

Maximizing High-Impact Practices in an Environmental Design Curriculum – An Introductory Study

Ana Marie Hanger, Auburn University, United States
C. Ben Farrow, Auburn University, United States
Tom Leathem, Auburn University, United States
Eric M. Wetzel, Auburn University, United States

The IAFOR International Conference on Education in Hawaii 2023
Official Conference Proceedings

Abstract

The Environmental Design (ENVD) program at Auburn University is a multidisciplinary program designed to solve twenty-first century problems. The curriculum focuses on the built environment, while placing an emphasis on “systems thinking” which focuses on how the parts of the whole interact. Students can personalize their projects based on their individual interests and create conceptual solutions to the problems studied. While the degree is a broad exposure to design disciplines, the individuality of this major allows it to stand out amongst related majors within the College of Architecture, Design and Construction at Auburn University. The ENVD program has followed the university strategic plan to elevate the student experience through high-impact practices. The study focused on high-impact practices currently measured by Auburn University including e-portfolios, internships, co-ops, undergraduate research, and study abroad. The study also evaluated and categorized student-given data regarding peak student moments. These peak moments potentially represent additional high-impact practices to be experienced. Results indicated students participated in an average of just over one high-impact practice during their time in the ENVD program. Peak moment data indicated specific additional opportunities in mentorship, empathy and diversity, and additional project-based learning. If a curriculum model could be created that highlighted specific opportunities for high-impact practices, students may be encouraged to complete additional high-impact practices during their academic studies. In addition, the ENVD program could expand high-impact practices by better conveying the value and importance of these as students begin their academic studies.

Keywords: Curriculum, High-Impact Practices, Environmental Design, Student Experience

iafor

The International Academic Forum
www.iafor.org

Introduction

Created around the idea of a multidisciplinary approach to design, the Environmental Design Program at Auburn University provides a holistic view of the design discipline. The curriculum focuses on the built environment, while placing an emphasis on systems thinking through viewing problems as interconnected and linear. A keen emphasis is also placed on empathetic solutions that consider the human condition. Students can personalize their projects based on their individual interests and create conceptual solutions to the problems studied. This approach allows students to be a partner in defining which problem they wish to solve as opposed to solving a definitive, pre-developed problem common in other disciplines. The individuality of this major allows it to stand out to prospective students amongst related majors within the College of Architecture, Design and Construction at Auburn University. Individual projects compound to form the cohesive learning outcomes that future employers seek.

Traditional educational practices have occurred inside a classroom with limited accommodation of student interests or needs. Typically, each classroom has a single instructor, and students are asked to advance at the pace of the instructor. New approaches offer opportunities to expand beyond the classroom, engage a broader range of instructors, and personalize the student's educational experience. In addition, traditional practices have been found to unequally prepare students, historically neglecting those who are underserved, or students whose life circumstances may put them at an educational risk. Educational practices must be improved to maximize all students' educational experiences and to create clear outcomes for them (Kuh, 2008).

High-impact teaching and learning practices (HIPs) have been widely tested and proven to be beneficial to students (Kuh, 2008). These following practices have been identified as HIPs:

- First-Year Experiences
- Common Intellectual Experiences
- Learning Communities
- Writing-Intensive Courses
- Collaborative Assignments/Projects
- Undergraduate Research
- Diversity/Global Learning
- ePortfolios
- Service Learning, Community-Based Learning
- Internships
- Capstone Courses and Projects

These practices allow a large range of students to find educational, professional, and personal success with the goal of elevating student learning and the student experience. HIPs allow for further interdisciplinary skills to be acquired and utilized throughout a student's career (Sandein, 2012). Elements within HIPs acknowledge a more disparate group of students, with various abilities, to succeed. However, HIPs are not always accessible nor adaptable for each individual student. Often, students must blindly seek out HIPs offered within their university, only to discover multiple restrictions that force them to choose between not participating or difficult compromises. Restrictions for these students may include time

constraints, additional financial commitments, and a lack of general understanding of how these practices add educational value (Valbrun, 2018).

