



Inspiring
Learning
Spaces

contents

*With special thanks to the following
for their contributions:*

ILS project teams

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Introduction

Teaching and learning in Scotland is in the midst of transformation. The Curriculum for Excellence puts the learner at the centre, a dynamic participant in how learning happens. Schools are engaging in new learning situations which have proven benefits for equipping the adults of tomorrow.

In this context, learning spaces are being reimagined. The conventional classroom, which has changed little in 100 years, is transforming into a flexible space which enables individual, collaborative and interdisciplinary working and gives the learner more choice in how they learn.

In August 2014, the Scottish Government made £5million available to encourage local authorities to imagine teaching and learning spaces differently. Inspiring Learning Spaces

(ILS), administered by the Scottish Futures Trust, did not set down a list of criteria. Applicants were encouraged to think creatively, to find low-cost interventions which made high impacts.

ILS encouraged local authorities to look at spaces within school buildings which could be transformed: an old Home Economics lab became a state-of-the-art restaurant kitchen, a storeroom became a skills academy for the construction industry. Some local authorities used the funding to trial new kinds of learning space to better inform forthcoming new-build schools. Innovative partnerships were formed with FE colleges, local businesses and a Science Centre.

In collaboration with SFT, Architecture & Design Scotland captured learning on the early impacts and benefits of the ILS projects based on interviews with 20 project leads. The majority of the projects fell into three broad categories: flexible learning spaces in which to explore new learning

styles; vocational training facilities; and digital and virtual classrooms which expand the use of technology in learning. The projects were very different in size and scale, ambition and intended educational outcomes, and, as you'd expect in an innovation initiative, some aspects were more successful than others. From those projects able to report early results, there were both expected and unexpected benefits. In some cases, the ILS proved transformative for pupils, teachers, and the wider school community.

Many of those who took part in ILS are keen to share their ideas more widely. This publication brings together the lessons learned during the initiative for those in the learning and estates community across Scotland. Whether you are in a position to make a large change or a small one, it invites you to pause for a moment and imagine new and innovative ways of learning.



Education reflections



A conversation about changing spaces for learning can act as a catalyst for a discussion about learning itself. The launch of Inspiring Learning Spaces created a space for exploring what new ways of learning and teaching might look like, and how they could benefit pupils and teachers.

As spaces for learning begin to change, they support changes in how learning takes place. Settings are more fluid, rules change, relationships are redefined. Small-scale, low-cost interventions in learning spaces provide evidence about how changes in teaching and learning nurture confidence, promote engagement, encourage pupil choice and enable greater equity of experience.

Reflecting on the early impacts of Inspiring Learning Spaces and drawing on experience and research, a group of educationalists helped identify the following themes to support others interested in making changes:

Leading change

A clear, shared vision of what education needs to look like to support better outcomes for learners and teachers needs strong leadership and continuous conversation. Capital investment can provide the conditions for change, and a timetable to prepare for change in practices. Changing the learning environment needs both transformational leadership to shape the shared vision and instructional leadership to lead the change in practice.

Test learning approaches

Small-scale interventions can be used to test new practices and gather evidence of what works. Build up

skills and evidence around different styles of learning and teaching practice aligned to the outcomes in the educational vision. It is important to understand how each learner learns: there is no “one size fits all”.

Collect evidence

Evaluate small-scale interventions, having defined what you regard as indicators of success in accordance with your aims. Build a research base of evidence of what works from your own and other projects, focussing on learning and teaching success. Select the lessons from other projects which best match the context of your vision.

Support teachers

Build opportunities for teachers to lead the change in practice through paired teaching, mentoring, group practice, observation and reflection. Use evidence and results to share the new ideas with other teachers and recruit them to the culture of the new practices.

Listen to pupils

Include learners as partners in shaping change and evaluating the impacts. Build a range of settings to facilitate different ways of learning, from independent learning outside the classroom to group activities which encourage peer support, and help individuals to make their own choices about their learning journey.

Encourage problem-solving

Flexible spaces can be adapted to deliver a range of learning situations. Experience of different learning situations builds skills in creativity, critical thinking, negotiation, conflict resolution and different ways of working. Young people learn to think independently in unfamiliar situations: what do you do when you don't know what to do?

Nurture parity of esteem

Build spaces and experiences which recognise different learner choices and support a range of pathways for individuals to test themselves. Provide opportunities to validate all learner experiences across the spectrum of vocational and academic learning, establishing parity of esteem.

Use technology

New spaces will bring new practice around shared space, storage and planning of learning experiences. Technology can provide valuable resources for these, as well as new ways to engage learners and evaluate learner progress. Build support for teachers by encouraging early-adopters to get involved in peer support groups and training.

