

SCOTTISH
FUTURES
TRUST



INSPIRING LEARNING:

SPACES TOOLKIT

Supported by:

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INTRODUCTION

Taking lessons learnt from the successful Inspiring Learning Space projects, and from school projects wider afield, this Toolkit has been developed to help schools, teachers and local authorities get the best from their learning environments.

Whether you simply want to think about how you use your existing spaces, have a small amount of money to spend on remodelling spaces, or are involved in a large capital project, the Toolkit sets out a clear process with practical questions and exercises designed to help you manage change effectively. The main driver is to start a conversation about how spaces help or hinder you in delivering your learning vision.

The ideas here can be used within the current school environment to support the delivery of the School Improvement Plan, review annual budget allocations, inform staff CPD planning and inform the briefing process for potential capital investment, whether it be small or large.

The Big Picture section is designed to help individual schools, clusters of schools, and local authorities explore how improving learning spaces can link to the delivery of wider area, regional and national priorities for learning and community.



THE TOOLKIT

Throughout the Toolkit the emphasis is on understanding what will have most impact for school users, and how the learning environment can be improved to support that vision.

While the Toolkit is written primarily for schools, the process could just as easily be adopted by a group of schools or a local authority in order to share ideas and agree priorities. Each section offers advice and prompts, and includes examples from the Inspiring Learning Spaces projects.

The Toolkit is broken down into 5 steps :

-  **STEP 1**
Identifying the issues you want to address
-  **STEP 2**
Assessing the options
-  **STEP 3**
Setting the vision
-  **STEP 4**
Getting the process right
-  **STEP 5**
Evaluating and sharing



INSPIRING LEARNING SPACES



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 expected in an innovation initiative, some aspects were more successful than others. However, all supported wider education policy agendas. 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.

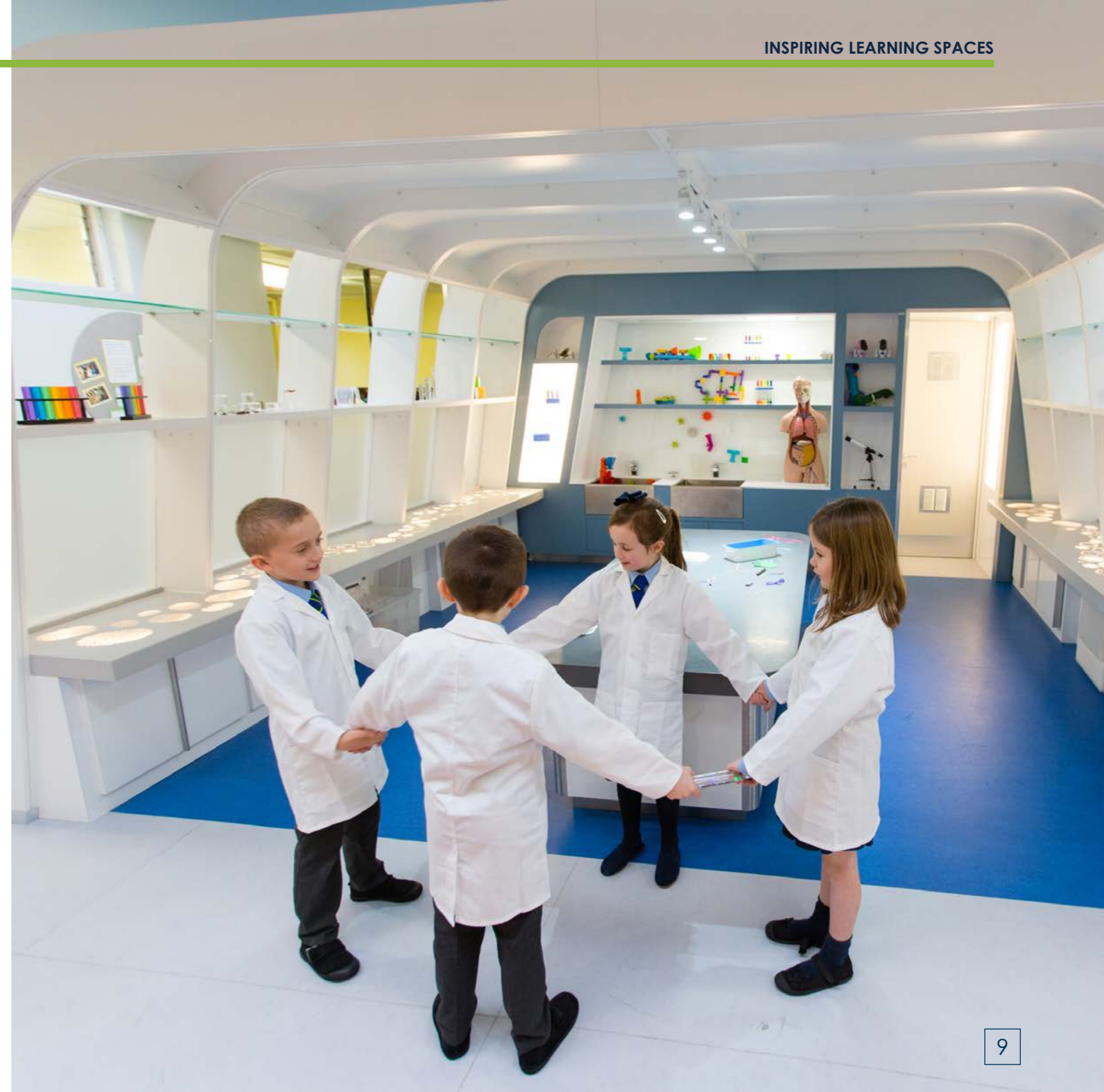
Scottish Futures Trust wanted to continue the learning and promotion of these spaces, with many local authorities involved indicating their desire to roll out similar spaces across the education estate.

THE TOOLKIT

This Toolkit has therefore been developed for schools, teachers and local authorities who want to explore how they could use new or existing space differently to facilitate new methods of learning and teaching.

CASESTUDIES AND FURTHER READING

Links to information about the Inspiring Learning Space projects can be found in the References and Further Reading section. Case studies in relation to the ILS projects are used to highlight how the toolkit can be applied to specific scenarios.



SUMMARY OF KEY MESSAGES



1

IDENTIFY THE ISSUES

you are trying to address and don't be afraid to tackle the difficult problems.

2

INTERROGATE

the issues, prioritise and consider a range of possible solutions.

3

LOOK AT MANAGEMENT

organisation and communication alongside changes to the physical environment.

4

BE CLEAR

about the process but focus on the outcomes.

5

INVOLVE

the right people at the right times.

6

DRAW ON THE EXPERIENCE

of others but understand what it means for you.

7

MEASURE SUCCESS

and think about long term sustainability.

8

ADAPT

as you go if things aren't working.

9

TAKE THE LESSONS

and embed them across the whole school, and find ways to share your learning widely.

