Agile Learning Spaces
a user manual for teachers and students

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All round the world new agile spaces, with zones and nooks and new approaches to seating and organisation are appearing because they make better spaces and places for creating engaging learning. Engaged minds achieve…

…but how to use those spaces, how to work together as teachers, and students, in those spaces - and how to avoid gainsayers trying to drag us backwards and losing all the advantages these spaces can offer?

A user manual is needed.

This primer, in the form of that user manual, has been written for the new integrated science learning spaces at Wesley College in Western Australia's Perth, but it should help others everywhere too…

illustration: Bryan Mathers

S, M and J Heppell, 2015
for Wesley College, Perth

Before you begin:

Context

A lot of new spaces in schools - for example in the UK resulting from the Building School for the Future scheme (BSF), or in Australia resulting from the BER (Building the Education Revolution) programme - and from much good recent design since, have been characterised by greater scale, a multifaceted layout with zones and activities marked out by furniture and colour, with little three sided spaces - nooks or booths - offering privacy without secrecy, and an intentional absence of traditional details like expensive corridors, rows of identical chairs, a teacher zone, or closed doors.

In many schools, indeed for most, these have been spectacularly successful, with better engagement, better learning, better results and more enjoyment all round. They are bigger spaces, but they should not be the barn-like noisy Open Plan spaces of the 70s in any sense. Despite that success, in most cases staff still had to discover how it could all work for them, and for their students. Most did so successfully, but in a few cases staff simply collectively wrung their hands and asked how they could carry on exactly as before now that their teachers' desks, or the walls, had gone? And they tried to use furniture, plants, screens, anything to (badly) recreate the "closed boxes" of the 20th century. Unsurprisingly, that doesn't work very well. It is obvious that what's needed is a user manual; it is desirable and less wasteful of precious staff time to start from what others have already discovered, and to add local tweaks and ideas from there…

This user manual for these new spaces is written for the new science spaces at Wesley College in Western Australia's Perth. It is built from a host of experience of what works, worldwide, in a huge range of different social and economic contexts. Hopefully other can share it too, and might then suggest further ideas and details so that colleagues around the world will have a starting point to quick-start them, and to help them build even better learning in these new, ambitious, learning spaces.

Zoning

Sometimes a teacher, or a student, needs to speak directly to a whole class, of course, regardless of class size. But there are a lot of other activities that might / should be happening in the learning spaces too. Historically, learning spaces are too often laid out only for that one-to-many "directly to a whole class", moment and all the other activities suffer as a result.

Schools have learned that zoning a space, and selecting the right FF&E (furniture, fixtures & equipment) for the right activities, builds better learning but also helps both students and teachers be reflective about the different modes of learning that might be on offer.

Zoning also helps with preparation. Staff and students quickly get into an understanding that with this task / topic they might need to do some reading, to plan a bit with classmates, to be heads down and working quietly, to connect and discuss with others on-line, to do practical activities… and so on.

This manual walks through a range of different learning activities and their physical manifestation within these agile spaces. It is not a final or definitive list of zones, obviously, but it represents a subset that many school have adopted. There is plenty more that you might do adding your own zones, or activities.

If you have 20, 50 or even 90 students in the space you certainly don't need 20, 50 or 90 chairs and desks. But you will need more activity places than children or else it becomes a little like musical chairs as the last ones to settle try to find an increasingly elusive place to settle in. By and large the activity dictates the zone to be occupied so that a typical lesson / morning / day would have multiple activities to utilise the multiple zones. Children of all ages are drawn naturally towards these nooks

and zones and to the collaborative work they support. A big change for many colleagues is the move on from "my space" to being part of a shared "our space". In these spaces your location will vary with the role you have for the various learning activities.

The activities do not need to be sequential - although you might need to start, and / or end, in a plenary with everyone together. A final plenary to review the session together is always a nice punctuation point to signal closure.

