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The Case for Inclusion of International Planning Studios in Contemporary Urban Planning Pedagogy

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Abstract: The pedagogy of urban planning education should include an understanding of the growth and complexity of city development issues, especially the best ways to respond to dealing with current and future challenges. At the same time, the nature of the city that urban planners engage with continues to change, with one major challenge being the increasing growth of informal settlements. This paper asserts that an essential component of contemporary urban planning pedagogy is the inclusion of international planning studios and, importantly, studios which focus on major urban social and civic planning issues, such as informal settlements. The latter have been acknowledged as a major sustainable development challenge and are incorporated into the global Sustainable Development Goals (SDGs). To support this assertion, the paper outlines the case for international planning studios, reviews the literature on studios—including planning and international studios—and discusses the benefits and challenges of organizing an international studio grounded on embracing global development issues and learning objectives. This paper uses a case study of an international postgraduate Master’s degree planning studio, set within an informal settlement (kampung) in Indonesia, held annually since 2015 to illustrate the above. The latter studio is in collaboration between the University of Sydney and the Institute of Technology Bandung (ITB) University, Indonesia. The paper concludes with a summation for the case for international studios in contemporary urban planning pedagogy, including a set of principles that can be used by planning programs when designing an international planning studio.

Keywords: studio; planning studio; informal settlement; sustainable development; global learning

1. Introduction

Education facilitates our ability to live, work, and learn effectively and ethically in an increasingly interconnected world [1]. Urban planning academics, their knowledge pools, and the institutional settings they work within all play a crucial role in this process. This includes the transference of knowledge on cities to students and the wider community. How knowledge on city planning—including stakeholders and the processes of city making—is understood, constructed, and conveyed reflects how academics and practitioners understand the workings of the city in theory and practice [2]. Over the last 50 years, planning has changed in its complexity, with urban planners increasingly required to address a greater range of issues and problems, given the shifting demands and preferences of urban planning [3]. At a global level, a key feature of contemporary cities is the increasing trajectory of the growth in informal settlements, with approximately 25% of the world’s population in 2015 living in informal settlements, including slums. This equates to approximately one billion dwellers, and by 2030, this population is expected to double. Of these one billion persons, some 881 million residents in 2015 resided in informal settlements in developing countries, compared to 689 and 791 million persons in 1990 and 2000, respectively. Approximately 50% of the world’s informal settlement and slum population are in the Asia-Pacific region, with the region being home to the world’s largest

concentrations of urban slum populations and people living below the poverty line. Collectively, these settlements pose a major challenge for the attainment of sustainable development [4].

In the Asia-Pacific region, the provision of adequate accessible and affordable housing, supported by basic services and infrastructure, is of increasing concern, as many informal settlements located in highly valued inner-city areas have become prime candidates for private sector and government middle-class development [4]. The dynamics of their form, structure, and community capital as produced through local rules, networks, institutions, governance arrangements, and traditional and local knowledge are either ignored and or not well understood, as new redevelopment schemes are designed and implemented [5]. The unique local circumstances which make these settlements ‘home’ to their residents are being eroded and devalued. Despite such situations existing across diverse local geographical contexts, histories, demographics, cultures, and governance arrangements in the Asia Pacific region, a “one size fits all” spatial model of city development is too often applied in the name of attaining sustainable development [6].

In terms of learning, it is argued that mainstream planning curriculum fails to expose students to the realities of development that this mode of urbanization produces. Aside from the above, this also includes the persistence of disadvantaged communities characterized by issues relating to insecure land tenure, lack of potable water, inadequate sanitation and drainage, environmental degradation, overcrowding, and messy land boundaries defining plots and the public spaces. Major human rights issues and spatial inequities constraining sustainable development are strongly visible in informal settlements, including pressure by developers to secure informal settlements located on highly valuable inner-city land (see Figure 1).



Figure 1. A major feature of informal settlements in South-East Asia is their location in highly sought-after inner-city locations seen as ripe for redevelopment. This image shows a swathe of inner-city informal settlements (kampungs) adjoining the major Cikapundung River in Indonesia’s third largest city, Bandung. Source: Author.

As urban growth occurs in varying contexts, urban planning education should parallel an understanding of the growth and complexity of the city, including effective ways to respond to

dealing with current and future issues. It should also articulate what the role of planning is and what planning should be in terms of its contribution to sustainable development. As early as the 1980s, it was observed that Western planning education was not applicable or immediately transferrable to countries in the Global South [7]. To express this in another way, cities in developing countries have different development paths, varied urban development issues, ethnic complexity, and vexed governance arrangements. Planning models applied from advanced economies may not be appropriate or sustainable and should not be imposed on new contexts without first understanding planning “as it is” practiced. In studio pedagogy, defined here as the “the strategy of instruction, the process of teaching, the style of instruction” [8], the planning studio has been well acknowledged as a key tool for student-centered problem-based learning. Students typically work in small collaborative groups with multiple learning and teaching approaches [3]. However, there is minimal attention in the literature concerning international planning studios that expose students to understanding wider regional and global city contexts, as well as address pressing social and civic planning and sustainable development issues [9].

If one key objective of urban planning is to seek inclusive and sustainable cities, then providing knowledge to students on affordable housing, sanitation, and water as basic human rights for all becomes pivotal in planning and design education [10]. The broader debate on sustainable development continues to confront major social, moral, and professional issues, increasingly those relating to spatial justice and creating more equal cities in terms of affordable land and housing, basic infrastructure, employment, and green space concurrent with recognition of local governance, knowledge, and social capital. The global importance of these urban challenges is recognized by their inclusion in the New Urban Agenda, as well as the targets of the Sustainable Development Goals (SDGs), especially the urban SDG 11 which aims to “make cities and human settlements inclusive, safe, resilient and sustainable” [11].