10

THE LEARNING ENVIRONMENT

and new technologies are tools to help you achieve change – knowing what you want them to do is important but they will not bring about change in isolation.

THE BIG PICTURE

Education is a key contributor to the wellbeing of individuals and their communities, and schools are a focus for initiatives, ideas and collaborations that instil excitement about the possibilities amongst young people, their parents and carers, staff and wider stakeholders.

This Toolkit is designed to support schools in exploring how they can provide educational opportunities that match those aspirations, and how they can use their buildings to support change. It also encourages conversations that explore the 'big picture' and think about the school's wider role in supporting learner journeys and experiences.

NATIONAL PRIORITIES

At the national level, Scottish Government's Inclusive Growth Framework aims to achieve growth in Scotland that combines increased prosperity with greater equality, creates opportunities for all, and distributes the benefits of increased prosperity fairly <https://beta.gov.scot/policies/economic-growth/inclusive-growth/>

Scotland's Labour Market Strategy sets out a vision for a strong labour market that drives inclusive and sustainable economic growth characterised by, amongst other things, a skilled population capable of meeting employers' needs <https://beta.gov.scot/publications/scotlands-labour-market-strategy/> .

Schools have much to contribute to economic wellbeing by ensuring young people are work ready and able to take up the range of opportunities available to them.

Specifically in education, the National Improvement Framework and Improvement Plan Priorities <http://www.gov.scot/Publications/2017/12/2207> set out the vision for education in Scotland as excellence through raising attainment and achieving equity.

The key priorities that drive the Framework are :

- Improvement in attainment, particularly in literacy and numeracy
- Closing the attainment gap between the most and least disadvantaged children and young people
- Improvement in children and young people's health and wellbeing
- Improvement in employability skills and sustained, positive school-leaver destinations for all young people

The Curriculum for Excellence aims to raise achievement for all, enabling young people to develop the skills, knowledge and understanding they need to succeed in learning, life and work

<http://www.gov.scot/Topics/Education/Schools/curriculum>

The International Council of Education Advisers (ICEA), <https://beta.gov.scot/groups/international-council-of-education-advisers/> which was established in 2016 to advise Ministers on how best to achieve excellence and equity in the Scottish Education system is clear that both the National Improvement Framework and the Curriculum for Excellence share a consistent narrative aimed at raising attainment and closing the poverty related attainment gap.

In order to maintain and deliver the improvements set out in the National Improvement Framework, whilst at the same time retaining the vision and holistic approach of the Curriculum for Excellence, the ICEA identified three priority areas: <https://beta.gov.scot/publications/international-council-of-education-advisers-minutes-september-2017/>

- Improving pedagogy for specific subjects, using clear evidence to identify what works in the classroom;
- Developing effective leadership at all levels in Scottish education – unleashing untapped potential within the system;
- Ensuring a culture of collaboration exists throughout Scottish education, at classroom, school, regional and national level.

REGIONAL DRIVERS

At the Regional level, Improvement Collaboratives will bring together a range of professionals with a relentless focus on supporting young people to improve their wellbeing, attainment and outcomes.

The Collaboratives will include sector and curriculum area support including additional support for learning and schools will be able to draw on a range of expertise to provide targeted support based on identified needs. The Collaboratives will also be expected to share good practice across council boundaries: <https://blogs.gov.scot/engage-for-education/2017/11/02/regional-improvement-leads-appointed/>

Across Scotland, local authorities adopt different service structures and increasingly, education is part of a wider department, which can also include services such as leisure, culture, sports, the arts, community learning and social work services. This encourages a more joined up approach to local service delivery. The Christie Commission on the Future Delivery of Public Services, <http://www.gov.scot/Publications/2009/09/22154600/7> recognised the importance of this by setting out the following principles :

- public services are **built around people and communities**, their needs, aspirations, capacities and skills, and work to build up their autonomy and resilience;
- public service organisations **work together effectively to achieve outcomes**;
- public service organisations **prioritise prevention, reducing inequalities and promoting equality**; and
- all public services constantly seek to **improve performance** and **reduce costs**, and are open, transparent and accountable.

There are also 500 Community Learning and Development (CLD) practitioners across the country in recognition of the fact that children and young people do not learn in schools in isolation from the 80% of education that happens elsewhere involving them, their families and their communities.

CLD <https://education.gov.scot/scottish-education-system/cld/About%20Community%20Learning%20and%20Development>

Development supports primarily disadvantaged or vulnerable groups and individuals of all ages to engage in learning, with a focus on bringing about change in their lives and communities.

This is also in line with Objective 9 of the Scottish Government Building Better Schools, which aims to deliver schools which best serve their communities: <http://www.gov.scot/Publications/2009/09/22154600/7>

Schools also play an important contribution to the Delivering Scotland's Young Workforce agenda, re-imagining the senior phase through partnerships with higher education and employers. <https://education.gov.scot/scottish-education-system/policy-for-scottish-education/policy-drivers/Developing%20the%20Young%20Workforce>

THE SCHOOL'S ROLE

This Toolkit looks to support schools in thinking about how changes in the learning environment can contribute to whole system change by being anchored to national, regional and local educational priorities. This is achieved by helping schools to manage complexity and ensuring they fully consider the priorities they are tasked to deliver in deciding how best to manage their learning environments.

Figure A looks to bring together some of the main priorities that schools will wish to consider, when looking at learning environments. This is not a definitive list, but rather a framework to start discussion. It can be added to depending on local need.

The Toolkit uses this framework to surface the issues to be addressed and, in turn, to encourage thinking on how the learning environment might contribute to delivering change. It also shares emerging lessons from the Inspiring Learning Spaces projects, and good practice from elsewhere.



NATIONAL PRIORITIES

These include the priorities set in the National Improvement Framework, those set by the ICEA, and those included in the Christie Commission Report.

- **Improvement in attainment**, particularly in literacy and numeracy
- **Closing the attainment gap** between the most and least disadvantaged children and young people
- Improvement in children and young people's **health and wellbeing**
- Improvement in **employability skills** and sustained, positive school-leaver destinations for all young people
- **Improving pedagogy** for specific subjects, using clear evidence to identify what works in the classroom
- **Developing effective leadership** at all levels in Scottish education – unleashing untapped potential within the system
- **Ensuring a culture of collaboration** exists throughout Scottish education, at classroom, school, regional and national level
- Public services are built around **people and communities**, their needs, aspirations, capacities and skills, and work to build up their autonomy and resilience;
- Public service organisations **work together** effectively to achieve outcomes;
- Public service organisations prioritise prevention, **reducing inequalities** and **promoting equality**; and
- All public services constantly seek to **improve performance and reduce costs**, and are open, transparent and accountable.

