Digging for Gold:
Evaluating the Impact of Your Early College Program

Dan Rempala, Hawaii P-20 Evaluation Specialist
What will happen in the next 60 minutes?

• I will first talk about how Early College has been evaluated in the past, including:
  
  – Ongoing evaluation from the Data Exchange Partnership
  
  – An external evaluation paid for by Hawai‘i P-20

• I will then discuss options for evaluating your programs and respond to your many, many questions
Dual Credit Students: Increasing in Participation

Class of 2011: 604 (5% of Grads)
Class of 2012: 672 (6% of Grads)
Class of 2013: 728 (8% of Grads)
Class of 2014: 880 (10% of Grads)
Class of 2015: 1,058 (14% of Grads)
Class of 2016: 1,573 (14% of Grads)
Dual Credit High School Graduates: Enrolling in College at Much Higher Rates

Grads with Dual Credit

Class of 2011: 80%
Class of 2012: 73%
Class of 2013: 81%
Class of 2014: 79%
Class of 2015: 81%
Class of 2016: 78%

Grads without Dual Credit

Class of 2011: 53%
Class of 2012: 52%
Class of 2013: 52%
Class of 2014: 53%
Class of 2015: 53%
Class of 2016: 50%
Dual Credit High School Graduates: Remaining in college at higher rates
(First fall to second fall college persistence)

Class of 2012: 76%
Class of 2013: 76%
Class of 2014: 76%
Class of 2015: 76%

Dual Credit, Class of 2012: 87%
Dual Credit, Class of 2013: 85%
Dual Credit, Class of 2014: 87%
Dual Credit, Class of 2015: 85%

No Dual Credit, 2012: 77%
No Dual Credit, 2013: 76%
No Dual Credit, 2014: 76%
No Dual Credit, 2015: 76%
Economically Disadvantaged Graduates with Dual Credits attend College at Higher Rates (than those without Dual Credits)

Statewide: 62%

<table>
<thead>
<tr>
<th>Economically Disadvantaged</th>
<th>Statewide: 44%</th>
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</thead>
<tbody>
<tr>
<td>No Dual Credit</td>
<td>39%</td>
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<tr>
<td>Dual Credit</td>
<td>72%</td>
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</table>

<table>
<thead>
<tr>
<th>Not Economically Disadvantaged</th>
<th>Statewide: 59%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Dual Credit</td>
<td>59%</td>
</tr>
<tr>
<td>Dual Credit</td>
<td>82%</td>
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</tbody>
</table>

Class of 2016 College Enrollment Rate
Economically Disadvantaged Graduates With Dual Credits Remain in College At Higher Rates

Impact of Dual Credit on Low Income Students (Cont’d)

Class of 2015 One Year College Persistence Rate
College Enrollment Rate Disaggregated by Gender, Race/Ethnicity, Economic Status

Class of 2016 college enrollment rate

Statewide 55%

- Female 62%
- Male 47%
- Gender Gap 15%

- Non-NHPI 61%
- Native Hawaiian (42%) & Pacific Islander (34%)
- Race/Ethnicity Gap 21%

- Not Economically Disadvantaged 62%
- Economically Disadvantaged 18%
- Econ Status Gap 44%
College Enrollment Rate Disaggregated by DC Participation & Gender, Ethnicity, Economic Status

College enrollment rate for high school completers

- Male
  - Dual Credit: 73%
  - No Dual Credit: 47%
  - Gap: 26%
  - N=34,029

- Native Hawaiian
  - Dual Credit: 73%
  - No Dual Credit: 32%
  - Gap: 41%
  - N=16,285

- Econ Disadvantaged
  - Dual Credit: 68%
  - No Dual Credit: 28%
  - Gap: 40%
  - N=27,951
Early College Classes Increase

Number of Early College Classes Offered by UH System

Only includes courses offered at public and charter schools

Course totals from Summer 2018 have not been finalized
Evaluation of Hawaii’s Early College High School Program

Preliminary Findings: 2014-15 Cohort
Research Question Addressed

What is the impact of participating in Hawai‘i P-20 funded Early College courses on student academic outcomes?

These include:

High School Outcomes
- High School GPA
- Dual Credits Attempted and Earned

Postsecondary Outcomes
- College Credits Attempted and Earned
- College Enrollment
- College Persistence
Data Sources

Data for this portion of the evaluation were provided by the Hawaii State Department of Education in a two-step process:

1. We identified 2014-15 graduates who had participated in a Hawai‘i P-20 funded Early College course and examined student characteristics prior to participating in the programs (i.e. demographic data and academic data).