In Australia, urban planning education is available in 24 universities, and collectively they offer over 50 urban planning programs endorsed under the accreditation framework of the Planning Institute of Australia (PIA) [12]. As students increasingly come from both developed and developing countries to study higher education, there are strong arguments for including international planning studios that focus on major global planning and sustainable development issues, such as informal settlements, as part of the planning pedagogy of planning programs [2]. The evidence for upscaling international learning and being globally engaged to meet student needs is supported by the latest research from the Australian Government’s Department of Education and Training [13], which indicates a continuing upward trajectory in students from Australian Universities engaging in an overseas program. Based on a survey of 34 universities, there has been an increase of approximately 18% in students undertaking a study abroad experience since 2013, with China being the most popular destination. Some 49,263 study experiences, for example, were undertaken in 2017; a 12% increase of programs run by 35 universities in 2016. Importantly, the research shows that short-term overseas mobility experiences of less than one semester have increased in popularity since 2011 when compared to semester or longer international experiences. The most popular types of study experiences were student exchange programs (36%) as led by faculty or school led programs (24%), with some 60% of overseas experiences undertaken by domestic undergraduates, 11% by international undergraduates, and the remainder by postgraduate students [13].

With increasing student demand for international learning experiences, it is argued that providing planning students the opportunity to be exposed to different planning contexts and development nuances grounded in local realities, where they can apply and acquire new knowledge, skills, and be culturally competent in the Asia-Pacific region, is critical. This is also important if the domain of planning to which international students will return for employment contains informal settlements, thus addressing relevant planning like sustainable development challenges. Relevant curricula, clarifying choice of careers, and employability are major concerns of universities, and planning degrees should aim to educate students to be employable in varying development settings as ‘work ready

planners'. These are planners who are able to adapt and effectively respond to the myriad of domestic and international work settings in which urban planning occurs [12]. The cultural diversity of student cohorts is also changing, with the student cohort in postgraduate planning degrees in Australia increasingly characterized by international students. In this setting, the studio should embrace the diversity of cultural and ethnic backgrounds, their socio-cultural capital often underrecognized in its contribution to the learning process [1]. Incorporating such approaches in studio design will enhance the student learning experience, workplace readiness, and the application of core planning competencies and skills in differing cities and sustainable development settings, all of which students will need when eventually working as professional urban planners, urban designers, and architects.

Within this context, this paper seeks to contribute to the scholarship of teaching and learning in the domain of international planning studio pedagogy by advocating the benefits and challenges of undertaking a well-structured offshore planning studio. International planning studios can support students engaging in global learning, knowledge, and skill creation by focusing on major planning and sustainable development challenges in developing countries. The paper achieves this by reviewing the literature and reflecting on the format and structure of a studio case study anchored in achieving global learning for students, and which purposefully focuses on a major global social and civic planning and the SDG 11 target, specifically, informal settlements.

The case study investigated is an international postgraduate Master's urban planning and design studio that has been delivered annually since 2015 as a collaboration between the University of Sydney and the Institute of Technology Bandung (ITB) University, Indonesia. Utilization of case studies has been well argued as a key tool for unpacking insights and connections into complex social phenomena and real-life situations [14]. The joint planning studio was recognized by UN-Habitat in 2016 as one of 150 global solutions making a positive difference to improved sustainable development outcomes in cities [15]. The studio has its learning objectives firmly anchored on students' better understanding issues associated with the planning and development of informal settlements (kampung) in Bandung, Indonesia, whilst concurrently exposing students to understanding issues associated with cultural competency and diversity of contexts. The narrative of the paper is articulated from the experiences of the Sydney University partner perspective and concludes with a set of principles that could be used by planning programs when creating an international studio as part of their program and curriculum strategy.

2. The Importance of the Studio in Planning Pedagogy

With their roots in architecture and landscape design schools, studios were fundamental in American, European, and other Anglo-Saxon urban planning pedagogies in the first half of the twentieth century. Their usage declined during the 1960s to 1980s, and this was attributed to the overriding emphasis on the nature of social sciences taught in urban planning at that time [8]. Since the resurgence of studio teaching in urban design and urban planning programs in the 1990s, often as a capstone unit, there has been a renewed emphasis on the value of studio pedagogy, especially its emphasis on experiential learning connected to real world practice and problems [16]. In the new millennium, planning pedagogy that embraces studios developed around student-centered issues of global concern, such as the SDGs, has become an important component of the toolkit used by programs and teachers to educate aspiring planners and designers [17].

Planning studio pedagogy is a mode of inquiry that encourages students to think creatively on complex issues by working collaboratively in groups [3]. It has been acknowledged that urban planning studios have developed as a robust tool for learning and teaching that potentially empowers student planners and designers to acquire and apply new skills and knowledge to deal with solving complex urban problems [6]. It has been claimed that they allow students greater exposure to current planning issues and their processes whilst developing practical skills [3]. The studio, as a tool of learning, can allow students to leverage off concepts acquired in earlier learning and apply these in the critical analysis of a project or theme. Unlike offshore studio education and learning, approaches centered

on traditional lecture rooms cannot replicate the experience of students being physically present and experiencing firsthand new city and project contexts. When properly structured, the studio process can prompt students to re-evaluate existing perceptions regarding project-based work, informed by prevailing pedagogical practices, and encourage their creativity in different learning and development settings. It also allows students to embrace a range of different planning and design tools and methods in their learning experience that they would otherwise not use or be exposed to in larger classroom settings [18]. As Macedo [17] and Bosman and Dedekorkut-Howes [19] reinforce, this will only occur if the studio is appropriately designed and structured to achieve such outcomes.

