Exploring Students’ Experiences of Learning in Outdoor Places on a University Campus

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The creation and renovation of learning spaces is currently a priority for educators working in higher education. While indoor learning environments continue to develop, one place rarely considered as integral to learning, teaching and research is the outdoor campus. The research reported in this paper used photographic images and autobiographical stories to explore the contribution of the outdoor campus to student learning. The findings indicate that students, who frequented outdoor campus places and made use of the facilities and the landscape, were afforded opportunities for holistic and transformative learning that contributed to a sense of wellbeing and belonging. The outdoor campus is a precious resource because it influences the overall student learning experience and impacts on the quality of graduates.

**Key words**: Outdoor places, higher education, and student learning

**Introduction**
Consideration of learning places in higher education “… has commonly taken place either in the context of space planning, or campus master-planning, rather than being seen as a resource to be managed as an integral part of teaching and learning and research activities” (Temple, 2007, p. 12). Given that learning, teaching and research are such critical activities for universities, it seems extraordinary that the relationship between the outdoor campus and these activities has remained largely ignored. Strange & Banning (2001, p.30) highlight that “… among the many methods employed to foster student learning and development, the use of the physical environment is perhaps the least understood and the most neglected.” Additionally, Stevenson (2008, p. 355) asserts, “… one place that has become increasingly absent from or less inhabited by young people is the outdoor environment.” In an attempt to redress these gaps in the literature, this research was undertaken to explore how outdoor places on a university campus contribute to students’ learning.

A starting point in the paper is to locate the importance of the outdoor campus in student learning within the broader higher education context. Following is a description of the theoretical and methodological approach used to conduct this research. Finally, narrative extracts from autobiographical stories, and images from the study are explored to highlight how outdoor places on the university campus have contributed to student learning.

**Background**

The higher education landscape includes some key features that direct attention to the possibility of using the outdoor campus to enhance student learning. Globally universities have identified a range of graduate attributes that encompass more than traditional content knowledge (Barrie, 2004; Hart, Bowden & Watters, 1999). This emphasises the well-
recognised view that a university education should go beyond the acquisition of discipline-specific knowledge and skills (Bradley, 2008; Kember, 2009). Thus curriculum developers are actively seeking opportunities to engage students in learning activities that foster the development of broader learning outcomes. Educators also argue that the study of places is essential if we are to increase students’ knowledge and understanding of issues such as environmental sustainability and community well-being (Gruenewald, 2003).

Theories that position learning as an active process where learners dynamically construct their learning environment, and are central to it, are dominant (Engeström, 1999; Greeno, 2006; Kolb & Kolb, 2005; Lave & Wenger, 1991; Robbins & Aydede, 2009; Vygotsky, 1978). These theories focus on ‘where’ students learn just as much as ‘how’ and ‘what’ they learn. Hull (1993, p. 4) endorses such a view and states:

According to contextual learning theory, learning occurs only when learners process new information … in such a way that it makes sense to them in their frame of reference (their own inner world of memory, experience and response). This approach to learning and teaching assumes that the mind naturally seeks meaning in context – that is, in the environment where the person is located…

For students to become active, contextual learners, exposed to a broad range of learning outcomes they need to move beyond the confines of classrooms, to create meaning in their own frame of reference, which includes learning in outdoor places.

Outdoor Learning Places

The literature explaining the concept of place is extensive and multi-disciplinary (Gruenewald, 2003). In this research we draw on the seminal work of Relph (1976) and define place as a fusion of three features: physical setting, activities and meanings. Outdoor places are settings outside such as manmade courtyards, walkways and stairwells or more natural settings like tree covered parkland, lakes and streams (Muñoz, 2009). In these settings students engage in activities where they work to make meaning from their diverse experiences.

Theoretical and Methodological Framework

Three theoretical positions intersect and underpin the methodological framework for this research, they are: intersubjective relationships (Jackson, 1998) that connect people to their environment; place as profoundly pedagogical – “places teach us” (Gruenewald, 2003, p. 621); and “stories as heuristics for making sense of place and constructing meaning” (Kooy, 2006, p.11). Intersubjective relationships are the links that connect people and the outdoor environment together (Jackson, 1998). Pedagogical place is used to talk about the way that both students and researchers can learn from the places they inhabit. The kinds of learning experiences that students, educators and researchers pursue and recall are often connected to the distinctive qualities of the places in which they live and work (Ambler, 2009). In the context of this research, self-realisation and the development of one’s self is considered to be as beneficial as the social benefits of research (Bullough & Pinnegar, 2001). To this end the research participants were actively encouraged to make sense of place and construct their own meaning by telling ‘a story’. Autobiographical stories of private experiences are
acknowledged to be valuable for providing insights into “public issues” and gaining understandings to make human “interaction increasingly educative” (Bullough & Pinnegar, 2001, p. 15). Witherell & Nodding (1991) suggest that, “We learn from stories ...” (p. 279) and a major aspect of this research was to draw on students’ autobiographical stories expressed through text and image, to explore the contribution of outdoor places to their learning.