SCHOOL PRIORITIES

Those set out in the School Improvement Plan

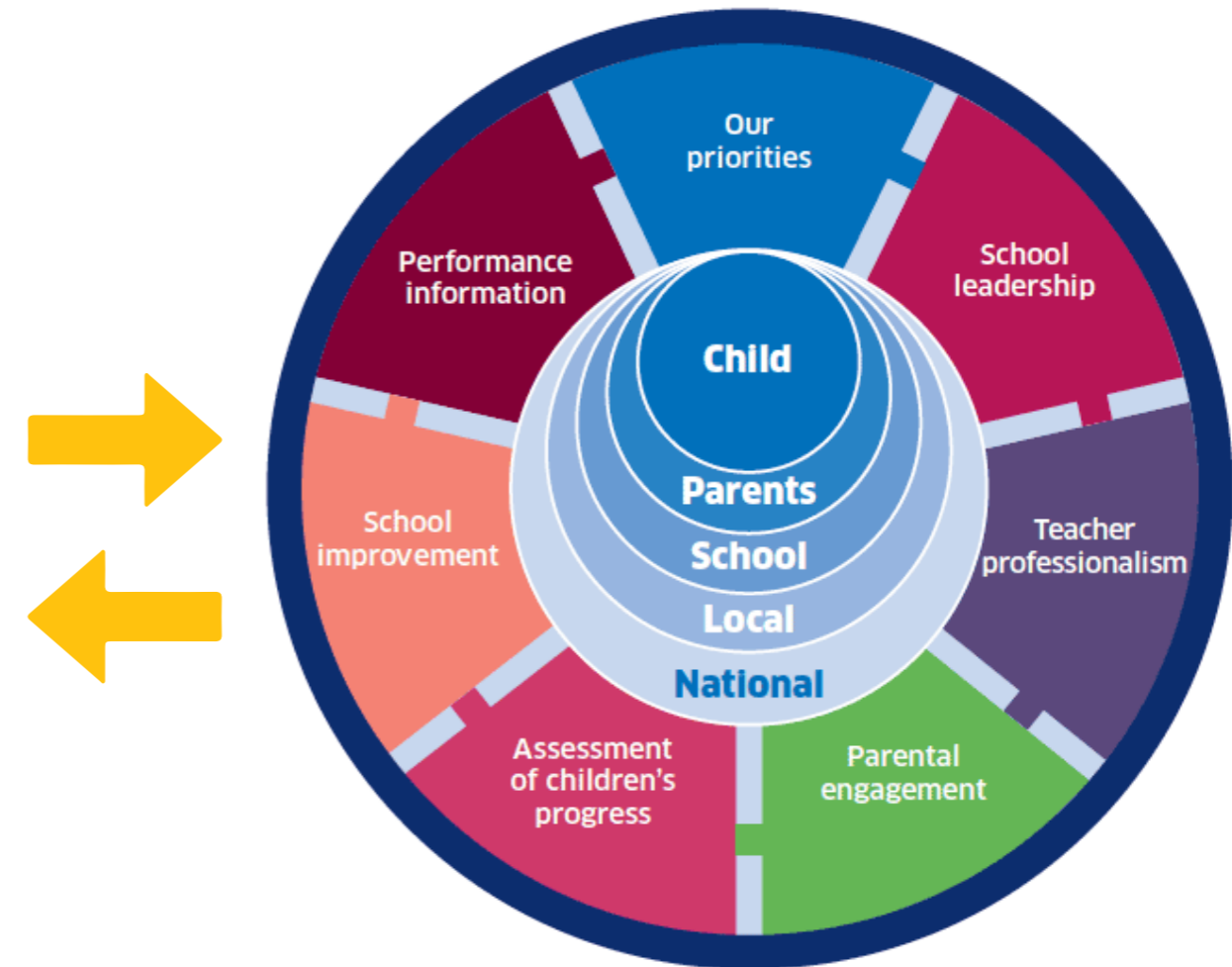


Figure A

TOOLKIT STEPS



STEP 1

Identifying the issues you want to address



STEP 2

Assessing the options



STEP 3

Setting the vision



STEP 4

Getting the process right



STEP 5

Evaluating and sharing



TOOLKIT STEPS

Any project to create new learning environments cannot be considered in isolation from the wider educational, cultural and organisational needs within a school.

In this Toolkit we focus on a process that identifies and prioritises the educational context to ensure :

- The project fully explores and contributes to the school's long term vision and how it can be realised;
- Conversations about the design of new spaces do not dominate. While good design is important, the long-term success of a school building will depend largely on the way that the school organises and manages itself to use the spaces effectively; and
- That by being clear about what the school wants in terms of its vision, curriculum, management and organisation, designers have the information they need to create spaces that support and enable this.





STEP 1

Identifying the issues you want to address



To identify whether making changes to the learning environment will have the desired impact, begin by creating consensus about the most important issues you need to address.

You can start by asking :

What are the big challenges facing our school?

How do they fit with the national and local priorities?

What issues are we trying to address and which are the most important?

Can we prioritise those that will have most impact or make the most difference in achieving our vision?

What outcomes do we want to deliver?

What will the difference be if we get it right?

Using the national and local priorities to challenge assumptions and encourage new thinking might include asking:

ATTAINMENT, CURRICULUM & PEDAGOGY

- Are we looking to improve attainment in a particular curriculum area, or for particular groups of students?
- Do we want to improve pedagogy for specific subjects, using clear evidence to identify what works in the classroom?
- Do we need to look at ways to improve the employability skills and sustained, positive school-leaver destinations for all young people?

STAFF DEVELOPMENT

Are we trying to develop effective leadership at all levels within our school?

Do we have gaps in staff knowledge or training that we need to address?

HEALTH & WELLBEING

Do we need to do more to improve the health and wellbeing of our young people?

MANAGEMENT & ORGANISATION

Is there more we can do to improve efficiency and reduce costs?

As a school, are we doing everything we can to be open, transparent and accountable?

COMMUNITY & PARTNERSHIPS

Do we need to do more to ensure a culture of collaboration and practice sharing within our school and with partner organisations?

Do we need to build a different relationship with our community in order to better address their needs and aspirations?

Can we do more to work effectively with our public sector partners?

Be as specific as you can about the issues you need to address and look to quantify how much change you want to achieve.

For example, which groups do you need to target? What is the gap you're trying to close? What improvement are you aiming to achieve and what is a reasonable timescale?

Explore what is working well already. It is easy to focus on problem areas but understanding what is already successful can help you to think about whether you can do more to build on what works.

Much of this analysis may already be set out in your School Improvement Plan but it is worth revisiting to see whether it covers the broad range of issues and looks far enough ahead. In doing this exercise you might, for example, want to take a view on what you want the school to be like in 5 or 10 years. You may also want to have a particular focus on the school's relationships with the community, involving those individuals and groups you would not normally reach.

Many of the ILS projects had a specific issue they were aiming to address through the development of new spaces.

