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HYPER-LOCALIZING PEDAGOGIES IN DESIGN: THE SITUATING LEARNINGSCAPE AT THE FARM STUDIO

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INTRODUCTION

In densely urbanized Hong Kong, where land resources are premium real estate, and nearly 98% of food is imported, the traditional agricultural sector is marginalized, edging towards a ‘sunset industry’.¹ This scarcity of arable land, compounded by food security challenges, has catalyzed various responses, including experimentations with soil-less food production, precision agriculture, and urban farming.² In this context, the digital-centric, artifact-driven curriculum of design education may be at odds with such emerging food system interventions. Within this context, we conceived the Farm Studio, an off-campus design education program aimed at reinvigorating the ‘food-enabling’³ connections between urban life and rural agriculture. By engaging students in hands-on farm tasks alongside purposeful design work embedded in the village community, the Farm Studio endeavored to foster a new breed of designers—grounded experimenters, local soil nurturers, and globally aware citizens.

Ezio Manzini has underscored the importance of engaging with the “hyper-local”,⁴ a concept that aligns closely with the ethos of our Farm Studio. This emphasis on the hyper-local challenges us to re-evaluate our connections and to consider how localized design interventions can transform values, priorities, and actions.⁵ Such a perspective was the foundation upon which we conceived the Farm Studio, raising essential questions about the implications of rural “hyper-locality” for our design methodologies. Specifically, it led us to consider why a rustic, land-based farm setting provides evolutionary pragmatics and challenges conducive to design education and social innovation.

METHODS

The Farm Studio embarked on an empirical implementation of a work-integrated, service learning program developed by the School of Design at Hong Kong Polytechnic University from the summer of 2022 to the spring 2023.⁶ This program enrolled 20 Bachelor students from diverse design fields, including product, communication, environment, interior, and social design. Seven students leveraged the Farm Studio program to realize their final-year projects. The diverse backgrounds of this student cohort infused the learning dynamics and outcomes of the nine-month-long program.

Setting and Approach

Hosted within the Hong Miu Organic vegetable farm in Tai Kwong Po village, rural Hong Kong, the Farm Studio was part of an eco-social agriculture pilot.⁷ Over three years, the project has explored community-enabling strategies to redirect organic wastes from urban centers to regenerate local soils, bolster food production, enhance village cohesion, and strengthen agricultural capabilities. This initiative has involved Bachelor students and engaged diverse community members, including hotel kitchen staff, ethnic minority mothers, agriculturists, local villagers, and families of a food localization platform.⁸ Notably, the Farm Studio offered students an immersive rural experience distinct from their urban-centric education. This environment facilitated a novel learning model that intertwined practical farm work with conceptual instruction and systemic studio practice, as illustrated in Figure 1. This setting encouraged an apprenticeship-like framework, blending rigorous academic tutoring with practical farming experience. Students organized themselves into small workgroups and committed to weekly, day-long, immersive farm task assignments set out by the farm management. We complemented the farm immersion with tutoring sessions on campus for reflection with the entire cohort. This methodology fostered a holistic learning environment, emphasizing direct exposure to natural elements and the rural setting that was interspersed with intellectual exchange.



Figure 1. At the Farm Studio, design students prototyped farm tools, constructed playful shading structures, organized advocacy showcases, and created a multi-mode wayfinding system as part of their learning journey (photographs by Chin-hei Tom Kam and the authors).

Data Collection and Analysis

Our research into agriculture-integrated design education responds to the lack of empirical work on the subject. In this situation, qualitative research approaches are valuable since they allow insights from datasets with little conceptual structure.⁹ Thus, we collected data through longitudinal participant observation¹⁰ and in-depth, semi-structured interviews with 14 students (4 males, 10 females), focusing on their personal experiences, insights, and reflections related to the Farm Studio program. The collected data, including interview responses and observational field notes, were tabulated, coded, and examined using thematic analysis¹¹ aimed at understanding the pedagogical impacts and learning outcomes of this unique blend of immersive complexity immersion and applied reflexivity on design students.

