P/REFERENCES OF DESIGN

EMPOWERING EXPERIENTIAL EDUCATION IN DESIGN: INTEGRATIVE MODEL AND PILOT APPLICATION IN AN UNDERGRADUATE EXPERIENCE DESIGN COURSE.

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ABSTRACT | This paper presents a model of empowerment integrated to experiential education in Design. Experiential learning programs provide opportunities for students to empower themselves and develop competencies, attitudes, and maturity to make a successful transition from school to work. Students are prompted to actively engage as designers in their communities and envision themselves as agents of change for the common good. The paper contributes to the track “Ways of Living Together” by presenting an approach embedded to Design Education that advances individual and community empowerment, helps students to constitute identity and community engagement, and expands their awareness of the eco-social responsibilities associated with professional practices. Experiential learning is considered an ideal approach to achieving the tenets of empowering education, because the results of direct experience are often concrete, identifiable, and applicable. To construct and advance their professional identities, Design students need exposure to processes that help developing internally while also having opportunities to enact abilities and skills in the real world. Empowerment is increasingly essential for Design students to develop their professional identities in a changing context requiring reflection, awareness, self-direction, and creativity. The paper also reports a case study on a pilot application of the model in the context of a project-based undergraduate course in Experience Design. Empowering experiential learning supports reflection on sense of purpose, provides exchanges with diverse mentors, participation in community as opportunities to develop confidence in real-world contexts and help to address complex socio-ecological problems.

1. Introduction

Experiential learning programs have the potential to provide opportunities for Design students to empower themselves and develop competencies, attitudes, and maturity to make a successful transition to adulthood as they move from school to work. Because of their involvement in such programs, students may experience opportunities to actively engage as designers in the life of their communities and envision themselves as agents of positive change for the common good.

In this paper, we present a model of empowerment integrated to experiential education in Design. The paper seeks to contribute to the track “Ways of Living Together” by presenting an approach which, embedded to design education, fosters processes of individual and community empowerment, help students to constitute identity and community engagement, and expands their awareness of the eco-social responsibilities associated with professional practices. A case study presents a pilot application in the context of an undergraduate course in Experience Design.

2. Empowerment in the Transition to Adulthood

Typically-aged college students are entering adulthood and dealing with a range of developmental tasks to constitute competencies, attitudes, values, and maturity necessary for a successful transition. Completing education and entering the job market are major milestones to be attained in this phase. Early adulthood might be considered a key turning point in the life span (Schwartz, 2016).

In adolescence and early adulthood, young people ‘construct’ their own selves through a cycle of experimentation and reflection (Erikson, 1968; Steinberg, 2007). The transition to adulthood is marked by a shift from relying on external authority to taking ownership and responsibility for one's life, therefore they need to be exposed to experiences and receive support to develop mature meaning-making and capacity for their own decisions (Baxter-Magolda & Taylor, 2015). For many of them, universities play a significant role in this transition, providing opportunities to improve cognitive and psychosocial development, constituting identity through role experimentation, choice, meaningful achievement, and reflection (Erikson, 1968).

Promoting empowerment in this period has significant benefits, including healthy identity experimentation, gains in confidence, critical awareness, self-efficacy, and self-esteem (Chinman & Linney, 1998). Empowerment is a strengths-based multi-level construct, pointing both to a process of social change and to the outcomes of this change (Rappaport, 1995; Maton et al., 2011). The concept was first defined as an intentional, active, ongoing process through which individuals and groups gain greater control over their lives (Rappaport, 1981; Cornell Empowerment Group, 1989).

Foundational work on youth empowerment (Cargo et al., 2003; Chinman & Linney, 1998; Jennings et al., 2006) highlights the importance of essential elements: welcoming and safe environments; meaningful participation and engagement; equitable power-sharing; engagement in critical reflection; participation in sociopolitical processes to affect change; integrated individual- and community-level empowerment. Focusing on specific contexts and challenges of early adulthood, Mouchrek and Benson (2023) extended previous theoretical propositions and built a comprehensive model of *integrated empowerment in the transition to adulthood*. Their theory informed the work presented in this paper and will be described next.

2.1 Integrated Empowerment Model

In this model, focused on early adults between 18 and 25 years-old (primarily from Western societies, including developed and developing countries), empowerment is understood as a process of capacity building for the transition to adulthood, leading to positive developmental outcomes. The model emphasizes the nature of empowerment as an interactive, gradual, and multifaceted interplay among developmental experiences at the internal and the external contexts (Figure 1), as follows:

> "Empowerment emerges as the interplay between two foundational dimensions. Representing internal processes of development, the key catalysts personal agency and sense of purpose interact to produce the first empowerment dimension: the constitution of self-direction. Since internal development needs a 'stage', a concrete space for enacting and consolidating developmental gains, a necessary counterpart would be external experiences of development. In these, the key catalysts mentoring experiences and engagement in community come together to form the second dimension of empowerment: developing a meaningful role in society. These two dimensions combine and emerge as the overarching construct of empowerment" (Mouchrek & Benson, 2023, p. 6-7)

