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Unpacking the Pedagogy of Uncertainty in an Online Urban Design Studio

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ABSTRACT

This article unfolds a collective educational journey that while initially faced uncertainties, ultimately received positive feedback from the students in an online urban design studio. During the rampant COVID-19 pandemic, one of the two instructors communicating from overseas, raised initial pedagogical concerns. To remedy these, the two instructors dedicated the first part of the studio to promote self-discovery, and theorizing the urban complexity. Exposure to theory, while less common if not uncommon in design studios, removed the students' initial misgivings. Gaining student confidence boosted their spirit in crafting idiosyncratic interpretations based on personal memories, and paved the way toward assuming agency, and subsequently integrative learning. This technique enabled students to connect discrete structural learning domains to produce more complicated outcomes, and by doing so experienced three states of mind. Melting away initial *doubts* coincided with thematic arrangement. Boosting *confidence* through conceptual connectivity and self-discovery resulted in *ebullience* in designing through purposeful action. Juggling the balance of hope and expectation, this article contributes to the scanty literature on uncertainties faced by both for students and instructors in teaching studios.



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students some leeway to clear the air, remove mixed-feelings, and celebrate *ebullience*. This strategic decision complemented the values of integrative learning, which synthesizes different types of interpretations. This approach guided the students toward self-discovery, where they arranged and connected field observations for a purposeful analysis and design (Leadbeater, 2019).

An Overview of the Literature on Urban Design Pedagogy

Urban design definitions (Madanipour, 1997) vs. its standing as a university discipline, profession or field (Banerjee, 2011; Myers and Banerjee 2005), whether it purports a “science, pseudo-science” (Marshall, 2012) or “proto-science,” (Dovey and Pafka, 2016), and other related debates on distance learning vs. classroom education (Willson 2000), “plan making” vs. “plan evaluation” (Balsas 2012), “creativity” vs. “rationality” (Fadjar, 2017), “problem” vs. “riddle” (Arefi and Triantafillou, 2005) represent its pedagogies challenges. The *plan making* and *plan evaluation* dichotomy, for example, focuses on integrating the students’ design skills into their “knowledge of evaluation methodologies” (Balsas 2012, 480). Thus, as a key aspect of urban designers’ unique professional trait, students utilize knowledge and understanding (*Techne*) first, and then attempt to create (*Poiesis*) or design (Palazzo, 2011).

These intertwined stages of *knowing* and *designing* justify offering studios, where students first explore the unknown in a problem-identification phase Leadbeater (2019) calls “arrangement and connectivity,” and then transmit their local understanding into design by “widening the lens” and “purposeful action.” Studios, thus, enhance both students’ knowledge (plan evaluation), and creative skills (plan making), thereby promoting their power of persuasion. To emphasize agency in this process, instructors can become facilitators, giving students more latitude toward self-discovery by arranging and connecting what they know. As Neuman (2016, 596) notes: “Studio teaching is student-centred, where the student is actively engaged in learning, as opposed to teacher-centred, where the focus is on the teacher’s lectures and classroom presentations.” With this strategic decision, students’ deliverables include more variety and idiosyncrasy. The theory-practice or knowledge-action gap in urban design and planning is not new. Inam (2011, 275) tested Lynch’s good city form theory in a studio at MIT, where the students found the theory “to be far too difficult to translate into practice.” Moudon (1992, 345), however, linked what urban designers (should) know to “the knowledge of the city, as perceived, produced, and lived in.”

Catanese (1984) advises urban designers to avoid “presenting only one alternative” as one of his “seven golden rules.” How design studios “shape” and “develop” students’ “problem-solving” and “communicative abilities” (Tokman and Yamacli, 2007) come into play in synoptic vs. integrative teaching approaches (Kitchen 2006), where the former guides novice students (i.e., undergraduate students) toward specific goals, whereas the latter better fits the needs of the graduate students (Senbel, 2012; Balsas, 2012; Arefi and Al-Douri, 2016; Arefi and Edelman, 2013; Higgins *et al.*, 2009).

