>
<th>Key Performance Indicator</th>
<th>Date of Data Finalization for Academic Year 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Completion</td>
<td>Data is final 9/16/17</td>
</tr>
<tr>
<td>2.0 GPA Or Greater</td>
<td>Data is final 9/16/17</td>
</tr>
<tr>
<td>Fall to Spring Retention</td>
<td>Data is final 9/16/17</td>
</tr>
<tr>
<td>General Education Course Completion</td>
<td>Data is final 9/16/17</td>
</tr>
<tr>
<td>New Program Students By Successful Post-Secondary Credits Completed</td>
<td>Data is final 9/16/17</td>
</tr>
</tbody>
</table>
KEY PERFORMANCE INDICATORS: An Overview

The WTCS Business Intelligence Cross-functional Team identified the key performance indicators that are included in the College-wide Student Success Dashboard. These indicators are: (1) program completion, (2) 2.0 GPA or greater, (3) fall to spring retention, (4) general education course completion, and (5) new program students by successful post-secondary credits completed (i.e., early credit momentum). For a more detailed description of each indicator, please see the business rules at the end of this document.

These indicators can help assess college-wide reform that may influence student success (e.g., implementing early-alert programs or intensive student supports in general education gatekeeper courses). These indicators can be measured in just one year, allowing for quick feedback and evaluation of institutional reforms. In addition, the dashboard allows for assessing first-time college student experiences in their first year. These indicators can be thought of as ‘early-momentum’ metrics. Research suggests that these early-momentum metrics are highly correlated with long-term student outcomes, i.e., program completion (Jenkins & Bailey, 2017).

To replicate the early momentum indicators within the dashboard prompts, select “True” for both First-Time College Student and Program Student:

Importance of the Key Performance Indicators:

% of Students with a 2.0 GPA or Greater: For a student to remain eligible for financial aid, one of the requirements of satisfactory academic progress is maintaining a cumulative GPA of a 2.0 or better. Students who are unable to maintain financial aid may be at risk of dropping out.

% of Students Retained from Fall to Spring: Research suggests that first-time program students who maintain enrollment from fall to spring have higher rates of attaining a credential compared with students who do not maintain fall to spring enrollment in their first year (Belfield, Jenkins, & Lahr, 2016). This indicator also encourages colleges to monitor enrollment and offer courses based on students’ academic plans.

% of Gatekeeper Courses Successfully Completed i.e., general education course completion: Research suggests that program students who passed a college-level math or English course in the first year are more likely to complete a credential compared with students who did not pass a college-level math or English course in their first year (Calcogno, Crosta, Bailey & Jenkins, 2007; Denley, 2016). The indicator also helps colleges monitor the guiding of students to enroll in the appropriate math and English courses based on the college placement process. The indicator can also provide insight into the importance of integrating academic support into gatekeeper courses.

% of Students Accumulating Postsecondary Credit: Research suggests that first-time program students who complete more credits in their first year have higher rates of attaining a credential compared with students who complete fewer credits in their first year (Attewell & Monaghan, 2016). In addition, program students who complete more credits in their first year paid less for their degree in tuition and fees (Belfield, et al., 2016).
DASHBOARD PROMPTS
The College-Wide Student Success Dashboard includes a series of prompts on each of the dashboard pages to allow end-users the ability to analyze the dashboard key performance indicators across a series of variables. Dashboard page data will update based on the prompt selections. Dashboard prompts include:

- **Academic Year**: the academic year a student outcome is derived and allows for longitudinal trending
- **Cohort Year**: the cohort year prompt is only available on the ‘Program Completion’ dashboard pages; cohort year represents the academic year new program students enter the cohort for assessing longitudinal program completion
- **District Name**: allows for selection of a particular college or the entire WTCS system.

