

Learning estate conference 2016

Summary note

Overview

The Learning Estate Conference has hosted by Scottish Government, and supported by Architecture and Design Scotland and Scottish Futures Trust on March 9, 2016 at the TIC building in Glasgow. The purpose of the conference was:

- to challenge ourselves about how we are responding to the needs of modern learning in shaping the estate;
- to explore international best practice in learning and innovation, and;
- to debate our shared leadership priorities to maximise the impact of future investment

The conference was broadly divided into three parts:

- Contexts and challenges. This set out where we are, provoked thinking on the leadership and challenges around where we want to be. The morning was opened by Minister Alasdair Allan, and followed by Donald McKay, former Director of Education in Midlothian, Ian Robertson, Deputy Director, Glasgow City Council; David McEwan, Estates Programme Manager Glasgow and Laura Mason, Chief Education Officer at West Dunbartonshire Council.
- Innovation. This session focused on two key issues. The first is around the destination of learners. Discussing the future of work as one destination, Martin Hottass of Siemens set out a landscape of rapid change in technology and engineering, demanding new skills and rounded individuals. The second issue relates to the insights of learners as innovators, the power of the right conversations at the right time to craft the right questions to inform action. Ewan McIntosh set out the NoTosh experience of learner led innovation, drawing on practice from across the world.
- Action: Professor Stephen Heppell set out a provocation about the nature and pace of the changing landscape of learning, and the different responses places are making to address these changes with the learner at the heart. Professor Heppell challenged around where Scotland is in terms of its learning and learning estate, challenged around the need for more conversation with learners and active participation to drive improvement, attainment and innovation, and challenged around pace. The presentation was followed by an interactive workshop on ambition and action.

The purpose of this note is to summarise some of the headlines of the main presentations. The note has been prepared by A+DS.

The presentations from the conference are available in pdf and video format from the following web link:

www.ads.org.uk/learningestate-estates-conference-2016/

Contexts

Minister Alasdair Allan opened the conference, highlighting the transformation of the estate, the challenges of accommodating new policy initiatives like DSYW and early years, and the need for continued leadership.

Donald McKay opened the conference with a provocation. Though we have built new schools, how much have we really changed the nature of how space facilitates learning since Victorian times? Donald emphasised the need to understand the science of education in shaping learning space. He focused on the responsibility to challenge and take leadership in the shaping learning spaces as a collaborative corporate priority to better prepare our learners for a new and changing world. Education can be risk averse, slow to change. 'It aye been' needs to be challenged. We need to ask fundamental questions on the purpose of our investment, and the benefits for learners, community and teachers. The full impact of education on a learner can't be measured until they have moved through their life making choices for them and their children. We need to look long term.

Ian Robertson invited thinking on three key issues: the focus of innovation, the capacity to absorb innovation, and workforce development. On focus, are we clear on our target; is it about innovation in the estate, or innovation in learning? Great teachers with people who want to learn can transcend the limitations of any space. Using the example of Hillhead primary school, Ian acknowledged the architectural merits of the building, but suggested that it is the combination of great teachers, engaged learners and inspiring leadership with the building that makes the difference. The 'soft' infrastructure is critical. This leads to the capacity to absorb innovation: how much more innovation can the system absorb in the next 5-10 years? Supporting the learning and teaching community is key. Finally, workforce development, new teachers entering schools and support for existing staff is essential to continue the development of the conditions to free teachers up to be innovative, with engaged learners and inspiring leadership. Key to this are young people leading the learning. **David McEwan** highlighted the differences between innovation, doing new things, and creativity, thinking new things. Innovation is a key modern lifeskill. We need to build the conditions to invite both creativity and innovation in learners, at all stages of their learning journey. This, the learning process, should lead, and the estate support.

Laura Mason discussed the path West Dunbartonshire are taking around regenerating learning. This story is about three things. First, it is about recognising the Child's needs, and where they are at with their learning. It's not about us. Second, curriculum for excellence invites integrated thinking. We need to open up spaces and spill the curriculum around all the available spaces. Thirdly, we need to build the conditions to give people the confidence to go further, develop more, and take more risks to expand the learning experiences. The story is about changing hearts and minds, with learners at the centre.

To get where we want to be, we need to be honest about the challenges and address them directly. The nature of local authority organisational structures can make it difficult to get the time to work together. There are ideas about the standard design of a school, and the regulatory requirements of tools like the 2010 Act. Teachers can be challenging, but it is our responsibility to help them see the opportunities of collaboration. We need to invest in professional development in parallel with building development. We also need to think about the community, their histories and links with schools, and understanding of learning and teaching. Understanding the past is key to working with community. The path through these challenges is to maintain the focus on the learner, and keep an open heart.