Problematizing Uncertainty in an Online Urban Design Studio

This research addresses two contemporary challenges: one imposed by the pandemic resulting in offering a virtual instead of a face-to-face workshop; two, addressing pedagogical uncertainties by bridging the theory-practice divide and initiating integrative learning at the graduate level. This studio incorporated theory into hands-on activities through self-discovery. The student-instructor relationship becomes important in this collective endeavor. Scholars have explored the emotional interface between the students and instructors in the studio pedagogy (Austerlitz, et al., 2002). But the literature has not laid out the uncertainties facing these settings—let alone under extraordinary conditions of a pandemic.

To unpack the uncertainties observed in an online urban design workshop in the Fall semester 2020 at the Jundi-Shapur University of Technology in Dezful, Iran, the instructors and students dealt with uncertainty as “the mixture of hope and expectation” (Fiedmann and Hudson, 1974) in three consecutive phases. ‘Low hope and low expectation’ characterize the first phase where the students expressed reasonable concerns about their progress. The instructors too felt uncertain about their expectations of the students’ output. Honing the students’ theoretical knowledge on the cognitive, behavioral, physical, interpretive, and social attributes of the projects helped boost their confidence in the second phase. Characterized with ‘moderate hope and moderate expectation’, the second phase made the instructors and students cautiously optimistic. Finally, the ‘high hope and high expectation’ phase describes the students’ upbeat personal experiences during the fieldwork, where they tied their loose ends with rigor and confidence. This phase eventually caused for celebration for both the students, and instructors.

Students and the two instructors had every reason to believe that this course would ultimately fail. For one thing, due to extraneous circumstances including the pandemic, unpredictability prevailed. For another, students took a class with a lead instructor, who taught online from overseas with a 9-hour time difference. On the other hand, while the instructors had no previous online teaching experience—especially studios/workshops—they set up a fairly flexible syllabus that probably raised more questions than answers at the outset. Nonetheless, the students’ final reports and class evaluations show a strong pedagogical promise.

Methods

Combining knowledge with real-world applications, experiential learning that draws from evidence-based practices (Kiener, et al., 2015) promotes the hands-on nature of urban design studios. The data collected in this research include students’ final reports, six posters and online presentations, instructors’ observations, and personal notes. The students’ final reports comprised executive summaries of their fieldwork, analysis, and design process in addition to assessing the relevancy of self-discovery in urban design; the pros and cons of the episodes’ potential overlaps; any significant difference detected

between this and their previous studio experiences; and any potential challenges faced during fieldwork. The instructors ultimately used content analysis of the project reports, and class observations. Coding the final reports revealed three stages of uncertainties the instructors and students initially faced, but ultimately, overcame and coped.

The instructors used the “*five episodes of urban discovery*” (Arefi and Nazanin, 2020) approach one of whom had previously taught elsewhere. Unlike that introductory undergraduate planning course, this studio consisted of five females and four male students with undergraduate degrees in architecture. While synoptic learning better fits novice students than the latter group, experienced students benefit from using theory as a precursor to critical thinking. Integrative learning, therefore, encourages advanced graduate students to arrange and connect by weaving the seemingly disjointed areas of expertise into coherent designs. These five episodes, thus, helped avoid “the single-minded devotion designers have for design” (Kreditor, 1990, p.161). By and large, this attitude gave students more leeway with instructors acting as “guides on the side” rather than “sages on the stage” (King, 2013).

Per curriculum, Urban Design Workshop III in this program encourages teamwork. Tucker and Reynolds (2006, p.53) believe “students perform better in group design projects than in individual design projects.” As opposed to individuals, teams can also manage large-scale projects. Stemming rightly from the necessities of the real-world, where planners and designers break large scale projects into manageable components, this original setup ensured that students both engage in teamwork, and also divvy up group tasks like consulting firms.

Nonetheless, the pandemic imposed restrictions on the original studio setup. Mimicking the real-world urban design practice, while important, could not materialize, and forced students work from home during the lockdown. Despite such restrictions, the students met the prescribed curricular criteria in an online platform (Rooij, et al., 2020). These extreme conditions seemed opportune, however, for revisiting the business-as-usual in most design-oriented disciplines like urban design and landscape architecture (ibid.). The following sections discuss the five episodes of urban discovery (*knowing*) followed by analysis and *design* stages provisioned in this studio.