HIPs often create memorable experiences for students that are recalled years after completing an education. Similarly, a recent book explored the impactful experiences in life, and the moments that resonated with an individual long after the experience had occurred (Heath & Heath, 2017). Some of the most notable moments cited included the birth of a child, the start of a new job, winning a championship sports game, or attending college. These types of experiences tend to echo in the memory of individuals, because they are inclined to think of these experiences as flagship, or peak moments. These peak moments are both impactful and meaningful to individuals – much like HIPs. The concept of a “moment” tends to imply a short period of time; education seldom occurs in an isolated period. But, that is not how the term “moment” is used here. Instead, the work builds on the concept of “duration neglect” which says that even in longer experiences, one tends to remember only specific, shorter events within a longer context.

While this study focused on HIPs experienced by students, peak educational moments for all students were also considered as they may provide a pathway for establishing and developing additional HIPs. By examining both HIPs and moments, a greater potential for maximizing the student experience exists.

Auburn University has recorded measurable outcomes from previous graduating Environmental Design student data, recorded since the Fall of 2020. In each undergraduate student’s last semester at Auburn University, they are required to participate in a Campus Engagement and Experience Survey (CEES). Within the CEES, students are asked about their participation in five specific HIPs offered through Auburn:

- Study Abroad
- Internships
- Co-ops
- Undergraduate Research
- e-Portfolios

Additionally, students are asked to record their peak moment that occurred while they were a student at Auburn. This is an open-ended qualitative question allowing students to choose a moment, or experience, from any part of their college career which has impacted them in some way. These impacts can be from both positive and negative moments, as how the student chooses to move forward and learn from the experience greatly reflects its influence. It is conceivable that the intersection of HIPs and peak moments could produce an even larger learning experience, or a transformational educational experience (Farrow et al., 2022). If the relationship between these HIPs and Environmental Design students’ peak moments could be better understood, greater targeted engagement of these HIPs could be implemented accordingly within the Environmental Design program. If there was a direct connection between the two, a designed curriculum could be developed to provide an increased understanding of the practices and opportunities for HIPs and moments.

Specifically, the following research questions were addressed in this introductory study:

- Are some HIPs more common among the students in the Environmental Design program?

- What common categories of peak moments appeared when analyzing Environmental Design student data?
- When did these HIPs and peak moments occur within each Environmental Design student's academic career?

If the above items could be better understood based on student experiences, a curriculum complete with opportunities for HIPs and moments could be created. Incoming students could then follow that model purposefully engaging in transformative educational experiences (Farrow et al., 2022).

Literature Review

Educational Flow

In 1990, Csikszentmihalyi (1990, p. 3) identified the concept of educational flow as “a sense of exhilaration, a deep sense of enjoyment that is long cherished and that becomes a landmark in memory for what life should be like”. Baker (2005) subsequently identified three components of flow as absorption, enjoyment, and intrinsic motivation. In essence, educational flow represented total immersion by a student in an activity. Educational flow invokes the idea of a trance-like state or “total use of one's abilities, focus of attention, effortless control and feelings of mastery and transcendence” (Rana et al., 2009, p. 42).

Mental energy peaks when a student is engaged in educational flow (Bowers, 2017). In this situation, the student is motivated and enjoys the experience, often enhancing student engagement, which is an important element of both academic success and student happiness. Thus, engagement is linked to educational flow (Raettig & Weger, 2018).

The Power of Moments

Educational flow and powerful moments are related. A defining moment is a short experience that is both memorable and meaningful (Heath & Heath, 2017). Moments often develop from times of educational flow. In contrast, not all instances of flow yield long-lasting memories for students (Cherry, 2020).

Defining moments exist throughout all stages of life. Chip and Dan Heath (2017) identified three different types of defining moments: peaks, pits and transitions. These defining moments shape and transform an individual's life. Peak moments create positive emotion and are long lasting in an individual's memory. One definition of peak moments is stated as follows:

..a highly valued experience which is characterized by such intensity of perception, depth of feeling, or sense of profound significance as to cause it to stand out, in the subject's mind, in more or less permanent contrast to the experiences that surround it in time and space. (Leach, 1962)

These moments are based off three fundamental ideas:

- When individuals consider an encounter, they often focus on key moments within the experience. Often, these occur at peaks, valleys, and times of transition.

- Moments are created from at least one of the following four elements: i) elevation, ii) insight, iii) pride, and iv) connection.
- It is important to recognize, celebrate, and set clear expectations at times of peaks, valleys, and times of transition.