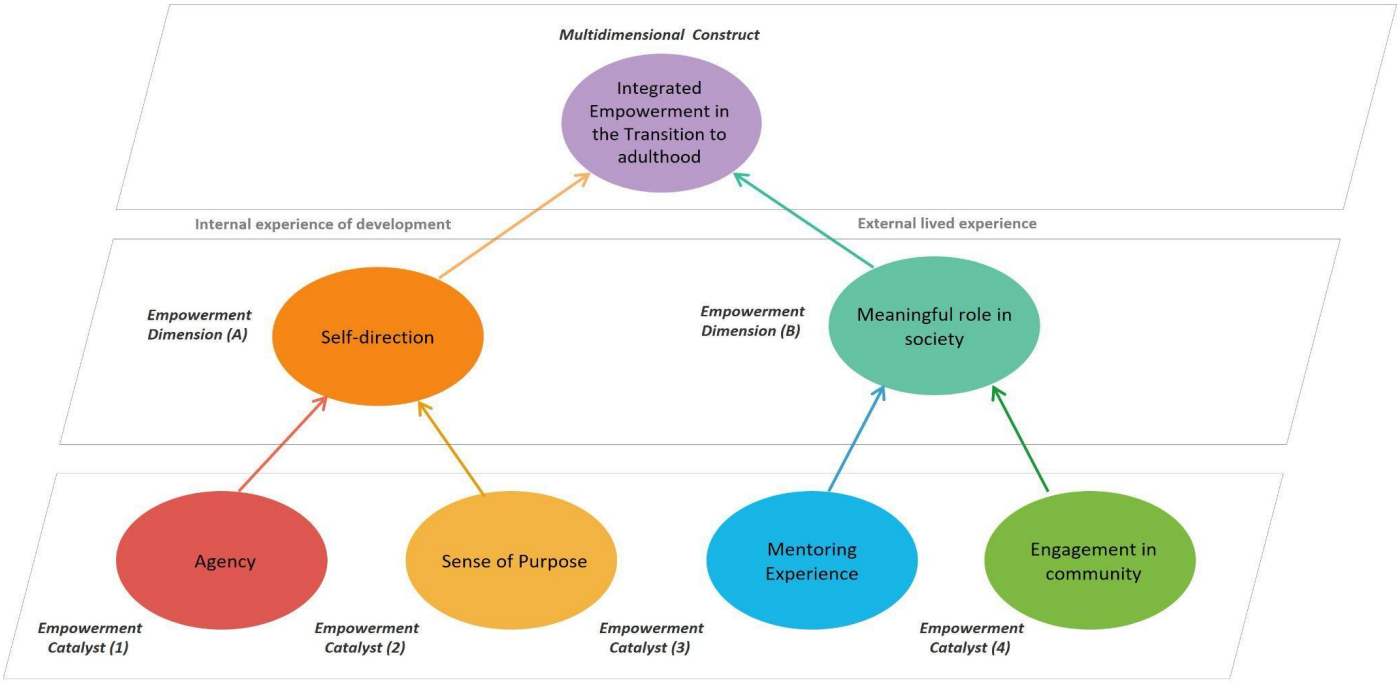

Figure 1. Model of Integrated Empowerment in the Transition to Adulthood (Mouchrek & Benson, 2023).

The empowerment catalysts in the model are described as: (a) *personal agency*, including self-understanding, sense of control, critical consciousness, autonomy in decision making; (b) *sense of purpose*, encompassing a perception of meaning in life and desire to make a positive difference to help solve problems beyond the self; (c) *mentoring experiences,* pointing to experiences with mentors providing guidance, support, appreciation, balance of power, and healthy collaboration; (d) *engagement in community*, when there is a sense of belonging, intrinsic motivation, meaningful participation, space and support to use talents and potential for the success of the community.

The authors suggest potential applications in the form of a model they called CAMP, which posits that interventions aimed at supporting developmental empowerment in emerging adulthood have strongest potential when *combining all four catalysts*: stimulating agency, fostering reflection on purpose, offering opportunities for shared dialogue and action with older adults, and positioning youths as potential active members in their communities (Mouchrek & Benson, 2023). Special consideration is recommended to apply the model to college students, because universities have great potential to be empowering settings supporting youth's self-orientation and future plans, through intentional design of environments for development.

3. Empowering Settings in College: Role of Experiential Learning

Higher Education may play a significant role, constituting positive environments for students' growth and empowerment -- hence the importance of designing the college experience having in mind youth's developmental needs. Colleges may provide a wide range of new experiences while also requiring an increasing complexity in reasoning, executive and reflective skills. Supporting the students' development in this period has important repercussions on their personal and intellectual trajectory, helping them to become active, self-regulated and engaged learners. It matters to capture students' perspectives during these years and understand what makes an empowering experience for them.

Reviews of theory and evidence from research indicate that empowering settings are those that: (a)promote a sense of community, encouraging cooperation and collective decision making (Lakin & Mahoney, 2006); (b) take into consideration young people's needs, interest and abilities (Frandsen & Petersen, 2012); (c) frame their participation as autonomous, responsible social actors (Chaskin, 2009); (d)have both an empowering process (participatory, developmental) and an empowering outcome (enhanced control, capacity, and access to resources) (Maton et al., 2011); (e) foster a critical understanding of their sociopolitical context (Zimmerman, 1995). Based on these concepts, the present paper proposes the following reflection*: How might we create structures and dynamics for empowering settings for emerging adults in college?* Experiential education emerges as a privileged context for this type of developmental setting, for Higher Education in general and for Design Education in particular.

Experiential education is an approach to learning through hands-on, real-world experiences. It follows the conception of learning by doing, in which experience and learning are inseparable (Dewey, 2007). Essential elements of experiential learning are: experiences are chosen by their learning potential; students are actively engaged intellectually, creatively, emotionally, socially, or physically; critical thinking, problem solving, and decision making are present; reflection on and after the experience are integral components; the learning task is perceived as authentic and allows learning directly from real situations; relationships are developed and nurtured (AEE, 2014). Diverse modalities of experiential learning are considered as high-impact practices in Higher Education (AAC&U, 2012): community-based service learning, internships, global learning, undergraduate research, professional work experiences, among others.