Walking

Students’ poster presentations identified three distinct *walking* patterns (Bridge 2004): individual and collective (social) behavior, and spatial affordances. Rather than collective behavioral patterns, some students drew attention to whether individuals walked slow, fast, or purposeful, and revealed how they struggled with local obstacles, i.e., negotiating sidewalks with motorcyclists, bikers, or avoiding beggars. Others discerned collective walking behaviors like group safety, security, inclusiveness (i.e., unsafe space for women), or lack thereof along major traffic arteries. Yet, those who focused on spatial affordances were attracted by their instincts believing that people’s walking patterns reflected local spatial shortcomings, i.e., sidewalks, or lack of a sense of spatial enclosure.

Observing

Observing tangible physical “clues” and “cues” (Jacobs, 1985) signaled growth, decline or locational significance. The students understood growth and decline in terms of land use changes¹, or street changes² and urban renewal³ as its distinct manifestations. Against the backdrop of spatial change, they then observed pedestrian safety concerns as a result of new auto-related (i.e., oil change) shops or stores opened along commercial strips. These shops created unsafe pedestrian environments after hours. Street network problems and poor-quality street furniture emerged as additional consequences of the economic decline.

Encountering

Encountering (Stevens, 2007) created three types of social interactions: between people and cars or cyclists and/or information overload at intersections. Unlike the previous two more straightforward themes, students’ findings on this theme showed more diversity. To some, intersections were sites of making quick decisions. Waiting about a minute for the traffic light to turn green, people decide whether or how they cross the street, and whether one minute seems sufficient to read billboards or mingle with others.⁴ Yet, some students viewed encountering as an opportunity to engage with loiterers and beggars, or the information overload on billboards. To other students, intersections have become sites or spaces where pedestrians, cars, or cyclists negotiate unsafe shared space.

Perceiving

Perceiving (Raban, 1974) constituted three patterns: physical, personal or between the two preferences. Some students reverted back to their childhood memories and personal stories and described untold accounts of their locales while some others used their neighborhoods’ main spatial attributes. Lynch’s (1960) five elements of urban form helped students to verbally and graphically describe their areas. Yet, other students who used physical accounts of their study area realized how inappropriate green space or insufficient signage exacerbate economic and physical decline. The third group fit between these two patterns. One student indicated the role of new developments in her case study while also combining that observation with her own personal memories of that area predicting a potentially thriving future.

Interpreting

Finally, *interpreting* (Clay, 1973) broadly implies public perception of the city. Interpretation comprises broad-brush themes, i.e., “breaks,” “rumors and gossips” Clay calls “epitome districts.” The students applied these concepts to their sites as they saw fit. Two students referred to spatial breaks separating the vernacular urban fabric (i.e., the bazaar) and new developments. One of them detailed how spatial breaks between the old

and new developments create visual and social breaks. Unlike the old fabric, those walking through the new fabric see people treat each other as strangers outside a convivial social enclave that characterizes the older one. Two students focused on rumors. Despite the prevalent public perception about his case study as an 'affluent', high-end place that attracts beggars and loiterers, one student classified it as 'middle-income'. Another student characterized his area as having a bad reputation as well due to incompatible land uses (i.e., a barber shop next to an oil change auto-shop).

Results

Unpacking Uncertainty

Unraveling the hope-expectation interface captures the essence of the initial uncertainty in this studio. This research explores three stages of these collective uncertainties. Hope and expectation followed similar patterns for students and instructors, where low hope created low expectation, and vice versa. These consistently low moderate or high patterns created certain students'-instructors' attitudes. Thus, when the students experienced low spirits or hope, the instructors, too, lowered their expectations. Conversely, however, the students' more confidence, and hope raised the bar for the instructors as well.

Doubt: Low Hope, Low Expectation

With little hope and expectation for success, doubt begets uncertainty. The mental and emotional stress created a precarious situation in the initial stage of this studio both for students and instructors. The COVID-19 pandemic not only imposed emotional stress but increased uncertainties as if successful completion was wishful thinking. Furthermore, the mandated protocols put more pressure on the students forcing them to work individually rather than in teams per curriculum.