Several researchers have examined urban planning and design studios from the perspectives of what they emphasize and explore [17,20]. For example, some studios have their focus on design solutions that could be used in practice; others work with a client, such as a local council, providing 'service learning', while some are situated in an international development setting using a foreign country and a partner institution. Bosman, Vella and Shutter, (2016), suggested three types of planning studios as identified in the literature: Design-based planning studios, planning problem and process-solving studios, and virtual planning studios [3]. In practice, all three types could be combined to varying degrees, thus resulting in a range of types and approaches [17]. Given the studio emphasis on real world issues, the physical setting in which the studio learning and teaching takes place, such as an international studio, is just as important as the modes of learning and teaching employed in the studio process.

As a pedagogical concept, studios allow students to learn from peers, including academic staff, visiting lecturers, and other stakeholders, in small groups or a classroom setting, normally within a condensed time frame. This occurs within a learning framework but without the formalization that may be imposed by a larger lecture setting that might include rigid linear teaching methods and set content. In studios, students learn to think and act outside the box, with many often gaining confidence and self-esteem as they explore and feel comfortable with the issues at hand [21]. Smaller groups and informal interaction with academic staff, visiting lecturers, and residents set within an overarching guiding framework of studio activities may allow more frequent student discussion, feedback, and interaction. The smaller scales of learning via groups and unstructured interaction, plus proximity to the space being learned, can translate into a greater sense of connection and understanding of the issues at hand (see Figure 2). In small groups, students quickly learn to work together and understand differing views and group dynamics. Social acquaintances and friendships often form as the studio unfolds [16]. Importantly, students can compare their studio and field experiences to their home settings where they live, thus drawing important comparative lessons on how cities are planned and the challenges of sustainable development in different contexts. This includes reflecting on the varying stakeholders, local processes, rules, and regulations involved in the making of places and spaces, and the reality that not all stakeholders are equal in the decision-making processes of urban planning and development [22]. In this setting, the learning outcomes of a planning studio carried out offshore in vastly different urbanization conditions are potentially unique learning experiences, if the studio is properly structured and facilitated [2].

Notwithstanding the merits of incorporating studio pedagogy in planning programs, planning studios in Australia remain under pressure as a mode of teaching and learning. Issues of competition for adequate teaching space, managing large class sizes, student time constraints, budget ceilings, and the preparation time required to source background information places the studio mode of teaching in a precarious position [3]. In the Australian context, there is limited literature on the value of planning or urban design studios [19]. More importantly, there is little research on the value and benefits of undertaking international planning studios or teaching approaches using similar terminology, such as studio abroad, global studios, travelling studios, and the like, in the Australian planning education landscape. In 2013, Owen, Dovey, and Raharjo observed that the major impediments to teaching students planning and design in offshore international studios are the difficulties of safety, settlement access, and the necessary skills required to understand city complexity [9].



Figure 2. Students working in small groups, preferably with a mix of students from different countries and disciplines, are central tenets of a successful international studio. (a) shows Sydney University students discussing kampung morphology in the studio room, while (b) depicts ITB and Sydney University students sharing ideas on kampung livelihoods on an external working space. Source: Author.

In the Australian setting, the only universities whose planning schools offer international planning studios and include urban design education on a consistent basis are the University of Sydney, University of Melbourne, University of Queensland, and the University of New South Wales (UNSW). These studios are disciplinary-specific, and importantly, can be seen as part of a broader push by universities to encourage students and staff to embrace notions such as “global connectedness” and “global learning” [1]. For example, the University of Sydney Strategic Plan 2016–2020 acknowledges that higher education is “inherently global” and refers to the need for developing an approach to global engagement that leverages the university’s reputation in “global leadership in research and teaching”. The plan identifies that students will benefit from international perspectives that will provide the foundations for a “global career”, whilst academics will be “globally connected” in teaching and research in attaining sustainable development [23]. The strategies to achieve these goals remain inherently opaque at this higher order level. It is only through actively pursuing mobility programs, such as the international studio model that focuses specifically on broadening student learning experiences, that the meaning and value of the above policy emerges.

3. The Case Study—An International Planning Studio in Bandung, Indonesia

3.1. Background

Now in its fifth year, the postgraduate unit in the Master of Urban and Regional Planning Program at the University of Sydney, called PLAN9049 Foundation of Informal Urbanism, has been conducted as an offshore studio in an urban kampung (informal settlement) in Bandung, Indonesia. Bandung is the third largest city in Indonesia and the capital of West Java, located south east of Jakarta. In 2014, Bandung had an estimated metropolitan population of approximately 10.5 million persons, and after Jakarta, rates second in terms of persons living in slum areas in Indonesia. These slums pose a major sustainable development challenge as they are concentrated into densely populated and underserved neighborhoods known as kampungs, with such settlements generally being associated with communities comprising poorer and disadvantaged residents [24].

The partner institution in the joint studio is Department of City and Regional Planning, School of Architecture, Planning and Policy Development, at the Institute of Technology Bandung (ITB) University, Indonesia. The opportunity for both institutions to use a studio format and collaborate on the theme of informal urbanism evolved from a conference held in ITB in 2014, where academics from both institutions with similar interests in cross-cultural learning and informal settlements agreed to trial

a studio based on understanding the dynamics of an urban kampung to postgraduate Masters students. Since 2015, the student cohort from Sydney University has consisted of between 20–25 students, normally comprising an equal share of international and domestic students. The offer of participation is made to Sydney University students studying in the Master of Urban and Regional Planning, Master of Urbanism, Master of Urban Design, Master of Architecture, and Master of Heritage degrees. The mix of student backgrounds varies; the 24 enrolled students in 2019, for example, comprise 40% Master of Architecture students and the remaining cohort being a mix from Master of Urban and Regional Planning, Master of Urbanism, and Master of Urban Design degrees. Students from these disciplines commit to a learning experience interspersed over the semester by three distinct learning modules (phases) centered on the theme of understanding informality and informal urbanism. Central to this semester-long learning experience during the middle phase is a ten-day intensive studio based at ITB. This studio is focused on exploring the dimensions of informal urbanism and associated sustainable development issues in the case study kampung, Lebak Siliwangi, in northern Bandung (see Figure 3).



