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# You might go in with a plan, but it's going to change.

**A Case Study on the impact of Interdisciplinary Learning at Hazlehead School, Aberdeen.**

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## 60" CASE STUDY

Learning through themes isn't the same as interdisciplinary learning. Hazlehead School is a primary school in Aberdeen where staff have discovered that nearly 95% of learners are engaged throughout a learning project when certain conditions are met:

1. Practitioners plan together, not just run their own lessons, disciplines and subjects around a common theme.
2. Learners build up a collection of skills that help them see, understand and dig deeper into content they encounter.
3. Learners and practitioners work with each other to share learners' own insights, questions and next steps emerge.
4. Learners learn how to operate within their zone of proximal development, with opportunities and encouragement to go beyond the obvious first answer or idea.

The school's mission makes clear that challenge and self-determination should be at the core of learning: "When you believe in yourself, anything is possible." IDL provides the ideal platform to achieve that.

**The Thrive Project** was designed during a period in 2020 when the nation's school buildings were closed and children were locked in at home. Thrive is an IDL project that centres on the idea that we thrive when we adapt, and with time and the skills to reflect and a goal of self-realisation for every learner. In the end, the Thrive Project has achieved that, and also created stronger connections between the school and the community.

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## A SUSTAINABLE WAY TO ENGAGE EVERY CHILD

The team at Hazlehead School, Aberdeen, manage to engage 95% of their learners in challenging learning experiences, where each learner is in the driving seat of their own projects. The term-long lockdown in Spring 2020 put their approach to the test: could they continue to engage almost every pupil in such deep, demanding learning at home?

For years, Head Teacher Barbara Jones and her team have placed an effort on making learning exciting and meaningful, relevant for each and every learner. Within the comfort of a school classroom, the teaching team explored whole-school term-by-term themes, for example: *Our Historical World*, *Our Scientific World*, *Our Global World*. All the classes would look at those themes throughout the term through the lens of each curricular area they were tackling, in turn.

## A TURNING POINT

But with the lockdown, as they embarked on the theme of *Our Healthy World*, the team felt that this traditional thematic approach was going to fall short. The learners were no longer tied down to a specific classroom, a specific learning time. They no longer approached the curriculum one curricular area at a time. The teaching team needed to focus their efforts on planning and executing the curriculum in a truly Interdisciplinary way: the artifice of ‘subject lessons’ didn’t fit with the motivation of home learning.

When learners had to learn from home, the team’s attention was sharply focussed on how Interdisciplinary Learning could change the way they plan learners’ experiences, and how they’d tap into skills they’d been building over the months and years beforehand.

## WHAT IS INTERDISCIPLINARY LEARNING?

Interdisciplinary Learning (IDL) is an approach that brings together teacher co-planning, facilitation skills and a focus on giving learners the thinking skills they need to handle more responsibility for their learning.

It is a planned experience that brings disciplines together in one coherent programme or project. The different disciplines plan and execute as one. These disciplines might fall within one curricular area (e.g. languages, the sciences) or between several curricular areas. IDL enables children and young people to

- learn new knowledge or skills, and develop new understanding of concepts;

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- draw on prior knowledge, understanding and skills;
  - transfer and apply that collective knowledge to new problems or other areas of learning.

## TWO KEY PLATFORMS TO BUILD RESILIENT LEARNER SKILLS

In previous years, two key sets of practices have built a set of learning habits in learners and staff: **The Ethos Block** and **Cooperative Learning Strategies**.

**The Ethos Block** was set up 2010 as a weekly programmed feature, every Friday, to crystallise the spirit of the Curriculum for Excellence (CfE). Historically, schools have always had groups designed to amplify learner voice: eco groups, school councils, and so on. But for Depute Head Teacher Lynne Stuart this wasn't enough:

*"It can always be the same faces getting voted in or choosing to participate. It sends out a clear message: "you might have what it takes but if you're not voted in you can't contribute". That message just isn't us. For us, all voices matter."*

So the Ethos Block aims to involve, amplify and place learner voice and choice at the centre of school life, with three key components:

### 1. A Learner-Led House System

In 2010, the school moved from an old building to a new one, with a new management team, and a new curriculum. This was an opportunity to rethink the use of time. The team established a House system, and every Friday morning House Captains lead sessions with the peers in their House. The activities are designed by the House Captains, not the practitioners. And it's a key part of the curricular routine of the school, not an extra activity people opt into at lunchtime or after school.

### 2. Masterclasses

While the House System develops a strong connection within one group, Masterclasses give a chance for learners to develop friendships they'd not necessarily have developed with peers who share a common interest. Every member of staff can introduce an interest or hobby that they have, in the arts and crafts, sports, music, technology, for example. Learners look forward to it because they can get to learn with a different practitioner who they've not had access to before, and can work with children from other year groups who all have a common interest.