The following prompts allow for assessing student outcomes across various student groups and identifying equity gaps:

- **Race/Ethnicity**: American Indian or Alaskan Native, Asian, Black or African American, Hispanic or Latino, Native Hawaiian or Other Pacific Islander, Not Reported (unknown), Two or more races, White
- **Gender**: Female, Male, Unknown
- **Disability**: Disabled (student has a reported disability), Not Disabled
- **Used Veteran Benefits**: False (the student has never used veteran benefits), True (the student has used veteran benefits and includes direct veterans using benefits, veteran spouse/surviving spouse using benefits, and veteran child using benefits). Veteran benefits is derived from reported program fee codes in Client Reporting: veterans using benefits includes program fee codes (0A, 0E, 5A, 5E); veteran spouse/surviving spouse using benefits includes program fee codes (0B, 0C, 5B, 5C); and veteran child using benefits includes program fee codes (0D, 5D).
- **First-Time College Student**: False (the student was enrolled in FTE generating courses at the college for at least one semester within the prior four years), True (the student was never enrolled in FTE generating courses in the college in the prior four years)
- **Program Student**: False (the student has not declared a program in the academic year assessed), True (the student has declared a program in the academic year assessed; programs include program aid codes: 10-Associate degree, 20-Liberal arts, 30-Short-term technical diploma, 31-One-year technical diploma, 32-Two-year technical diploma, 50-Apprenticeship, or 61-WTCS pathway certificate)
- **Economic Disadvantage**: the student receives need-based financial assistance, and/or their income is at or below the poverty level as defined by the U.S. Department of Health and Human Services (“Economically Disadvantaged”), or the student does not receive financial assistance and their income is not below the poverty level (“Not Economically Disadvantaged”)
**DASHBOARD PAGE FORMAT: System-wide overview pages**

System-wide overview pages allow for benchmarking across colleges and the WTCS system. This example highlights the 2.0 GPA data (others include: Program Completion, Fall to Spring Retention, & General Education Course Completion). Please refer to the color-coded legend and information on the following page for details about the system-wide overview pages content and functionality.

---

**Table: 2.0 GPA Or Greater**

```
<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Race/Ethnicity</th>
<th>Gender</th>
<th>Disability</th>
<th>Used Veteran Benefits</th>
<th>First-Time College Student</th>
<th>Program Student</th>
<th>Economic Disadvantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>BTC</td>
<td>79.7%</td>
<td>4.050</td>
<td>9.3%</td>
<td>7.479</td>
<td>92.4%</td>
<td>7.863</td>
</tr>
<tr>
<td></td>
<td>CVTC</td>
<td>81.4%</td>
<td>7.727</td>
<td>8.4%</td>
<td>8.14%</td>
<td>82.4%</td>
<td>8.43%</td>
</tr>
<tr>
<td></td>
<td>FVTC</td>
<td>96.7%</td>
<td>5,170</td>
<td>96.9%</td>
<td>15,456</td>
<td>96.9%</td>
<td>14,570</td>
</tr>
<tr>
<td></td>
<td>GTTC</td>
<td>74.6%</td>
<td>12,083</td>
<td>75.8%</td>
<td>11,556</td>
<td>76.1%</td>
<td>10,570</td>
</tr>
<tr>
<td></td>
<td>LTC</td>
<td>66.1%</td>
<td>3,050</td>
<td>85.5%</td>
<td>3,050</td>
<td>85.3%</td>
<td>2,547</td>
</tr>
<tr>
<td></td>
<td>MDSN</td>
<td>82.0%</td>
<td>20,672</td>
<td>82.5%</td>
<td>20,672</td>
<td>82.5%</td>
<td>20,672</td>
</tr>
<tr>
<td></td>
<td>MILW</td>
<td>78.1%</td>
<td>24,282</td>
<td>77.3%</td>
<td>22,996</td>
<td>78.1%</td>
<td>21,886</td>
</tr>
<tr>
<td></td>
<td>MPTC</td>
<td>90.2%</td>
<td>8,121</td>
<td>91.3%</td>
<td>7,863</td>
<td>92.4%</td>
<td>7,069</td>
</tr>
<tr>
<td></td>
<td>MSTC</td>
<td>80.9%</td>
<td>4,074</td>
<td>82.5%</td>
<td>4,006</td>
<td>83.5%</td>
<td>3,799</td>
</tr>
<tr>
<td></td>
<td>NATC</td>
<td>79.8%</td>
<td>1,816</td>
<td>79.4%</td>
<td>1,706</td>
<td>81.9%</td>
<td>1,532</td>
</tr>
<tr>
<td></td>
<td>NTC</td>
<td>85.5%</td>
<td>6,632</td>
<td>84.1%</td>
<td>6,559</td>
<td>81.3%</td>
<td>6,475</td>
</tr>
<tr>
<td></td>
<td>NWTC</td>
<td>83.3%</td>
<td>14,686</td>
<td>84.8%</td>
<td>14,637</td>
<td>85.0%</td>
<td>14,499</td>
</tr>
<tr>
<td></td>
<td>SWTC</td>
<td>84.5%</td>
<td>3,748</td>
<td>84.6%</td>
<td>3,727</td>
<td>84.4%</td>
<td>3,712</td>
</tr>
<tr>
<td></td>
<td>WCTC</td>
<td>79.4%</td>
<td>8,642</td>
<td>87.0%</td>
<td>8,642</td>
<td>86.9%</td>
<td>8,622</td>
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<tr>
<td></td>
<td>WITC</td>
<td>85.8%</td>
<td>4,652</td>
<td>84.3%</td>
<td>4,429</td>
<td>84.9%</td>
<td>4,014</td>
</tr>
<tr>
<td></td>
<td>WTC</td>
<td>78.5%</td>
<td>6,077</td>
<td>78.7%</td>
<td>5,880</td>
<td>79.1%</td>
<td>5,487</td>
</tr>
<tr>
<td></td>
<td>WTC</td>
<td>83.2%</td>
<td>147,276</td>
<td>83.7%</td>
<td>141,785</td>
<td>83.7%</td>
<td>134,845</td>
</tr>
<tr>
<td></td>
<td>WTC</td>
<td>83.2%</td>
<td>583,162</td>
<td>83.7%</td>
<td>583,162</td>
<td>84.3%</td>
<td>583,162</td>
</tr>
</tbody>
</table>
```