Figure 3. The case study kampung, Lebak Siliwangi, is a compact and dense informal settlement near Institute of Technology Bandung (ITB), thereby enabling easy student access to the field. Source: Author.

3.2. Format and Structure of the International Studio

The main objective of this international studio has been to give students the opportunity to understand and experience a major global, social, and civic urban planning and sustainable development issue (informal settlements and informal urbanism) via a studio mode of teaching in a multi-cultural environment. The sub-theme of the studio has been to expose students to understanding the making and shaping of the city from the ‘bottom up’, with a strong focus on how complex form and structure evolves through a unique mix of local rules, knowledge, and governance, in conjunction with the socio-cultural norms underpinning the dynamics of the broader kampung community. Annual reviews are conducted on the specific learning objectives, including applying good design and strategic planning skills, working in small multi-cultural groups, hearing the views of a diverse range of stakeholders, and collating key lessons learned from existing development programs. The latter are based on pedagogical needs within the program, with annual post-reflection on the studio being evaluated on its alignment with the set learning objectives, student feedback, and any comments from ITB academics, plus adherence to the accreditation guidelines of the PIA [25]. In Australia, planning programs are accredited when the learning content aligns with PIA’s core competencies and general capabilities. This includes attributes such as critical analysis, understanding spatial relationships,

knowledge of planning principles and legislation, work readiness, high levels of oral and written communication skills, and teamwork.

There are five sequential activity periods in the semester-long (13 weeks) learning process and these have been grouped into three phases as adopted in other studio pedagogies, namely: Pre-studio, in-country studio, and post-studio [18]. While the in-country studio forms the focus of the unit, the learning experience differs greatly from normative studios that are traditionally of short duration and intense activity [26]. It achieves this by several measures, including having student learning activities before and after the in-country studio. This expanded structure is considered essential to allow students time to prepare for the offshore experience, and importantly to give students ample time on their return to Australia to reflect on their learning experience. In summary, these phases comprise:

Pre-studio: This preparatory phase occurs over approximately two months prior to the studio being held in Indonesia. Students receive basic readings on the fundamentals of what informality is, expressions of informal urbanism, urbanism in Indonesia, and their relationship to the SDGs and SDG 11. These concepts, together with examples, are discussed in a classroom setting and, essentially, reflect 'book learning'. Basic language training in Bahasa, as well as basic protocols of dresswear and behavior in an Islamic country, occur prior to student departure. The Unit of Study outline is prepared and assessments are linked to the unit objectives. As a rule, there are three assignments, of which two are group activities. These are: (i) Group presentations of student work in Indonesia to peers, including academics and local government representatives, at the end of the studio (30%); (ii) preparation of five A0 posters per group for public exhibition of joint student work, held at Sydney University with ITB students and academics after completion of the in-field studio (40%); and (iii) an individual reflection piece on how students understand informal urbanism in the kampung and its relationship to SDGs following their Indonesian experience (30%).

An important element that strongly favors the studio on an annual basis is the deliberate attempt to include cross-disciplinary and local, national, and international development views. Against the backdrop of this learning objective, the studio has been joined by professors from other international universities. Since 2016, the studio has been strengthened by the knowledge provided by an academic from the University of Aveiro, Spain, who contributes lectures to students on 'adaptive' and 'bottom-up' urbanism, and in 2019, an academic from CEPT University, Ahmedabad, India (formerly the Centre for Environmental Planning and Technology) will join the studio. These peers provide lectures on informal urbanism anchored in different city development and local cultural settings, and interact and engage with students in a conversational atmosphere to discuss ideas and issues arising in the studio and field. Students can see that the issues they confront in informal settlements in Bandung are universal challenges requiring local nuanced solutions based on sustainable development principles.

In-country studio: The studio and in-country fieldwork is held over an agreed period of ten days. Students have access to a dedicated ITB studio room and use this and outside spaces as their home base. The daily studio activities are guided by a specific Studio Program which, as a general rule, comprises morning lectures and a discussion on themes central to the studio. This includes lectures on the plans of the Bandung City Government for kampung upgrading, trends in Indonesian urbanization and progress on achieving SDGs, issues of land titling and ownership, lessons learned from World Bank kampung upgrading experience in Indonesia, and insights on morphological elements comprising the form and structure in kampungs. The afternoons are used to undertake fieldwork, including the best tools of analysis to be used relative to the topic selected by students. Discussion with academics and the unit tutor can occur in the studio room or with groups in the field. There is a collective wrap up and reflection by all groups at the end of each day's session on their progress and any issues arising in understanding the planning and development of the kampung.

In the studio room and outside seating areas, students work on their respective themes, exchanging information and knowledge from their disciplines within and between other groups, ITB students, academics, and the unit tutor. The Sydney University students voluntarily divide themselves into their own working groups of four to five students, respectively. Groups which have a mix of international

and domestic students are 'rewarded' by being given the opportunity to be first to select the nominated priority studio themes if they form groups with such representation. For the first three days, these groups work alongside approximately twenty ITB students, also in groups of four or five students, each undertaking field observations through drawings, photographs, and video recordings. In this setting, students experience firsthand the kampung via their respective cultures, including language exchange in English and Bahasa. After the third day, students rejoin their respective groups from Sydney University and ITB, and proceed to undertake their detailed analysis on their chosen theme.