FINDINGS: LIFE-WIDE ENVIRONMENTAL LEARNING AS RESOURCEFULNESS

Based on interview responses and empirical observation, our Farm Studio students had no prior agricultural experience. Some were even unaware of an agrarian sector existing in Hong Kong. This baseline finding underpins the students' educational journey throughout the program, leading to significant and transformative learning outcomes. Focusing on students' learning experiences, we identify in this paper the pedagogical impacts in six categories: experiential demands, multisensory learning, cooperative creativity, nuanced understanding, collectivizing transformations, and cognitive evaluations—as illustrated in Figure 2.

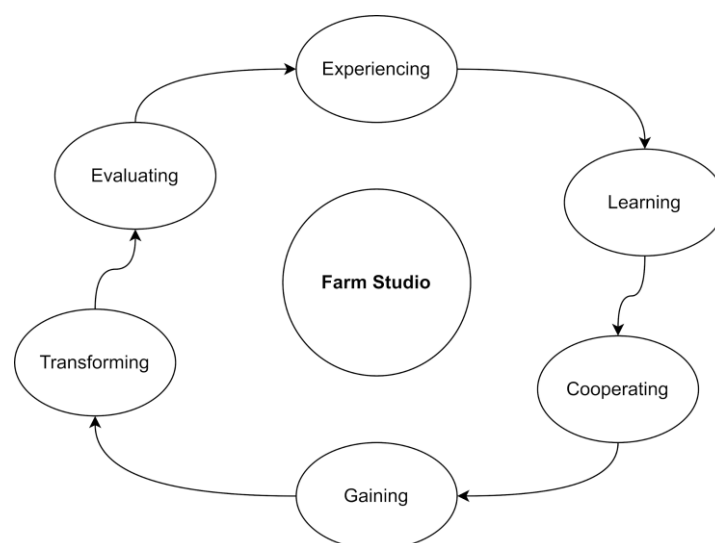


Figure 2. Six dimensions of life-wide learning at the Farm Studio

Experiencing: inspiring yet demanding

The Farm Studio, as described by the students, offered an inspiring, dynamic, and engaging alternative to the conventional indoor design studio. The heightened sociability derived from cooperative work in an outdoor setting, together with the uncertainty associated with farming challenges, has sparked their curiosity. Students' immersion in this setting broadened their perspective on design, adding depth to their understanding and application of design principles in everyday life. Contrary to conventional studios' conceptual focus, the Farm Studio allowed students to iteratively create tangible physical objects, monitor their usage, and receive concrete feedback. The Farm Studio also provided a distinctive opportunity for students to subject themselves to a wide range of farming techniques. This unique hands-on opportunity suspended pre-existing design knowledge and

presented a platform to solve real-world problems through design. The novelty of the experience, initiated by a community planting day as a pivotal induction event. It involved the creation of functional items out of recycled materials, maintain good rapport with villagers, and reinvention of self and group.

The students' perception of the eco-social farmland as "another, discoverable environment" shaped a salient part of their Farm Studio experience. The environment emerged as a recuperating oasis, offering relief from the stress of conventional academic settings promoting a sense of self-assuring tranquility. Its self-in-other enabling nature facilitated conversations among the ethnically diverse farm volunteers who were able to bridge cultural and linguistic divides. This nurturing backdrop promoted simplicity, devoid of competitive pressures often present in indoor design studios. Students could relish the "simple joy" of working together on joint farm tasks dictated by the conditions of the day and, thus, were freed from the need for constant comparison with their peers. Notably, the farm landscape also fostered a form of natural communication. It broke with rigid social norms and minimized social distance, often assimilating into daily life. The intimate and relaxed setting spurred storytelling, allowing for the sharing of personal experiences and narratives, thereby fostering a sense of camaraderie and mutual understanding. The Farm Studio served as an alternate educational platform and a holistic space promoting mental wellbeing, inclusivity, simplicity, and spontaneous communication.

While the Farm Studio offered intensely relational experiences, it also necessitates substantial effort and commitment on the part of students. Not only did the requirement for physical labor contrast vastly with the sedentary urban modes of conventional studios, but also subordinating one's schedule to the timelines of imminent farm tasks demanded from the students ample flexibility and perseverance. They learned to grapple with the disparity between expectations and reality, developing resilience to navigate an environment marked by the inherent uncertainties of farming. Moreover, the limited resources available posed challenges and stirred inventive thinking and resourcefulness. Through this holistic body-mind engagement and transformation, the Farm Studio experience also called on adaptability and determination, made possible by the collective agency of learning together.