Instead of waiting for these peak moments to happen spontaneously, Chip and Dan Heath write that it is possible to actively curate them. If planned and executed in an educational system, an opportunity for elevating the student experience exists.

High-impact practices

High-impact practices are a set of educational endeavors that have been proven to lead to a greater interest and retention rate among students in undergraduate programs (Kuh, 2008). Kuh identified ten of these high-impact practices which include: (1) first year seminars and experiences, (2) common intellectual experiences, (3) learning communities, (4) writing-intensive courses, (5) collaborative assignments and projects, (6) undergraduate research, (7) diversity/global learning, (8) service learning, (9) internships, and (10) capstone courses and projects. When implemented, these practices can benefit students significantly and allow them to take advantage of the opportunities offered throughout their college years.

According to Kuh, these high-impact practices are productive because they offer students learning experiences outside of the standard classroom setting that utilize a diverse skill set. Studies have found correlation between high-impact practices and student success. The participation in learning communities can lead to an increase in critical and higher order thinking, openness to difference and appreciation of diversity, and high academic performance (Kilgo, 2012; Kuh, 2008). Students who participated in a sort of global learning were shown to make gains in their cognitive development and critical thinking skills (Gurin et al., 2002; Kilgo, 2012). Students who participated in these practices were able to learn, integrate, and share the information at an elevated pace than students who did not (Nelson et al., 2008). High-impact practices are useful for undergraduate students to obtain skill sets which will benefit them both academically and professionally.

Transformative Active Learning Experiences (TALES)

Each of the above individual tactics of educational flow, peak moments, and high impact educational practice have an opportunity to create significant learning as well as highly valued student experiences. When curated moments are strategically combined with high impact practices, the odds of having a transformative educational experience exists. Such an experience would not only provide deep learning but would also create a lasting memory for the student. Known as TALES (Transformative Active Learning Experiences), this type of experience has the opportunity to significantly improve the academic experience of students (Farrow et al., 2022). Considering these experiences are educational, their potential impact goes beyond that of common moments to include things like career impacts.

Methods

Environmental Design students at Auburn University were targeted for this research project. Data was collected from graduating seniors using the Campus Engagement and Experience Survey (CEES) over the following academic semesters: Fall 2019, Spring 2020, Summer 2020, Fall 2020, and Spring 2021. All graduating students were required to complete the

survey as part of the expectations within the zero-credit graduation course, UNIV-4AA0. Environmental Design students that completed the survey were graduating in the semester in which they completed the CEES. Administered by the university using a web-based learning management system, the CEES has approximately 40 questions that measure areas including the following: demographic information, time at Auburn University, perceptions of class experiences, HIPs, peak learning moments, and expectations as a future alumnus. This research focused only on data related to the specific HIPs measured by Auburn University and the open-ended question about peak learning experiences.

The five HIPs measured by the university included co-op, internships, e-portfolios, study abroad, and undergraduate research. The survey asked students to identify which of the five HIPs they had participated in, with the option to include multiple HIP experiences. Each time a student identified a HIP, the student was then asked when they participated, why they participated, and what they got out of the experience.

For peak learning moments, a specific, single question was asked of students:

Describe a transformative learning experience, while a student at Auburn University, that helped shape the person you are today (a short experience that was both memorable and meaningful). Please be descriptive and note that the moment could take place anywhere (classroom, internship, study abroad, work, athletics, fraternity/sorority, student government, etc.)

An Auburn University employee from the office of Academic Insight collected the data and coded the qualitative data in NVivo[®]. Key themes were identified based on an analysis of the data and the HIPs measured by Auburn University to categorize the peak moment information digitally and separate data. The initial themes for the peak moments were the following:

- Internship (HIP also measured directly)
- Co-op (HIP also measured directly)
- Undergraduate Research (HIP also measured directly)
- ePortfolio (HIP also measured directly)
- Study Abroad (HIP also measured directly)
- Mentorship
- Class
- Personal Relationships
- On-Campus Organizations/Clubs
- Leadership
- Athletics
- Volunteering
- Diversity and Inclusion Experiences

The listed themes were developed using search terms appropriate to detect the different categories. To search for student responses involving mentorship, the following key search terms were used; *professor, *faculty, *staff, *Dr., *Dr., *dr., *dr, *doctor, *teacher, *mentor, *peer review, *peer. From hits on data strings including these search terms, further analysis was done to identify the context in which the terms were used and appropriately categorize the response. A similar approach was used for each theme.