2. After conducting a matching process, we requested outcomes data for the 2014-15 cohort and their matched comparisons.
Matching Design

AIR considered several matching approaches to find the students that were most similar to Hawai’i P-20 funded Early College students but did not participate in the programs.

- Ultimately, we chose to match Hawai’i P-20 funded Early College students to other students who graduated from the same school but did not participate in the program.

- Matching was based on 8th grade academic achievement in reading and mathematics, attendance and student demographic characteristics.
Matching Design

**Prior Achievement**

- **Math:**
  - All Other Students: 299.85
  - ECHS/HSRS: 329.3
  - Matched Comparison: 328

- **Reading:**
  - All Other Students: 306.85
  - ECHS/HSRS: 329.06
  - Matched Comparison: 331.55

**Absences**

- **Mean:**
  - All Other Students: 10.13
  - ECHS/HSRS: 5.81
  - Matched Comparison: 5.53
Matching Design

Demographics

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
<th>Group 4</th>
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</thead>
<tbody>
<tr>
<td>Male</td>
<td>28.7%</td>
<td>31.26%</td>
<td>32.63%</td>
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<tr>
<td>Fr/Red Lunch</td>
<td>31.26%</td>
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<tr>
<td>ELL</td>
<td>38.57%</td>
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<tr>
<td>504</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Asian</td>
<td>37.02%</td>
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<tr>
<td>Pacific Island</td>
<td>24.33%</td>
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<tr>
<td>Mult. Ethn.</td>
<td>13.05%</td>
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<tr>
<td>White</td>
<td>6.52%</td>
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<tr>
<td>Hispanic</td>
<td>5.43%</td>
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</tr>
<tr>
<td>Black</td>
<td>2.71%</td>
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<tr>
<td>Amer. Indian</td>
<td>0.62%</td>
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</tr>
</tbody>
</table>

Group
- All Other Students
- ECHS/HSRS
- Matched Comparison
Outcomes
High School Outcomes

The Hawai‘i P-20 funded Early College students outperformed their matched comparisons in cumulative high school grade point average.
Outcomes

Preliminary results indicate a statistically significant effect of Early College participation in terms of:

• **High School Outcomes**
  – High School GPA
  – Dual Credits Attempted and Earned by High School Graduation

• **Postsecondary Outcomes**
  – College Credits Attempted and Earned Within First Year of College
  – College Enrollment
  – College Persistence
Postsecondary Outcomes

Hawai’i P-20 funded Early College students were more likely to enroll in college the first semester after high school graduation.
What does all this mean for you?

• **First**, why bother conducting a program evaluation?

• **Examples:**
  – Tracking successes
  – Proving efforts/time commitment/financial investments
  – Justifying need for more resources
  – Program improvement
Second, what is your research question?

- If you’re interested in program growth, you have to establish a baseline

**Examples:**
- # of courses offered
- #/% of students participating
- #/% of students participating to a specific degree (e.g. 6 credits)
- #/% of students taking specific courses
- #/% of specific students participating (e.g. gender, ethnicity)
• If you are interested in the impact of dual credit, you might want a comparison group.

• **Examples:**
  – Identify a matching group based on specific characteristics
  – Compare to the rest of the student body
  – Compare subgroups within a larger sample (e.g. 3 credits vs. 6 credits)
• Alternatively, one could conduct a pre-test/post-test comparison with the group of interest

  – For example, if I thought that EC participation promoted particular soft skills, I could measure those before and after the first semester of EC.
Third, what impact do you think your program is going to have on participants?

• Be sure that you can actually obtain the outcomes you are interested in.

• **Examples:**
  - HS GPA
  - HS on-time graduation
  - Passing a “gateway” course
  - College enrollment
  - College persistence
  - College graduation
Do you get cross-sector data?

Contact Hawaii DXP (http://hawaiidxp.org/index):

“The Hawai'i Data eXchange Partnership, or Hawai'i DXP is a statewide cross-agency, longitudinal data system that links information from infancy through early learning, K-12 and postsecondary education, and into the workforce. Hawai'i DXP will help guide decisions and policies to improve learner and workforce outcomes for the benefit of our community.”

- The “Resources” page on the DXP website contains a Confidentiality Form and a Data Request form.

- You can also email or call them if you have any questions.