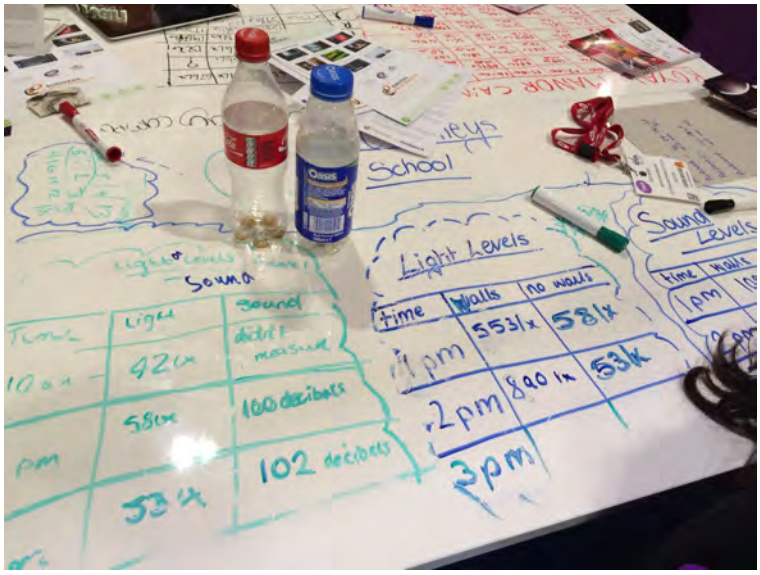
VOCABULARY

Nothing confuses colleagues, students, governors and parents more than a range of words to describe the same thing. It is fundamentally important that you agree your vocabulary from the outset. There is no globally agreed glossary of terms for any of this - just chose words that sound right to you culturally, and that make sense, and then stick to them absolutely. In the past some have even adopted swear boxes (money to a good cause) in schools to stop people using the "wrong" terms (don't ever say Open Plan for example, we are not in 1974).

We really can't overstate how important this consistent and appropriate vocabulary is, for abolutely everyone. Everyone must use it consistently. Perhaps the main word to lose is "classroom"; it will help everyone to rename the new areas as "learning space", or similar.

LEARNER VOICE

This is so important, but it often gets lip service rather than full implementation. Put simply, the protocols for behaviour in these spaces, the reasons for each zone, and so on, are all the more effective when the learners themselves have been a major part of the conversation. "Voice and vote" is a really significant part of engagement, but also is a major part of getting the best from the spaces.



Students have good ideas, they see things that you don't and their involvement triggers their own meta-cognition as they think about, and learn about, their learning. You can't build better learning **for** your learners, you can do it **with** them.

With science spaces, or others, the opportunity to measure and explore existing spaces' potential for Learning, as a science project, looking at ambient temperature, the light levels, the sound and more, is too good to miss. Learners love to do this work and are always amazed by what it reveals about their existing learning spaces.

See www.learnometer.net for more details and numbers.

LEARNING EVERYWHERE

Although we are talking here about one space, or clusters of spaces it doesn't mean that a student need wait until arrival in those spaces to start learning. Spreading the science, or maths, or whatever out and around the institution helps cue up the learners for what they will be doing - and is fun too. Why waste those pillars, playground surfaces, stairways, or floors!?

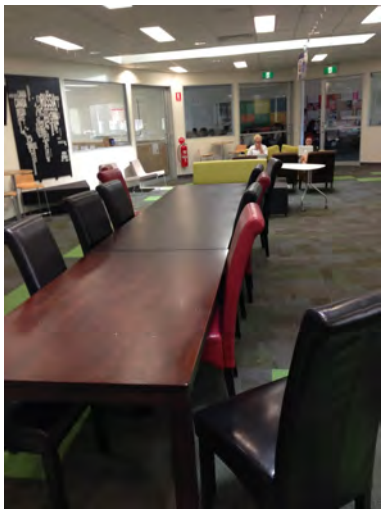
The point here is to cue up learning right across the institution and to set the tone for continual learning, everywhere.

photo: maths / language learning stairs, at a SEK school in Madrid, Spain

DOWN TO DETAILS - SPACES

FAMILY LEARNING TABLES

Family learning tables are large, usually offering a dozen or so seats, and at first sight teachers often think they would be ideal for "seminar" style conversations. But students of all ages think very differently about these tables; typically they embrace them as **the ideal place to work quietly, alone, without conversation.** If one student becomes chatty, the other eleven will shush then right away. A bit like a gym, it feels good to be working hard together, but it doesn't need conversation.