The climax of the student work is the presentations by Sydney University and ITB student groups to an 'expert panel' on the second-last day of the studio. Here, the students outline their findings of how they understand their respective themes, informed by the local kampung development setting. In 2019, for example, Sydney University students had a choice to focus on one of five themes: (i) Livelihoods and the informal economy; (ii) adaptation types in the private (housing) and public (unbuilt space) interface in alleyways; (iii) the process and steps of incremental housing transformation; (iv) types of housing; and (v) patterns and differences in the morphological units comprising the kampung, such as irregular blocks, plots, and unbuilt 'public spaces. Some student groups introduced their presentations with quotes from key texts and readings defining informal urbanism, and followed with providing the rich urbanism examples collated from Lebak Siliwangi, together with diagrams and plans to unpack their local meanings and substantiate the narrative being presented. The panel comprised ITB and Sydney University academics and a Bandung City Government representative, and collectively they critiqued the students' approach, method, understating of local context, findings, and logic of their narrative (see Figure 4).

During the studio fieldwork, students collect baseline data and undertake mapping, photo analysis, and typological surveys to appreciate and understand the complexity and diversity of form. Students use a range of tools and themes in their initial analysis to grapple with 'unpacking' the high density compact urban form, visual disorder, and community dynamics. A key studio tool used by students to identify practices of adaptation and transformation emerging from local self-organization was typologies. Students were encouraged to develop typologies; that is, identifying repetitive form elements such as housing types, setbacks, and materiality that define the recurring patterns impacting on the evolution of urban form [27] including constraining the width of the alleyways. Starting from a wider set of physical and non-physical typologies embracing governance, housing types, infrastructure and services, alleyway types, and building materials, students focus on identifying types relative to their respective theme of exploration [6].

Central to the planning of the studio is the deliberate engagement with stakeholders who have a vested interest in kampung development and who were willing to share their views and experience with students. Partners in the studio process in Bandung included the Bandung City Government, World Bank and UNESCAP, private sector planning agencies, representatives of the Indonesian central government agencies, and community members. The latter ensure that the visions and plans provided by other agencies for kampungs are infused with the concerns of residents over the scale of re-development (often tower development, not in-situ), and that residents' livelihoods and community capital are important considerations in the planning process. This connectiveness with stakeholders is invaluable for students so they can observe the range of players involved in city-making, generally, and kampungs, specifically, thus hearing firsthand their development perspectives which cannot readily be discerned in textbooks. Furthermore, development partners involved with SDG implementation are keen to know what can be learned from students and academics to be applied across institutional and policy boundaries, especially when such knowledge is driven through cross-cultural learning experiences and emerges through processes they perceive as legitimate 'bottom-up' activities [2] (see Figure 5).



Figure 4. A key highlight of the studio is the presentation of student group work to peers, thus allowing students to share and discuss their planning and design ideas and development assumptions together with stakeholders and obtain feedback. Source: Author.



Figure 5. Students and visiting academics have the opportunity to meet local residents in their community centers, including the governance leaders of the overarching local administrative government units known as rukun warga (RWs) and rukun tetangga (RTs). Source: Author.

Post-studio: This phase focuses on student reflection of what has been learned through the experiential studio learning using the Bandung case study. The primary focus is students preparing posters and videos reflecting their ideas for a public exhibition of student work, which is normally held one month after completion of the in-country studio in the School of Architecture, Design, and Planning. Reflecting the importance of cross-cultural cooperation and broader economic ties between Australia and Indonesia, the exhibition is opened by the Indonesian Consul General based in Sydney and is

supported by other stakeholders, including the Australian Department of Foreign Affairs and Trade. The latter have provided mobility funding to support offsetting student travel expenses on occasion. The Dean of the School of Architecture, Planning, and Policy Development from ITB, as well as ITB academics and students who participated in the studio, also travel to Australia to participate in this important multi-cultural presentation of joint student work. Aside from renewing social acquaintances during this time, ITB and Sydney University students share their personal experiences on learning as part of the exhibition opening.

After completion of the two-week public exhibition, tutorials are held for Sydney University students to collate ideas and thoughts for their final reflection essays. The latter focus on student's understanding of their learning on informality and informal urbanism, as experienced in the Indonesian kampung context, including how they now see the dynamics driving 'bottom-up' urbanism compared to the initial readings. Importantly, students express in their own language how they understand the interplay of local rules and protocols, governance frameworks, social capital, and local knowledge in creating these communities, including implications for attaining the urban SDG 11 targets. Compared to the commencement of the unit, students can now clearly articulate with real life examples and understanding of the step-by-step incremental processes of how development unfolds through small-scale physical additions, all of which have both positive and negative implications for kampung life. Comments from the student's self-reflection essays indicate strong insights into student learning and understanding, with the following typical of the value placed on the experiential studio experience:

- * "I better understand bottom up urbanization" and "value of social capital";
- * "Through immersion, I understand other cultural values different from my own";
- * "Only through a lived experience can an understanding of kampungs emerge";
- * "To see theory in action is necessary to understand"; and
- * "The experience made me question the relevance of conventional planning and urban design in an informal setting and challenged my previous negative perception of informal settlements" [2].

For a small cohort of participating Sydney University students, the learning experience was far reaching, resulting in some of the students readjusting their career choices. Utilizing their studio experience in informal settlements, some students have obtained UN-Habitat internships in international development in the Asia-Pacific region, while others have used this internship experience to gain longer term work with the United Nations.

