

Authentic learning: what, why and how?

s educators, we have all known for a long time that learning is best done through experience - *learning by doing* rather than *learning by listening or observing*. Educational theory and research support this claim. The daunting thing is, how do we as educators, plan for this? How do we design learning so that it is a meaningful experience? How do we ensure that students are active and engaged participants in their learning?

In this article, I aim to help to define 'authenticity' in learning, and begin to introduce some ideas to help guide you through the design process.

What is authentic learning?

Authentic learning is learning designed to connect what students are taught in school to real-world issues, problems, and applications; learning experiences should mirror the complexities and ambiguities of real life. Children work towards production of discourse, products, and performances that have value or meaning beyond success in school; this is *learning by doing* approach.

It was once said that 'education is what survives when what has been learned has been forgotten' (New methods and new aims in teaching, 1964). Experiences that do not encourage the children to make meaning from their learning will quickly be forgotten. Any learning experience should aim to instill authenticity into every task, lesson and unit to ensure that 'students are [able] to develop problemsolving skills and confidence in their own learning abilities' (Nicaise, Gibney and Crane, 2000). It is only with this confidence that children are then able to use the skills and knowledge learned beyond the classroom walls.

To prepare students for life outside school, we need to develop children who can make meaning of their learning; this is done by making links between previous learning and new learning, from one subject to another. Research at Canterbury Christ Church University has found that placing 'each learner's personal quest for meaning at the heart of curricular and pedagogical decisions, is one most likely to generate the resilient communities needed



to face a future of unimaginable challenge and change' (Barnes and Shirley, 2007).

Neither our lives, nor our jobs, are compartmentalised and sectioned into subjects. In order to reflect the real world, authentic learning takes a truly cross-curricular approach in its design as well as implementation in the classroom.

There are ten design elements that learning researchers believe represent the 'essence' of authentic learning. According to these researchers, each learning experience should have:

- *1 Real life relevance* Activities and tasks that represent those of a professional as closely as possible.
- 2 An ill-defined problem
- Challenges that are not easily solvable, or don't have an obvious answer. There may be layers of tasks that need to be completed in order to solve the problem.
- *3 Sustained investigation* Projects and tasks that require a significant investment of time and cannot be solved in a matter or minutes or hours.
- 4 Multiple sources and perspectives Resources may be theoretical or practical, and may require learners to distinguish useful information from irrelevant information.



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- 5 Collaboration Individuals cannot achieve success alone. Projects and tasks will require social connections.
- 6 *Reflection* Learners will reflect on their own learning and make choices and set targets accordingly.
- 7 An interdisciplinary perspective Projects are not limited to a single subject or set of knowledge, but will make use of knowledge and skills from across subjects.
- 8 Integrated assessment Formative assessment is woven seamlessly into tasks and activities and used purposefully by learners and teachers alike.
- *9 Polished products* Activities and tasks will lead to the creation of a product.
- 10 Multiple interpretations and outcomes There are many possible solutions and answers to the problem.

(in Lombardi, 2007)

This checklist is exhaustive and represents authenticity at its greatest. However, I do believe that it can seem intimidating to the first time authentic learning designer. Essentially, authentic learning is multi-disciplinary, skills-based learning in a real-life context, demonstrating to students that their learning is connected, relevant, and can have an impact upon the world around them, as well as their future selves.

Why is authentic learning beneficial?

Every day, in both our professional and personal lives, we come up against unfamiliar situations in which we have to solve problems, adapt our own behaviours and make decisions. We do this by utilising and manipulating the knowledge we already have, drawing upon our experiences and skills to guide our choices and help us to determine our next steps within the context of the situation we find ourselves in. Authentic learning aims to equip students with these essential life skills, to show the connection between learning and real-life and to give students the problem solving abilities that they require for life beyond school.

Along with this, authentic learning experiences give students the opportunity to address the three goals of learning: acquisition, making meaning and transfer (AMT). The AMT model in Figure 1 illustrates how these three processes are interrelated:

By designing learning experiences with relevance and authenticity, teachers can plan occasions for all three of these goals to be realised, allowing teachers to become 'coaches of understanding, not mere purveyors of content or activity' (Wiggins and McTighe, 2011). In the AMT model in Figure 1, understanding cannot be told; it is constructed by the learner and transferred independently between tasks or activities.

Further to this, authentic learning is able to change the dynamics of the learning environment, to '[break] down the barriers of the classroom and the power hierarchies within it' (Steventon, 2016), encouraging learning communities and connections



Figure 1: The AMT Model (McTighe, 2010)

among both peers and staff. Learning along with the students about a topic with which you may not be familiar models learning behaviours in a way that students do not see in other learning pedagogies.

When thoughtfully designed, authentic learning experiences can help teachers in their assessment of, and for, learning. Building in ongoing assessment, teacher led as well as peer and self assessment, is an added benefit for teachers and students; assessment becomes a part of the learning process, a formative tool to drive next steps, rather than an added extra at the end of a unit that generates data yet has no meaningful impact on learning.

