Just In Time Remediation for AAS and Early College Students

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Rational

• Students generally struggle with science courses.
• Students are being placed into science courses without appropriate educational preparation.
• Students mathematics skills are often lacking.
• Early College High School and AAS students are particularly at risk.
• Students often fear science courses.
Target Courses

• General Chemistry I and II
• Forensic Chemistry I and II
Target Audience

• Students enrolled in CHM 151 and 152.
  • Students at our Stokes Early College were our pilot group.

• Students enrolled in CJC 251 and 252
  • Students in our Forensic Science program
    • This group was not part of the initial pilot due to changes in the course content.
    • This group will be part of our second cohort.
What we did in 2019FA

• Students were given an opportunity to attend hour long sessions on Monday and Wednesday mornings before the beginning of labs.
• The instructor picked remedial topics that were appropriate to the lecture topic to present each day.
• The instructor also answered any questions that students brought to the session.
• These sessions took place during each week of class.
What we did in 2020SP due to COVID-19

• Prior to March 9, we operated our sessions as we did in the fall semester.
• Following March 16, these sessions were held as Blackboard Collaborate meetings.
## Participation

<table>
<thead>
<tr>
<th></th>
<th>2019FA</th>
<th>2020SP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Students</td>
<td>18</td>
<td>13</td>
</tr>
<tr>
<td>Students regularly participating</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Grade Average for Participants</td>
<td>91.1</td>
<td>97.3</td>
</tr>
<tr>
<td>Grade Average for non Participants</td>
<td>77.3</td>
<td>85.8</td>
</tr>
<tr>
<td>Withdrawals from Course</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Participants Chemistry Background</td>
<td>None</td>
<td>CHM 151</td>
</tr>
</tbody>
</table>
Student Comments

• Kendall,

  “This program allowed me to do well in a class that I feared. Thank you for doing this.”

• Alyssa,

  “I had not taken high school chemistry. This helped me do well in college chemistry.”
Best Practices

• Make sure that all students are aware of the times and days this program is available. Remind them weekly!

• Always plan ahead with content and focus content on skills needed for upcoming material.

• Be prepared to move the program online.

• Whenever possible, record the sessions for future viewing.

• Keep it light. Students are already stressed because of the content.
Conclusion

• Low participation limits the conclusions that can be formed from this study.
• This method was effective with students who participated.
• More work is needed with larger cohorts of students.