The researchers recognize that other HIPs as identified by Kuh may have also been included in peak experiences. Those were not included in this introductory study.

Results

61 students graduated in Environmental Design at Auburn University during the period surveyed. Among the 61 students recorded, 74 HIPs were noted. While some students reported participating in multiple HIPs, others reported not participating in any. If a student participated in one HIP multiple times, this was still recorded as a single instance.

Are some HIPs more common among the students in the Environmental Design program?

Table 1 summarizes HIP participation by Environmental Design students. Over half of the students had completed an E-Portfolio, which was a course requirement during the graduated students' time in the program. Participation was significantly less among the other HIPs recorded, with the next highest recorded HIP being the completion of an internship, recorded by 28% of the students surveyed. Furthermore, 15% of Environmental Design students studied abroad and 18% of students participated in Undergraduate Research. Only 3% of students recorded the completion of a Co-Op.

HIPs	Number of Students Participating (Percent of Respondents)
E-Portfolio	35 (57%)
Internship	17 (28%)
Undergraduate Research	11 (18%)
Study Abroad	9 (15%)
Co-op	2 (3%)
Total	74 or 1.21 HIPs/student

Table 1: High Impact Practices Recorded

What common categories of peak moments appeared when analyzing Environmental Design student data?

Of the 61 student who graduated in Environmental Design during the survey period, 58 student responses on peak moments fell into one of the 13 original key themes. Summaries of the results were provided to the researchers using an Excel® spreadsheet. The data was then further classified based on similar themes created through manual organization resulting in eight different key themes: self-development, empathy and diversity, project-based learning, mentorship, on-campus organizations, study away, peer relationships and undergraduate research (Table 2).

Key Themes	Number of Students (Percent of Respondents)
Mentorship	14 (23%)
Self-development	10 (16%)
Empathy and diversity	8 (13%)
Project-based learning	7 (11%)
On-campus organizations	7 (11%)
Study away	7 (11%)
Peer relationships	3 (5%)
Undergraduate research	2 (3%)
Total	59

Table 2: Peak moments of students categorized in eight themes.

Of the 58 graduating students who provided admissible responses on the CEES survey, 23% expressed a significant moment in which they received mentorship from a professor or instructor. Students described the guidance they received from those within the Environmental Design program as well as the knowledge gained from the professors. One student stated it as follows:

Through the guidance of my instructors, I found new meanings for what design is and what design can be. They gave me an entirely new outlook on the way I perceive design and how I make design related decisions. This new perspective allowed me to gain the appreciation and passion that I now have for design, and its endless possibilities in shaping a better future for the world. – M

16% of the students mentioned self-development during their time at Auburn, both personally and professionally. One of the 10 students mentioned learning time- management skills, while another gained confidence throughout their degree. 13% of students referenced Empathy and Diversity within their Peak Moment.

During my internship, I was able to help with a project focused on experimental housing for developing communities. It had a great impact on me and showed me what can happen when you think outside the box and beyond conventional methods. This experience alone with others in my internship inspired me to pursue a master's degree in Community Development. – K

Along with the key themes found amongst the student data, 25 students acknowledged the impact their peak moment had on their future. Indicating the lasting significance of these moments throughout their career. 15 students referenced specific projects they had worked on in class, and 13 students cited their studio experiences. Example comments included the following:

...I loved being able to feel a part of both the university as well as the .. community through organizations, classes, and volunteer work (which often overlapped). In doing so, I have cultivated irreplaceable friendships, experiences, and life lessons I will take with me after graduation.

One of the most impactful moments of my academic experience was an interaction I had with one of my mentors... In a personal meeting we had to discuss options for post-graduation, she was supportive of my decisions to pursue further education but

told me that she wanted me to not hold back. She said, "Sometimes I get the feeling you are afraid to be good... you are afraid to be yourself" and that moment will be with me until the day I die.