4. A Model of Empowering Experiential Learning

Experiential education encourages college students to develop fundamental dimensions of empowerment: personal agency, sense of purpose, mentoring experiences, and engagement in community (Mouchrek & Benson, 2023). The process of youth empowerment is considered as interplay among multiple factors including internal and external processes. In this paper, we propose an application of the empowerment model integrated to experiential education in Design. While the model was derived from theory and evidence from research, it is developed as a potential application[1]. In this section, we present the model of experiential learning that promotes student empowerment by addressing several catalysts. These processes are described as follows, in experiential education in general and applied to Design Education.

4.1 Fostering Agency and Purpose

By addressing needs for experimentation for construction of self and fostering reflection and critical consciousness, experiential learning encourages the development of internal processes such as personal agency. Additionally, by focusing on purpose-driven experiences, this modality promotes a sense of meaning and purpose.

[1] In line also with recommendations from the Education Advisory Board (EAB): Integrating Academic and Career Development (2017).

Experimentation and reflection. In adolescence and early adulthood, construction of self happens through experimentation: there is a richness of experience as the brain presents great plasticity and is extremely sensible to experiences (Erikson, 1968; Steinberg 2007). Since experiential learning focuses on direct experience and in-context action and reflection, this modality may address the students' need for diverse lived experiences that offer room for them to make sense of the knowledge, relating it to their personal way of understanding the world and building connections with their own trajectory. Experiential education fosters skills needed for students to become their own agents of change (Shellman, 2014). The reflective process in experiential learning broadens students' perspectives, addressing important developmental aspects: in this period, the young person develops advanced cognitive processes, including abilities of practical, flexible, and dialectical thinking, greater processing of emotions, perspective taking, and capacity for self-reflection (Berger, 2008; Arnett, 2014). Reflection in context potentially fosters a more complex meaning making process, providing novel options for interpreting experiences and navigating environments (Baxter-Magolda & Taylor, 2015). In Experiential Education, learners are purposefully engaged in direct experience and focused reflection (AEE, 2013).

Purpose-driven experiences. In the college years, cognitive and social transitions lead to the development of personal values and the political principles that will guide the person throughout adult life (Santrock, 2014). Purpose plays a powerful generative role in youth development (Damon et al., 2003), as a sense of purpose assigns meaning to and connects the experiences toward integration and fulfillment of potential when students ask themselves about their own values and goals in life – and how important are concerns that go beyond their selves. A purpose-driven approach to experiential learning promotes developing real-world projects that students can connect to their own aspirations to contribute to and being actively engaged in processes of social change. Empowering educational experiences should look for intentional ways to foster a process of awareness and encouraging intrinsic motivations allows students to explore states of flow and possibility development for the future.

Experiential Modalities Fostering Agency and Purpose in Design Education. Design is fundamentally a discipline of learning by making and doing (Davis et al., 2004), requiring active participation through problem solving, modeling, creativity, critical thinking, and self-construction of knowledge (Fontoura, 2002). Experiential learning opportunities fostering agency and purpose may include project-based learning using studio pedagogy, internships and professional work settings, global learning opportunities, among others. Project-based learning activities embedded in courses allow for studio-like experiences that introduce students to real-world work projects and to how collaborative work in workplace settings may function (Strait & Sauer, 2004). In design education, studios are recognized as the signature pedagogy and provide an engaging mode of learning by making them reflect on ongoing development (Chamorro-Koc & Kurimasuriyar, 2020; Desai et al, 2021). Studio pedagogy might include direct contact with professionals and/or community partners. Those are empowering also because they promote self-directed learning and increase student comfort with uncertainty (Davis, 2004).

Internships and professional work experiences are particularly important to advance the development of students' professional identities. Designers' professional identity is complex and encompasses both developing a range of personal attributes and advancing several design skills. During their academic formation, students start to gradually construct their professional identity as designers, which grows intertwined with their personal identity. To construct and advance their professional identities, students need exposure to processes that help developing internally while also having opportunities to enact abilities and skills in the real world. Opportunities for global education are also excellent to help develop direct experimentation and nurture a sense of purpose by observing and reflecting on the role of design and designers and reflecting on their values and purposeful life goals.

In order to prepare students to face contemporary complex challenges, learning must provide opportunities to develop an emergent in-context skill set, including critical thinking, communication, collaboration, and creativity, among others (Finn et al., 2012). Students need to acquire knowledge and work skills, but also have opportunities for reflection, critical thinking, and systemic competences, to be prepared to participate fully and actively in a changing society (Delors, 1998; Fontoura, 2002). Empowering

experiential learning in Design Education has the potential to support the development of consciousness and required competences, but also to create structures for participation, spaces for students to express their own vision, perspectives, and design ideas for the future.

4.2 Cultivating Mentorships and Engaging in Community

Fundamentally focusing on learning in touch with the concrete realities and lived experiences, experiential learning activities have the potential to address external processes feeding youth empowerment: development of healthy partnerships among youth and adults and opportunities for students to have a meaningful participation in the local and global communities.
Mentoring experiences. Professionals, community members, instructors, and students engage in positive, productive partnerships. We highlight the importance of mentoring and apprenticeship in experiential education: these programs are a promising environment to foster a multi-generational shared leadership and decision-making. Balanced mentoring partnerships in the transition to adulthood are an essential element of empowerment, in which equitable power sharing, opportunities to express their voice, and positive support are considered essential (Cargo et al., 2003; Wong et al., 2010; Krauss et al., 2014). Dialogical experiential learning models, defined by a co-constructed, relational, and holistic approach to learning (Desmond & Jowitt, 2012), are highly beneficial for youth development.

