4-1-2015

Technology for teaching and learning outside

Shelley Kinash
Bond University, shelley.kinash@gmail.com

Ron Kordyban
Bond University, Ron_Kordyban@bond.edu.au

Sarah Long
Bond University, Sarah_Long@bond.edu.au

Follow this and additional works at: http://epublications.bond.edu.au/tls

Part of the Educational Methods Commons, and the Teacher Education and Professional Development Commons

Recommended Citation
http://epublications.bond.edu.au/tls/95

This Popular Press is brought to you by the Learning and Teaching at ePublications@bond. It has been accepted for inclusion in Learning and Teaching papers by an authorized administrator of ePublications@bond. For more information, please contact Bond University's Repository Coordinator.
Technology For Teaching And Learning Outside

By Shelley Kinash, Ron Kordyban and Sarah Long

There are many reasons for teaching outside. For example, fresh air and sunshine have proven health benefits. Outdoor learning spaces tend to be natural and can be aesthetically pleasing in that there are numerous shades and varieties of colours and textures. Outdoor spaces and places are usually larger and less confining. Students can move between solo, small and large group work without the indoor restraints of heavy, fixed furnishings and view-blocking walls and pillars. Why study inside a confining room when the green grass, blue skies and fresh air beckon?

Students better absorb skills when they are using all of their senses and connecting to their immediate environment. Students do not just learn inside the walls of the classroom and they need to draw upon their knowledge and skills beyond the formal curriculum and context. Outdoor learning can encourage creative thinking, risk-taking and higher order thinking as the context and environment challenge, stimulate and inspire students. Outdoor spaces can enable small group work, encourage low-stakes debate and inquiry questioning, reinforce contextual awareness, facilitate team problem-solving and practical activities, and provide a creative and complementary space to share in the learning and teaching process.

From a simple set-up of students working together at picnic tables under the shade of a tree with Wi-Fi connectivity for research tasks, to a session that makes use of cloud-based collaborative intranet technology to connect students on multiple
Outdoor learning can encourage creative thinking, risk-taking and higher order thinking as the context and environment challenge, stimulate and inspire students.
education and university-based kinesiology, occupational and physical therapy are optimally suited for learning outside. There is space to move. There are objects to climb, manipulate, lift and carry. There are hazards to consider and negotiate, thus building empathy for future clients with mobility impairments. Technologies such as GPS, pedometers and heart-rate monitors complement the curriculum.

Sociology and psychology (particularly social psychology) are afforded interesting and compelling cases. How do people move about outside? Solo or in groups? To what extent are power imbalances observable? Are people texting while walking or are they appearing to observe their natural surroundings? Do people notice being observed? Is there a researcher effect? Mobile devices expedite creation, storage, analysis and sharing of field notes.

Architecture and environmental studies are natural choices for outdoor learning. Natural artefacts can be collected, charted and measured with the help of mobile technologies. The design of built-environments can be observed and evaluated. Animal tracks and patterns can be noted, recorded and annotated. Using concise instruments, air and soil quality can be tested.

The outside environment is a noble and inspired muse for writers – including students learning English, literature, poetry or journalism. Budding authors can practise capturing and conveying meaning and substance verbally. Students need only look up to observe that there are many colours besides blue in the sky and white in the clouds. Thoughts, ideas and descriptions can be audio, text or video recorded.

Despite the advantages, there are complications and prohibiting factors to learning outside. Some teachers say that it is difficult to maintain classroom control, discipline and management when learning outside. Both teachers and students can be distracted and let their attention lapse and weaken. Children who associate the schoolyard with tea breaks may not be able to resist the urge to roughhouse when formal learning is moved outdoors. Students who are not partaking in the class may walk by and intentionally disrupt learning. Colleagues may not respect outdoor learning and share the confidence of well-intentioned innovators.

The weather and other natural factors might also be prohibitive. Sometimes it is too hot to concentrate or too cold to be comfortable. The rain can soak potential seating and bird droppings can make settings unusable. Wind can blow away papers and distract students into worrying more about their hair than about learning. People can become dehydrated. Roots and stones can cause people to stumble or trip. Naturally poor acoustics and ambient sounds can make the teacher and/or students difficult to hear. Outdoor spaces are seldom dedicated as ‘classrooms’ or set-up to be conducive for learning. The chosen space may already be occupied and equipment and supplies may need to be hauled and stored. Areas may require clearing before they can be suitably used.

While it cannot solve all of these problems, education technology can be used as an enabling and enhancing factor in learning outside. In other words, outdoor learning is not possible without some technologies and is improved by others. The first factor to consider in technology-enabled outdoor learning spaces is the balance between bring-your-own-device (BYOD) and teacher and/or school provided devices. Many (but not all) students at school and university can bring their own mobile devices, including smartphones, tablets and laptops. Most also have a wide variety of productivity apps installed, enabling them to record, note-take, produce and readily save, store and share. However, it should not be assumed that every student will own and/or bring such a device. Experienced outdoor learning teachers are advised to have a class-set of software-loaded devices at hand so that no students are disadvantaged by not being able to afford a device or by lapsed batteries.

The next enabling technology factor is Wi-Fi. Prior to moving outside, Wi-Fi should be tested. Most schools and universities have adequate and consistent Wi-Fi inside their classrooms and other interiors (such as libraries). Outdoor spaces are sometimes forgotten. Outdoor learning works well when teachers and students can use mobile devices to search phenomena and document, post and share observations, descriptions and images. Note-taking on mobile devices works well because it means that people do not have to cope with the conditions of wind and paper. However, most student note-taking apps work best with internet connectivity.

With technologies destined to continue to improve and develop, the needs, skills and expectations of modern learners are sure to keep pace. There is an undeniable allure of being mobile, free and unconfined in time, space and imagination. With the development and proliferation of education technology, previously bored students sitting at their desks and daydreaming out the window are increasingly being engaged through the novel and inspiring opportunities of learning in the fresh air of the outdoors.

Dr Shelley Kinash is the Director of Learning and Teaching at Bond University. You can contact her on skinash@bond.edu.au

Ron Kordyban is the Blending Learning Co-ordinator & Blended Learning Designer at Bond University

Dr Sarah Long is the Deputy Director Learning & Teaching at Bond University