Supporting First-Year STEM Students’ Belonging with STEM Peer Mentors
Ellen Hokkanen, Ashley Vaughn, Julia Bedell
Northern Kentucky University, Highland Heights, KY

Background

STEM Ambassadors Program
Previous program focused heavily on peer academic support (peer learning/tutoring).

First-Year Seminar Courses
STEM Departments have integrated first-year seminar courses into their course sequencing.

Retention for diversity and inclusion
Research shows that peer mentoring increases the retention rates for first-year students, particularly those from diverse backgrounds.

Key Components

- Hire 20 STEM Peer Mentors for introductory courses in Biology, Chemistry & Biochemistry, Computer Science, Mathematics & Statistics, and Physics, Geology, & Engineering Technology Departments.

- Provide training for Peer Mentors through concurrent upper level leadership/development course.

- Create stronger academic advising relationships for the Peer Mentors, first-year students, and the advisors who teach the introductory courses.

- Collaborate across departments by creating a community with our seminar instructors to share ideas and resources.

- Host events including monthly pizza suppers and additional social events each semester. Peer Mentors and course instructors promote attendance.

Question

Does the inclusion of STEM Peer Mentors improve retention in STEM programs and university wide by providing upperclassman role models for our students through increased belonging and engagement.

Results and Next Steps

![Belonging Among First-Year Students](chart)

- Pre- and Post-Belonging Surveys were taken by students in the introductory STEM courses.
- Results showed freshman with a peer mentor had a higher sense of Peer and Faculty support than those who did not participate in the program.
- The participants also showed a higher sense of belonging than their non-participating peers.

Timeline

<table>
<thead>
<tr>
<th>Event</th>
<th>Description</th>
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<tbody>
<tr>
<td>STEM Retention</td>
<td>Retention of STEM students in 2nd Fall, 2nd Spring, 3rd Fall, 1st Spring</td>
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<td>Building Buy-In</td>
<td>5 STEM departments invite, plus first-year STEM mentors &amp; seminar instructors</td>
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<td>Funding</td>
<td>Innovation Challenge proposal competition</td>
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<td>Pilot</td>
<td>Staff meeting to kick off, all building, Fall 2021 as pilot</td>
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<tr>
<td>Review</td>
<td>Pilot kickoff meeting, new mentor training</td>
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<td>Final Planning</td>
<td>Fall 2021 Planning</td>
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<td>Initial Planning</td>
<td>Spring 2020, Begin mentor recruiting, full planning</td>
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<td>Fall 2021 Planning</td>
<td>Fall 2021, Start “mentoring”, “how-to” materials, mentor training</td>
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<tr>
<td>Social Events</td>
<td>Fall 2021, Initial mentoring, full planning</td>
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