Family learning tables can be long (five seats on each side, one on each end…) or circular but the long rectangular shape takes up a lot less room whilst still encouraging "quiet time" work.

Often these are sourced pre-used. There is something grand about an ex-boardroom table that seems to the add status and value to quiet work.

photo: family learning table, at Mark Oliphant College, South Australia

TALKING TO WHOLE GROUPS: TIERED SEATING

Whole group instruction is for important things you don't want anyone to miss - and you are reasonably certain that nobody knows it already. Some teachers can be wonderfully engaging in front of a whole group too. We might take our cue here from traditional science labs: when a teacher wants to convey something of key importance to the whole cohort, everyone brings up their lab stool to the front - the important detail here is the closeness of faces, the intimacy of the moment.

Talking to a whole cohort spread out in traditional rows of forward-facing-desks is, apart from taking up an inordinate amount of space, a lot less effective for those at the margins of the room, even if the teacher walks about.

Today, a good and popular solution is to use tiered seating which will take a large cohort, while you talk fairly briefly. On the tiered seats everyone is "in the face of" their teacher/s, close to their teacher (or to whoever needs their full attention) and they won't miss anything.

Ideally the tiers should be both shallow and high. If the seating area is too generous the students at the top tier will be too far from the presenters face for real learning intimacy.

photo: New Line Academy, Kent, UK

These spaces also provide a good opportunity for a large group of children to come together and be student led, especially if the tiered seats break into smaller units.

Mostly, you will end up needing to have these tiered seats made, it is quite hard to find suitable ones to buy. A guide is that students should be sitting in between other students' knees and not in front of them. It is a moment of collective engagement, and also useful for reinforcing the "cohort identity".

The teacher needs to stand as close to the front of the tiered seating as is practical. Even in a large agile space the teacher can be clearly heard conversationally without a raised voice, or amplification.

TALKING TO WHOLE GROUPS: ATTENTION SQUARES

Sometimes, in a big space where everyone is engaged in a different part of the overall task, it might be important to stop everyone briefly to convey something of importance. You could just stand in the middle and shout (!), but a more nuanced approach is to mark out a "attention square" on the floor - usually the one place where your line of sights sees into all the nooks and alcoves.

Anyone stepping onto the square is signalling a need for everyone's attention. Students might use this too - for example if they needed to ask the whole larger group for a moment of help with their project. This is a two way protocol: you will have everyone's attention, but it is time limited. Stepping on the Attention Square means your important-thing-to-say will only last a short fixed time. Try three minutes as your initial limit, then tweak it a bit if needed.

Some have found a small hand bell on the square helps everyone to notice that you are there, or a protocol like a raised arm when you get there to call for brief silence. In a space where quiet background music (slow and without lyrics please) is used to help concentration then pausing the music is an obvious way to draw attention to someone arriving on the attention square too. Using sounds cues to mark activities (like packing up) helps bring order to the session in many ways.

QUIET READING ZONES

photo: quiet reading zone at Lampton School, London, UK

All the schools where children lead the design of their own learning spaces reach the same surveyed conclusion: at home just about all children read whilst comfortably seated and this is almost never on an upright straight backed chair. So if one of the learning activities that you value is quiet reading, even just the pre-reading before something active or

collaborative starts, them a quiet, comfortable, reading corner is an important zone.