### 3. Staff-led Learner Working Groups

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Every two years, staff take to the gym hall in an exhibition where they 'sell' their working group to the children, soliciting certain skills or interests they have. There are five well-established Working Groups which improve the life of school, our community, and develop a better understanding of health or global issues. Children get a rich learning experience over time, changing groups every second year, and taking part in projects across three or four different areas. We are beginning to track the skills and attributes gained by learners through their participation.

The second key component is formed of **Cooperative learning strategies**, which permeate the whole day, every day. Every teacher has undertaken a three-day intensive cooperative learning training programme, and has a toolkit to share with learners. Every learning intention they design contains an element of content, skills development and social learning: learning to compromise, learning to listen, to ask good questions and so on.

Teacher Matt Crowther explains the importance of taking time out for reflection and feedback:

*“More than any facet of what we do in the classroom, cooperative learning strategies fit perfectly with undertaking IDL. In my class, for example, I might see groups of four learners eliciting feedback from each other, working methodically through a process they’ve learned to use over time.*

*“Asking questions, for example, is something that happens all day, every day, in all aspects of teaching and learning. We might play the day’s episode of Newsround and explore the types of questions that are being asked by reporters. Comprehension tasks include lots of talking about open and closed questions. Then we build it into what we’re learning later that day.”*

There is one guaranteed slot for this kind of reflection every week. Reflection Time is a weekly expectation in every class timetable, where the teacher and learners review, give feedback to each other, and together formulate open questions about what they’ve achieved.

Head Teacher Barbara Jones also places an emphasis on these thinking skills, as a way for IDL to offer learners far more personalisation and choice than other, more traditional modes of learning. “We want learners to be able to answer a challenge in any way they choose.” she says. “Thinking routines that we’ve introduced before are one way that learners choose how they’re going to tackle the big question in hand.”

## **EIGHT STAGE MODEL FOR LEARNER-LED IDL PROJECTS**

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During the period where learners were learning exclusively at home, the school took on a rich IDL project as part of their *Our Healthy World* theme. *The Thrive Project* asked: “What skills do we need to thrive in difficult times”. Originally, it was designed with key themes in mind, particularly health and wellbeing, numeracy and literacy. But with learners stuck learning at home, teaching staff regrouped and designed a more interdisciplinary approach.

### **Stage 1: How do you inspire? Design a Knowledge Harvest**

Teaching teams from across the school meet to choose the cross-curricular contexts that will provide an introduction and backdrop to an IDL project that makes the most of the local setting. For example, a Primary 2 team might explore The Senses initially, as a ‘way in’ to exploring the ideas of how we ‘thrive in difficult times’, while Primary 6 learners explore healthy choices. At this point, practitioners start to curate material that could stimulate learners’ own questions, and help them reflect on what they already know about a given context.

### **Stage 2: What do they know? Implement a Knowledge Harvest with learners**

The knowledge harvest starts by tapping learners’ prior knowledge on the context. Teachers use thinking routines that encourage students to generate scores of questions. The goal is to find those that the learners themselves have an interest in answering, and whose investigation will help the teacher meet the curricular goals they also have in mind. By the end of the harvest, learners and teacher co-design four or five “Big Questions” they want to investigate further. For example:

- what effects do different foods have on my body? What about different food groups?
- what happens to my body when I exercise?
- what can I do to help others with their mental health?
- how are my mental, physical and food health all linked?

### **Stage 3: How do you build on what they know? Plan Rich Experiences**

Based on what learners already know, and the questions they want to explore, the teacher plans and curates experiences, activities and content that relate to the Experiences and Outcomes for the Curricular Area, Age and Stage.

### **Stage 4: How do you stretch every learner? Co-design Outcomes**

Further planning kicks in, collaboratively between practitioners within a specific Level and specialist subject areas. Here, teachers share their Big Questions so that they can all see what is being planned from class to class. This is a chance for colleagues to spot connections between

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their ideas, challenge each other to make the experiences even richer, and to team up on planning.

*“As staff started sharing their Big Questions and exploring their initial thoughts on planning, connections across the learning emerged,”* explains Depute Head Teacher Lynne Stuart. *“From this, what had started initially as tentative conversation moved to powerful dialogue. There was enthusiasm and excitement as the rich tasks started evolving. Some practitioners began to see how they would go back to their planning, to make lessons even more focused. They saw the need for even more clarity in what knowledge and skills needed to be developed so that their pupils had the best chance of successfully tackling the rich task.”*

The Rich Task Questions teachers settle on at this stage is based on what learners have already developed, and replaces the topic heading teachers might have used before.