Innovation

Martin Hottass of Siemens highlighted the need for a holistic approach to learning. The changing world of world is demanding new abilities, a different kind of workforce, skills of the future. The foundation for this development is learners that are rounded individuals, are literate and numerate. But, fundamentally, are curious, ask 'why'. Industry 4.0 is the latest industrial revolution. It is data driven, trend based, in time, where production is collaborative between humans and robots. It is about intelligent systems, complex manufacturing and new ways of visualising, interpreting, managing and synthesising information to drive innovation and production. There is full transparency and feedback on the production cycle, enabling fast informed decisions across supply chains. This is about systems within systems. Virtual reality technology has advanced significantly to build full futures of buildings, products and services in advance of capital driven construction, to test, to prototype and improve. Innovation is critical. Integrated and collaborative working is critical. There are no silos. Reflecting on the implications for the learning estate in Scotland, Martin drew out four challenges:

| Challenge: | Martin Hottass insight: |
|----------------------------|--|
| Opportunity | Collaboration with employers on learning and skills. Dialogue is key |
| Investment | This is as much about investing in 'creating mindsets' as it is in infrastructure. The outcome is about building innovation, doing things in new ways, being curious, asking the right questions |
| Challenges | Skills are demand led. There will be variations, which need agile strategies. There are also differences in skill programmes across the UK. Validation may affect workforce mobility |
| Difficult decisions | The key is clarity about what not to invest in as much as what to spend on. It is outcome driven |

Ewan McIntosh of Notosh focused on three key issues: problem finding [asking the right question], decision creation [participation] and prototyping [changing by doing, quick tests of change]. The starting point for re-thinking learning spaces is our knowledge of what makes strong learning. This is the necessary start. From here, there are five criteria for success along the journey of change: a common language, shared objectives, quality feedback early, build from the first day, test by doing.

Ewan urged for audaciousness in ambition, built with learners and teachers. This practical evidencing moves us away from a high level view, a prediction model of the future of education, to a live and action oriented method of changing education now, reflecting on what works, and iterating change. In shaping change, in shaping spaces for learning, it is essential that the youngest learner understands the process as much as the oldest person in the room. Designing the question, provoking responses and making sense of insights to drive action are critical parts of problem finding. We need to ask the right questions. This means investing the right time at the right time to support conversations, not consultation.

Translating insights into action is about thinking through the three horizons: [1] problem finding [2] routes to get there [3] the destination. The order you take to the process matters. Start with problem finding. Why do we need a school? This is about the 'why'. We don't ask 'why' enough. It can be unpopular. Then be audacious about the destination. From there, work out the routes to get there.

In the morning session, David McEwan said there are 'no old roads to new destinations'. Navigating the way to the new destinations can be facilitated by three things: understanding the 7 spaces for learning, great listening and rapid prototyping, cheap quick construction to live test new spatial formats. This resonates with the West Dunbartonshire re-purposing work.

In the afternoon, **Professor Stephen Heppell** provided a masterclass on modern and future settings for learning. The lecture highlighted ten themes for action:

1. Town of learning

Heppell is working on a school designed for 500 learners, but caters for over 1500. This is made possible by sharing spaces in the neighbourhood surrounding the school, so that the school is one part of a local cluster of integrated learning spaces.

2. Community of learning

Learning is not separated out by age group. It is a dynamic process, where people support and challenge each other. Building the conditions for community within learning spaces, and beyond are key to supporting whole child and whole person development

3. Mixed age, self organised learning

Mixing age groups within specific spaces, or between spaces allows for mentoring and management. The variation in age group, an expectation between age groups, and the ambition of young learners to bet the older learner, or to test their own ability is supported when the environments we create for learning allow self organisation by learners of what learning happens where. Zoning helps. Protocols matter.

4. Protocols for effective use of learning spaces

Working with learners as researchers in shaping both the learning and learning space provides evidence of how people use space, where conflicts may arise and the language people use to make sense of what happens where. As part of the process of changing space, it is essential to have a participation led process of creating a shared protocol for using the space for learning, so everyone understands what is possible, where and how. Heppell provided examples of learner led protocols from New South Wales.

5. Re making classrooms

Using low or no budget, and enabling students and teachers to ask the questions and set the brief for change, Heppell has worked with students across the world to prototype and test new learning settings in existing spaces. In one school, the students mocked up furniture, smart boards and ipads using cardboard, and 'pretended' to learn using these simple touchstones in advance of the actual learning space being constructed. Their attainment in the 'pretending' period increased. Participation matters.

6. Learning 2025

We know now what the immediate future of learning looks like. We can describe it, break it into properties and link it to settings and groupings. The information is already out there. Are we sufficiently aware, adopting and integrating it?

7. Environmental quality for learning

The environmental quality of classrooms has a huge impact on concentration, and attainment. From CO2 to light, we know the optimal conditions. We also have learners and teachers in these environments everyday, live researchers on performance, who can capture and monitor data, feedback and review change.

8. Social contexts of learning

Every surface, every piece of circulation, every piece of kit, every wall, floor and level change in a learning space is a learning opportunity. We understand what conditions support collaboration, from flat screen technology to minimise physical barriers to conversations, to writeable surfaces. The infrastructure of spaces should be organised around the social contexts of learnings, moments where we can shared deep insights about each other to embed memory, learning and questions.

9. Work space inspired by learners

Modern workspace design which seeks to foster greater collaboration, socialisation and innovation mirrors closely the settings and formats imagined by children and teachers in re-purposing learning spaces and class rooms. Industry is borrowing from the learners.

10. Re purposing places for learning

Any building can be adapted to be a learning space. Deep plan, large format footprint buildings provide huge spaces that can be adapted, appropriated and adjusted to allow for a huge variety of learning settings. It is about opening up the learning. Old buildings can be repurposed, from office space to industrial space, to arts of neighbourhoods for learning when we are driven by a vocabulary of what makes good learning.