These included:

- Promoting high quality staff development and training.
- Providing cost effective solutions to deal with a temporary increase in pupil numbers, without the need to build permanent structures.
- Using technology to promote equity and access to learning.
- Exploring new ways of teaching and learning, for example in STEM subjects.
- Creating pathways to careers through the provision of vocational training.





STEP 2

Assessing the options



Once you have identified your issues you will need to think critically about the sorts of solutions that might help you to address them.

School capital projects are enablers in making change happen – rarely can they address all the issues without some additional changes to how a school community manages and organises itself. In the same way, some issues may not need physical change in order to see improvements.

For each issue ask can improvements be brought about by:

- **MANAGEMENT INTERVENTIONS ALONE:** Could additional training, or new ways of working, a new timetable or better communications with key groups address the issue? or
- **ENVIRONMENT CHANGES ALONE:** Would re-modelling a space, changing the furniture, upgrading the technology or refurbishing the fittings make a difference? or
- **BY A COMBINATION OF MANAGEMENT INTERVENTIONS AND ENVIRONMENT CHANGES:** For example, new technology and staff training; or re-modelling and a new timetable?

It is important to explore all potential options, to understand what would really make the difference before moving forward.

The process of developing new spaces may also address some of the key issues such as encouraging staff to work collaboratively in new ways, strengthening relationships with parents and community users, or increasing student voice and participation. This is explored in more detail in the following sections.



STEP 3

Setting the vision



Obtaining buy in to change is key to making it happen.

Setting a clear, concise vision will help everyone understand:

- The specific issue or issues to address;
- How much change can be achieved and over what timescale;
- How everyone can support the change while it is happening and beyond;
- What will be different once the project is finished.

Share the vision widely and talk about why change is happening and the benefits this change could bring about if implemented to its best potential. This will form the basis of the engagement process at Step 4.



STEP 4

Getting the process right



- A.** LEADING CHANGE
- B.** TESTING LEARNING APPROACHES
- C.** COLLECTING EVIDENCE
- D.** SUPPORTING STAFF
- E.** LISTENING TO STUDENTS
- F.** ENCOURAGING PROBLEM SOLVING
- G.** NURTURING PARITY OF ESTEEM
- H.** USING TECHNOLOGY WELL
- I.** IDENTIFYING INNOVATORS AND USING CHAMPIONS
- J.** GETTING BUY IN BY INVOLVING STAKEHOLDERS



A. LEADING CHANGE

It is important that the project has :

- A designated leader responsible for seeing the change through;
- A transparent decision making and governance process so that all involved know who is responsible for signing off at key stages;
- A timetable with key milestones; and
- An audit trail which tracks progress and ensures decisions are recorded.

Normally a school senior leader will be responsible for coordinating the process and ensuring milestones are met. This might be shared with a small working group or task group.

PARTICIPATION

Involving the school community in generating ideas and sharing aspirations creates a common purpose and builds ownership. Some benefits are :

- **BETTER DECISIONS AND OUTCOMES-** the people who use the school or have an interest in it will be the best source of knowledge and wisdom about what would make a difference.
- **POSITIVE THINKING-** if staff and pupils are involved in the process they are more likely to take the project seriously and think positively about it.
- **IMPROVED RELATIONSHIPS-** participation provides the perfect opportunity to forge links with the community, businesses and local organisations.
- **REDUCED MAINTENANCE COSTS-** participation encourages people to feel ownership over their own environment. This can lead to a sense of pride in the new spaces and them being treated with respect by users. This has even led to a reduction in vandalism and graffiti in some schools.

SET THE BRIEF

This is the school's statement of what it needs the project to deliver. It acts as a starting point for the designers/stakeholders and helps them to understand priorities so they can bring forward options to deliver them. It also ensures the school has an agreed set of criteria against which to evaluate emerging solutions.

The brief should be a short, concise document which captures:

- **THE CONTENT-** The issue or issues being addressed and how this supports the achievement of the wider school vision;
- **WHAT THE NEW SPACES NEED TO DELIVER-** This is not about the design of spaces but rather about the learning activities they need to support. So, for example, the size of teaching groups, the pedagogical approach, the equipment and resources required to deliver a high quality learning experience, the look and feel of the space and the behaviours it should encourage. Think about internal and external spaces – the wider school site can provide learning and social spaces that enrich the learning experience if they're well used and thoughtfully designed;
- **FUTURE FLEXIBILITY-** Thinking about future proofing and sustainability at the start of the project will be important – will the technology need to be upgraded in 3-5 years? Are you relying on a particular funding source that might end at some point? Will the space still work if the curriculum changes? Might you want to increase or decrease learning group sizes in future? Are the student needs likely to change? This will ensure the spaces are designed flexibly for the future;
- **THE PROGRAMME-** What needs to be achieved and by when, and any key dates such as exams, assessments and holidays that may influence the works; and
- **SUCCESS INDICATORS-** The difference you want to make.

MANAGE ENGAGEMENT

It is important to keep the school community informed about what is happening and to involve the right people at the right time. However, there is a difference between:

COMMUNICATION- giving people information about the project and what is happening.

CONSULTATION- asking stakeholders for their input and ideas on the understanding that not all of them will be taken on board.

CO-DESIGN- making decisions together in a collaborative way.

MAKE IT HAPPEN- A capital project can often be resource intensive to deliver and this needs to be taken into account in planning for change. Depending on the size and scale of the project, some schools will release a member of staff for a portion of the week or bring in additional external support. This may have funding implications that will need to be built into the overall budget. However, it may be that capital investment is not the only way to deliver the necessary change.

EMBED CHANGE AND PLAN FOR THE FUTURE- The project lead will see the process through to completion but needs to look beyond the day when the work is done. Once completed, they will need to review how the spaces are working, evaluate the impact they are making, and consider any ongoing changes that would make them better.



B. TESTING LEARNING APPROACHES

Rather than leap in and make major changes, it is worth thinking about whether it is possible to trial changes within the existing buildings and spaces. Small-scale interventions can be used to test new practices and gather evidence of what works. They are also an opportunity to build up skills and evidence around different styles of learning and teaching practice aligned to the outcomes in your vision.

Some schools have adapted existing spaces quickly and easily to try new pedagogical approaches such as taking over a hall to create a flexible learning space with a variety of furniture layouts, changing or removing the furniture in a classroom, modifying the timetable to facilitate collaborative working, or trialling new technology for a term to evaluate the impact.

Many furniture and technology suppliers are willing to discuss how they might support schools in testing their products and will also find your feedback useful.





ILS CASE STUDY: LEARNING SPACES OF THE FUTURE

AIM- To adapt old spaces into innovative environments to explore new approaches to teaching and learning.

PROVIDER- Glasgow City Council

KEY MESSAGE- Engaging pupils in the development of the learning spaces builds confidence and ensures the spaces reflect their learning needs.