4. Discussion

The learning process undertaken in an Indonesian kampung provided students with the opportunity to work with academics and other students of varying nationalities, the local community, and interested stakeholders in a multi-cultural setting. For Sydney University students, this allowed them to experience the realities of life in an informal settlement, including how city planning occurs when divorced from 'top-down' regulated planning systems. It was a "situated learning context", actualizing the classroom and text book education intrinsic to planning pedagogy [8]. At a broader level, the studio experience supports the university goal of engaging students and academics in offshore 'global learning' [1]. With collaboration from students and teachers from ITB, the studio allows students to effectively engage in an unfamiliar environment on a major global sustainable development challenge. Although the initial few days could be overwhelming for Sydney University students in particular, given that ITB students already experience informal settlements on a day-to-day basis, the students quickly adjusted their expectations, values, and assumptions to the new circumstances in which they were working. For example, during the first few days some students saw modernist high-rise towers as solutions to accommodate the ground level urbanism practised in kampungs. At the conclusion of the studio, students appreciated that there were other more humanistic alternatives, such as in-situ development, that reflected the views of all stakeholders as opposed to only some. In this setting, students from both institutions were challenged to consider their own preconceived planning

and design assumptions and expectations against what they had learned from the field, a key objective of global learning [28].

By leveraging off a studio setting where students see visible signs of urban ‘disorder’ and inequality, such as overcrowding, poor water supply, and inadequate sanitation, as part of everyday living, unpacking in detail the local context forces students to experience beyond their typical middle-class Western educational environments where there is a strong emphasis on regulated planning and design theory [22]. This is an important objective of the studio, given the initial contact with the city is visual and it is through such encounters that we create and reinforce assumptions about the condition of the city, its residents, and how best to plan. The cross-cultural studio provides an experiential medium that exemplifies the realities of vastly different planning systems and sustainable development challenges, confronting students with informality and informal settlements. Student thinking is questioned not only through the observation of local issues such as adverse housing, water, sanitation, built form, and general environment conditions, but by the application of tools as learned and practised in new community settings. Students are readily informed by using tools, including typologies, land use and morphology analysis, mapping, observing, sketching, talking to residents, and documenting the range of issues that define and shape local context. This includes the important role that local governance systems, social capital, and knowledge play in shaping form and structure, as well as using form itself as a tool to understand processes of social and economic change [29] (see Figure 6).

Annual reflection on the studio process, learning objectives, and the feedback from students and ITB academics is critical to improving the overall student experience and robustness of the learning outcomes. For example, the first iteration of this studio in 2015 allowed students to choose a research topic from a list prepared by teaching staff. This included livelihoods, hierarchy of alleyways, housing typology and adaptation, public space, micro-morphology, and the public-private interface. The emphasis in 2015 and 2016 studios was on both contextual analysis, plus project designs for ‘step-by-step’ improvements. Based on feedback, the studio structure has been refined, with a stronger emphasis on students gaining a ‘deeper understanding’ of local context and the physical evolution of the kampung, with a main theme being understanding the form and structure of housing and alleyway types that comprise the kampung fabric. Thus, the emphasis has been on understanding the kampung “as it is”—both processes and outcomes—rather than what it “might be”. The key feedback learned from the first two studios was that trying to adequately address both an understanding of context and how a project for slum improvement and upgrading might appear in design and physical terms was not realistically possible within a eight to ten day field trip.

By adopting this approach, the notion of the term ‘context’ takes on a more nuanced meaning, with students learning from residents the tensions that exist between local kampung communities, government, and developers over the lack of consultations on plans. A recurring theme raised by residents was the lack of recognition of local circumstances such as community capital, knowledge, and local governance and their interplay with sustaining local livelihoods. Some residents, for example, are considered as squatters as they have been deemed to have no land titles, despite residents having varying forms of proof not considered legitimate by government. Against this background of varying decision-makers, access to resources, and differing development motivations and aspirations, the current emphasis in studio design since 2017 has been on a deeper understanding of how the kampung works and evolves “as it is” so as to achieve more sustainable development outcomes [22].

Organizing and running an international studio which attempts to maximize multiple learning objectives and involve different stakeholders is not without its operational challenges. These include securing funding for travel and accommodation for academics, maintaining connections with overseas colleagues teaching in different semesters and degree structures, and the peculiarities of cross-institutional frameworks such as requirements for Memorandums of Agreement (MOAs). There is also the need to align teaching outcomes of different units in different teaching institutions, keeping the studio travel costs affordable for students, organizing the day-to-day activities of the studio

(such as involving guest lecturers), accessing local facilitators, and importantly, obtaining permission from communities to use their kampung as a 'case study'.