Where to begin

educational vision
what outcomes would you like to see?



research
what changes would help bring these about?



small-scale changes
focus on low-cost, high-impact interventions



evaluation
choose the methodology which best suits your aims



expand impact
communicate well, keep adapting to changing needs

Vocational pathways

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More than ever before, schools have a dynamic role to play in supporting young people in their onward journey to further education or employment.

Scottish Government initiatives such as Developing the Young Workforce have affirmed the importance of providing diverse learning pathways, both academic and vocational. Many schools used Inspiring Learning Spaces funding to create workshops and training centres in which to offer vocational learning in a range of subjects from carpentry and catering to the creative industries.

A mini construction site to teach engineering skills or a fully-fitted restaurant kitchen for hospitality training creates a new kind of

space for teaching and learning. In a workplace environment, the relationship shifts between teacher and learner; schools reported how young people responded positively to this change with improved attendance, growing confidence and an increased willingness to participate.

Pupils took on more responsibility, getting themselves ready for “work” each morning, or learning business skills by running a cafe within the school. Once the facilities were up and running, they were highly visible; parents, teachers and pupils were quickly convinced of the benefits, and pupils of all abilities became keen to participate.

If made accessible across the school, vocational training can teach a range of valuable life skills. Pupils interested in training to become architects or surveyors can learn a great deal on a mini construction site, while those

who follow an apprenticeship route into work have the potential to study for a degree later, supported by their employer.

Often, these projects were delivered in partnership with Further Education colleges and local businesses, who were, in turn, able to advise on the most suitable training to offer. Vocational training facilities at school act as a bridge into further education, removing perceived barriers for many students. Staff from local businesses, from chefs to electricians, became involved as consultants and mentors, teaching courses themselves and providing work placements for pupils. A number of schools created facilities which could then be accessed by pupils from neighbouring schools.



East Lothian

Good quality construction workers are required across East Lothian to enable the extensive growth plans that are in place across the region. A construction skills academy, delivered in partnership with Edinburgh College, offers pupils a range of vocational training across the construction sector. The project shows how integrated spaces for vocational learning can help bridge the gap between school and college and help to provide the necessary skills for further education or future work.

“There is a sense that there will be a job at the end of this.”

Dumfries & Galloway

A former Home Economics lab was upgraded to create a state-of-the-art restaurant kitchen and fine dining space, creating pathways to careers in hospitality in an area where tourism is a major part of the economy. Early results suggest significant benefits: high quality facilities mean pupils feel invested in; engagement and attendance have improved. The facility has encouraged new ways of teaching and has also impacted school life more widely.

“Geographically, it is difficult for pupils to get to the local college, but these facilities enable the college to deliver courses within the school.”



“The feeling is the days of having a standard academic curriculum are gone. It is important to have a vision and commitment to delivering a curriculum that meets the needs of every child.”
Fife

Key topic summary

Flexible learning spaces

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Today's schools are about learning skills for life as well as academic knowledge, equipping young people to be capable, confident citizens. The Curriculum for Excellence emphasises the value of different learning situations where pupils can work individually or in groups, take the initiative in shaping their own learning or develop their abilities to work with others.

Many schools used Inspiring Learning Spaces funding to experiment with new kinds of learning situations, whether by adapting existing classrooms or working with experts to design new spaces. Teachers

and pupils were involved from the beginning in a process of participation and engagement, contributing ideas and working with specialists to create spaces which suited their needs. This not only built confidence but created a sense of ownership and enthusiasm.

Lesson plans were adapted to make it easier for pupils to work collaboratively and engage in learning based around exploration and investigation. Teachers found their role changing: they were teaching less from the front, and working more to facilitate learning. Peer-to-peer learning became more important as groups within the same class focussed on different projects.

Schools reported increased levels of pupil engagement in the new spaces. Having the autonomy to choose whether to stand or sit depending on the task and approach learning more creatively helped increase

participation and engagement in the learning. Both teachers and pupils felt more relaxed, and found the new environments productive.

Bespoke designs and modern furnishings clearly supports these changes: in one innovative STEM project in a primary school, the design within the different learning zones signals to children how to use each area. However, even small changes in a traditional classroom can enable a greater degree of flexibility in the learning environment. Such changes make it possible, in turn, to explore multidisciplinary learning, team teaching and offer young people more choice in the kind of learning which suits them best.



Glasgow Primary Schools

Glasgow adapted underused spaces at three existing primaries into innovative environments to explore new approaches to teaching and learning. They found that engaging pupils of all ages in the development of the learning spaces built confidence and ensured the spaces reflected learning needs.

“The pupils learned a huge amount from doing this and gained lots of confidence.”

Midlothian Primary Schools

Midlothian Council engaged primary pupils across the authority in design, development and decision-making processes to adapt and transform their current learning spaces. The resulting spaces are agile and easily adapted for different tasks and requirements. Children can take control of their own learning.