Example highlighted on the next page
**Legend for system-wide overview pages**

**A** — Users can update page content through the available **prompts**

**B** — The data for the **system-wide overview** are shown as a series of bars. Each bar represents the percent of students who have (in this example) a 2.0 GPA or greater for a given college (or the WTCS system as a whole) in a particular academic year. To explain (*in the example highlighted with an arrow*), for the WTCS system 147,278 students were enrolled in the 2013 academic year and of these students 83.2% of them completed the year with a 2.0 GPA or greater.

The bars are **color-coded** based on the percentage of students with a 2.0 GPA or greater. If this value is below 70% then the bar will be dark orange. If the value is between 70-79.9% then the bar will be light orange. If the value is greater than 80% then the bar will be light blue. This color-coding scheme is also used for the General Education Course Completion pages.

Other indicators (Program Completion, Fall to Spring Retention, and New Program Students By Successful Post-Secondary Credits Completed) are color-coded from light blue for low indicator values to dark blue for high indicator values. In contrast to the orange-blue color-coding scheme, the blue color-coding schemes can vary in scale depending on the data that are present within the graph/figure. To explain, light blue is not always associated with values lower than 10%, but rather light blue is associated with the lowest values of the indicator that are present within the graph/figure. For example:

**To replicate the early momentum indicators within the dashboard prompts, select “True” for both First-Time College Student and Program Student:**
DASHBOARD PAGE FORMAT: Student characteristic pages

Student characteristic pages allow for identifying equity gaps across student populations. This example highlights the 2.0 GPA data (others include: Program Completion, Fall to Spring Retention, & General Education Course Completion). Please refer to the color-coded legend and information on the following page for details about the student characteristic pages content and functionality.
Legend for student characteristic pages

A — Users can update page content through the available prompts.

B — Heatmap of the indicator values (e.g., 2.0 GPA or greater) summarized by academic year (columns) and student race/ethnicity (rows). Each number within a given cell is the number of students within the assessment and the percentage is the percent of those students who completed the academic year with a 2.0 GPA or greater (as an example for this particular indicator).

C — Line graph of the indicator values (e.g., 2.0 GPA or greater; y-axis) summarized by academic year (x-axis) and whether the student was economically disadvantaged (gray line) or not (black line). Each number next to a point on the graph is the number of students within the assessment and the percentage is the percent of those students who completed the academic year with a 2.0 GPA or greater (as an example for this particular indicator). Note, the scale of the y-axis varies depending on the included data, and that these line graphs maximize differences between the minimum and maximum values which may make small gaps (e.g., 2% difference) between student populations appear large.