The Student Participants

Posters located at key points on the University campus were used to recruit participants for the research. The response from students was positive with 70 emailing the research assistant for details about the project and 40 attending an information session. At the end of the recruitment process 23 students volunteered to participate in the research. The table below offers some key information about the student participants:

<table>
<thead>
<tr>
<th>Students</th>
<th>Student Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic undergraduate students</td>
<td>8</td>
</tr>
<tr>
<td>Domestic postgraduate students</td>
<td>5</td>
</tr>
<tr>
<td>International undergraduate students</td>
<td>9</td>
</tr>
<tr>
<td>International postgraduate students</td>
<td>1</td>
</tr>
<tr>
<td>Male participants</td>
<td>8</td>
</tr>
<tr>
<td>Female participants</td>
<td>15</td>
</tr>
</tbody>
</table>

In qualitative research sample sizes vary (Lal, Suto & Ungar, 2012) and we acknowledge that the sample size for this research is small. However, the number of students involved and the research methods selected generated a rich source of information that offered useful insights for furthering understandings of the contribution of the outdoor campus to student learning.

Data Collection Methods

The student research participants explored how outdoor places contributed to their learning by using autobiographical stories and photographs. It is often difficult for words alone to adequately “describe the meanings of outdoor experiences” and places, (Loeffler, 2004, p. 56), and that is why photography was chosen as one of the research methods. The combination of text and image presented an opportunity for students to capture or “reconceptualise” (Grumet, 1980, p. 24) their evolving experiences of learning in the outdoor campus. During the data collection process the research team provided participants with some framing concepts and focus questions to help them think reflectively and examine their experiences of outdoor places (Griffiths, 2004; Moon, 1999). The framing concepts covered ideas such as, how a person observes, identifies and records the details (for instance, flora and fauna) of their experiences learning in outdoor places. It was a priority for the researchers to create student-centered activities that encouraged the students to connect their life experiences, to the task of interpreting the contribution of outdoor places to their learning.

Data Analysis Procedures
Ely (2007, p. 42) comments:

… at some point in their writing, narrative researchers must communicate important, binding ideas and insights about what it all meant to them, what they learned, and what this might mean to others.

The researchers responded to the task of creating “ideas and insights” about what they learned by coming together to discuss the stories and images; keeping in mind the main research question: how do outdoor places on a university campus contribute to students’ learning? The images were printed and set out on a large table. The researchers grouped the images according to any emerging ideas, such as: arriving at Macquarie University, building one’s learning and noticing details. The intent was to analyse the stories and photographs to explore the ideas within them (Ellis, 2004). Upon agreeing some of the general themes emanating from the stories and photographs each researcher selected one for further exploration: discovering your place, constructing learning, presence of nature, outdoor facilities, a sense of well-being and belonging. The next part of this paper includes selected images and extracts used to highlight and explain how outdoor places on the University’s campus contributed to the students’ learning.

Discussion

Discovering Your Place
The theme of learners discovering and developing an attachment to a meaningful outdoor place springs from the students writing about the way they sought specialised places on the campus to support their learning. This involved students either spending their leisure time in a particular place or focusing on specific aspects of learning in a chosen location (Semken & Freeman, 2008). Here, a participant reflects on the sense of privacy and intimacy that was sought and found in an outdoor location:

Out here everyone is alone, but we are all together, all able to disappear. It becomes an intensely private atmosphere … the grounds beside the lake compel an entirely new kind of learning together...one not marred by exams or readings [Participant 9].

This extract hints that the process of discovery in learning is not solely confined to predetermined places and times (Payne & Wattchow, 2008) but can occur whenever there is a break in the flow from routine lectures, tutorials, visits to the library or exams. In the grounds beside the lake, students were able to find a place where the atmosphere was private, intimate and compelling. In other words conducive to seeding a different type of learning. Gibson (1977, cited in Brown, Stillman & Herbert, 2004) introduced the term ‘affordances’ to describe what an environment can offer to people. Students clearly demonstrated they took action to discover outdoor places in order to access beneficial properties and attributes that they considered would enrich their learning.