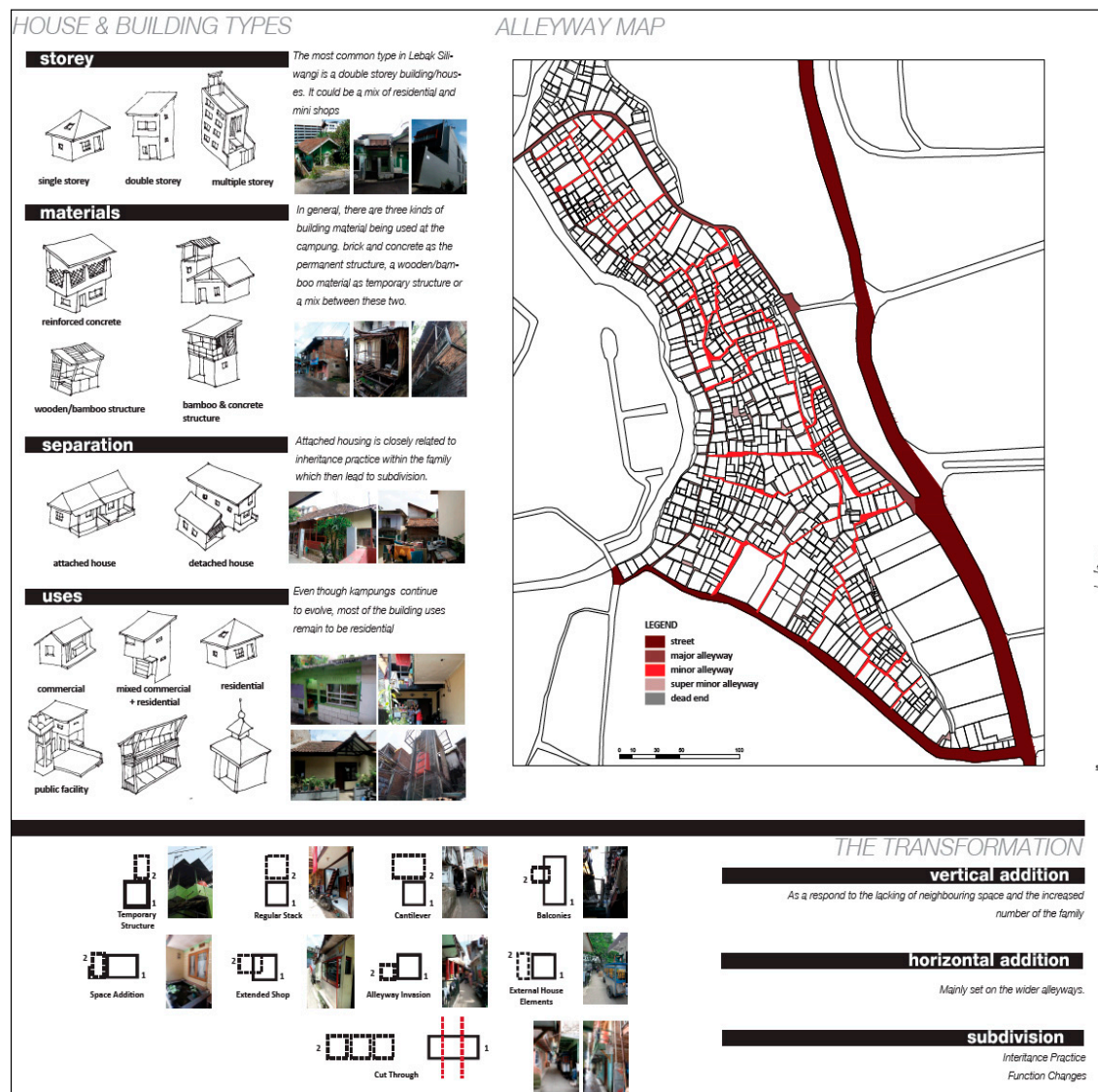


Figure 6. Students use typologies, land use, and morphology analysis to better understand the processes of adaptation and transformation occurring in the dense kampung. Source: Sekar Rahajeng.

For Sydney University students, a Safety Plan must be prepared with key contacts and actions in case of an emergency and requires approval from the Head of School. Despite pre-studio inductions and training in basic Bahasa for Sydney University students, communication problems do arise. While ITB staff are fluent in English, ITB students have varying levels of English and, likewise, Sydney University students struggled with conversations fully communicated in Bahasa. Some Indonesian planning concepts, for example, have to be translated and some socio-cultural nuances may not be appreciated. One such example is that many ITB students leave the studio room late in the morning to attend Islamic prayer time and this may impact group learning. Despite all precautions, students do get sick and these are all extra challenges and potential risks that may not arise if undertaking a studio in one's home institution and city. The collective impact of the above is that it can be a major constraint to educators when considering the advantages and disadvantages of running an offshore planning studio as part of their planning pedagogy.

5. Conclusions

The key proposition in this paper has been the extent to which urban planning programs effectively prepare future planners and urban designers with the critical thinking, skills, and knowledge required to engage with the varied complexities and contexts of the modern contemporary city by having international studios in their pedagogy. The paper asserts that by taking the studio offshore where student tasks are activity-centered in new cultural settings [8], the studio format provides a valuable learning environment in which to work collaboratively on a specific place-based project, namely, an informal settlement. Improving the living standards of informal settlements is a key focus in attaining the global targets contained in the SDGs, specifically SDG 11, and their incorporation into planning curricula is a major challenge for planning programs. In this context, the offshore learning experience enables students to unpack the differences in “planning cultures” and share diverse perspectives, including understanding varying development interests, stakeholder motivations, and the nature of local circumstances and contexts [26]. As observed elsewhere, international studios provide a valuable immersion experience for students that can result in improved learning outcomes [30]. Despite the limited use of planning studios in Australia, they have been validated by planning practitioners as an important teaching strategy when educating planning students [12].

The value of a studio group comprising students, academics, and practitioners from related but different disciplines, intertwined with a student cohort of varying cultural and national backgrounds, reflects rich cultural capital. It is this cultural resource that is too often underrecognized in the practice of global learning [1]. One key advantage of this cultural capital is that while student cohorts may come and go, the studio provides the opportunity to continue to develop cross-cultural academic exchange and ongoing research collaboration [22]. One major cross-cultural by-product of the studio experience has been a gradual influx of ITB students who have participated in the studio and are now studying in the urban planning Master’s program at Sydney University. Thus, the impact of studio engagement and learning is measurable.