D — Line graph of the indicator values (e.g., 2.0 GPA or greater; y-axis) summarized by academic year (x-axis) and whether the student was disabled (gray line) or not (black line). Each number next to a point on the graph is the number of students within the assessment and the percentage is the percent of those students who completed the academic year with a 2.0 GPA or greater (as an example for this particular indicator). Note, the scale of the y-axis varies depending on the included data, and that these line graphs maximize differences between the minimum and maximum values which may make small gaps (e.g., 2% difference) between student populations appear large.

E — Line graph of the indicator values (e.g., 2.0 GPA or greater; y-axis) summarized by academic year (x-axis) and whether the student used veteran benefits (gray line) or not (black line). Each number next to a point on the graph is the number of students within the assessment and the percentage is the percent of those students who completed the academic year with a 2.0 GPA or greater (as an example for this particular indicator). Note, the scale of the y-axis varies depending on the included data, and that these line graphs maximize differences between the minimum and maximum values which may make small gaps (e.g., 2% difference) between student populations appear large.
DASHBOARD PAGE FORMAT: New Program Students By Successful Post-Secondary Credit Completed

This page allows for identifying equity gaps in credit momentum across student populations. Please refer to the color-coded legend and information on the following page for details about the credit momentum page content and functionality.

### District Name
(All)  
(All)  
(All)  
(All)  

### New Program Students By Successful Post-Secondary Credits Completed

<table>
<thead>
<tr>
<th>District Name</th>
<th>Academic Year</th>
<th>Gender</th>
<th>Disability</th>
<th>Used Veteran Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2017</td>
<td>(All)</td>
<td>(All)</td>
<td>(All)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>0 Credits</th>
<th>1 to &lt;6 Credits</th>
<th>6 to &lt;12 Credits</th>
<th>12 to &lt;18 Credits</th>
<th>18 to &lt;24 Credits</th>
<th>&gt;= 24 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.0%</td>
<td>24.4%</td>
<td>19.4%</td>
<td>15.6%</td>
<td>10.6%</td>
<td>17.5%</td>
</tr>
</tbody>
</table>

### Race/Ethnicity

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>0 Credits</th>
<th>1 to &lt;6 Credits</th>
<th>6 to &lt;12 Credits</th>
<th>12 to &lt;18 Credits</th>
<th>18 to &lt;24 Credits</th>
<th>&gt;= 24 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian or Alaskan Native</td>
<td>23.8%</td>
<td>25.1%</td>
<td>21.7%</td>
<td>15.6%</td>
<td>5.9%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Asian</td>
<td>11.4%</td>
<td>19.1%</td>
<td>23.9%</td>
<td>19.7%</td>
<td>12.4%</td>
<td>13.8%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>31.9%</td>
<td>18.5%</td>
<td>22.8%</td>
<td>15.1%</td>
<td>7.0%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>18.0%</td>
<td>20.0%</td>
<td>23.8%</td>
<td>17.3%</td>
<td>9.1%</td>
<td>11.8%</td>
</tr>
<tr>
<td>Native Hawaiian or Other Pacific Islander</td>
<td>18.8%</td>
<td>35.4%</td>
<td>22.8%</td>
<td>8.3%</td>
<td>6.8%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Not Reported</td>
<td>11.5%</td>
<td>43.7%</td>
<td>18.3%</td>
<td>11.6%</td>
<td>7.4%</td>
<td>7.4%</td>
</tr>
<tr>
<td>Two or more races</td>
<td>22.8%</td>
<td>19.0%</td>
<td>22.8%</td>
<td>15.9%</td>
<td>9.1%</td>
<td>10.4%</td>
</tr>
<tr>
<td>White</td>
<td>10.5%</td>
<td>26.4%</td>
<td>19.4%</td>
<td>15.6%</td>
<td>10.6%</td>
<td>17.5%</td>
</tr>
</tbody>
</table>