“Teachers are saying that it has changed the way learning takes place and it is the best teaching experience they have had... There have been noticeable differences in behaviours.”



“Because of the effective design, the pupils sense how to behave. In the Reflective area, for example, the children do not need to be told to be quiet and calm as the design makes them adapt the behaviour that is appropriate to the space.”

West Dunbartonshire

Key topic summary

IT as a tool for learning

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Today's young people use digital technology in almost every aspect of their lives, and many schools are now embracing its potential as a key tool for learning. Used well, digital resources can support and enhance the learning experience, enabling learners to be more creative and take more control of when and how they learn, as well as helping them prepare for a technology-rich work environment.

Digital resources support changes in learning and teaching, such as the move towards collaborative and project-based learning in which the

teacher acts as facilitator. Using digital technology, young people can also carry out research away from the classroom, meaning contact time with the teacher can focus on drawing out and applying the learning. Flexible spaces support technology-rich learning by enabling collaborative working in large and small groups through facilities such as screen-sharing.

A number of schools used Inspiring Learning Spaces funding to enhance and expand their use of digital technology, from teaching classes online to purchasing devices for children to use. Bringing digital resources into the classroom led to a greater sense of pupil engagement, an increase in peer-to-peer learning and in collaboration between learners and teachers. In one project, young people took the initiative and approached teachers with their ideas about new ways in which the technology could be used.

Schools in remote areas were early adopters of e-schooling, enabling equal access to specialised subjects. However, even urban schools are now exploring the potential of the virtual classroom to offer equal access to a broader range of subjects, and to support adult and community learning.

The schools involved emphasise that the use of digital technology is not a replacement for face-to-face learning; meeting the teacher in person before the learning began was an important component for success in virtual classroom projects. Similarly, the most successful uses of digital technology come when it is not itself the focus of the learning but is used as a resource to enhance education across a range of disciplines.



“There has been a lot of positive feedback about increased motivation and a better attitude towards learning. The pupils want to use the Chromebooks so the project is being led by pupil demand. The pupils are suggesting things to the teachers that can be done with the technology.”
Highland

Western Isles E-School

The Western Isles e-school project was an innovative solution to address teacher recruitment challenges in the Islands. Digital technology has been used to increase the range of subjects offered to pupils in remote areas showing that well facilitated e-learning is an effective tool, promoting equity of learning to all. Those taking part believe e-learning could have useful applications across Scotland.

“This isn’t a substitute for traditional schools and face-to-face teaching, it is simply a tool. It helps provide equality in that all pupils, no matter where they live, can access the subjects they want to study.”

West Lothian

West Lothian Council combined three traditional high school classrooms to create a digital plaza to explore best use of digital technology and open learning spaces prior to moving into a new school. Pupils and teachers helped to design the space. The new environment has brought about new ways of teaching and learning.

“How teachers approach the lessons is very different now, for example, the PE lesson might begin with a video of the pupils doing a sport which they review in groups and then develop strategies to improve. The teachers set the challenge, ask hard questions and facilitate the learning.”

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Key lessons and early impacts

The early learning from the 20 ILS projects highlights a series of lessons.

Involving pupils and teachers at the planning and development stages of an ILS project was found to bring significant benefits. Pupils developed confidence from being part of these discussions and their involvement generated a sense of pride and ownership which continued once the project was up and running.

The sense of excitement generated by many of the ILS projects appears to be related to the new approaches to teaching and learning as well as to the new physical environment. Project-based interdisciplinary lessons and “learning by doing” have been welcomed, as have opportunities for collaborative and peer-to-peer learning.

Early results show that high quality new spaces which take account of learning and teacher needs make pupils and teachers feel valued and invested in. In turn, pupils respect and value the new facilities. Projects report positive practical impacts in terms of increased engagement and attendance, and little or no vandalism.

Gaining the support of teachers is crucial. Presenting evidence about the potential benefits of the changes is important, as is listening to their concerns and equipping them with the skills and confidence to make the most of the new environment. Teachers who act as leaders, modelling new practice and mentoring and supporting colleagues, have proved invaluable.

Many reported that success emerged from forming a multi-disciplinary team to make strategic decisions, bringing together colleagues from

across the local authority, including educationalists, teachers, estates and procurement staff. Setting a clear brief from the beginning was found to be important, as was good communication between all involved.

Challenges were faced around timeframes, collaboration and decision-making processes. A clear vision of what success looks like for learners, coupled with strong leadership and a clear project management approach helped to overcome challenges faced in delivery.

Ongoing evaluation of the lessons and impacts from ILS projects will help ensure the most successful approaches are adopted across the country, for the benefit of Scotland’s learning community.





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