While studying abroad I was able to learn about how other cultures and people approach design in everyday life. This really opened my world up to different methods and ideas to use going forward.

When did these HIPs and peak moments occur within each Environmental Design student’s academic career?

As shown in Fig. 1, 22 of the student responses did not specify a certain time frame in which their peak moment occurred, and 19 students spoke of multiple academic years in their response. However, 5 of the peak moments were based in the student’s first year, 2 were specific to sophomore year and another 2 were specific to junior year. Finally, 8 student’s peak moments occurred during their senior year at Auburn University. For the few moments that occurred during a student’s first two years in college, almost all surrounded a significant point of transition and self-development like failing a test, being challenged to transition study habits, or not meeting admission standards into a degree program.

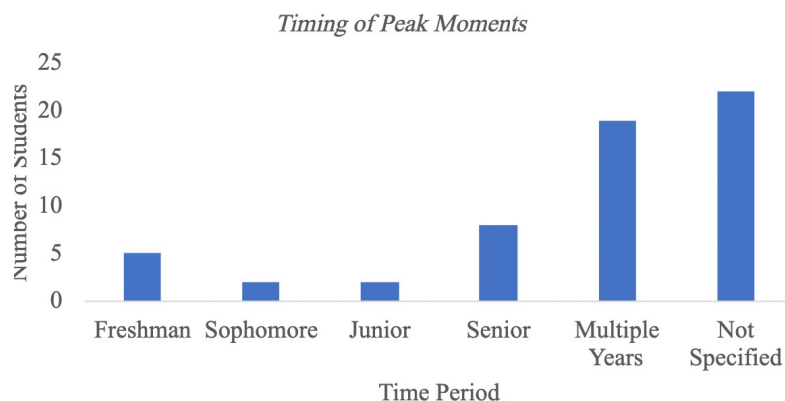


Fig. 1. Time periods recorded when a student’s peak moment occurred.

Discussions and Conclusions

The purpose of this introductory research was to explore HIPs and peak moments experienced by Environmental Design students at Auburn University. Based on the findings, it is apparent that students may not fully understand the value or know about the opportunities of HIPs. While five HIPs are measured at graduation for each Auburn student, ENVD students report only an average of 1.21 HIPs per student over a four-year undergraduate degree. Further, results indicate a lack of peak moments that occur during a student’s sophomore and junior years. The authors noted that the exit survey could be the first time the ENVD student hears about HIPs. If the value of HIPs and opportunities for peak moments could be better explained to students early in their academic career, students would have a better opportunity for deeper learning and more curated academic experiences. The development of a document that may convey opportunities to students through academic advising is one such way this could occur. This could occur through a specific flyer (Fig. 2) or through a modified curriculum model (Fig. 3) students use on a regular basis.