### Disability

<table>
<thead>
<tr>
<th>Disability</th>
<th>0 Credits</th>
<th>1 to &lt;6 Credits</th>
<th>6 to &lt;12 Credits</th>
<th>12 to &lt;18 Credits</th>
<th>18 to &lt;24 Credits</th>
<th>&gt;= 24 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disabled</td>
<td>17.1%</td>
<td>18.3%</td>
<td>21.3%</td>
<td>17.6%</td>
<td>11.5%</td>
<td>13.8%</td>
</tr>
<tr>
<td>Not Disabled</td>
<td>38.4%</td>
<td>26.0%</td>
<td>20.2%</td>
<td>15.6%</td>
<td>9.2%</td>
<td>10.5%</td>
</tr>
</tbody>
</table>

### Economic Disadvantage

<table>
<thead>
<tr>
<th>Economic Disadvantage</th>
<th>0 Credits</th>
<th>1 to &lt;6 Credits</th>
<th>6 to &lt;12 Credits</th>
<th>12 to &lt;18 Credits</th>
<th>18 to &lt;24 Credits</th>
<th>&gt;= 24 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economically Disadvantaged</td>
<td>16.6%</td>
<td>12.5%</td>
<td>22.1%</td>
<td>19.3%</td>
<td>11.4%</td>
<td>17.9%</td>
</tr>
<tr>
<td>Not Economically Disadvantaged</td>
<td>27.6%</td>
<td>20.7%</td>
<td>21.7%</td>
<td>10.9%</td>
<td>10.3%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Economically Disadvantaged</td>
<td>22.5%</td>
<td>16.3%</td>
<td>22.1%</td>
<td>19.3%</td>
<td>11.4%</td>
<td>17.9%</td>
</tr>
</tbody>
</table>
Legend for the New Program Students By Successful Post-Secondary Credit Completed Page

A — Users can update page content through the available prompts. Note, that the “First-time College Student” and “Program Student” prompts are unavailable, since this page exclusively addresses new program students.

B — Bar plot of the percent of new program students who successfully completed a set amount of post-secondary credits (0, 1-5, 6-11, 12-17, 18-23, 24 or more) within their first academic year. Each bar corresponds with a particular number of post-secondary credits. Each number next to a given bar is the number of students within the assessment and the percentage is the percent of those students who completed their first academic year with a set amount of successfully completed post-secondary credits.

C — Heatmap of the percent of new program students who successfully completed post-secondary credits (0, 1-5, 6-11, 12-17, 18-23, 24 or more; columns) in their first academic year summarized by the student’s race/ethnicity (rows). Each number within a given cell is the number of students within the assessment and the percentage is the percent of those students who completed their first academic year with a set amount of successfully completed post-secondary credits.

D — Heatmap of the percent of new program students who successfully completed post-secondary credits (0, 1-5, 6-11, 12-17, 18-23, 24 or more; columns) in their first academic year summarized by the student’s disability status (rows). Each number within a given cell is the number of students within the assessment and the percentage is the percent of those students who completed their first academic year with a set amount of successfully completed post-secondary credits.

E — Heatmap of the percent of new program students who successfully completed post-secondary credits (0, 1-5, 6-11, 12-17, 18-23, 24 or more; columns) in their first academic year summarized by the student’s economic disadvantage status (rows). Each number within a given cell is the number of students within the assessment and the percentage is the percent of those students who completed their first academic year with a set amount of successfully completed post-secondary credits.
DASHBOARD PAGE FORMAT: New Program Students By Successful Post-Secondary Credit Completed Trend

This page allows for trending credit momentum across academic years. Please refer to the color-coded legend and information on the following page for details about the credit momentum trend page content and functionality.

<table>
<thead>
<tr>
<th>District Name</th>
<th>Academic Year</th>
<th>Race/Ethnicity</th>
<th>Gender</th>
<th>Disability</th>
<th>Used Veteran Benefits</th>
<th>Economic Disadvantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>(All)</td>
<td>(Multiple values)</td>
<td>(All)</td>
<td>(All)</td>
<td>(All)</td>
<td>(All)</td>
<td>(All)</td>
</tr>
</tbody>
</table>

### New Program Students By Successful Post-Secondary Credits Completed Trend

![Graph showing credit momentum trend across academic years with details about each variable's impact on credit completion](image-url)
Legend for the New Program Students By Successful Post-Secondary Credit Completed Trend Page

A — Users can update page content through the available prompts. Note, that the “First-time College Student” and “Program Student” prompts are unavailable, since this page exclusively addresses new program students.