*“The teacher’s job is to give learners access to the rich world that’s out there, point them in the right direction. We want to bring the outside in,”* explains teacher Matt Crowther. *“It’s the teacher who brings this to life in the early stages, and we all have different skill sets. My stage partner is really interested in politics and I’m quite musical, so I’ll bring song writing and creative writing while he brings material that engages them in the big issues of the moment.”*

In *The Thrive Project*, the team needed significant input from the school’s PE specialist, too. And the primary school’s German teacher, Kenny Webster, who visits each week from the neighbouring secondary school, has real expertise and passion in the area, too. He wanted to get involved as a way to engage Primary 7 learners in their transition to the local Academy. He even created his own blog to let pupils see how he was learning to thrive during lockdown.

**An example:**

Eight teachers working with different classes in the Second Level create connections between learners who have shown prior learning and interest in specific parts of the bigger question around how we thrive in challenging times. They now refine the Rich Task they seek to answer, based on more specific prior learning and expectation. They can then teach to their own passions and expertise.

**Common Thread #1 from P5-7’s Big Questions:**

Pupils in each class will have studied significant events in history to discuss and understand the impact that these have had on society through exploring the aftermath, e.g. Aberdeen Typhoid Outbreak in 1963.

HWB 2-07a, SOC 2-01a & SOC 2-04a

<p>Rich Task for this group:</p> <p><b>What do you think will be the aftermath of COVID-19? What might change in society as a result of the pandemic?</b></p> <p>This might be in terms of lifestyle choices or environmental issues, for example.</p>	
<p><b>Common Thread #2 from P5-7's Big Questions:</b></p> <p>Pupils in each class will have studied the importance of maintaining positive mental, physical and food health.</p> <p>Rich Task for this group:</p> <p><b>What are the key wellbeing messages that you would give as advice to someone in the future, of a similar age, who faces a lockdown situation for an unknown period of time? What qualities really matter?</b></p>	<p>HWB 2-17a &amp; HWB 2-45a</p>

## Stage 5: How do you build skills and understanding? Plan the experiences

Staff plan the final content, experiences and expected outcomes for learning that involves specialists and other colleagues. The experiences will include ways to dive deeper into specific knowledge, activities to develop and show understanding, and ways to develop new skills they need to complete the experiences successfully.

## Stage 6: How do you keep momentum? Learn, feedback and document

Rich tasks will provide a range of entry points and expectations, and choice so that learners can push themselves into new ground. They'll be regularly introduced, with deadlines the learners should meet.

Feedback from the practitioner and from peers should take place throughout, as learners share their partially complete ideas and more polished artefacts of learning.

Despite collaborative planning that builds on learners' ideas, it's also possible that you have to change tack early on, says teacher Matt Crowther:

*"The main way you know they're engaged is that they're talking about it. The class is buzzing. You introduce the input on a topic, and if it's quiet, it's going to be a flop. The class comes alive. That's a real key moment, and there's a lot of nuance in it. You need*



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*to be able to identify when they're able to really go for it - they're sponges. You need to hone what you're doing to keep momentum over days and weeks of a project."*

## **Stage 7: How do you involve others? Exhibit.**

Exhibition is often perceived as something that happens solely at the *end* of a project. But an IDL project will see learners share early ideas, drafts and iterations of their thinking, as they build one idea on another. Early years practitioners have a long heritage of documenting learners' journeys. In IDL, that responsibility shifts increasingly to young people themselves, who can document their thinking before it's solidified, as well as share their final 'products' of learning. Online platforms provide an easy way for every learner to share, review and adapt their prior products of learning,

DHT Lynne Stuart explains the importance of both prototyped thinking as well as the final product:

*"We've got so much material from learners over the course of this project - lockdown diaries, recipes, videos, texts, audio commentaries... - the ends clearly justify the means. The product of their learning is both as beautiful as it is excellent."*

## **ASSESSMENT AND IMPACT**

### **Ongoing, formative assessment**

It's easier to see when learners are struggling, or when they need to be pushed, when you've got "circuit routines" and "thinking recipes" to hand, built up over time. As a standalone activity in class these kinds of routines are easy to do. They might even feel mechanical. But bringing them into play during a Rich Task leads to richer thinking.

*"When we asked our learners why this project was important right now, their answers opened up a curriculum in front of them," says Matt Crowther. "They said the project was all about relationships and growing into adolescence, and why eating healthily and keeping fit are important at this stage in life, in these tricky conditions."*

*"They were taking their own personal experiences of lockdown, and thought about this in a specific way centred on their own experience, rather than in the abstract way we might have done it traditionally in class."*

Participation in an online environment made it easier to gather data on participation and deeper engagement: it's close to 95% on this kind of project.

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Learners have tasks that allow them to see new ideas, write their own, make and do things. Every one of these creates data of engagement. The teacher can therefore know who is engaging to the best of their ability, and who isn't. Formative assessment strategies are key, so every day consider exit notes, and asking learners to provide regular feedback on each other's learning, as well as adding your own. Cooperative strategies are useful because they help shine a light on nuances in engagement and performance, and you can then adjust the next day as needed.