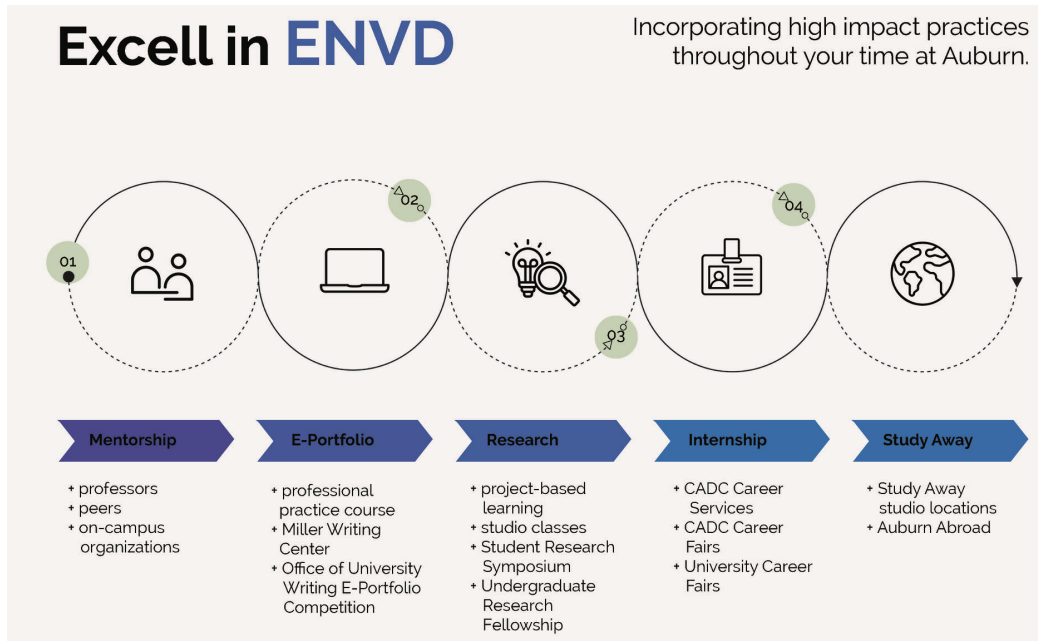


Fig. 2. Flyer for students as they begin ENVD program.

THIRD YEAR			SPRING			SUMMER		
FALL								
COURSE NO.	COURSE NAME	HRS.	COURSE NO.	COURSE NAME	HRS.	COURSE NO.	COURSE NAME	HRS.
ENVD 3000	Environmental Design II	3	ENVD 3100	Civic Engagement & Research Methods (SLO E)	3	ENVD 4100	ENVD Workshop II	6
ENVD 4010	ENVD Elements	3	ENVD 4970	ENVD Special Topics	3	Free Elective 2000 Level**		3
Social Science (SLO F,G)		3	ENVD 5030	Entrepreneurship Studies	3	TOTAL CREDIT HOURS		9
ENVD 3200	Systems in Built Environment I	3	ENVD 3300	Systems in Built Environment II	3	Junior status required for 3000 and 4000 level ENVD courses		
Free Elective 1000 Level*		3	ENVD 4500	Professional Practice	3			
TOTAL CREDIT HOURS		15	TOTAL CREDIT HOURS		15			

FOURTH YEAR			CADC DIRECTED ELECTIVES***			HIGH IMPACT PRACTICES	
FALL							
COURSE NAME		HRS.	COURSE NO.	COURSE NAME	HRS.	each sem	
Humanities (SLO B, E, F, G, or I)		3	ARCH 1000	Careers in Design & Construction	1	1st - 4th	Project-Based Learning
Directed Elective 4***		3	ARCH 2600	Art of Architecture	3	1st - 4th	Mentorship
Directed Elective 5***		3	ARCH 3700	Seminar in History and Theory	3	2nd - 4th	ePortfolio
Free Elective 1000*		4	INDD 1120	Industrial Design in Modern Society	3	3rd	Study Away
UNIV4AA0AR1 University Graduation		0	BSCI 1100	History & Intro. to Construction	3	3rd and 4th	Research
TOTAL CREDIT HOURS		13	UNIV 1150	CADC Success Strategies	1	3rd and 4th	Internship
			ARCH 2110	History of World Arch. I	3	...	
			ARCH 3110	History of World Arch. II	3		
			ARCH 3410	Dessein Elective	3		
			ARCH 4110	History of Urban Architecture	3		
			ARIA 2150	Elements of Interior Architecture I	3		
			ARIA 2160	Elements of Interior Architecture II	3		
			LAND Directed Elective approved by semester				

The timing of these practices are suggestions. Each student can assess their individual interests and incorporate the practices as needed.

Fig. 3. Curriculum modified to show possible HIPs and opportunities for peak moments.

Students could even be challenged to complete one HIP each semester to disperse opportunity and provide an opportunity for HIPs to build on each other. The ePortfolio, required in one ENVD class, could be introduced early in a student’s career. While early introduction does not guarantee a high-impact experience, it does increase the odds of success if the student initiates engagement in the experience by being more informed of the available opportunities. Students could populate the ePortfolio with experiences each semester, and mentors could review the portfolios periodically during the academic experience.

Specific to the Environmental Design program at Auburn University, mentorship is currently recognized as the single biggest peak moment in the program. Much of this stems from the relatively small size of the program and specific faculty placing significant emphasis on this for students. Training for all faculty and staff within the ENVD program would enhance and expand the student experience in this area.

Professional development classes or seminars could be implemented in a student's first or second year to provide guidance on available opportunities, such as internships or co-ops. Faculty could also review the curriculum map to assure project-based learning (a common peak moment identified by students) is infused in the curriculum. While the program offers a single study abroad each year as well as a study away, expanded opportunities could be made available for students. This could include more economical options or approaches that provide a variety of time periods the student could explore.