Constructing Learning
Contextual learning has three main components: (1) the information to be learned, (2) the opportunity to use what has been learned and (3) the contextual environment that embraces the first two points (Clough & Lehr, 1996). The contextual environment emphasises the interrelatedness of learning and the consolidation of learning so that a clearer and more
meaningful perception of how learning can be used or applied becomes apparent. The students were able to construct their own contextual learning in outdoor places. They perceived objects that surround them in their outdoor environment as prompts or reminders for constructing learning (Randall, 2012). One participant comments on how a sculpture in a courtyard served as an aide-memoir “… stereotypical Ancient Greek Rhetor, a learned man, and it creates for me a reminder that this space is a learning space” [Participant 4].

Figure 2: Prompts or reminders for constructing learning

Objects found in the outdoor environment were used by the participants to construct learning. One participant reflected upon how an inanimate object can act as a catalyst for a renewed sense of focus: “It (the courtyard) also has some nice sculptures which, when I’m stuck on writing something, I always find myself contemplating to clear my head” [Participant 13]. Even functional objects, such as a clock inspired a literary contemplation about the cyclical nature of learning: “Walking home or to the library, the timeless clock greets me like it has greeted countless other students the years before. I am reminded of the fleeting nature of time, the limited number of hours in which learning can be enabled” [Participant 15]. In early childhood education the environment is well-regarded as a third teacher (Strong-Wilson & Ellis, 2007). Mokom and Kohti (2012) suggest that students who actively seek to integrate aspects of the outdoor environment (such as objects) into their learning schema show a desire to enrich and construct their own experiences by developing new habits and approaches to learning:

Strange,
How learning is a liquid experience in the outside world,
Not contained in a rigid line of desks. Trees and picnic tables are sprawled across the courtyard, and the wind tousles my hair messily as I crouch crab-like over my laptop, Tapping away; completely absorbed. [Participant 8]

In other words, they demonstrate a propensity to adapt to new surroundings, and hence further their sense of ‘self’ and ‘place’. The stories and images collected exemplify the manner by which participants were able to “connect the puzzle pieces” [Participant 2] of their learning by making various useful mental constructs fit together.

**Presence of Nature**

As one might expect, nature was a recurring theme in all stories. Gullone (2000, p. 294) argues that “the human tendency to maintain contact with nature can be seen throughout history.” The importance and “power of the nature” [Participant 18] in the outdoor environment was central to participants’ experiences. Nature evoked figurative prose and students used metaphor expressions to describe their relationship to nature. Here is an illustrative quote, “Nature becomes the safety net from which man seeks refuge from for inspiration while nature needs man for growth” [Participant 2]. Nature also served to distract and soothe those who were “…feeling trapped in class and yearning to be out in the natural world” [Participant 19], a world which is in stark contrast to “fluorescent tubes decorating the concrete jungle just beyond” [Participant 9]. It offered them both solitude, to study or to sit and reflect, and a space to gather and “…get closer to each other and the beautiful nature.” [Participant11]. However, students valued different facets of the outdoor environment. Most focused on the open expanses of lawn and the shade provided by the groves of trees dotted throughout. Their imagery dwelt on what they felt; “the tickle of grass, against … bare feet” [Participant 8] and “the soft cool breeze” [Participant 7]: what they smelt: fresh air and freshly mown grass; and what they heard: “flapping wings of the flying birds” [Participant 7]; “listen to the secret stories of birds” [Participant 20] and as the same participant eloquently conveys, these are “…gifts from nature”.


There were some students who were drawn to courtyards; an “oasis of nature within a man-made structure planted with gardens and filled with moss-covered sculptures” [Participant 4]. The “warmth of the sunshine” [Participant 20] was a pervading theme across the narratives and there was a sense that these places, both “the built and the natural” [Participant 5], are less frequented “if it is raining” [Participant 13] or when seasons change: “The bench will remain empty until the start of the next learning season. Winter is here…” [Participant 15]. Whilst nature provided sensory stimulation and an “… escape from everyday routine and demands” (Grind & Patil, 2009, p. 2335) there were indicators that specific outdoor locations, such as the lake were particularly valued. “Every time I pass by the little lake, I think about how strong a life can be and the power of the nature that is able to change everything” [Participant 18] and “sunlight is the source of learning” [Participant 15].