B — Line graph of the percent of new program students who successfully completed a set amount of post-secondary credits (0, 1-5, 6-11, 12-17, 18-23, 24 or more) within their first academic year. Each line corresponds with a particular number of post-secondary credits which are color-coded with shades of blue (darker blue for more credits completed). Each number next to a point on the line is the number of students within the assessment and the percentage is the percent of those students who completed their first academic year with a set amount of successfully completed post-secondary credits (0, 1-5, 6-11, 12-17, 18-23, 24 or more, depending on the line).
RESOURCES TO SUPPORT DASHBOARD DATA USE: Effective Use of Data Framework

WTCS Student Success Center

EFFECTIVE USE OF DATA FRAMEWORK

Step 1:
- Schedule time for college staff to engage in data review and discussion
- Organize college data (i.e., develop data definitions, disaggregate data, identify benchmarks, trend data longitudinally)

Step 2:
- Convene staff and create a reflective environment where data is used for continuous improvement, and not to cast judgment
- Commit to reviewing data with an equity and inclusion lens
- Build data understanding and identify completion gaps before forming solutions

Step 3:
- Explore root causes of completion gaps (i.e., barriers hindering success or limited access to momentum building activities)
- Build hypotheses around the root causes of completion gaps

Step 4:
- Identify evidence-based interventions that address completion gap hypotheses
- Develop an action plan to implement evidence-based interventions; consider college resource limitations and staff professional development needs
- Align resources (grant proposals, staff, etc.) with action plan

Step 5:
- Implement action plan and evidence-based interventions
- Develop a post-implementation evaluation plan
- Reevaluate completion gaps and adjust as needed (i.e., restart framework cycle)
RESOURCES TO SUPPORT DASHBOARD DATA USE: Notes on Effective Use of Data Framework

STEP 1 - PREPARE: Step one requires establishing a commitment to improvement through staff and time resources. Schedule time with a group of college staff who will engage in reviewing data and strategizing around continuous improvement interventions. In support of this stage, Institutional Research or other continuous improvement staff should organize data that will be accessible for college staff to review. It is important that the data is easily digestible. This can be accomplished by providing strong definitions for the data being presented and by reporting the data through simple scorecards or visually appealing graphics. It is also important to disaggregate the data by confounding variables. For instance, if you are interested in analyzing course success within a program, it will be important to disaggregate the data by courses within the curriculum to pin point what courses appear to have strong success rates in order to identify best practices as well as the courses with lagging success rates in order to target continuous improvement efforts. It is also valuable to benchmark data – this can be done at the college level, system level, or national level as available. Looking at data longitudinally will also be valuable to discern if educational outcomes are consistent or if a specific academic year proved to be an anomaly. Finally, in an effort of looking at data through an equity and inclusion lens, it is valuable to desegregate educational outcomes by a series of student characteristic variables such as low-income status, gender, race-ethnicity, or first-generation status for example.

STEP 2 – CONVENE & REVIEW DATA: With your college staff organized into continuous improvement teams, time scheduled for reviewing educational outcomes, and your data organized and disaggregated, the next step is to convene and begin reviewing your college student outcomes. During this data review stage, it is important to establish an environment of reflection that does not use assessment results and data in a punitive or judgmental fashion. Staff should feel comfortable to let their guard down and feel open to identifying opportunities that elevate student success at their college. Within the data review stage, staff should focus their efforts on first identifying differences or completion gaps in the available data rather than jumping directly to solutions. Reflect on the data and develop summarizing statements through guided exercises or open discussion. This step will help to develop data literacy skills. In simple terms, describe what you are seeing and identify completion gaps.