Learning: multisensory and multidimensional

At the Farm Studio, students underwent a multifaceted learning journey, highlighted by direct (active) and indirect (passive) experiences, reflective thinking, collaborative activities, temporal suspension, and a unique sensory immersion.

It begins with learning through experiencing as a form of enlivening observation, a passive yet profound process. Here, students engage in a circular journey of life affirmation that extends from planting, growing, preparing, and finally, eating foodstuff, providing a holistic perspective of the larger metabolic meshwork we are all part of. Such direct experience deepened students' comprehension of farming realities, bridging abstract concepts like seasonality or biodiversity with tangible (tasty!) experiences.

Indirect education also relates to the lens of system thinking, where students tackle complex agricultural issues involving multiple stakeholders, including humans and nonhumans. Learning through making here becomes an embodiment of personal sensation, leading to unique reflections and outcomes as students' design interventions derive from and interact with the physical world surrounding them. Each touch, movement, and visual cue becomes part of a narrative that brings forth a multitude of unique reflections and learning outcomes, serving as tangible takeaways from their time at the Farm Studio. This intertwining of making and sensing deepens the students' relationship with their work and provides a richer context for their learning journey.

Active engagement in farming tasks equates to learning by doing, aiding students in acquiring farming techniques while exploring the principles underpinning these practices. The transformation from theoretical knowledge to hands-on practice exemplifies learning through process, enabling mutual understanding and learning among students from disparate disciplines and *modus operandi*. Furthermore, the practical approach provides a deeper understanding of farming tradition in Hong Kong, connecting students with local agricultural ecologies. Samuel articulates this sentiment fittingly: “we’re actually taking from nature.”

The Farm Studio experience also encouraged self-instructing insights. Students reflected on their time investment and changing roles enacted, which revealed previously unnoticed tensions. As Kit stated, “how long should I stay in this [experience] before I know enough about farming?” Belle observed, “[my] role is to bridge society with agriculture... using [my] skills to communicate with people about agriculture.”

Finally, learning through sensing, whether touching soil, the microbially active compost, or wild-roaming critters, creates bodily memories and thus evokes deeper connections with nature. Ricky’s recollection of “moving encounter... like when I touch the frog” illustrates the profundity of these tactile experiences, foregrounding the Farm Studio as a playground for active, experiential learning that could bring about developments in manifold ways.

Cooperating: from diversity to creativity

Cooperation was a significant vector at the Farm Studio, involving the interplay with individuals from diverse socio-demographic backgrounds, disciplines, and professional perspectives. The collective unfamiliarity with farming, particularly the use of agricultural tools, necessitated reliance on external assistance. It presented opportunities to enhance communication skills and learn from a variety of viewpoints. Working alongside farm instructors, peers, and other volunteers, students had to approach problems by balancing various vantage points. One student shared, “although it’s the same project, we will have different perspectives by working on the same thing.” This sentiment of contributing uniqueness combined with overarching purpose resonates with learning as a way of communicating and translating ideas across different knowledge bases.

Such collaborative learning and working experience are markedly different from conventional studio education, where design artifacts often exist as standalone entities aimed at securing design awards. In contrast, at the farm studio, students are encouraged to create physical objects, study their usage, and acquire robust feedback on their many intended and unintended effects. Particularly for product design students, the process of building something from scratch and witnessing its potential to improve farmers’ day-to-day work offered unpredictable revelations, driving them to seek less apparent approaches. The collaborative atmosphere, accentuated by epistemological diversity, not only fostered creative trouble-shooting since they were part of a team but also made students embrace the given situation or challenges posed by the farming environment, putting all involved on a plain-level field.

Gaining: encounter to understand

The Farm Studio experience provided students valuable opportunities for personal growth, introspection, and development based on encounters, sensibilities, and revelations.

First, students were able to have encounters with otherness conducive to self-discovery. Through what some students described as “encountering a new self,” they began to view themselves through a different lens that brings them closer to ethnic minorities and cultural diversity. The unique agency of farming facilitates this introspection, prompting them to reflect on their position also within the larger society.