THE STORY- Three projects were chosen for development at Quarry Brae, John Paul II and Pollokshields primary schools, including a health and well-being zone in the shape of the Loch Ness Monster. Pupils and teachers were proactive from the start, generating ideas. Pupils made presentations to a Council committee and worked with architects on designs. This involvement resulted in a significant increase in confidence and a sense of ownership for pupils.

C. COLLECTING EVIDENCE

Before embarking on any new project, it is useful to know whether anyone else has done this before. Part of the whole system approach to learning is to share your experiences and evidence with others, and to learn from them. Look to build a research base of evidence of what works (and why) from other projects and which conditions of success best match the context of your vision.

If you know that you have money to spend on your school, whether it be a large amount to rebuild or refurbish, a relatively small amount to update your existing spaces, or just want to change the current environment to get the most out of it, it is often difficult to know where to go for inspiration.

It can be very useful to visit other recently rebuilt or refurbished school spaces and to take time to plan trips carefully to make the best of the effort you invest in them. The questions set out here are aimed at helping you prepare for your trip, get the most from it, and continue the discussion when you get back to school.



- **WHAT DO YOU WANT TO SEE?** You will have identified issues which you want to tackle. Find schools which are exemplars in the areas you want to succeed in and talk to them about how they deliver and why it works. This may be nothing to do with their learning spaces – it's easy to get side tracked into looking at new school buildings when what you're really interested in is best practice in teaching and learning.
- **DO YOU NEED TO LOOK AT OTHER SCHOOLS?** It may be that you can take your inspiration from other sorts of buildings and spaces. While there are many interesting schools to visit, there are some equally inspirational public buildings and civic spaces you could be reviewing. Museums, galleries, sports centres, libraries, council buildings – all can offer an insight into how to tackle specific issues.
- **DO YOU NEED TO LEAVE HOME?** There are some good case studies online and you can gather a lot of detailed information without having to visit. A phone call to the Headteacher and the architect of an interesting-looking building will allow you to assess whether it's worth the trip to see for yourself. Avoiding disappointing journeys will enable you to focus on the spaces you really need to see to move forward.
- **IS THERE GOOD PRACTICE ALREADY HAPPENING ANYWHERE WITHIN YOUR OWN SCHOOL?** Think about what is working well now and whether you can build on that in the future.
- **HOW ARE YOU GOING TO ASSESS WHAT YOU'RE LOOKING AT?** Think about how you'll test whether the school performs through the day, the academic year and the various seasons. You might want to find out how it works outside school hours and how easy it is to secure the main community facilities from the rest of the school? You'll need to decide how you will test value for money. Is it expensive to run in terms of staff and resources? How has the curriculum model been translated into teaching spaces, and are they successful? How is ICT integrated into the learning spaces? Once you know the questions you need to ask, it is worth making sure the right people are available to talk to. Having slots booked with curriculum specialists, the school business manager or caretaker will make sure you come away with exactly the information you need.
- **WHO ARE YOU GOING TO TAKE WITH YOU?** It is often useful to get a range of perspectives on another school or learning space. Investing time to take a small group of users is worthwhile. Your staff, students and parents will allow you to view the other space through their eyes and add to the data gathered on the day. Preparing them and asking them to look at specific issues is as important as preparing yourself.
- **WHAT DO YOU DO WHEN YOU GET THERE?** You can request a tour led by one or two students, asking them to take you to their favourite and least favourite places – they will be brutally honest about what works! Sometimes, with the best intentions, school senior staff will give you the 'glossy tour', inadvertently missing out what could be better, so it would be worth letting the school know in advance what you want to see.
- **HOW WILL YOU CAPTURE AND SHARE WHAT YOU'VE LEARNT?** Having someone designated to make notes and take photographs will allow you to ask the questions and concentrate on what you are seeing. It will also ensure you have a record of where you've been and allow you to show others when you return to school.
- **WOULD IT WORK IN MY SCHOOL?** Most importantly, take time after the visit to reflect on what you have seen and to ask whether, if you transplanted that solution into your school, it would allow you to deliver your vision, ethos and curriculum. Seeing a design solution work wonderfully in another school doesn't mean it will necessarily translate well into your own context.

D. SUPPORTING STAFF

At an early stage, it can be very helpful to start a conversation with staff about what a modern learning environment looks like. One way to do this is to think about a Victorian school classroom and one in your current school. We often hear it said that nothing has changed in the past hundred years with the teacher still at the front and children still at rows of desks.

But is that true?

What has changed and what has stayed the same?

Are the students different? The pedagogical approaches and teacher training?

The furniture, lighting and ventilation? Technology and resources?

What is better and what could still be improved?

Help staff imagine the future and what it will be like to work in new ways and in new spaces. Use CPD sessions to explore new scenarios and what they mean, for the additional skills, or support, staff will need to deliver effectively.

During the project, create opportunities for teachers to lead the change in practice through paired teaching, mentoring, group practice, observation and reflection so they are ready to operate in the new spaces.

Once the project is finished, use evidence and results to share the new ideas with other teachers and recruit them to the culture of the new practices.



ILS CASE STUDY: PROFESSIONAL LEARNING ACADEMY FOR TEACHERS

AIM- To offer high quality training and development for teachers in a purpose-built environment

PROVIDER- North Ayrshire Council

KEY MESSAGE- Teachers benefit from continuous training and sharing good practice in an attractive and flexible environment.

THE STORY- A vacant school annex has been turned into an innovative purpose-built facility to offer CPD for teachers. Two teaching rooms mimic a modern teaching environment, one based around collaborative work, the other for individual work. The aim is to create a pleasant environment with high-quality facilities which teachers feel good about being in, offer research-based training and pilot new approaches.

Teachers have welcomed opportunities to work collaboratively, share good practice and develop professional networks. Early evaluations show positive impacts on staff, resulting in benefits for pupils.

E. LISTENING TO STUDENTS

Include learners as partners in shaping change and evaluating the impact.

Students are extremely insightful when asked about what would make their learning better. As a result you might find you want to 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.

It is important in any participatory process that you start with a clear question, based on participants experience and understanding.

Simply asking **'What do you want in the future?'**, or giving them a blank sheet of paper to design something new, will result in confusion and unrealistic expectations.

Start by exploring what works well and less well in terms of the issues you are aiming to address. This anchors the conversation in reality and common experience.

Architecture & Design Scotland can facilitate workshops and deploy techniques to help learners and teachers envisage and explore how a space could be used to facilitate different learning and teaching methods.

If you want to think about raising aspirations and supporting young people to make the most of their opportunities ask them:

- What is it like to be a young person in this town/community?
- What do you like and what could be better?
- What are the opportunities and challenges you see in having the best possible future?
- What does that mean for the skills, qualifications and experiences you need to make the most of the opportunities?
- How should that be reflected in what happens at school and elsewhere?
- What would that mean for your learning environment?