STEP 3 – DETERMINE ROOT CAUSES & CREATE HYPOTHESES: With completion gaps identified and summarizing statements development, college teams should begin exploring root causes and develop hypothesis around the data. Root causes should be thought of as the barriers hindering student success or limited access to opportunities that promote student success. These might be societal or economic related, or educationally related such as the delivery method of a specific course. It will be important in this stage to reflect on evidence-based root cause research that might be institutionally driven or gleaned from published external research.

STEP 4 – DEVELOP AN ACTION PLAN: Once you have explored hypothesizing around root causes to completion gaps, teams should begin thinking about interventions or practices to address the root cause. Again, colleges can reflect on evidence of proven high impact practices within their institutions or reflect upon practices vetted through external higher education research. With the intervention identified, teams should form an action plan for implementation. Within this action plan, it is important to address college resource availability, staff time, and the professional development needs of staff. It will also prove to be valuable for teams to connect these action plans to future grant applications to the WTCS or other grant awarding organizations.

STEP 5 – IMPLEMENTATION & EVALUATION: Finally, the last step in the process is taking action to implement the team action plan. It is important for teams to couple this implementation with an evaluation plan. This will help to address and measure the success of the implemented practice or intervention. As time goes on, it will be important for the team to evaluate the effectiveness of the process and action plan. Evaluations should be done regularly to ensure the implementation of the action plan is still working. Having the team revisit the evaluation process and action plan will help the team members assess if the intervention was a success and adjust the action plan as needed.
RESOURCES TO SUPPORT DASHBOARD DATA USE: Guided Questions for Convening Teams to Review Data

Understanding College Data Trends:
  a) How has the dashboard indicator trended over the last five years at your college (e.g., increase, decrease, volatile, consistent)?
  b) How does this trend compare to the WTCS overall?
  c) Identify a WTCS college(s) or non-WTCS college you might benchmark your college with. How does the dashboard indicator over the last five years at your college compare to the identified benchmark college(s)?

Identifying Equity Gaps:
  a.) Identify any equity gaps that exist within the available data for your college (e.g., economically disadvantaged students vs not economically disadvantaged students).
  b.) Among which populations does it appear equity gaps are narrowing at your college?
  c.) How do your college equity gaps compare to WTCS overall equity gaps?

Reflection and Next Steps:
  a) Who at your college should be made aware of the dashboard indicator equity gaps you identified? Why should they be made aware of the data and how could they use the data?
  b) What kinds of policies, practices, and/or programs does your college currently have in place to help each student achieve higher rates of success in the dashboard indicator?
  c) Identify a quantifiable goal you would like to see your college achieve related to the dashboard indicator.
  d) What additional data might you need to help monitor your progress towards your identified dashboard indicator college goal?
  e) What are your next steps? Refer to the WTCS Effective Use of Data Framework or your college continuous improvement processes. Next steps could include: schedule time with other staff to review dashboard indicator data; reflect on dashboard indicator data; explore additional data; create an action plan, etc.
  f) How does the presented dashboard indicator data and emphasis on equity in student outcomes support/align with other college-wide efforts (e.g., college-wide accreditation, departmental/college strategic planning, college-wide continuous improvement, grant writing, existing student success initiatives, etc.)
# Key Performance Indicators