Participation in community. Engaging youth in community issues has important implications leading to developmental outcomes such as independence, problem-solving, hands-on learning, leadership, increased sense of control and personal responsibility, and overall well-being (Browne et al., 2011; Morton & Montgomery, 2013). Active community participation also brings more proactive and healthy behaviors (Cargo et al., 2003) and gains in agency and confidence (Krauss et al, 2014). Empowering settings in community-based projects frame the participation of young people as active, autonomous, responsible social actors and agents of change in their own right (Chaskin, 2009). Experiential learning may offer opportunities for students to develop awareness of multicultural realities and diversity, to participate in a meaningful way, and to work alongside with community partners, at local and global scale. ‘Develop people's capacity to contribute to their communities’ is one of the main goals of experiential education (AEE, 2013). Research shows that, because of their involvement in experiential programs, students experience increased feelings of empowerment and make positive changes in their life and the community (Shellman, 2014).

Experiential Modalities Cultivating Mentorships and Engaging in Community in Design Education. Experiential learning opportunities fostering mentoring and community may include relationships with a diverse set of mentors, community design studios, community-based service learning, among others. A diverse array of mentoring relationships in experiential learning opportunities are beneficial for Design students as they learn about the intricacies of the profession and several aspects of professional activity. Besides their instructors, mentors might include work or internship supervisors, peers, and even local industry professionals. In Design Education, community-focused experiences might include the involvement of community partners as mentors in the learning process as students engage with communities to design solutions (Desai et al., 2021). In community design studios, students learn while doing projects to address issues for real demands in the community. Cameron and colleagues (2001) point that, in this learning modality, students learn about political, cultural, and economic problems faced by designers, besides their inherent responsibilities: "in dealing with the diverse backgrounds, agendas, and schedules of community members, students can learn communication skills, collaboration, and leadership qualities that they would not learn in a traditional studio" (Cameron et al., 2001, p. 106). In community-based service-learning projects, there is great potential to support developing empathic dispositions and skill sets in Design education.

Engaging with communities, student designers act as facilitators and need radical empathy beyond basic understanding of people’s challenges, considering their cultural positioning, engaging in respectful collaboration and ethical practices based in interdependence (Noel et al., 2023). Complex issues regarding the current global eco-social crisis will require designers to work alongside communities to redirect lifestyles towards an active well-being based on the quality of life, infused with a sense of action and

common purpose (Manzini, 2007; Brown, 1981). Collective engagement and problem solving, capacities for self-determination and community-oriented action based on care will be key (Meroni, 2007; Manzini, 2007). Engaging design students in community efforts helps understanding of eco-social responsibilities associated with professional practices, cultivates responsible citizens, and applies learning to their everyday lives.

In this section, we explained the model components and reported on how they apply to experiential learning in Design Education. In the next section, we present an early application of the model combining the four catalysts applied to experiential education in Design.

5. Case Study: Project Designing to Improve Human Experience

In this section, we present a pilot application of the empowering experiential learning model in a project-based undergraduate course in Experience Design at Northeastern University (U.S.). Following recommendations for empowering interventions based on the CAMP model (Mouchrek & Benson, 2023), the project was designed with the four empowerment catalysts in mind – agency, purpose, mentoring, and engagement in community – in a studio setting in which students worked in teams on a seven-week long design process.

Building upon previous higher education experiences with living labs for design, innovation and sustainability (Mouchrek & Krucken, 2018), open innovation co-create labs (Mouchrek, Baum, & McNair, 2016), and participatory design workshops for empowering undergraduate students (Mouchrek, 2023), we build this project-based course to provide opportunities for students to learn how to select and apply design methods, integrate experience design principles to their practice, and work collaboratively in an autonomous, hands-on project geared towards creative approaches to designing for social responsibility.

Context. The undergraduate course, ARTG3462 - Experience Design Principles, includes students in different years, enrolled in majors like Design, Graphic Design, Experience Design, Interaction Design, and majors that combine Design with Behavioral Neuroscience, Business Administration, Mechanical Engineering, or Computer Science. The course was taught throughout four consecutive semesters in 2023-24, involving six cohorts of 12 to 16 students each. After an introduction to principles of Experience Design (including technology as experience, sense making, storytelling, emotions, human needs, engagement, flow, and Design for social impact) and practice of several methods and tools of Design research and development, students set to apply the course concepts on an experiential learning project. The project explores the potential of Experience Design to develop concrete and action-oriented interventions, offering opportunities for students to go through a structured process to collaboratively reflect and work to envision possible futures in a multiparty team (Figure 2).

Figure 2. Students interpret findings from field design research in the Project *Designing to Improve Human Experience*.

Prompt. The project prompts students to research and design to help improve the human experience on a topic of their choice. Applying course materials, students identify real-world needs in the local community,

undertake field research, ideate design concepts, develop prototypes, and evaluate the developed solution. Interventions can be objects, services, information systems, installations, events, exhibits, programs, or campaigns. The Sustainable Development Goals (SDGs) are used as a tool to define the topics and teams for the Experience Design Project.