To reduce uncertainties, the instructors guided the students to pursue self-discovery rather than starting out with a business-as-usual top-down teaching. This new feature, initially backfired and made students somewhat uncomfortable because they had never started out their previous studios with strong doses of theory. This is why with the students' feeling of despair, the instructors, in turn, lowered their expectations.

A cursory glance at the students' reports confirms their initial low morale and low hope. Words and phrases like "superficiality," "confusion," "complexity," "the common goods," "difficulties," "crisis," "business-as-usual assumptions," "futility," "more questions than answers," "hindrances in conducting fieldwork," "utopian thinking," and "cut-and-dried top-down planning techniques" characterize collective uncertainties felt during the first couple of weeks of this studio. The students categorically questioned their previous top-down approaches and some felt that the methods mandated by the instructors (clients) formulated in other projects, may not have realistically solved the community problems

they originally set out to solve. They described those techniques as flat-out “superficial,” “irrelevant,” or “cut-and-dried” for this studio. But why irrelevant or superficial? Some viewed the typical top-down design apparatus failing to effectively engage the community input into the design scenarios. These thoughts created more confusion, and a sense of loss in a new setting that placed emphasis on design approaches that reflected cognitive, behavioral, social, spatial, or interpretive characteristics of target communities.

Some felt those tried and tested approaches posed more questions than answers or created more problems for their target communities. Others felt that their previous design techniques based primarily on physical, aesthetic sensitivities reflected utopian thinking rather than projecting realistic solutions. Yet others, saw serious roadblocks ahead, i.e., the COVID-19 pandemic, working individually rather than in groups, or online rather than face-to-face before finding effective alternatives. These concurrent problems and disappointments overwhelmed the students who sought answers to their inquiries. The instructors too, had their own doubts about the students’ performance due to the online nature of the studio and the pandemic. Stressing on any type of top-down mandate on the part of the instructors could have further backfired, nipping the studio’s chance of success in the bud.

Against this backdrop of low hope and low expectation, the first few weeks played pivotal roles in whether or not this new approach could gain students’ trust or end as a potentially boring workshop.

One student expressed his doubts about the course in his initial remark:

“After previous exposures to design studios, asking us to observe people’s walking behavior sounded weird; observing what? So what? To what end? What would any of this have to do with design? We always examined documents crafted by experts as our starting point. Now, the instructors are asking us to do something that seems useless. I for one had many questions, some of which I asked in the first few sessions. However, answers created more questions to a point where I started doubting the utility of this studio.”

To avoid downplaying the students’ initial misgivings about their progress, the instructors guided them step by step. The students acknowledged, in their off-the-cuff remarks, the comparatively more predictable format of their previous workshops with ‘synoptic’ tasks provisioned by instructors. This stage produced diverse outcomes requiring time to think and ‘arrange’ observations. Some students followed the formal definitions of the discussed episodes. Others conceptualized themes more dynamically, and shared their interpretations that, at times, differed from the discussions covered in the readings. This latter group found these additional challenges more interesting and commensurate with their graduate standing.

The overarching themes detected two distinct walking patterns: optional vs. forced, and orderly vs. unorganized. Other students refrained from classifying people’s walking patterns, and simply mapped their origin-destination paths. Similar observations apply to the other four themes (observing, perceiving, interpreting, and encountering) too.

Confidence: Moderate Hope, Moderate Expectation

Cautious optimism eventually increased hope and expectation and lowered the uncertainties; but why? The instructors' decision on inducing self-discovery and giving students more latitude paid off. Unlike the students' previous experiences, the instructors had briefed them on the role of self-discovery rather than rehashing previous experiences. This initial approach had not immediately sunk in, and needed more time to make sense. Once the students familiarized themselves with each episode, they realized that unlike their previous studios, they needed to spend more time on fieldwork and reflection. While fieldwork plays big roles in urban design/planning studios, this approach required regular and multiple site visitations. Fieldwork and data collection in typical urban design studios, lead to analysis, and problem-solving. This studio, however, relied on multiple visitations not solely as the first phase toward problem-solving, but as an ongoing stage of deep thinking and relevance.