Second, the experience imbues students with a profound sense of achievement. “Successfully arriving at the farm on time” exemplifies students’ determination to go the extra mile and stick to their commitment. The physical labor also brings a new appreciation for healthiness. But perhaps more significantly, the physical presence helps cultivate new sensibilities. Students learn to empathize with farmers’ situations and biographies, or as a student indicates, “meeting the person behind the vegetable.” They also started paying attention to how to use language – the first tool in design – to avoid disrespect, for example, by designating the walking path prone to stray dogs as “a dog lovers’ route” or food waste as “kitchen scraps.”

Third, the Farm Studio stipulates a stance on design that privileges first-hand exposure. As Ricky reflected, “design is not only about imagining things; you have to immerse yourself into something else to really feel it, to touch it directly.” Such immersive and embedded design made students reconsider their place as team members, and their role as designers was articulated by Mandy: “[I learned] not seeing myself as a designer but as a part of the users themselves.” Moreover, students came to understand the limitations inherent in design and human endeavors, recognizing that accepting them is not a setback but a part of the process. Students gained insight into environmental realities, fostering a deeper appreciation for local culture and the potential for community self-sufficiency vis-à-vis a fast-paced, commercialized world.¹²

Lastly, as mentioned above, students’ validation of cooperation and teamwork became evident. They develop a willingness to contribute as part of the team and keep a good rapport with the group. The Farm Studio, thus, is not merely an academic exercise but a rich, multidimensional experience and action space that shapes students’ perceptions, values, and professional principles.

Transforming: individual to society

The Farm Studio experience showed transformative potential within students based on the process orientation, communal agency, and embodied activation.

Transformativity begins with a newfound appreciation for embarking on a (shared) journey rather than merely rushing singlemindedly to the destination. Students learned to appreciate the subtle yet steady changes occurring in their natural surroundings, immersing themselves in larger-than-self ecologies, primarily conveyed through the cyclic renewal of life. Another profound shift occurs in the students’ mindsets as they transition from mindless consumers to reflective co-producers. For example, students began re-evaluating consumerism and its reliance on food miles, excess packaging, and external food certification. Their perception of local agriculture evolved as they started questioning the appropriateness of indiscriminate vegetable pricing. By understanding the hard work that farmers invest in, they came to understand farming as a fertile ground for societal change.

The transformation extended beyond individual experience, influencing relatives and broader communities. Students shared their newfound appreciation for unpackaged food and plant-to-mouth eating with their families, stating that “[raw crops] taste better than cooked ones,” forging connections across generations. As Belle described, her family started caring about the origin and quality of food. Some students even confessed how their farming experience opened a common ground to relate to their parents’ bygone village life and bridge generational differences.

This transformation was not only mental but physical. Design students, usually glued to desks and screens, were subjected to one morning of farm labor every week. This experience revealed their deficiency in physical exercise and proposed a healthier lifestyle, which could prompt concrete behavioral changes. In addition, the Farm Studio permeated everyday behavior. As Belle admitted, in order to reduce food waste, she opted to order less food, leaving the option for buying more food later if needed. Making time for sensing one’s satiety and realizing when is enough, can extend beyond food consumption towards thoughtful action in many other aspects of life.

The Farm Studio has rendered circular experiences whereby active engagement leads to new knowledge, which stipulates awareness, reflection, and follow-up action. In turn, it can prompt sharing and behavioral transformation, marking the opening of circularities elsewhere.

Evaluating: shifts and alternatives

The Farm Studio has significantly expanded the repertoire of the conventional educational paradigm, presenting a pedagogy of interdependency on multiple levels. It expands the spectrum of evaluation systems, emphasizing creative problem-solving and practical applications over rigid, outcome-based performance scales. It extends to alternative opportunities as students gain direct, hands-on experience in eco-social farming, diversifying their skill sets beyond the routine functioning in conventional design studios. This experience also reshaped students' perspective toward homework, reframing it from a stress-inducing, standalone assignment to a tangible, operational contribution to the Farm Studio's viability. Human relationships, too, undergo a shift as the cooperative work environment fosters mutual respect and a sense of collectiveness among students. These transformative shifts can manifest when students are suspended from regular stress-laden environments focused on singular projects, short-term competition, and outcome orientation. The Farm Studio opened up unprecedented learning arenas grounded in situated challenges and collective agency. It created a learning environment that propelled the reinvention of self and group, conducive to personal growth, cooperation, and even the transformation of students' economic imaginaries.

