Evaluation of Hawai‘i’s Early College - High School Program

A Brief Presentation of Findings, 2014-2017
American Institutes for Research (AIR) conducted a comprehensive evaluation of Hawai‘i’s Early College Program.

- This involved a total of 12 ECHS and 6 HSRS schools

Data Sources

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

1. We identified graduates who had participated in a Hawaiʻi 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 cohorts and their matched comparisons.
Matching Design

AIR considered several matching approaches to find the students who 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

Eighth-Grade Academic Achievement

<table>
<thead>
<tr>
<th></th>
<th>ECHS/HSRS students</th>
<th>Matched comparison students</th>
<th>All other students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean scale score HSA reading</td>
<td>329.8</td>
<td>330.5</td>
<td>312.2</td>
</tr>
<tr>
<td>Mean scale score HSA mathematics</td>
<td>326.3</td>
<td>326.1</td>
<td>304.3</td>
</tr>
</tbody>
</table>
Matching Design

Demographic Comparison

- ECHS/HSRS
- Matched comparison
- All other students

Chart showing demographic comparison between ECHS/HSRS, matched comparison, and all other students for various categories such as Male, FRPL, ELL, 504, Asian, Pacific Island, Multi-Ethnic, White, Hispanic, Black, and Native American.
Early College students were significantly higher than the matched comparison group in all outcomes ($p < .01$) except on-time graduation, which was roughly equal.

Early College participants were significantly higher in:

- High School GPA (+.4 GPA)
- College Credits Earned within 1 year of graduation (+6 credits)
- College Math (+18%) and English (+34%) Course Completion within one year of graduation
- College Enrollment (+21%)
- College Persistence (+27%)
In addition, there was a consistent pattern indicating that, the more one participated in Early College, the better one’s outcomes.

For example:

**Average High School GPA**

- Matched comparison: $n = 1,249$
- ECHS/HSRS 0 credits: $n = 94$, GPA = 3.0
- ECHS/HSRS 1–4 credits: $n = 765$, GPA = 2.7
- ECHS/HSRS 5–8 credits: $n = 446$, GPA = 3.4
- ECHS/HSRS 9–12 credits: $n = 277$, GPA = 3.5
- ECHS/HSRS 13+ credits: $n = 210$, GPA = 3.7
Student Outcomes

First-Fall College Enrollment

- Matched comparison: 58%
- ECHS/HSRS 0 credits: 48%
- ECHS/HSRS 1–4 credits: 77%
- ECHS/HSRS 5–8 credits: 81%
- ECHS/HSRS 9–12 credits: 87%
- ECHS/HSRS 13+ credits: 89%
Student Outcomes

College Math Completion Rates

Matched comparison 21%
ECHS/HSRS 0 credits 18%
ECHS/HSRS 1–4 credits 35%
ECHS/HSRS 5–8 credits 42%
ECHS/HSRS 9–12 credits 41%
ECHS/HSRS 13+ credits 55%

College English Completion Rates

Matched comparison 33%
ECHS/HSRS 0 credits 35%
ECHS/HSRS 1–4 credits 56%
ECHS/HSRS 5–8 credits 79%
ECHS/HSRS 9–12 credits 82%
ECHS/HSRS 13+ credits 94%
Student Outcomes

Second-Year College Persistence Rates

- Matched comparison: 46%
- ECHS/HSRS 0 credits: 31%
- ECHS/HSRS 1–4 credits: 68%
- ECHS/HSRS 5–8 credits: 77%
- ECHS/HSRS 9–12 credits: 82%
- ECHS/HSRS 13+ credits: 89%
For college partners...

• **Benefits:**
  – Establish pipeline from local high schools
  – Strengthen commitment to local communities
  – Prepare students for the demands of college

• **Challenges**
  – Time
  – Resources
  – Managing logistics
Additional Benefits and Challenges

For high schools...

• **Benefits:**
  – Improved school culture
  – Improved instruction
  – Improved reputation

• **Challenges:**
  – Time, resources, managing logistics
  – Cultivating student interest
  – Teacher resistance or skepticism
For students...

• **Benefits:**
  – Gaining academic skills
  – Gaining personal skills
  – Gaining maturity and independence

• **Challenges:**
  – Meeting new expectations
  – Balancing high school and college course work
AIR assessed programs in terms of:

1) Clear program emphasis
2) Support for students
3) Leadership support
4) Teacher support
5) Coordination
6) Program growth
7) Effort to sustain
1. School leaders have articulated and communicated a vision for the program and are willing to provide the resources to support it.

   – Having a designated coordinator helps anchor the program within the school and advocate for the program.

2. Teachers are aware of and support the program.
3. Number and variety of courses matches the academic backgrounds, interests, and needs of the students.

- **Sample target populations**: first-generation college students, low-income students, Native Hawaiian-Pacific Islander

- **Sample goals**: college readiness (using bridge courses) vs. credit accrual (using rigorous courses)
4. High school and college partners work together to select and plan courses and support students.

- Block schedules make it easier to schedule courses, compared to alternating day schedules.

- Tutoring, writing, and non-academic support helped students transition to college courses.