*"Pupils should be able to show their thinking throughout all of this," says teacher Matt Crowther. "That's what gives them personalisation and choice along the way. We know from our day-to-day that learners don't always show their best when we ask them to write a story or speak in front of the class. So the best reflection of their thinking is going to be in the format they want to use."*

*"It doesn't have to be one class all using the same thinking routine - they can have many to choose from. Going back, we want to work in a far more focussed way anyway - we have less time on site, with deep learning happening there. At home it'll be structured in a more personalised way. So it's important that we continue to equip young people with those different methods they might have to reflect. It's not comfortable and sometimes it doesn't feel very controlled. But it works better."*

## The Listening Teacher

Giving learners more responsibility does not reduce the role of the teacher; it increases it. There are several key functions of the teacher in the classroom, and in the planning and assessment of learning:

- Connecting learning moments during planning, and then in real time as learners generate learning surprises;
- Designing an initial provocation, or hook, to open up learners' capacity to ask rich questions;
- Ensuring that beyond an initial provocation, learning is memorable, through an imaginative choice of content, experiences and activities.

The 'end product' of learning is not something the teacher designs ahead of time, along with success criteria and connection to the curricular Outcomes.

*"If you give them an activity with the end product named - you're putting a ceiling on what your learners can achieve. If they all have to give a written response, then not all young people will succeed," says Crowther. "They need to bring their own disciplines, their own skills and hobbies."*

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*“You start with who they are, and where they’re at, and bring that back into the school. Listen to them, and go with the questions that they have an existing interest in answering.”*

IDL does not work well with pre-defined, beautifully presented kit boxes, as they define the journey tightly. Practitioners might choose, instead, to audit all the resources and sources they can tap into, and have these on hand and easily accessible when the need or question arises from the learners.

*“Local library curriculum resources service will put together resources that might be useful for themes. But now that we’re looking at the most unique learning that we’re doing, the most useful resources are on our doorstep, and they’re often people,”* says DHT Lynne Stuart.

*“Partners in the local community are important. When staff change the stage they teach, they’re often looking at a theme for the first time. They need to share between each other’s past experiences. We have staff meetings where this experience is passed on and informal mentoring. Our specialist subject leads are crucial to give someone you can tap into. That’s where a lot of recommendations come from.*

***“Repositories don’t work as well as just in time learning from peers.”***

## **Engage the parent, engage the child**

*“Some parents like the rigidity of “doing the Titanic, or “doing Charlie and the Chocolate Factory”. We wanted to take parents with us and let them see that when we set the weather, we set the climate within the school. If we’re excited by what we’re delivering then it’s going to get a positive response from their children.”* Lynne Stuart, Depute Head Teacher.

Whether IDL is a key part of a blended approach to learning at home, or learners simply want to work on their project at home, parents need to know how to strike a balance so that their child can learn and use the skills needed to take more responsibility for the learning. It can be challenging for parents seeing their child struggle with an IDL project: they see it’s not that straight forward. Sometimes *the adult* has to make connections to help the young person make the next connection.

Involving parents early on in the development of IDL projects helps, says Head Teacher Barbara Jones: “We’ve always been transparent to parents about our curriculum, sharing through newsletters, open afternoons, information evenings, skills databases for our parents to highlight where they can offer help.”

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A virtual or physical exhibition of what learners can achieve helps parents see what the whole process is like.

## **Conclusion: COLLABORATIVE PLANNING, INTERDISCIPLINARY LEARNING**

Head Teacher Barbara Jones believes that the pandemic has accelerated her team's skill set in building projects that harness IDL:

*"You cannot teach IDL - it comes from what they've been taught so they can apply what they've learned in a new context.*

*"We planned collaboratively during the pandemic, using the same big themes we'd have tackled anyway. The solid foundations of curriculum design were there. But we really invested time in planning shared Rich Task questions. We spotted where different classes were using similar questions, so we grouped those together to create something more substantial.*

*"One of my teachers had filmed herself talking with the class during reflection time. I've never seen anything more alive, more magical, from a teacher."*

And teacher Matt Crowther's practice is transformed by IDL:

*"Every time we do it, it takes time to organise. But when the kids get their hands on it, it gives you a second wind. I remember being told at university: "never underestimate the value of children learning from one another". A lot of times, you're standing there talking about something, but within two minutes of the kids talking to each other they've got it, in child speak.*

*"Unintended learning" is one of the massive bonuses - you might go in with a plan, but it's going to change."*

## **DIVE DEEPER**

Hazlehead School's journey: <https://sites.google.com/ab-ed.org/hazleheads-idl-journey/home>