The SDGs were proposed by the United Nations in 2017 as a blueprint to achieve a better and more sustainable future for all (Spencer, 2021); they are considered one of the best opportunities to frame design for social responsibility (Cooper & Koo, 2021). The goals address the global challenges faced in our current society, including poverty, inequality, climate change, environmental degradation, need for peace and justice (Figure 3). Students are prompted to reflect on how they can design to improve the human experience in ways that address some of these challenges. Participants identify their goals of interest, perform research about them, refine their choice and form teams around the same topic. Each team will then work on one of the Sustainable Development Goals, identifying a need at a local/regional level linked to one or more targets in that SDG. The overall design challenge is: "How might we improve the human experience regarding [specific goal/target]?"

Figure 3. Sustainable Development Goals. Source: United Nations Development Program (2017).

Development. Students progress through a structured process involving project ideas, field research and data collection, interpretation, ideation, prototyping, and initial ideas for implementation. Teams work in a studio-based structure for seven weeks. Several participatory design activities are developed in class and outside class. At each step, students submit documentation of progress (text and design artifacts) and present a summarized update in class to receive feedback from instructor and peers. The five main deliverables are shown in Figure 4. The project constituted an opportunity for students to: learn skills in teamwork, planning, communication, and others; perform research on themes of interest; envision practical applications of experience design in contributing to solve world problems that they care about.

Figure 4. Project Designing to Improve Human Experience - Steps and Deliverables.

5.1 Application of the Model

The multilevel project embedded the four empowerment catalysts (agency, purpose, mentoring, community), as described in the next paragraphs.

Agency. While following a structured method, student teams had autonomy to decide the aims, the audience, the scope and reach of their project. Students received feedback from instructor and peers along the research and development process, but ultimately, they had autonomy to experiment, define and pivot the direction and boundaries of their project, and were responsible for decisions and overall project development. Embedded opportunities to reflect on their practice were helpful to advance and mature their decision-making process. Examples of student projects notable in developing agency, experimentation, and autonomy (Figure 5) were:

- *NUFood community recipe sharing app*[2], in which students started off looking to fight food waste on campus. Their research and analysis led them to uncover a negative loop cycle: students on campus do not have good cooking skills, end up buying more groceries than they actually use to cook, and that generates a sheer amount of food waste. By developing a community recipe sharing app, this team addressed the issue through an innovative angle.
- *ShellYeah! youth educational beach camp*[3], in which students had an initial goal to protect marine life in the Boston region. After surveys and interviews, they pivoted and decided that developing an engaging, fun approach to environmental education for children was the best strategy to indirectly attain the goal. The team developed a creative intervention that included designing a summer camp and pedagogical curriculum for it.

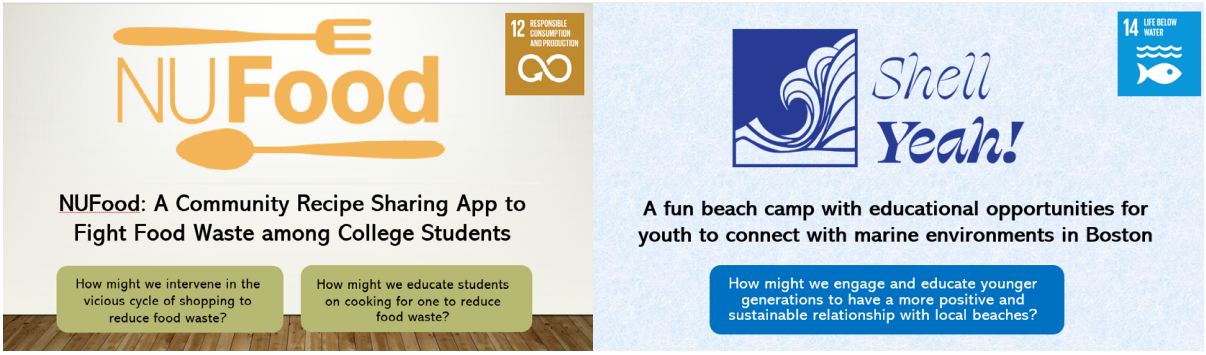

Figure 5. Projects displaying high levels of agency, experimentation, and autonomy: *NUFood* & *ShellYeah!*.

Sense of Purpose. The project intentionally prompted students to select goals aligned with their values and personal aspirations. Being able to choose to design towards a socially relevant goal that was meaningful for them and forming teams with people sharing the same values infused a strong sense of purpose into the projects. This prompted reflections about how potential career trajectories may connect with their willingness to contribute and make a difference to help solving complex contemporary challenges. Examples of student projects that displayed prominent sense of purpose (Figure 6) were:

[2] The NUFood project authors are undergraduate students Beyer Bullard, Caitlin McGuire, Marsha Angkasa, Mollie Harreys (Spring 2023).

[3] The ShellYeah! project was authored by students Brendan Ditullio, Karlee Malcolm, Greg Gold, Caleb Nyhart (Summer 2023).

- *NICE - Northeastern Intervention Care & Education program*[4], in which team members felt very strongly about the need for more intervention and care related to drug prevention and support for students dealing with drug addiction on campus. They developed a full program dedicated to that and wrote at length about how important it was for them to research and design on a topic that was felt was intensely purposeful.
- *Pawrents - Student Parents Club*[5], another example of a highly purposeful project in which students empathized with fellow colleagues going through a difficult time when discovering they were pregnant or would become parents – and how this might affect their college trajectory (and life as a whole). The team developed a thoughtful approach by creating a student parents club with several features.