Every week the students experimented one episode and performed specific tasks from observing people's walking habits or collecting tangible cues that described the existing conditions of their sites to local cultural rumors and fables. The more the students engaged in their assigned readings, the more they appreciated the missing links in the problem-solution nexus. Hence, they remained cautiously optimistic compared to their initial stage of despair and disillusionment. Phrases like "looking for more details during fieldwork," "the attractiveness of diversity and freedom in interpretation," "honing personal assessment skills," "flexibility and comprehensiveness of analytical techniques," and "unraveling the complexity" characterize hope and confidence after a few bumpy weeks. The students ultimately noted that multiple site visits both helped them to know their sites better and discern different patterns from how people walked around to how they reacted at the intersections, or even fathom reasons behind certain oddities in case they aroused curiosities.

One student wondered why one side of the street attracted more people compared to the other side. Spending more time than expected in previous design studios, another student wondered why people refused to walk on certain segments of the sidewalk, and instead, deliberately walked on street edges alongside the vehicles. These small intermittent steps in multiple site visits helped them get a better handle on problem definition, and effective design solutions.

After presenting the five episodes (**Figure 2**), the students analyzed their data and identified areas' strengths, weaknesses, opportunities and threats known as the SWOT technique. This stage showed how they drew out their points by cross-referencing them from the five episodes, and hence, "widened" their lens (Leadbeatter, 2019). Thus, the students integrated their previous takeaways. The SWOT provided both graphic and verbal variations. Adopting an integrative approach helped weaving the analyses of their study areas into coherent entities.

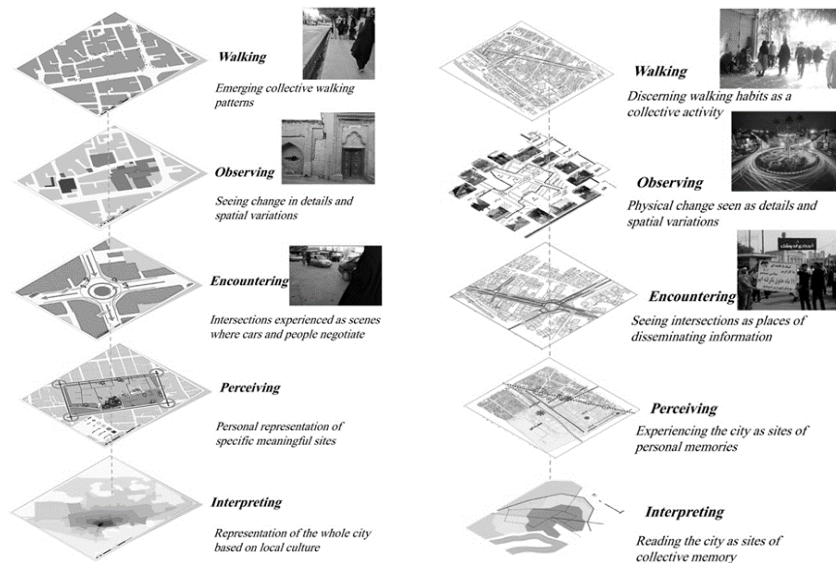


Figure 2: Applications of the five episodes in students' fieldwork

Some students singled out points from each episode while others paired multiple observations. A few students presented their pairs as weighted variables that selectively ranked prioritized conditions. For example, two students cross-referenced points from 'observing' and 'perceiving' under local strengths, or from 'interpreting' and 'observing' under opportunities. Other students mainly presented volumetric analyses based on minimum competencies of an average urban designer who might know the five episodes.

As opposed to the pre-design analyses they knew from previous studios, the students used the SWOT analysis to identify the hot spots, nodes, or places where design intervention made sense. These decisions reflected idiosyncratic judgments for effective design and provided some flexibility through iterations rather than feeling spoon-fed by the instructors. The downside though was that they thought the instructors had their own right or wrong answers. It took a whole session for the students to freely express their thoughts. Since the *techne* stage covered the behavioral, cultural, physical, social and cognitive aspects of the built environment, the students felt unambiguous about their contextual familiarity. This approach helped them feel more secure, and with their high technical skills (*poiesis*), craft realistic projects.