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<th>Indicator</th>
<th>Definition/Calculation</th>
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<th>Data Source: Client Reporting System</th>
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| **Program Completion**       | **Denominator:** Number of new program students (not reported in any program in the prior four years) who were enrolled in an FTE generating post-secondary course during fiscal year 20XX  
                                **Numerator:** Of those in the denominator, the number of program students who graduated from/completed any WTCS approved program within X number of years (e.g. for 3rd year program completion, the denominator would be tracked three years to see if the student completed any WTCS approved program during academic year 20XX, 20XX+1, and 20XX+2) | Post-secondary courses include course aid codes 10-Associate, 20-Liberal Arts, 30-Short-term Tech, 31-One-year Tech, 32-Two-year Tech, and 50-Apprentice  
                                Program students included those reported in program aid codes 10-Associate, 20-Liberal Arts, 30-Short-term Tech, 31-One-year Tech, 32-Two-year Tech, 50-Apprentice, and 61-Pathway Certificates |                                      |
| **2.0 GPA or Greater**       | **Denominator:** Number of students with known post-secondary course grades earned (grades A, A-, AB, B+, B-, BC, C+, C, C-, CD, D+, D, D-, DF, F)  
                                **Numerator:** Of the students in the denominator, the number who have a cumulative GPA of a 2.0 or greater at the end of the academic year | Post-secondary courses include course aid codes 10-Associate, 20-Liberal Arts, 30-Short-term Tech, 31-One-year Tech, 32-Two-year Tech, and 50-Apprentice  
                                Pass/fail grades and withdrawal grades are not included in the calculation  
                                Cumulative GPA data are calculated within the academic year and not summarized from all years a student is enrolled |                                      |
| **Fall to Spring Retention** | **Denominator:** Number of students who were enrolled in an FTE generating post-secondary course during the fall semester of the fiscal year  
                                **Numerator:** Of those in the denominator, the number of students who graduated or completed a WTCS approved program in the academic year or who were enrolled in an FTE generating post-secondary course during the spring semester of the academic year | Post-secondary courses include course aid codes 10-Associate, 20-Liberal Arts, 30-Short-term Tech, 31-One-year Tech, 32-Two-year Tech, and 50-Apprentice |                                      |
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<td><strong>General Education Successful Course Completion</strong>&lt;br&gt;Percent of WTCS System-wide General Education courses successfully completed by students</td>
<td><strong>Denominator:</strong> Number of known post-secondary course grades earned in WTCS System-wide General Education courses (all grades A, A-, AB, B+, B, B-, BC, C+, C, C-, CD, D+, D, D-, DF, F, PP, FF and withdrawals)&lt;br&gt;&lt;br&gt;<strong>Numerator:</strong> Of the course records in the denominator, the number of successful course grades earned (numerical value of 2.0 or higher or a PP grade in pass/fail courses)</td>
<td>Post-secondary courses include course aid codes 10-Associate, 20-Liberal Arts, 30-Short-term Tech, 31-One-year Tech, 32-Two-year Tech, and 50-Apprentice; only courses with a Course Completion Status of 01-Pass, 02-Fail, and 04-Withdrawal are included; only FTE generating courses are included&lt;br&gt;&lt;br&gt;Data Source: Client Reporting System</td>
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| % of Program Students Successfully Completing Post-Secondary Credit in the First Year by Credit Category<br>The number of students successfully completing post-secondary credit in their first year | The % of new program students (not reported in any program in the prior four years) enrolled in FTE generating post-secondary course who successfully completed FTE generating post-secondary credits by the following credit categories: 0 credits, < 6 credits, 6 - < 12 credits, 12 - < 18 credits, 18 - < 24 credits, 24 or more credits | Programs include program aid codes 10-Associate, 20-Liberal Arts, 30-Short-term Tech, 31-One-year Tech, 32-Two-year Tech, 50-Apprentice, and 61-Pathway Certificates<br><br>Post-secondary courses include course aid codes 10-Associate, 20-Liberal Arts, 30-Short-term Tech, 31-One-year Tech, 32-Two-year Tech, and 50-Apprentice<br><br>Successful course grades earned include a numerical value of 2.0 or higher or a PP grade in pass/fail course; only courses with a Course Completion Status of 01-Pass, 02-Fail, and 04-Withdrawal are included; only FTE generating courses are included<br><br>Data Source: Client Reporting System |

**Common Terms:**<br><br>**Post-secondary courses** include FTE generating course aid code 10 – Associate, 20 – Liberal Arts, 30 – Short-term Tech, 31 – One-year Tech, 32 – Two-year Tech, and 50 – Apprenticeship courses<br><br>**Program students** include students reported in program aid codes 10 – Associate, 20 – Liberal Arts, 30 – Short-term Tech, 31 – One-year Tech, 32 – Two-year Tech, 50 – Apprentice, and 61 – WTCS Pathway Certificates<br><br>**First-time students** have not been enrolled in FTE generating courses at the college in the prior four years<br><br>**Economically disadvantaged** includes any individual or member of a family who receives need-based financial assistance, or whose income is at or below the poverty level as defined by the U.S. Department of Health and Human Services
CITED RESEARCH


Denley, T. 2016. Choice architecture, academic foci and guided pathways. Presentation to the AACC Pathways Institute, Denver, CO.