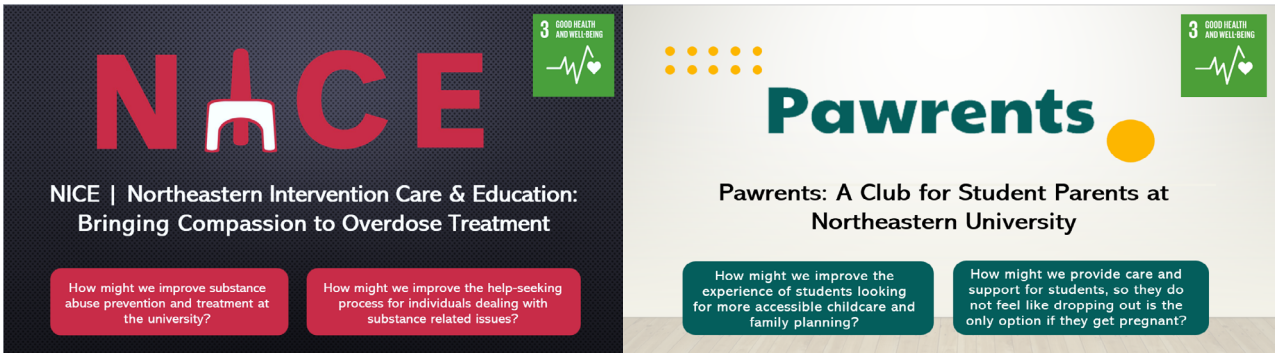

Figure 6. Projects with a prominent sense of purpose and reflection: *NICE* and *Pawrents.*

Mentoring experiences. Because continuous feedback and collaborative progress were central features, the project provided several opportunities for mentorship. It included intense mentoring from the instructor at the team level, which worked as facilitation, consultancy, and overall support for project management. Relevant experts and community members interviewed become informal mentors for specific groups as well. The project is structured to incentivize peer feedback and collaboration along the project development, which generated interesting peer mentorship dynamics. Examples of student projects with active peer mentoring partnerships (Figure 7) were:

- *Sexual Health for Huskies website*[6], a project developed for a team in an all-female student class that was inspired by needs directly felt by the students, including the lack of ample and integrated conversation and support regarding sexual health on campus. Because some of their classmates were intensely involved with sexual health advocacy on campus, they ended by establishing a strong peer mentorship alliance that helped inform the approach and tone of their project.
- *YouHCS app*[7], a project developed in the same class environment attending to similar needs, this time focusing on increasing on-campus knowledge and support about reproductive health. Once more, intense exchange and feedback from colleagues who were also student activists around the topic generated strong peer mentoring experiences.

[4] The NICE project was proposed by Ila Jagannath, Miles Chun, Matt Downing, Max Spencer (undergraduate students, Spring 2023).

[5] The Pawrents project was authored by students Luci Lobo, Catherine Kennedy, and Juliana LaPara (Spring 2023).

[6] The Sexual Health for Huskies project was created by Bryn Grespan, Natalie Walsh, Deefah He, and Nabaa Lafta (undergrads, Fall 2023).

[7] The YouHCS project authors are Ally Xu, Maya Haney, Sraghvi Anchaliya, Tori Simmons (undergraduate students, Fall 2023).

Figure 7. Projects with active peer mentoring partnerships: *Sexual Health for Huskies* and *YouHCS*.

Community. Being clearly oriented to research and design for a community-centered goal made students envision possibilities to act as "citizen designers", opening perspectives about how designers may intervene with skills and talents towards the common good. This fostered a sense of belonging, besides activating intrinsic motivation and willingness to meaningfully participate. Examples of student projects with increased engagement in community (Figure 8) were:

- *Nubian Station Local Market*[8], a project that started by focusing on improving infrastructure for a neighborhood close to campus that faces increased gentrification. After in-depth research and contact with residents, they developed an open, inclusive strategy to stimulate economic development and community relationships around a local market in a strategic location. The team was particularly concerned with the impacts of the university in the surrounding areas and their resulting designs showed intense involvement in the life of these communities.
- *Boston Hunger Helpers*[9], a project that also had concerns regarding the surrounding neighborhoods, this time focusing on needs related to food insecurity. They developed a dynamic donation-based program connecting food vendors and community members. In this case, student teams also displayed an intense call to contribute to the community inspired by a citizen design approach.

Figure 8. Projects with increased engagement in community: Nubian Station Market and Boston Hunger Helpers.

6. Recommendations

From our study and practice with the model, we derived a set of recommendations. Experiential learning opportunities are well suited to support empowerment for students to the extent that they may:

- provide youth with a wide range of experiences while also requiring an increasing complexity in reasoning, executive and reflective skills.

[8] The Nubian Local Market was proposed by students Bella Stone, Naseem Mohideen, Finn Cuccia-Fenton, Maddy Mckee (Fall 2023).

[9] The Boston Hunger Helpers project was authored by undergraduates Ashley Newell, Alia Alsaie, Aleena Narula (Fall 2023).

- offer opportunities for students to understand and practice competencies leading to autonomy, self-direction, and independence through exercises of problem-solving and decision-making.
- offer opportunities to engage in meaningful roles, and to develop collective work that is authentic, interesting, fun, and relevant to the real world.
- offer stimulating and rich environments for positive and healthy interaction with peers and the extended community, improving students' well-being and supporting their processes of socialization and identity formation in emerging adulthood.
- provide rich environments and social contexts to encourage students to express their values and inspire the development of prosocial values such as social justice, ecology, human rights, sustainability, diversity, and inclusion, among others.