The instructors detected minor drawbacks that while unexpected, in hindsight, seemed significant enough to avoid in future studios. For example, most students believed that the walking and observing episodes overlapped. While overlaps caused confusion, they surprisingly offered new design opportunities. Some students found the overlaps helpful in triangulating findings and honing their discursive skills.

For example, one student finds conceptual overlaps in the understanding stage an advantage:

“The detected changes in the observing and perceiving layers [of urban discovery] allowed me to probe the changes in both macro and micro scales, thereby, identifying their potential relationships. Similarly, the overlaps between ‘observing’ and ‘interpreting’ enabled me to examine the effectiveness of people’s urban image on identifying possible zones for design interventions.”

Upon plan evaluation or analysis leading to assessing the five observations, the students began plan making (design scenarios). The instructors asked for linking designs to the evaluation stage. The students realized that their projects relied as much on their artistic abilities as on linkages to the five episodes. Thus, the instructors touted plan making as a stage that tied the two previous stages. It is one thing to plan based on individual creativity, and another to stress scenario building as a conduit for creating plans while still analyzing the five episodes.

Thinking about urban design this way sounded new to students with architecture backgrounds. Architects, typically, think about design as a mysterious process of personal talents rather than methodical analysis. The instructors asked the students to propose scenarios through cumulative readings of the five episodes. The students merged their key urban discovery takeaways, outlined the design vignettes, and widened their lenses by carrying out composite readings of their analyses in two scenarios. This approach instilled fresh perspectives toward design and plan making. The students carried out this stage as advised and produced interesting outcomes.

In some cases, scenario building reflected prioritizing one or two layers of discovery. Giving students some latitude, integrative learning occurred by linking observation to analysis and finally plan making. Most students set design goals directly from the SWOT analysis and transposed the emergent macro- and micro-objectives into two or three scenarios. Those who opted for this approach explicitly pinpointed each goal to their cumulative episodes of urban discovery. However, not all students followed the same method.

One student paired the SWOT categories, i.e., ‘strengths’ with ‘opportunities’, ‘opportunities’ with ‘weaknesses’, ‘strengths’ with ‘threats’, and/or ‘weaknesses’ with ‘threats’ respectively. He then weighted them, crafted 19 integrated criteria, and grouped them in a descending order only four of which ranked the highest scores: energizing the historic urban fabric by compatible land uses, connectivity between the bazaar strip and the main drag for pedestrians’ and bikers’ access, revitalizing or paying attention to urban furniture, more durable pavement materials, and finally, preservation of the historic urban fabric. He then derived two scenarios based on these evaluative criteria, and addressed those goals separately in two scenarios.

Another student synthesized SWOT analysis by pairing design/intervention objectives, i.e., ‘strengths’ with ‘opportunities’ or ‘weaknesses’ with ‘opportunities’. He then derived specific goals from each pair, set overcoming vulnerabilities (i.e., preventing new

developments in the historic fabric or restrictive building heights inside the historic zones) and optimized appropriate construction materials for the historic zone by pairing strengths and threats. This approach helped him to better explain his design objectives. Revealing the power of integrative learning, these methods show urban design as being more than just an icing on the cake.

Ebullience: High Hope, High Expectation

The students' steady path towards success boosted their self-confidence and elevated the instructors' expectations. Phrases including "gaining a deeper sense of the built environment," "realistic design scenarios," "detailed and holistic analysis of the five episodes," "understanding interdisciplinarity," "a logical design process," "conceptual convergence of the five episodes," "user-compliant design," and "connecting the dots in the design process" represent the students' emotional and technical transformations resulting in ebullience.

Feeling good about their work, the students reflected-in-action by comparing this with their previous studios, and collectively underlined the significant lessons learned. Spending enough time to digest the readings along with multiple site observations proved effective where initial doubts faded away.

The student who made previous negative remarks acknowledged in his final report that:

"My initial doubts melted away during weekly class Qs and As. I also realized why observing people's walking patterns mattered. Those concerns helped me along the way—especially after reading the assigned book chapters—to understand how people's behaviors in the public realm affect urban design. Finding myself at a crossroad, this new approach was a wake-up call questioning six years of following similar methods, and convincing me that I was a copycat designer at best."