More than anything else, authentic learning experiences generate engagement with students. Think about it – how many times in your own schooling did you ask the teacher, '*Why are we learning this?*' or '*When am I going to use this in real life?*'. Authenticity automatically gives relevance to the learning journey; relevance encourages engagement and enthusiasm, which should bring about meaningful learning.

How to design authentic learning experiences?

There is no set formula for the planning and design of authentic learning experiences. The guidance here should be used merely as that – guidance. As an educator, it is you who knows your students best, who knows what they need from their learning and can make decisions accordingly. Use your professional judgment as your best guide!

- 1 Get to know your students. What are their interests? What engages them? Determine their learning needs. For example, are they a group who performs well in written tasks but could work on speaking and listening skills, or vice versa? The needs and interests of your students should always be a starting point.
- 2 Based on your students, determine a possible project, goal or outcome. This is where relevance and authenticity come into play – link the outcome to something real life. It could be running a restaurant, publishing a book, creating a museum, solving an environmental issue or a number of other ideas. There are many Project Based Learning (PBL) websites that can give you ideas if you need a starting point.

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- 3 Break down the skills that your students will need in order to complete the project or reach the outcome. Remember, these may be across a number of curriculum areas and can be matched to curriculum statements and objectives if necessary.
- 4 Pre-assess your students how do they perform in these skills already? There are a number of ways to pre-assess, but the best approach is to speak to your students – what do they think they need? Giving the students a role in the design of their learning journey helps to break down the 'hierarchy' and gives them ownership and control over their progress.
- 5 Make time for the AMT model give students the opportunity to transfer previously learned skills (or skills they have learned for this outcome).
- 6 Teach, facilitate, coach, guide...and learn. Some skills will require discrete teaching in a traditional sense, then an opportunity to transfer. Others will be better suited to more student-led learning and exploration. Assess throughout the project; help students determine their own next steps. Model positive learning behaviours.
- 7 I think it is helpful for students to self-assess at the end of a project. What have they learned? What new skills do they now have? What would they like to learn more about?

There are some who would argue that true authenticity only comes when the outcome or goal is shared beyond the classroom; this may well be the case, but again, the first time authentic learning designer may see the idea of sharing beyond the classroom daunting. I think it should be said at this point that authentic learning experiences do not have to be all singing and dancing, which it may seem from the steps above. Start small and work towards the larger projects. The key is that they need to have relevance, some sort of application to the real world – larger-than-life outcomes are not always necessary and can actually be a deterrent when taking on this approach.

Conclusion

From the standpoint of the child, the great waste

in school comes from his inability to utilize the experience he gets outside while on the other hand he is unable to apply in daily life what he is learning in school. That is the isolation of the school--its isolation from life.

(Dewey, 1915)

The outcome of any schooling or education system should be to send students into the world prepared for both their personal and professional lives – education and life should not be isolated from each other. However, we cannot teach our students everything. What we can do is teach our students to be adaptable and creative thinkers who are able to utilise the skills and knowledge they do have to create new solutions to problems. By giving students the opportunity to learn through authentic, real life, relevant learning experiences, we are giving them the ability to *apply* their learning, to *learn through doing*, to see their abilities, to adapt and change, and to form the habits required to do this successfully in their lives beyond school.

References

Barnes, J, Shirley, I 2007, 'Strangely familiar: crosscurricular and creative thinking in teacher education', *Improving Schools*, vol. 10, no. 2, pp.162–179. Dewey, J 1915, *The School and Society*, U of Chicago, Chicago, IL. Lombardi, M 2007, 1st ed. [ebook], available at https://net. educause.edu/ir/library/pdf/ELI3009.pdf, accessed April 2016.

McTighe, J 2010, Understanding By Design Stage 3: Teaching for understanding 1st ed. [ebook] p.2, available at: https://www.nesacenter.org/uploaded/conferences/ FLC/2010/spkr_handouts/McTighe_Workshop_-_NESA. pdf [Accessed 1 Mar. 2016].

'New methods and new aims in teaching', 1964, *New Scientist*, pp. 122.

Nicaise, M, Gibney, T, Crane, M, 2000, 'Toward an Understanding of Authentic Learning: Student Perceptions of an Authentic Classroom', *Journal of Science Education and Technology*, vol. 9, no. 1, pp. 80.

Steventon, G 2016, 'Authentic Learning. A route to student attainment?', in: G Steventon, D Cureton and L. Clouder, (eds.), *Student Attainment in Higher Education: Issues, Controversies and Debates, 1st ed*, Routledge, New York, p.98.

Wiggins, G, McTighe, J 2011, *The understanding by design guide to creating high-quality units,*. Alexandria, Va, ASCD

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Tell me and I forget. Teach me and I remember. Involve me and I learn. **Benjamin Franklin**

I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel. Maya Angelou

Live as if you were to die tomorrow. Learn as if you were to live forever. **Mahatma Gandhi**

He who learns but does not think, is lost! He who thinks but does not learn is in great danger. **Confucius**