On the other hand, it matters to avoid learning experiences that are ill-suited to support youth empowerment at the extent that they:

- maintain rigid curriculum structures that don't allow for experimentation or active learning experiences.
- offer limited autonomy for students to co-create interesting and authentic learning experiences.
- overlook the fact that students need to develop as a whole person and as a future professional at the same time – hence the importance of integrating academic and professional goals with their personal characteristics and trajectories.

7. Conclusion

Empowerment is increasingly essential for Design students to develop their professional identities in a changing context requiring ongoing reflection, awareness of content, self-direction, and creativity. Empowering experiential learning also supports reflection on sense of purpose and priorities, while providing exchanges with diverse mentors, participation in teams and communities as opportunities to develop confidence and an understanding of who the student can be as a professional in real-world contexts, helping to address the complex socio-ecological problems we currently face.

Experiential education is then seen as an opportunity for students to develop identity and agency, foster critical consciousness and empower themselves to meaningfully participate and be actively involved in their communities. Experiential learning is considered an ideal approach to achieving the tenets of empowering education, because the results of direct experience are often concrete, easily identifiable, and applicable (Perrin, 2014). A consistent framework for experiential learning in college education would consider its potential to positively impact youth development, working intentionally to promote empowering experiences and transformative outcomes for students during the transition to adulthood.

References

American Association of Colleges and Universities (AAC&U). (2012). High-impact practices. Retrieved July 31, 2024, from https://www.aacu.org/trending-topics/high-impact

Arnett, J. J. (2014). *Emerging adulthood: The winding road from the late teens through the twenties*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199929382.001.0001

Association for Experiential Education (AEE). (2014). What is experiential education? Retrieved July 31, 2024, from http://www.aee.org/what-is-ee

Baxter Magolda, M., & Taylor, K. (2015). Developing self-authorship in college to navigate emerging adulthood. In J. J. Arnett (Ed.), *The Oxford handbook of emerging adulthood*. Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199795574.013.34

Berger, K. (2008). *The developing person through the lifespan* (7th ed.). Worth Publishers.

Brown, L. R. (1981). *Building a sustainable society*. W. W. Norton & Company.

Browne, L., Garst, B., & Bialeschki, M. (2011). Engaging youth in environmental sustainability: Impact of the Camp 2 Grow program. *Journal of Park and Recreation Administration, 29*(3), 29-43. https://doi.org/10.1002/yd.398

Cameron, M., Forsyth, A., Green, W. A., Lu, H., McGirr, P., Owens, P. E., & Stoltz, R. (2001). Learning through service: The community design studio. *College Teaching, 49*(3), 105-113. https://doi.org/10.1080/87567550109595860

Cargo, M., Grams, G. D., Ottoson, J. M., Ward, P., & Green, L. W. (2003). Empowerment as fostering positive youth development and citizenship. *American Journal of Health Behavior, 27*(S1), S66-S79. https://doi.org/10.5993/AJHB.27.1.s1.7

Cassim, F. (2013). Hands on, hearts on, minds on: Design thinking within an education context. *International Journal of Art & Design Education, 32*(2), 190-202. https://doi.org/10.1111/j.1476-8070.2013.01752.x

Chamorro-Koc, M., & Kurimasuriyar, A. (2020). Insights from studio teaching practices in a creative industries faculty in Australia. *Arts and Humanities in Higher Education, 19*(2), 172-185. https://doi.org/10.1177/1474022218802529

Chaskin, R. J. (2009). Toward a theory of change in community-based practice with youth: A case-study exploration. *Children and Youth Services Review, 31*(10), 1127-1134. https://doi.org/10.1016/j.childyouth.2009.07.012

Chinman, M. J., & Linney, J. A. (1998). Toward a model of adolescent empowerment: Theoretical and empirical evidence. *The Journal of Primary Prevention, 18*, 393-413. https://doi.org/10.1023/A:1022691808354

Cooper, R., & Koo, Y. (2021). Design and social responsibility. In *Design for global challenges and goals* (pp. 38-46). Routledge. https://doi.org/10.4324/9781003099680-5

Cornell Empowerment Group. (1989). Empowerment and family support. *Networking Bulletin, 1*(2), 1-23.

Curtis, K. (2008). *Empowering youth: How to encourage young leaders to do great things*. Search Institute Press.

Damon, W., Menon, J., & Cotton Bronk, K. (2003). The development of purpose during adolescence. *Applied Developmental Science, 7*(3), 119-128. https://doi.org/10.1207/S1532480XADS0703_2

Davis, M. C. (2004). Education by design. *Arts Education Policy Review, 105*(5), 15-22. https://doi.org/10.3200/AEPR.105.5.15-22

Delors, J. (1998). *Learning: The treasure within*. UNESCO.

Dewey, J. (2007). *Experience and education*. Simon and Schuster.

Desai, S., Stahl, I., & Chamorro-Koc, M. (2021). Global design studio: Advancing cross-disciplinary experiential education during the COVID-19 pandemic. *Design and Technology Education, 26*(4), 165-181.

Desmond, B., & Jowitt, A. (2012). Stepping into the unknown: Dialogical experiential learning. *Journal of Management Development, 31*(3), 221-230. https://doi.org/10.1108/02621711211208853

Education Advisory Board (EAB). (2017). *Integrating academic and career development: Academic affairs forum*.

Erikson, E. (1968). *Identity: Youth and crisis* (No. 7). W. W. Norton & Company.

Finn, T., Cennamo, K., Baum, L., & Newbill, P. (2012). Creative collaboration: Trans-disciplinary methods to enhance critical and creative thinking. In *Society for Information Technology & Teacher Education International Conference* (Vol. 2012, pp. 2781-2785).