Other ways to encourage conversation and exploration are:

- **CREATIVE THINKING-** Coming up with a scenario for the day in the life of different stakeholders in their new school can help to stimulate thinking around the types of experiences that the new building/space might enable. What would a student or teacher be doing at different points of the day? Alternatively, thinking about a day in the life of a particular space within the building might throw up ideas around how the space could be used more flexibly, or how it is managed, or particular timetabling issues.
- **EXPANDING THE CONVERSATION-** using workshops to discuss themes that would not normally be part of the discussion with students, but which are important to the vision of the school, can be very useful. The relationship with the community; what it means to be a healthy school; how any new school building/space can value the past while looking to the future; what makes a school safe and secure are all examples of themes that have generated rich conversations with students.

ILS CASE STUDY: A LEARNING SPACE FOR THE FUTURE

AIM- To explore the impacts of innovative, flexible spaces for teaching and learning.

PROVIDER- Midlothian Council

KEY MESSAGE- Innovative spaces can have transformative effects on learning and engagement.

THE STORY- Primary pupils across the authority were involved in the design, development and decision making processes to adapt their current learning spaces, making this project an important exercise in pupil empowerment. The new spaces are agile and adaptable so they can be changed for different tasks, enabling each child to take more control of their learning. Both teachers and pupils have commented on the remarkable changes that have happened in the way learning takes place, with teachers feeling more energized and relaxed and pupils feeling more confident and valued.

- **AUDITS AND SURVEYS-** Ranging from simple surveys that encourage students to start thinking about their sense of place, to surveys that consider what is particularly positive about spaces or especially problematic, to more complex audits of existing resources such as access to technology. Active audits can form the basis of one-off exercises or they can take place over a longer period of time, such as how spaces perform over the course of an academic year. They can also be used to support a particular curriculum topic or cross curricular project.
- **MAPS AND MEASURES -** Maps and measures- Look at structured ways to capture information about how learning takes place and how the school is organised. This might include asking groups of staff, students and stakeholders to produce a diagram demonstrating how they see the organisation of the school. Circles of different sizes represent different year groups, departments, curriculum areas, key staff and so on. The circles then overlap according to the degree of contact they have with other groups in the school. Or ask students to draw "their" map of the school, annotating the areas they use most often and what they are doing there.
- **ART AND PERFORMANCE WORK-** Techniques such as drawing, collage, role play and simulations free the imagination. Using drama and performance to enact scenes of everyday life can be a useful technique for stimulating discussion. As well as portraying current issues, participants can perform ideal interactions and discuss how design can create the conditions that can stimulate positive behaviour or feelings of wellbeing.

You might ask participants to 'advertise' their new school/space or make a short film about school life. Creative writing can generate ideas and aspirations while producing an output that acts as a record of the workshops. Artwork created as part of the process can also be displayed to generate additional comments and feedback, and is often incorporated into permanent exhibitions or graphics within redesigned spaces.

F. ENCOURAGING PROBLEM SOLVING

Use the early stages of the process as an opportunity to gather creative ideas and interrogate all the possibilities. There are no wrong answers, just different ways to look at the problem!

You may want to build collective problem solving expertise within the school community and use the process to model good practice.

Once you start thinking about solutions you might, for example, decide that you want more flexible learning spaces in future that 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? This has been a key lesson in the learning and teaching at the Inspiring Learning Space in West Calder High School.

You might also want to encourage staff to see any new spaces as test zones, giving them autonomy to continually refine them to best suit student needs.

It may be worth thinking about holding back a small amount of money from the budget to support this. Things are not always 'right first time' but having a pot of money to change and refine after you've tried the space can be very helpful and encourage continuous improvement.





ILS CASE STUDY: DIGITAL LEARNING CENTRE

AIM- To explore the impact of new spaces and digital technology on learning and teaching.

PROVIDER- West Lothian Council, West Lothian College

KEY MESSAGE- Innovative spaces and creative use of technology can facilitate new ways of teaching and learning.

THE STORY- Ahead of occupying a new school with a very different layout to the current school, West Calder High School wanted to test how a different space could help facilitate new methods of learning and teaching.

Three traditional classrooms were combined to create a digital plaza to explore best use of digital technology and open learning spaces. Pupils and teachers helped design the space. The new environment has encouraged more collaboration between pupils and teachers.

Pupil engagement is high and attendance has improved. A virtual campus project was launched to offer greater equality of access to a wide range of subjects across a group of schools.

G. NURTURING PARITY OF ESTEEM

Your project is an opportunity to build spaces and experiences that recognise different learner choices and support a range of pathways for individuals to test themselves. In doing this you may want to explore opportunities to validate all learner experiences across the spectrum of vocational and academic learning, establishing parity of esteem.

Think about how any new spaces will sit along side existing spaces. One way to do this might be to set out the activities you want to promote in the learning spaces and then discuss which parts of the school would be best suited to delivering them. This will also help to identify spaces which are currently missing or not fit for purpose.

Figure B sets out an example of the type and range of spaces you might want in your school, and the activities associated with each. This is a starting point for further conversation and can be adapted and expanded to suit your own context. This might highlight the building already has all the necessary spaces to deliver the learning and teaching vision, without the need to create new spaces.

Spaces & Activities

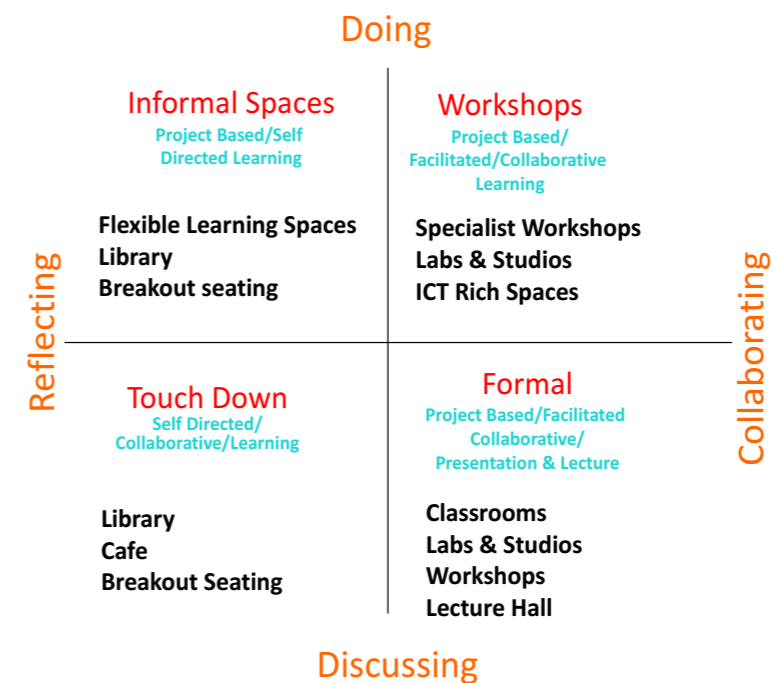


Figure B

Understanding the activities associated with a space ensures everyone is clear about expectations when you are teaching and learning in that area. In the West Dunbartonshire ILS Case Study (opposite), classrooms and Labs are identified as more formal spaces where students will be given new information or have more practical, hands on instruction while flexible learning space can be used for project based learning, building on the information students already have and allowing them to work together to test ideas and draw their own conclusions.