Outdoor Facilities
The students revealed in their stories and images how outdoor furniture and landscaped features had a positive impact on their learning. Outdoor settings that gave participants the opportunity to sit alone or get together influenced the learning experience (Temple, 2007). Some students expressed a desire to find a bench where they could sit and undertake “independent study” whereas others enjoyed benches grouped near a blackboard that allowed them to get together as a small group and “exchange information” [Participant 11].

You can always find a bench here. When you want a chat with friends, when you want to sit somewhere to eat, when you want to read, or, when you simply want to have a rest and take one more look at the university, you can always sit down
Access to power points was considered to be very beneficial and enabled participants to use the technology that is so much part of day-to-day life. One participant described how: “students live by their laptops and laptops love free electricity” [Participant 13]. Wireless mobile technology is now pervasive and facilities such as power point access and free Wi-Fi enable students to “…just take a laptop to a space…” (Mitchell, 2003) they want to be and study.

Figure 4: Outdoor facilities

Students’ narratives made reference to the juxtaposition of architecture to outdoor facilities. One participant juxtaposed the stairs connecting the library and courtyard as “a mood switch on/off” because the stairs indicated a distinct break from a “studying zone” [Participant 19]. Another participant identified that an outdoor balcony was conducive for the purpose of studying because it was always “nice and quiet there” and this helped them to “concentrate much better” [Participant 7]. A courtyard area described as being “protected from the wind” and surrounded by “nice sculptures” [Participant 13] was a place frequented by a participant when struggling to write and the act of “contemplating to clear their [my] head” soothed the individual. Another participant describes “the courtyard itself is composed of a series of juxtapositions …what was planned and what was present of its own accord” [Participant 4]. This signifies that seemingly banal places on campus can provide a diverse university community with a wide range of locations from which to draw inspiration.

A Sense of Well-being

Ideas associated with well-being such as reflecting, relaxing and recharging were prevalent in the stories. Participants’ responses to the landscaped features and outdoor areas are symbolic of the literature covering the symbiotic relationship between nature and sense of well-being (Grind & Patil, 2009; Gullone, 2000; Leslie & Cerin, 2008). Students’ commented on a wide range of stimuli which contributed to their sense of well-being. One of the participants acknowledged that it was simply a combination of “sunshine, lawn and trees” [Participant 22].
that attracted them to learn in that environment. Trees were important to many of the students and evoked experiences, such as gleaning “insights for life” [Participant 20] and sensing “an aggressive thrust of energy” [Participant 2] …” and providing a boundary “between one world and the next – the built and the natural” [Participant 5].

The “feeling of freedom” [Participant 1] triggered by people spread out in wide open spaces and a preference to be alone came out strongly in the data. Participants’ descriptions include:

- Each like an island in the breeze, aware of each-other’s presence, but not disturbing it [Participant 5]; Sometimes I just need some time alone, away from other people and some fresh air [Participant 1]; Seclusion and privacy, giving the area an untouched, secret garden tone [Participant 4]; Out here everyone is alone, but we are all together, all able to disappear… [Participant 9].

This data reiterates that, when given the task of exploring learning on campus, a common notion expressed by most students was that privacy and seclusion were essential elements that contributed to their sense of well-being.

When faced with assessment tasks and exams, the outdoor environment offered participants a calming place to “relax and forget about outside studies” [Participant 3] and find “time alone, away from other people and some fresh air” [Participant 1]. Breathing and fresh air featured prominently, as one participant describes the theme’s effects:

- Being outdoors means having no concrete ceiling a couple of metres above your head, but in another way it makes me feel like my brain has more room to breathe [Participant 6].

The restorative effects induced by the presence of nature – trees, grass, sky, birds, flowers and water as well as man-made sculptures contributed to a sense of well-being and were valued highly in the context of enriching the students’ learning.
Outdoor Places: Belonging
Belonging is the connection of an individual with the world around him/her (Temple, 2007). In this research a sense of belonging emerged from connections with people, places, groups, communities, and objects on the campus. The students’ stories and images explored aspects of belonging, and especially focused on belonging to a specific place and the University community. Some prose contained the word ‘favourite’, as well as describing the place as ‘my own’, ‘my place’, and ‘a part of me’. For instance: “The little forest next to the old library is my most favourite place on this campus” [Participant 20]; “I can have my own space and lots of it” [Participant 1]; “…this place will always be part of me as I appreciate it more and more each time I go there” [Participant 1].
The research question did not ask the participants to identify their favourite place, but to describe and reflect on how certain places on the campus contributed to their learning. In the data students made no reference to outdoor places they did not like. However, students focused more on a small number of ‘special’ or ‘favourite’ places on the campus that were important for engendering a feeling of familiarity, connection and belonging.