Most students had similar experiences and shared personal interpretations. Connecting the five episodes clearly emerged at the end of their weekly presentations of fieldwork on all episodes. For example, two students expressed doubts about their initial perceptions, and changed their minds after multiple site visits.

One of them noticed details she had glossed over in her overall understanding of people's walking patterns, and admitted that:

"Compared to our previous design approaches, this process has broader applicability, bringing up a series of broad and detailed points. More specifically, depending on each person, defining, understanding and operationalizing the five episodes made this journey more attractive, and quite different from past design methods."

A few students did not change their minds even after multiple site visits and collected more information about their sites. Some stressed the importance of a "logical design process" from problem definition to analysis, and design as opposed to previous studios

that mainly revolved around physicality and spatial significance. As a holistic approach, this wake-up call guided them toward “interdisciplinarity” integrating the spatial, social, cognitive, and behavioral attributes of the city or a “user-compliant design process.” Others said the same thing by “connecting the dots” and “gaining a deeper sense of the built environment.”

While the city operates as a natural learning laboratory for urban design students, keeping them motivated about personal observations, venturing out in the city—especially during a global pandemic proved challenging. Students repeatedly showed dissatisfaction about rehashing the things they already knew. Capitalizing on self-discovery, they experienced a transformative learning process that tangibly affected their learning outcomes. Those who viewed the city as a living organism, and their main source of inspiration, found new ways of thinking out of the box both by widening their lenses, and embarking upon purposeful design.

Self-discovery motivated students in dynamic atmospheres of learning by doing, “storytelling” (Sandercock, 2003), and “self-reflection” (Schön, 1983). As such, students connected the dots they had learned before, and experienced personal transformation (Leadbeatter, 2019). In this workshop, though, once the students realized they have (“progressive”) agency⁵ (Annala *et al.*, 2021) to apply, analyze and synthesize their findings, they spent more time than expected on fieldwork. They were not asked to use official masterplans as the only source for contextualizing their plans. Despite the COVID-19 pandemic precautions, the students willingly spent—in some cases five to six hours a day—observing and engaging with the five episodes.

Female students spent equal if not more time compared to male students in the field despite the expected cultural limitations. Compared to men, women faced more difficulties spending time in the public realm to take notes and photos, and willingly devoted afternoon and evening hours to fieldwork following their own instincts. Some of them stated with details whether they faced personal problems observing community engagement in the public space.

Those who expectedly faced cultural limitations in the public realm, acknowledged the ways around those challenges. One student took copious notes of her experience. Admitting the difficulties in taking photos of people’s walking patterns, she asked her sister to join and walk behind her. Whenever she wanted to take a photo, she asked her sister to pose, and then take the shot. Another student too reported that “her photography caused people to behave belligerently; some pouting their lips. Sometimes when frowned upon, we had to explain why we were taking pictures.”

This voluntary but enthusiastic engagement with the workshop, arose in part, because of using self-discovery as opposed to regurgitating past experiences. All students acknowledged that unlike previous workshops, where they were spoon-fed by top-down directives and no autonomy, enjoyed the reflexive “personal transformation” (Leadbeatter, 2019) experienced in this workshop.

Discussion

The students unanimously confirmed that the five episodes changed their preconceived notions of fieldwork before design. They also hinted at routinely observing the land use make-up, building conditions, construction materials, and development density in previous projects. This mainstream design process rooted in professional canons ensures students' commitments to incorporating local needs into design thinking. However, unlike those projects, students spent more time observing people's positive or negative interactions with the built environment.

To sum up, using the five episodes of urban discovery, the students reported both the upsides and downsides of this studio and challenged top-down thinking dominating the praxis. Experiencing interdisciplinarity in design thinking, they weaved the five layers of urban discovery, and triangulated overlaps between observing and walking, walking and encountering, or perceiving and interpreting before proposing design scenarios. They viewed the pandemic restrictions (i.e., working individually), occasional Internet connection problems, lack of support from local authorities for obtaining data, pushbacks from people while doing fieldwork, and not engaging them in their data collection process as important downsides.