Fontoura, A. M. (2002). *EdaDe: A educação de crianças e jovens através do design* (Doctoral dissertation, Universidade Federal de Santa Catarina).

Frandsen, M. S., & Petersen, L. P. (2012). From 'troublemakers' to problem solvers: Designing with youths in a disadvantaged neighborhood. In *Proceedings of the 12th Participatory Design Conference: Exploratory Papers, Workshop Descriptions, Industry Cases* (pp. 105-108). ACM. https://doi.org/10.1145/2348144.2348178

Jennings, L. B., Parra-Medina, D. M., Messias, D. K. H., McLoughlin, K., & Williams, T. (2006). Toward a critical social theory of youth empowerment. *Journal of Community Practice, 14*, 31-55. https://doi.org/10.1300/J125v14n01_03

Krauss, S. E., Collura, J., Zeldin, S., Ortega, A., Abdullah, H., & Sulaiman, A. H. (2014). Youth-adult partnership: Exploring contributions to empowerment, agency, and community connections in Malaysian youth programs. *Journal of Youth and Adolescence, 43*, 1550-1562. https://doi.org/10.1007/s10964-013-0027-1

Lakin, R., & Mahoney, A. (2006). Empowering youth to change their world: Identifying key components of a community service program to promote positive development. *Journal of School Psychology, 44*(6), 513-531. https://doi.org/10.1016/j.jsp.2006.06.001

Manzini, E. (2007). Design research for sustainable social innovation. In *Design research now: Essays and selected projects* (pp. 233-245). De Gruyter. https://doi.org/10.1007/978-3-7643-8472-2_14

Maton, K., Seidman, E., & Aber, M. (2011). Empowering settings and voices for social change: An introduction. In *Empowering settings and voices for social change*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780195380576.001.0001

Meroni, A. (2007). *Creative communities: People inventing sustainable ways of living*. Edizioni Polidesign.

Morton, M. H., & Montgomery, P. (2013). Youth empowerment programs for improving adolescents' self-efficacy and self-esteem: A systematic review. *Research on Social Work Practice, 23*(1), 22-33. https://doi.org/10.1177/1049731512459967

Mouchrek, N. (2023). Empowerment & participatory design for career exploration in college. In D. Jones, N. Borekci, V. Clemente, J. Corazzo, N. Lotz, L.-A. Noel (Eds.), *The 7th International Conference for Design Education Researchers* (pp. 89-100). https://doi.org/10.21606/drslxd.2024.089

Mouchrek, N., Baum, L. M., & McNair, L. D. (2016). Student persistence through uncertainty toward successful creative practice. *ASEE Annual Conference & Exposition, New Orleans, Louisiana*. https://doi.org/10.18260/p.25914

Mouchrek, N., & Benson, M. (2023). The theory of integrated empowerment in the transition to adulthood: Concepts and measures. *Frontiers in Sociology*. https://doi.org/10.3389/fsoc.2023.893898

Mouchrek, N., & Krucken, L. (2018). Living labs in co-creation and sustainability as strategies for design education. In C. Storni, K. Leahy, M. McMahon, P. Lloyd, & E. Bohemia (Eds.), *Design as a catalyst for change - DRS International Conference 2018, Limerick, Ireland*. https://doi.org/10.21606/drs.2018.267

Nakkula, M., & Toshalis, E. (2006). *Understanding youth: Adolescent development for educators*. Harvard Education Press.

Noel, L. A., Ruiz, A., Van Amstel, F. M., Udoewa, V., Verma, N., Botchway, N. K., ... & Agrawal, S. (2023). Pluriversal futures for design education. *She Ji: The Journal of Design, Economics, and Innovation, 9*(2), 179-196. https://doi.org/10.1016/j.sheji.2023.04.002

Perrin, J. (2014). Features of engaging and empowering experiential learning programs for college students. *Journal of University Teaching and Learning Practice, 11*(2). https://doi.org/10.53761/1.11.2.2

Rappaport, J. (1981). In praise of paradox: A social policy of empowerment over prevention. *American Journal of Community Psychology, 9*(1), 1-25. https://doi.org/10.1007/BF00896357

Rappaport, J. (1995). Empowerment meets narrative: Listening to stories and creating settings. *American Journal of Community Psychology, 23*(5), 795. https://doi.org/10.1007/BF02506992

Santrock, J. W. (2014). *Adolescence* (16th ed.). McGraw-Hill Education.

Schwartz, S. J. (2016). Turning point for a turning point: Advancing emerging adulthood theory and research. *Emerging Adulthood, 4*(5), 307-317. https://doi.org/10.1177/2167696815624640

Shellman, A. (2014). Empowerment and experiential education: A state of knowledge paper. *Journal of Experiential Education, 37*(1), 18-30. https://doi.org/10.1177/1053825913518896

Spencer, J. (2021). The sustainable development goals. In *Design for global challenges and goals* (pp. 12-25). Routledge. https://doi.org/10.4324/9781003099680-3

Steinberg, L. (2007). *Adolescence* (8th ed.). McGraw Hill Higher Education.

Strait, J., & Sauer, T. (2004). Constructing experiential learning for online courses: The birth of e-service. *Educause Quarterly, 27*(1), 62-65.

United Nations Development Program. (2017). *Sustainable development goals*.

Wong, N. T., Zimmerman, M. A., & Parker, E. A. (2010). A typology of youth participation and empowerment for child and adolescent health promotion. *American Journal of Community Psychology, 46*, 100-114. https://doi.org/10.1007/s10464-010-9330-0

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