In this case study, the studio focused on understanding and exploring informal urbanism and informal settlements; the latter, argued as a global phenomenon, being comparatively understudied as a major social, civic, and sustainable development issue in mainstream planning pedagogy. Their inclusion in curricula and planning programs as part of a suite of learning approaches supports the “internalization of the curriculum” and global learning [1]. In this context, it is critical to ensure students engage in the objectives of global learning, as well as being culturally competent and aware of diverse social groups and their needs whilst addressing a major pressing social and civic issue as recognized in the global SDGs, for example [31]. Foundational principles that need to be reinforced in studios supporting global learning include an emphasis on interdisciplinarity and the processes of learning, the importance of deconstructing and ‘uncovering’ the complexity of issues at hand, the viewing of global issues through the lens of plurality, multiplicity and differences, and the role of global connectedness at different scales. Ensuring students understand the importance of engagement, inclusivity, and diversity through their project experience are key outcomes of global learning [28]. If these and other outcomes are valued as part of achieving sustainable planning program pedagogy, then there are valid arguments that such studios should be mandatory in planning education, not optional or non-existent, which is the case in most Australian planning programs.

In summary, some guiding principles and prompt questions that could be applied by planning programs when considering international planning studios as part of their planning pedagogy are as follows:

- Understand the depth and breadth of planning pedagogy in your urban planning program. What needs do they meet, and are they globally connected or not? Is there a role for an international planning studio addressing a major urban sustainable development challenge, such as informal settlements, and should such studios be mandatory or optional, and why?
- Ascertain what your university or institution offers in the way of support for global mobility programs and attainment of SDGs. See if your school/faculty has guidelines for running domestic

and international studios, including understanding student ‘duty of care’ responsibilities that append this mode of teaching. Where possible, undertake basic cultural and language training prior to or as part of the main studio.

- Develop ties with a recognized counterpart institution whose planning staff and programs are keen to collaborate via a joint studio format. Examine options to eventually develop an MOA to embed the process and outcomes of the work, which may include scholarly teaching and joint research and engagement activities.
- Set clear learning objectives that include a specific emphasis on attaining global learning goals and embed these in the discipline-specific objectives, learning activities, and assessments. Ensure issues of local cultural diversity, competency, and equity are well discussed within the cohort, thus allowing students to appreciate the different norms, values, views, and processes that create differing urban forms, structures, and communities across myriad contexts.
- Know your student cohort and the planning circumstances in which they will work when they finish study; collect baseline data. Encourage a studio which has multidisciplinary students from the planning, urban design, heritage and architecture professions. This diversity will greatly assist in understanding the case study, complexities, scalar relationships, and problems to be resolved [32].
- Give strong consideration to how to make the studio process creative. Provide a framework for learning that includes flexibility. Consider tasks and activities—both social and work oriented—which encourage a greater sense of cultural competency, teamwork, and ownership of the issues being explored and resolved. Discuss the SDGs and challenges of going from global to local, and the importance of unpacking what local context means. Emphasize critical thinking outside the box and challenge pre-existing ideas and solutions.
- Reflect on the annual studio process and outcomes through oral and written feedback, mindful of what was and was not successful in the program. What are the implications for program pedagogy, teaching scholarship, and further options for future global learning and engagement? Set realistic, achievable goals in regards to what the offshore studio can achieve. Understanding the social, economic, and environmental dimensions of new city settings can be challenging, even with local facilitators assisting. Often, it is best to get a deeper understanding of how social and economic circumstances produce form and create local communities, for example, rather than attempting to achieve design solutions in too limited time.
- Invest in the institutional and civic capacity of the stakeholder organizations. Many are willing to participate as it provides them with social relevance. If possible, organize a public exhibition of student work to initiate discussion, debate, and create new conversations on major urban planning and sustainable development challenges.
- Ensure there is a time gap following the studio to allow students to reflect on what they experienced, including what they learned in the textbook as opposed to the studio experience. How did the experience relate to what their previously held expectations prior to the studio? How did it change or alter their view on informal settlements and the massive sustainable development challenges they present?

In conclusion, the replication of an international studio based on a structure similar to the case study in this paper assumes that planning disciplines and their wider school/faculty programs value and place importance on the pedagogy of international studios anchored in achieving principles of global engagement whilst preparing ‘work ready’ planners. International planning studios are centered on shifting student learning ‘beyond borders’, understanding cultural and global connectedness on major planning and sustainable development issues. Understanding how planning decisions relate on local, city, national, and global scales, including their impacts on attaining the SDGs, is critical to equipping students to more effectively explore notions of spatial and social equity, social justice, and civic responsibility when they join the workforce. There is anecdotal evidence based on studio feedback that international students want to learn more about the global planning phenomena they

are likely to encounter on their return home from study [2]. Constructive use of the international studio as a pedagogical tool also affirms that the scholarship of learning in the new millennium no longer develops from singular and discrete sources of knowledge, but evolves from international partnerships, collaborations, and students experiencing the plurality of cultures. Coupled with the increasing demand by Australian students for an international learning experience, this suggests the need for urban planning programs and their wider school/faculty setting to discuss the scholarship of learning, and where international studios and global learning fit within this narrative. Consideration must be given to what constitutes effective studio pedagogy that involves meeting student needs and provides external engagement and potential research collaboration, while also addressing major social and civic planning issues and SDGs. Is global learning integrated as part of current planning pedagogy, if at all? Do all students finish their planning degrees as globally ‘work ready planners’, and is this skill and knowledge set, however problematic to define, necessary for all students? These matters raise wider questions of how planning programs develop their curriculum pedagogy and planning programs generally, and importantly, how and what knowledge is created and transferred in today’s technologically and globally connected world. All this implies a possible need for new sets of pedagogical approaches to teaching and learning to address major social and civic global planning and sustainable development issues in contemporary urban planning programs.

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