The peak moment comments by students did not reveal obvious moments of educational flow. Not surprisingly, students remembered and told stories of experiences as opposed to remembering their immersion or lack thereof in a given experience. Students did indicate a connection between HIPs and peak moments. While some peak moments did reflect a specific HIP, most comments revolved around specific experiences within a given opportunity suggesting that the experiences the HIPs create provide the opportunity for peak moments as opposed to the HIP itself. This suggests that opportunity exist for faculty to further curate HIPs to improve the educational experience and elevate the peak moment for students.

The ENVD program resides in a college of majors that have been in place for long periods of time. One major in the college has been in place for 100 years. In contrast, ENVD has existed in its current for approximately ten years. In addition, dedicated faculty for ENVD have only existed for the last couple of years. This has limited the time the faculty have had to make small improvements, learn from them, and make additional improvements. Maturity of the program will help in the development of meaningful learning experiences.

Further research should expand the number of HIPs explored by students in the ENVD program and factors influencing non-participation. Further understanding about student and faculty knowledge of HIPs needs exploring. In addition, conceptual, logistical, and practical approaches to integrating HIPs into the ENVD program must be better understood by faculty and administrators. Thoughtful, creative approaches to TALEs in ENVD should be explored and evaluated for additional modifications if a curated, strong student experience is to be created for tomorrow's student.

References

- Bakker, A. B. (2005). Flow among music teachers and their students: The crossover of peak experiences. *Journal of Vocational Behavior*, 66, 26–44.
- Bowers, J. (2017). Flow and peak experiences. *Handbook of Medical and Psychological Hypnosis: Foundations, Applications, and Professional Issues.*, 559–563.
- Cherry, K. (2020, November 26). *Peak Experiences in Psychology*.
<https://www.verywellmind.com/what-are-peak-experiences-2795268>
- Csikszentmihalyi, M. (1990). *Csikszentmihalyi, M. (1990) FLOW: the psychology of optimal experience*. New York: Harper and Row. Harper and Row.
- Farrow, C. B., Wetzel, E., & Leathem, T. (2022). *Teaching in the Built Environment: Creating Transformational Active Learning Experiences* (1st Edition). Routledge.
<https://doi.org/10.1201/9781003106029>
- Gurin, P., Dey, E. L., Hurtado, S., & Gurin, G. (2002). Diversity and higher education: Theory and impact on educational outcomes. *Harvard Educational Review*, 72, 330–366. <https://doi.org/10.17763/haer.72.3.01151786u134n051>
- Heath, C., & Heath, D. (2017). *The power of moments: Why certain experiences have extraordinary impact*. Simon & Shuster.
- Kilgo, C. A. (2012). *The estimated effects of service learning and undergraduate research on students' intercultural effectiveness* [Master's thesis].
- Kuh, G. D. (2008). *High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter*. Association of American Colleges and Universities.
http://www.neasc.org/downloads/aacu_high_impact_2008_final.pdf
- Leach, D. (1962). *Meaning and correlates of peak experience* [Doctoral dissertation].
- Nelson, T. E., Shoup, R., Kuh, G. D., & Schwartz, M. J. (2008). The effects of discipline on deep approaches to Student learning and college outcomes. *Research in Higher Education*, 49(6), 469–494.
- Raettig, T., & Weger, U. (2018). Learning as a Shared Peak Experience: Interactive Flow in Higher Education. *International Journal of Applied Positive Psychology*, 2.
<https://doi.org/10.1007/s41042-018-0011-9>
- Rana, S. A., Tanveer, S., & North, S. C. (2009). Peak experiences of music and subjective well being. *Journal of Behavioral Sciences*, 191(1–2), 41–57.
- Sandeen, C. (2012). High-impact educational practices: What we can learn from the traditional undergraduate setting. *Continuing Higher Education Review*, 76, 81–89.
- Valbrun, M. (2018, April 25). Maybe Not so “High-Impact”? *Inside Higher Education*.
<https://www.insidehighered.com/news/2018/04/25/study-questions-whether-high-impact-practices-yield-higher-graduation-rates>