A range of different sorts of spaces across the school create maximum flexibility for how the curriculum can be delivered. Large group spaces for lectures and presentations, class based rooms for formal teaching, flexible spaces for project based learning and group work, and spaces which encourage self guided study. Also think about informal social spaces which can be used throughout the day by staff and students for eating, relaxing and informal group work and meetings, create variety.

Knowing what you want each space to do, and being explicit about its function, will avoid students being confused about what is appropriate in a space and avoid poor behaviour. It will also mean that you can specify the right furniture, equipment and resources in the space to support high quality teaching and learning.



ILS CASE STUDY: CREATION OF A STEM LEARNING CENTRE IN A PRIMARY SCHOOL

AIM- Changing the approach to STEM teaching and learning in primary schools.

PROVIDER AND PARTNERS- West Dunbartonshire Council, Glasgow Science Centre

KEY MESSAGE- An innovative and flexible learning space can facilitate new approaches to teaching and learning.

THE STORY- A STEM hub was created in St Patrick's Primary School in collaboration with experts from Glasgow Science Centre. There are three distinct areas within a flexible space, with the design helping to signal how each area is used for learning and teaching. Pupils are learning through exploration and discovery, working individually, in pairs or in groups. Teachers facilitate rather than direct the learning. The school reports significant improvements in pupil engagement, motivation and concentration.

H. USING TECHNOLOGY WELL

Understanding what you want technology to do and how it can support your vision is an important part of rethinking your learning environment. Above all else, the ICT solution needs to be built on robust and reliable infrastructure and provide a safe and engaging learning environment for users.

New environments 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 school experts and early-adopters to get involved in peer support groups and training.



Key questions might be:

How robust is our infrastructure now? What could be improved?

Do we have good, reliable Wifi inside and outside in learning areas?

Does the Local Authority policy allow your IT vision to be delivered? They need to be part of the conversation from the outset.

Do we have the right devices for staff and students? What is the right device : student ratio for us? Should we consider 'Bring Your Own Device' if we don't already?

Do our administrative technologies work well?

Do we have/use presentation technologies that can enrich the learning experience?

What generic software (e.g. Office 365 and SIMS) do we use? Does it work well?

What specialist software do we have/need to support the curriculum experience?

What sort of peripheral devices (printers, copiers) do we need? Should we look at new ways of managing key tasks such as 'follow me' printing?

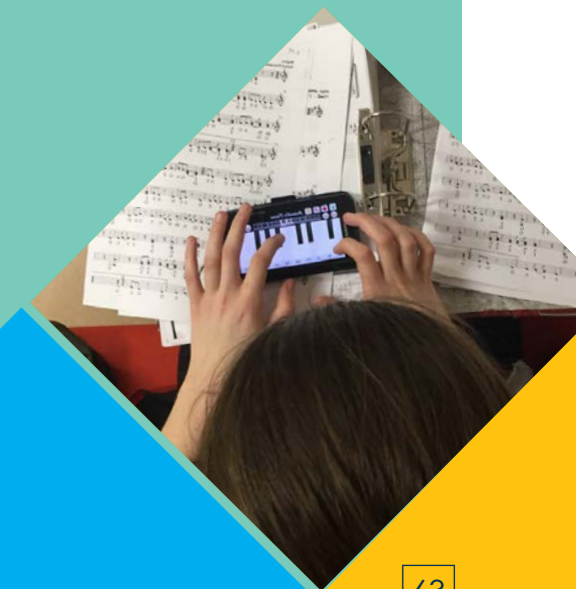
ILS CASE STUDY: EXTENDING THE USE OF DIGITAL TECHNOLOGY IN TEACHING AND LEARNING

AIM- Extending a range of ICT activities to support the curriculum.

PROVIDER- Highland Council

KEY MESSAGE- Digital technology has the potential to support teaching and learning in a wide range of areas and promote equity of access.

THE STORY- Highland Council used this opportunity to build on its ICT In Learning strategy. The Chromebook pilot was extended, with over 1,000 devices now in use in over 200 schools. These have been well received. Pupils are well motivated and are developing confidence and skills, bringing suggestions to staff about how the technology can be used. The virtual school pilot has been extended to offer equal access to a wider range of subjects and Highland Council are also working with the West Isles E-school, another ILS project.



I. IDENTIFYING INNOVATORS AND USING CHAMPIONS

Change can be a challenging process for some staff and students in that it creates uncertainty and disruption. Involving those who you identify as innovators can help to ease the transition to a new environment.

If there are already new, interesting or exciting practices happening within school, or there are learners and staff who want to test ideas, then this is an opportunity for them to share their experience more widely. This might be linked to a particular approach in the classroom; learners or staff who use technology to good effect; building on existing relationships with stakeholders or creating new ones; or adopting new administrative or management systems and processes.

Ask your innovators to lead a task group or set up a focus group to gather more ideas. Have them share what they are already doing at a staff CPD session. Encourage them to look at the evidence and come forward with robust solutions that can be built into the brief.

Students are often excellent Champions for change. They can share information with their peers, contribute ideas and be ambassadors for your vision. They will often also bring their parents along if they are enthusiastic, understand and can share the benefits of the project.

ILS CASE STUDY: MOBILE, RE-USABLE CLASSROOMS

AIM- Providing classroom space for a predicted temporary increase in pupil numbers, without the need to build permanent structures.

PROVIDER- South Lanarkshire Council

KEY MESSAGE- A new re-usable mobile classroom is a cost-effective way of meeting temporary spikes in pupil numbers.

THE STORY- The authority needed an efficient and effective solution for increasing accommodation to cater for temporary spikes in pupil numbers. The solution was a new design for a mobile classroom which could be redeployed easily as needed across the local authority. Pupils were involved in designing the exterior to help them take ownership of the classrooms. The units are an easy and economical way of providing short-term additional capacity when needed.

J. GETTING BUY-IN BY INVOLVING STAKEHOLDERS

There is often a concern that too many conflicting voices will be difficult to manage and will generate unrealistic expectations. However, involving the right people, at the right time and in the right way will create ownership and strengthen relationships.

In doing this :

- **DEFINE WHO YOUR STAKEHOLDERS ARE.** How widely do you want to cast the net? Who will be most important in what you are trying to achieve? Who can support your vision? Who would you like to involve that you wouldn't normally engage with?
- **BE UP FRONT ABOUT LIMITS ON THE PROJECT.** Every project has resource constraints. Make sure your stakeholders appreciate the parameters within which you are working; and
- **START TALKING SOONER RATHER THAN LATER.** Giving stakeholders the chance to input as early as possible in the project makes it most likely that their insights will be reflected within the design. If you wait too long, and it feels like a done deal, then they may feel like they have no influence or contribution to make.