The notion of finding a place to which one belongs is emphasised in the participants’ prose:

Standing on different stairs, you will have a different view about campus, perhaps you can find a unique place belongs to yourself [Participant 19]; …this place is separate from the university, a part of it but away from it [Participant 9]; “…international students who feel homesick … feel that they do belong somewhere” [Participant 16].

These students succinctly convey the importance of belonging to a community, and thus being a part of an extended relationship to others (Russell & Slater, 2011). The participants did not have to know everyone within the university community, but they articulated a need to feel some sort of link to other people or places. For one participant, belonging was linked to a sense of continuation by simply being a student at the university: “we are not alone when we are actually walking on these stones” [Participant 22]. Although a large university could be perceived as a lonely place at times; being aware of the broader connection to university community members, past and present, is significant and may help to foster a deeper sense of belonging.

For other students, their experiences prompted them to select a place in a seemingly random way, giving them the opportunity to escape the strictures of formal study or from being indoors:

It’s a place I come to at times…no particular pattern exists between one destination and the next, no rhyme, no order…but perhaps that is the point. It is here, in this place, that order can be escaped. It’s a taste of freedom, a place to rest and recuperate from the hustle and bustle of lecture and study [Participant 5].

Students did not necessarily go back regularly to the same ‘destination’ nor did they always explain why they chose one outdoor place over another. Some students alluded to their reasons. Figurative language was often present in these participants’ stories, and it was left to the reader’s interpretation to determine what was significant about a place:

We are at the beck and call of the seasons [Participant 15]; there is quiet in slow, measured breathing, in the feather-sweet air, the tickle of the grass against my feet [Participant 8]; during ordinary times through the university…the mind is always chattering away, thousands of thoughts fighting for attention to clog up one’s headspace [Participant 9].

Some participants, on the other hand, expressed a practical response to their choice of outdoor location. For example, a participant describes a situation when there are “not many sitting
alternatives on campus if it is raining, the library and food court are always full…” [Participant 13]. Hence an alternative outdoor sheltered place was deemed more desirable. Tellingly, the ‘freedom’ to make choices and the “feeling of freedom” [Participant 18] that came from being outside was shared between participants who enjoyed visiting one place and those who liked to visit many places. Given the research question was how outdoor places contribute to learning and by extending this question to which places on campus are worth belonging to, most participants expressed a preference, exemplifying learner autonomy - to have the freedom to decide for themselves.

**Conclusion**

The images and autobiographical stories created by the research participants have directed the lens away from the highly-structured, knowledge-focused, cognitive view of learning that is so often prioritised in higher education. It would be easy to conceive this approach to learning as the sole vision that higher education providers and policy-makers have for future generations of students, but it would be ignoring the informal, student-directed, affective aspects of learning that participants initiated while located outdoors. Students, who connect with outdoor learning places on campus, are likely to receive intrinsic and extrinsic benefits which contribute to their satisfaction with their learning experience. It is our conclusion that the students in this research who frequented outdoor campus places and made use of the facilities and the landscape, were afforded opportunities for holistic and transformative learning that contributed to a sense of well-being and belonging.

Based on the findings from this study, several areas for further research have emerged. With an upward trend toward moving degree courses via distance learning, one must ask the question: how do distance learners benefit from the outdoor campus? If a university campus is a precious resource, how can university educators adopt pedagogical approaches that connect students to places? Additionally, should we be advising distance learners, who do not have access to the university campus to spend time searching for an outdoor place that provides them with opportunities to enrich and broaden their learning experiences?

Further research asking learners to envisage how they would like the outdoor environment to be included in their learning is required. Students from a variety of disciplines could also be asked to contribute their ideas about the future of outdoor places when learning occurs in mobile environments. This may be particularly important for distance learning curriculum planners and designers who are eager to reform current methods, approaches and practices in learning and teaching. Higher education providers, who are able to create meaningful learning exchanges and create stimulating places where learners like to learn, will be well positioned to attract mobile learners to their physical and virtual campuses.

**References**