With these upsides and downsides, the students' enthusiasm promises future utility in incorporating theory into studio content. Surprisingly, instead of receiving pushbacks, the instructors received positive feedback about tying theory and design. Contrary to expected attitudes typically observed in studios that begin designing as quickly as possible, these students not only did not shy away from theorizing but acknowledged its strengths in design thinking. One student asserted that:

while design is important, so are those for whom we design. Some argue that we ultimately pave a sidewalk, or change land use based on per capita square footage and what not; so, why bother engage in tedious observations or rigorous analyses? I say that while all this might be true, we want to know what types of land uses might backfire in a project. We thoroughly detect the areas where pedestrians prefer to use or sit and why(?) That is why I can say with certainty that these five episodes have totally changed my perceptions toward public attitudes and the built environment.

These remarks reassure scholars wanting to reduce the theory vs. practice gap facing urban design both as a profession and a discipline. The sense of joy that sums up the students' final remarks, relayed a similar sentiment to their instructors too, hoping to share it with others.

Conclusion

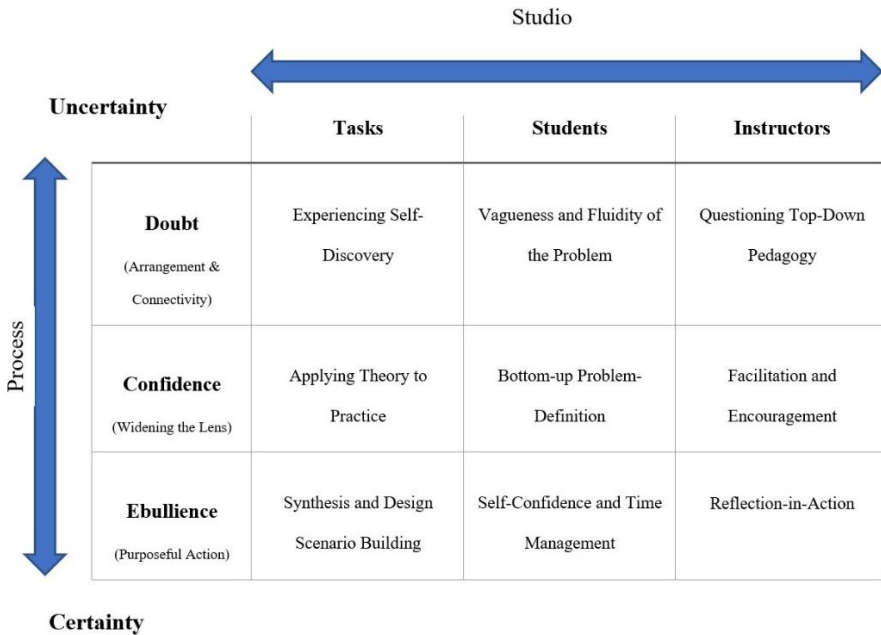


Figure 4: The evolving breakdown of uncertainty to certainty as experienced by students and instructors

Unlike studios that focus on fieldwork taking inventories of land use, building conditions, open/green or public spaces, and street network, the students first broadened their theoretical understandings. This setup operationalized ‘integrative’ learning where students connect the dots they knew before. Students (**Figure 4**) evaluate (*connectivity*) and analyze (*widening the lens*) their own preferences, and ultimately, design (*purposeful action*). These three themes unravel the students’ states of mind that operationalize integrative learning despite the initial hurdles. While the odds for success seemed significantly lower than failure, the students’ initial doubts gradually subsided, boosted their self-confidence, thereby celebrating their success by putting more efforts into their projects. ■

Notes:

¹ i.e., residential to commercial or office buildings or tearing down old buildings and building parking structures or parking spaces as well as seeing new boarded up or vacant buildings.

² i.e., street widening.

³ i.e., new buildings replacing dilapidated ones.

⁴ i.e., the lives lost during the Iran-Iraq war of the 1980s, or religious rituals taking place at or around intersections.

⁵ The type of agency where more than other priorities, academics focus on “student learning & teaching in general.”

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