Memo to the Dean of Engineering: Summary of Discussions on First-Year Success Initiative

To: Brad Putman

From: First-Year Success Initiative Working Group

Date: August 30, 2024

Subject: Summary of Working Group Discussions on First-Year Success Initiative

Introduction:

Over the past few months, our working group focused on developing strategies to enhance first-year student success through personalized student-faculty engagement. We explored what is currently done, what seems to be working, and where more support is needed. We see the need to create a more robust support network which we believe could be accomplished by synergizing faculty efforts with existing programs in the Dean's office, such as ENGR099/Garman Guides, Success Coach initiatives, Pathways Portfolios, and Bison Compass. This memo provides a summary of our key discussions, conclusions, and proposed next steps based on our meetings this summer.

Key Discussions:

1. Challenges Identified:

- First-year students often struggle to connect with faculty, peers, and the college as a whole, leading to feelings of isolation and underpreparedness in academic skills like math and study habits.
- Existing support systems, such as Garman Guides, have shown mixed effectiveness but the data on these has not been shared with the college faculty.
 There is a need to improve these systems to ensure that the objectives and how well the students meet them are more transparent.
- Faculty and student time is limited, making it crucial to integrate new initiatives within existing structures without adding significant burdens. Additionally, some faculty advising work remains unquantified and invisible with regard to faculty reviews. Some types of this invisible mentoring is extremely impactful to students from underrepresented groups.
- Much of the "data" that drove the creation of this group was anecdotal. We do not have a good sense of where we are and it would be difficult to measure changes as well.

2. 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 and/or feedback 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.
- More than anecdotal evidence: Institute and recurring set of measurements and analysis to show how we are doing in this space. We need to define success more clearly and evaluate how interventions are impacting students. We also need to better measure changes in student needs in this space. What works now may not work in 5 years.

3. Coordination with Existing Programs:

- We discussed the importance of not duplicating efforts and instead integrating our initiatives with existing programs. For example, we should align our efforts with the ongoing Garman Guides initiative and consider how to involve undecided students effectively.
- Suggestions include having faculty more involved in Garman Guides, ensuring that students can choose their guides, and extending the program into the second semester.
- An ongoing challenge is that there is no coordination that we can see across the various groups involved which includes at least the Dean's office, the first year experience group in admissions, and the departments. We assume that list is incomplete.

Conclusions:

 There is a consensus that improving student-faculty engagement through structured, early interactions will positively impact first-year student success. However, these initiatives must be carefully planned to integrate with existing programs and respect the time constraints of both students and faculty.

- We recommend working with the Dean's Office and the Student Success Coach to provide more faculty feedback and discussions on what might be incorporated into the ENGR 099 and looking for ways to integrate department interests and effort with ENGR 099.
- We suggest the ECC might consider having some input into ENGR 099.
- We propose that using Advisor Assignments in Pathways Portfolios may be a way to have students share important information with their academic advisors before arriving at Bucknell and throughout their time here. This might include a longitudinal ePortfolio template that students populate throughout their 4 years.
- Incorporating and integrating ENGR 099/Garman Guides with Pathways Portfolios, Bison Compass, and faculty and advisor input and feedback may improve the value of all of these programs/platforms.
- Making the time involved for faculty more visible and accounted for in faculty evaluation and compensated in some manner. A possible approach is to give a small amount of teaching credit for involvement of advisors in ENGR 099 or other department created student experiences. If work is done over the Summer before students arrive, financial stipend compensation might be appropriate.

Next Steps:

- 1. **Pilot Development:** Finalize the plan for the pilot program, including the structure and coordinate with Liz Clark (Garman Guides/ENGR 099), Joe Tranquillo (Pathways Portfolios), and others as needed.
- Coordination by Dean's Office: The Dean's office should coordinate these efforts to ensure the initiatives align with and enhance existing support structures with proper assessment and feedback loops.
- Assessment Plan: An assessment plan needs to be created to define success, measure the effectiveness of the pilot program, focusing on student retention, engagement, and satisfaction along with other identified metrics.

We appreciate your support in these efforts and look forward to working with you and your team to enhance the success of our first-year students.

Please let us know if you need any further details.

Sincerely,

Tim Raymond, Donna Ebenstein, Theo Hopper, Charles Kim, Mike Malusis, Alan Marchiori, and Stu Thompson

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