CONCLUSION

The Farm Studio was the result of a carefully structured and socially embedded facilitation for reshaping design education with a land-based pedagogy of interdependence. By immersing students in a socio-materially rich context with real-world pragmatics, challenges, and opportunities, the program has enabled a self-engaging, tangible learning journey for all learners. The transformative learning outcomes, categorized into six distinct realms, highlight the pedagogy's effectiveness in bolstering experiential affirmation, multisensory learning, cooperative creativity, nuanced sensibilities, societal transformations, and cognitive reflexivity. These outcomes encourage the evolutionary design committed to hyper-local complexity. The Farm Studio persuaded students beyond traditional classroom boundaries in biological, social, and psychological ways to follow through and grow stronger alongside the demands of the ever-evolving living environment. Land-based pedagogy suggests a middle path where human artifice remains firmly grounded in and subordinated to nonhuman ecologies so that future designers are attuned to their specific craft and committed to the locality of their environmental and societal contexts. Our single case study admittedly has limited external validation. Thus, it inspires future research. There is a need for more pedagogic exploration of integrative, experience-driven approaches in other application domains for preparing students to navigate the increasing eco-systemic complexities of our times.

NOTES

- ¹ Markus Wernli, and Kam Fai Chan, “Cosmotech Encounters: Designing with foodwaste, landscapes, and livelihoods,” *Contexts—The Systemic Design Journal* 2 (2023), <https://doi.org/doi:10.58279/v2001>.
- ² Shu-Mei Huang, “Urban Farming as a Transformative Planning Practice: The Contested New Territories in Hong Kong,” *Journal of Planning Education and Research* 41, no. 1 (2021): 32–47, <https://doi.org/doi:10.1177/0739456X18772084>.
- ³ Chiara Tornaghi, “Urban Agriculture in the Food-Disabling City: (Re)defining Urban Food Justice, Reimagining a Politics of Empowerment,” *Antipode* 49, no. 3 (2017): 781–801, <https://doi.org/doi:10.1111/anti.12291>.
- ⁴ Ezio Manzini, *Politics of the Everyday* (London: Bloomsbury, 2019), iv.
- ⁵ Gjoko Muratovski, “In Conversation with Ezio Manzini: Design for Social Innovation—What We’ve Learned So Far,” *She Ji: The Journal of Design, Economics, and Innovation* 9, no. 1 (2023): 76–85, <https://doi.org/doi:10.1016/j.sheji.2022.12.003>.
- ⁶ Markus Wernli and Kam Fai Chan, “Provocation Soil Trust: designing economies inside an interspecies world of feeders,” *Journal of Cultural Economy* 16, no. 4 (2023): 594–603, <https://doi.org/doi:10.1080/17530350.2023.2239823>.
- ⁷ Sara Nicli, Susanne Ursula Elsen, and Armin Bernhard, “Eco-Social Agriculture for Social Transformation and Environmental Sustainability: A Case Study of the UPAS-Project,” *Sustainability (Switzerland)* 12, no. 14 (2020): 5510–5526, <https://doi.org/doi:10.3390/su12145510>.
- ⁸ Markus Wernli and Kam Fai Chan. Are We Repairing Soils and Each Other Here? Exploring Design Cosmotech in the Waste Age. *Design/Repair: Place, Practice & Community*. Cham: Springer Nature (2023): 123–148. doi:10.1007/978-3-031-46862-9_6.
- ⁹ Melissa Graebner, Jeffrey Martin and Philipp Roundy, “Qualitative data: Cooking without a recipe,” *Strategic Organization* 10, no. 3 (2012): 276–284, <https://doi.org/10.1177/1476127012452>.
- ¹⁰ James Spradley, *Participant Observation* (Long Grove: Waveland Press, 2016).
- ¹¹ Victoria Clarke and Virginia Braun, “Thematic analysis,” *The Journal of Positive Psychology* 12, no. 3 (2017): 297–298, <https://doi.org/doi:10.1080/17439760.2016.1262613>.
- ¹² Shaw-wu Jung, “From resistance to co-living: rural activism in contemporary Hong Kong,” *Inter-Asia Cultural Studies* 21, no. 3 (2020): 406–424, <https://doi.org/doi:10.1080/14649373.2020.1796353>.

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