



First-Year Success Initiative: Enhancing Student-Faculty Engagement

Strategies to enhance first-year engineering student success through personalized student-faculty engagement

Introduction



Developed Strategies for First-Year Student Success

Our working group focused on creating strategies to enhance first-year student success through personalized student-faculty engagement.



Explored Current Practices and Identified Challenges

We examined what is currently being done, what seems to be working, and where more support is needed for first-year students.



Recommended Integrating with Existing Programs

We propose synergizing faculty efforts with the Dean's office initiatives like ENGR099/Garman Guides, Success Coaches, Pathways Portfolios, and Bison Compass.

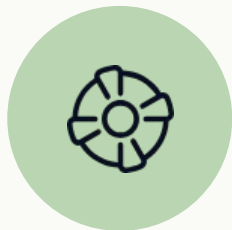
By leveraging personalized student-faculty engagement and integrating with existing support structures, we aim to improve the overall experience and success of first-year engineering students.

Challenges Identified



Difficulty Connecting

First-year students struggle to connect with faculty, peers, and the overall college community, leading to feelings of isolation and underpreparedness.



Ineffective Support Systems

Existing support systems, such as Garman Guides, have shown mixed effectiveness, and the data on their performance is not widely shared with faculty.



Limited Faculty Time

Faculty and student time is limited, making it crucial to integrate new initiatives within existing structures without adding significant burdens. Some faculty mentoring work remains unquantified and invisible in faculty reviews.

The combination of student isolation, underutilized support systems, and limited faculty time presents significant challenges in fostering first-year student success.

Proposed Interventions

- Entrance Interviews

One-on-one meetings between students and faculty before the semester begins to help faculty understand students' backgrounds, goals, and challenges. These could be incorporated into advising sessions and supplemented with ePortfolios.

- Peer Mentoring

Expanding peer mentoring programs like Garman Guides to include more structured training for mentors and better integration with faculty advising. This approach has been successful at other institutions, such as Clemson, and could enhance student support at Bucknell.

- Faculty Training

Developing a mentoring framework and providing training for faculty advisors to better support first-year students. This would include creating resources and possibly a course or seminar to give faculty the tools needed to mentor effectively. This should happen on a periodic basis like other types of training (e.g. Title IX) to update faculty on changes in best practices and refresh key points.

- Use of ePortfolios

Encouraging the use of Pathways Digital Portfolios as a tool for students to document their academic and personal development. This would also serve as a communication tool between students and advisors, fostering a more informed advising process. It would also allow for more reflective conversations between advisors and students. ePortfolios are an AAC&U best practice that helps students integrate experiences and develop.

- More Faculty Involvement in ENGR 099

ENGR 099 is required of every first year engineer. It was added without seeking faculty support, what happens in the course is not clear to faculty, and faculty feedback is not integrated into any type of assessment or feedback loop. This may set up an uncomfortable situation with regard to ABET and assessment.

Entrance Interviews

Entrance interviews are one-on-one meetings between first-year engineering students and faculty members that take place before the start of the semester. The goal of these interviews is to help the faculty better understand the students' academic and personal backgrounds, their goals for the first year, and any challenges they anticipate facing.



Peer Mentoring

● Step 1

Assess current Garman Guides program and **identify areas for improvement**

● Step 2

Develop a **structured training** curriculum for peer mentors, covering topics like mentoring skills, campus resources, and professional development

● Step 3

Establish regular **meetings between peer mentors and faculty advisors** to align on student support and share best practices

● Step 4

Integrate Garman Guides program more closely with academic advising, allowing for **better information sharing** and a more holistic approach to student support

● Step 5

Gather feedback from both mentors and mentees to **continuously improve** the peer mentoring program

Use of ePortfolios

Pathways Digital Portfolios

Web-based platform that allows students to **document and reflect on their academic and personal development** throughout their 4 years at Bucknell

Fostering Informed Advising

Students can share their Pathways Portfolios with academic advisors, providing them with a comprehensive understanding of the student's experiences, goals, and progress

Encouraging Student Engagement

By actively maintaining their Pathways Portfolios, students become more engaged in their own learning and personal growth, **promoting self-reflection and goal-setting**

Coordinating with Existing Programs

Align Efforts with Garman Guides

Integrate new initiatives with the existing Garman Guides program to leverage its established structure and resources.

Involve Undecided Students

Ensure that undecided students are effectively included and supported by any mentoring programs.

Increase Faculty Involvement in Garman Guides

Have more faculty participate directly in the Garman Guides program to strengthen the student-faculty connection.

Extend Garman Guides Beyond First Semester

Consider expanding the Garman Guides program into the second semester to provide ongoing support for first-year students.

Improve Coordination Across Campus Groups

Establish better coordination between the Dean's office, Admissions, Departments, and other stakeholders involved in first-year student support.

Integrate with Existing Platforms

Leverage and integrate new initiatives with existing platforms like Pathways Portfolios, Bison Compass, and ENGR 099 to maximize the impact and minimize duplication of efforts.

Next Steps