Using existing groups can be beneficial in relation to stakeholder engagement. The Parent Council may be key and you may also be able to work with other local community and business groups in order to bring people together.

Exhibitions, drop in sessions, focus groups, workshops and family days have all been used to great effect to gather views, spread information and garner support for school projects.

Several of the ILS projects found that getting parental buy in to what they were doing was a contributing factor to the success of their projects. They also used the project to build relationships that had not previously existed, strengthening the school-parent partnership and creating a basis for further collaboration and support.

ILS CASE STUDY : VOCATIONAL SKILLS ACADEMY

AIM- Developing four multi-purpose learning spaces to deliver training in a range of vocational skills and qualifications.

PROVIDER- North Lanarkshire Council

KEY MESSAGE- Integrated spaces for vocational learning can bridge the gap between school and college and help provide skills for further education and work.

THE STORY- Four multi-purpose learning spaces have been created, including a garage workshop, a kitchen, a polytunnel area and a digital lab. A working group of pupils, teachers, commercial trainers and colleges informed the project.

Training is delivered by teachers, college lecturers and specialists from industry in a mini-college environment which replicates aspects of the workplace and focusses on skills in short supply locally. Prior to opening, demand for places was already outstripping supply.





STEP 5

Evaluating and sharing



In order to create a real understanding of how space transformation is making a difference, it is important to look for quick and effective ways to evaluate the process and what has been delivered. Your original vision and brief will have set out what you wanted to achieve, and this is an important starting point. Think about :

- **TIMING-** When would be a good time to evaluate? When will the change start to become apparent? Do you need a term, or an academic year, or longer? Can you do some interim evaluation along the way?
- **WHAT ARE YOU EVALUATING-** How are you going to reflect on how successful the process was, as well as whether the project outcomes are delivering what you wanted?

FOCUS GROUPS

When gathering evidence, Focus Groups are a good way of exploring stakeholders' views and understanding why they hold particular opinions. Participants are encouraged to talk and challenge each other as opposed to simply responding to the facilitator's questions.

COMPOSING YOUR GROUP:

- You might want to invite only people who have been close to the project and who can discuss the outcomes in depth, or include people with less knowledge of the project who can challenge perceptions
- Make sure that you get representation from all the groups you need to meet – some people are more likely than others to come forward, but you'll need to hear from those who are quieter or harder to reach too. This might mean hosting sessions with parents or community representatives after school or on weekends when they are more likely to be available
- The ideal group size is between 10 and 12 participants to allow everyone to have a voice
- Make sure you can meet in a comfortable space free from distractions and ask everyone to put their mobile phones on silent

GETTING PEOPLE TALKING:

- Discussions of around 60 minutes give time for everyone to be heard
- The facilitator should have a series of open-ended questions as prompts for discussion. They should encourage people to explore the issue in depth but move the conversation on until all ideas have been heard

DRAWING TOGETHER THE OUTCOMES:

- Try to draw together any key themes that emerged during the discussions and sum up at the end, asking for the group's agreement that nothing important has been missed
- All views are valid and have equal importance. Even if someone disagrees with the majority, ensure their points are captured in the summing up. Others in the stakeholder community may feel the same

It can often be helpful for the facilitator to record the conversation so they can transcribe comments. Always ask participants permission for this and ensure them that they know individual comments will not be attributed by name but will be captured as 'Participant A said...'. After the meeting, give people an opportunity to review the written outcomes and clarify or add to particular points so they feel their views have been fully represented.

HOW YOU WILL MEASURE SUCCESS

- Will you measure using qualitative indicators (user satisfaction, focus groups, workshops etc.) or quantitative measures (energy usage, exam results etc.)?

HOW YOU WILL USE THE FINDINGS

- How will you capture and share the findings? Using your school website or newsletter, sharing at conferences, events and on social media, and getting students to blog or make videos are all great ways to continue the conversation and allow others to learn from your experience.
- If you have changed an area of the school (a new learning space or a curriculum subject) how can you embed the findings to support success across the whole school?
- How will the findings feed into future development of the learning environment at your school? What best practice can you adopt more widely?



TOP 10 KEY MESSAGES

The following checklist picks out some of the key messages from the Toolkit which you can use as a quick reminder :

1

IDENTIFY THE ISSUES

you are trying to address and don't be afraid to tackle the difficult problems.

2

INTERROGATE

the issues, prioritise and consider a range of possible solutions.

3

LOOK AT MANAGEMENT

organisation and communication alongside changes to the physical environment.

4

BE CLEAR

about the process but focus on the outcomes.

5

INVOLVE

the right people at the right times.

6

DRAW ON THE EXPERIENCE

of others but understand what it means for you.

7

MEASURE SUCCESS

and think about long term sustainability.

8

ADAPT

as you go if things aren't working.

9

TAKE THE LESSONS

and embed them across the whole school, and find ways to share your learning widely.

10

THE LEARNING ENVIRONMENT

and new technologies are tools to help you achieve change – knowing what you want them to do is important but they will not bring about change in isolation.

FURTHER READING AND RESOURCES



Growing the Economy : Inclusive Growth:

<https://beta.gov.scot/policies/economic-growth/inclusive-growth/>

Scotland's Labour Market Strategy:

<https://beta.gov.scot/publications/scotlands-labour-market-strategy/>

2018 National Improvement Framework and Improvement Plan:

<http://www.gov.scot/Publications/2017/12/2207>

Curriculum for Excellence:

<http://www.gov.scot/Topics/Education/Schools/curriculum>

International Council of Education Advisers (ICEA):

<https://beta.gov.scot/groups/international-council-of-education-advisers/>

Regional Improvement Collaboratives:

<https://blogs.gov.scot/engage-for-education/2017/11/02/regional-improvement-leads-appointed/>

The Christie Commission on the Future Delivery of Public Services:

<http://www.gov.scot/Publications/2011/06/27154527/0>

Community Learning and Development:

<https://education.gov.scot/scottish-education-system/cld/About%20Community%20Learning%20and%20Development>

Education Team - Scottish Futures Trust:

<https://www.scottishfuturestrust.org.uk>

Inspiring Learning Spaces:

<https://www.scottishfuturestrust.org.uk/storage/uploads/inspiringlearningspaces.pdf>

Architecture & Design Scotland:

<https://www.ads.org.uk>

Participation:

https://www.ads.org.uk/wp-content/uploads/11396_participation-screen-spreads.pdf

Test of change service:

<https://www.ads.org.uk/repurposing-learning-space-tests-of-change-information-resource/>

Prototyping change in learning settings:

https://www.ads.org.uk/prototyping_incremental_change/

10 thoughts on tech spaces :

https://www.ads.org.uk/10thoughts_designing_technology/





INSPIRING
LEARNING:
SPACES TOOLKIT