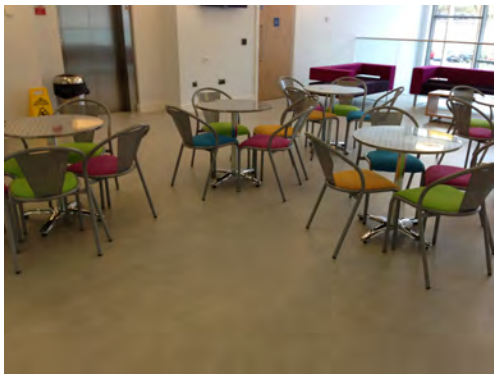
These reading corners, for all ages, are often shoes-off, and have comfy sofas, bean bags, soft furnishings, or whatever. The light levels for reading will need to be good - too many schools expect their students to read in poor light - and lux levels of 250+ for just reading, or 450+ for reading and making notes would be clear minima (you can measure light levels with any of a variety of free phone apps).

It is possible also to write in these comfortable reading zones - having a small set of portable hard writing surfaces - like IKEA's Brada plastic desktop for lap use - makes that simple and effective.

In one of our schools a very young student commented: *"Did you know in some other schools they read sat at tables? Why would anyone do that?"*!

COLLABORATION / CONVERSATION TABLES

Learning tasks often need a period of planning, conversation, collaboration and sharing. Most often this is a small group activity and best suited to a small "coffee table" type desk with two of three seats - think of the conversations in actual coffee shops for example.



Limiting the number of seats, keeping the table small, all help to structure the parameters of the activity. It may help to add some acoustic absorption around the area too. Quiet conversation is the aim and the need.

THREE SIDED SPACES

Students really enjoy quiet collaboration in small numbers, whilst their teachers like, not unreasonably, to see what is happening everywhere. One simple and often playful solution is these little three sided spaces either structured into the walls as "nooks" or free standing.

There are simply so many of these that it is hard to describe them in more detail - but it is great and engaging fun designing them with your students - see "voice and vote" elsewhere in this sheet.

The more unique the better, these will become favourite learning spaces. Above are a few examples from schools around the world.

Writeable surfaces

Fascinating this - the explosion of writeable surfaces was triggered by the ubiquity of phones in learning spaces, with their cameras. Without any discernible national policy push, or extensive research literature, the idea has spread in an almost viral way, via word-of-mouth and social media simply because it works so well. You will see it in many places of work too.

The short version is that in schools writing in a very public way helps attract support when you need it, helps model excellence when you see it and encourages work when you should be doing it.

You write on the wall / desk / window, then capture the work as a digital photo before saving it somewhere sensible, evidencing progress and storing for revision or celebration, or whatever.

Cognitively we certainly seem to remember details from a photograph better than our own hand copy onto paper - the cues and clues of the moment, the squiggles, the colour all help capture a moment, or a narrative, better than a poor copy on paper can ever do.

With wall based work teachers can walk around and offer their own feedback directly onto the wall / desk / window - with multiple points of focus multiple groups can be working and showing their work. If you are using window pens, the Edding 4090 lumo colours are ideal.

The most important thing is to clarify the protocol for saving images and backing up those images. A debate rages about pen writing and / or new technologies. Writing on surfaces and capturing the work with a tablet or phone combines both rather well.

Skype bars

In a connected world working with others as a natural part of a project activity, needs some organisation and management. A popular feature in agile spaces is a Skype Bar - usually in a corner or against a wall.

These are rarely open to all Skype contacts, but usually each station has pre-arranged Skype contacts - four schools in the Skype contacts menu, or even four stations, one per contact, work well.

How much connecting-with-others time is integral to any learning activity is a debate about entitlement, need and usefulness. Other video linking solutions are available, of course.

Devices - multiple points of focus

Just a brief mention here (it would be a whole manual on its own otherwise!) but just as these spaces allow diverse teaching and learning activities so an institutional move from the "right device" to varied personal devices - BYOD, BAB and so on also allow diverse teaching and learning activities .That move to personal and varied technology is a clear trend. The importance here is that the protociols for use of devices need to mesh with the protocols of activity within the learning space.

Thus, a larger space with its multiple points of focus, having perhaps three or more flat panels on the walls and Apple TV, or Google Chromecast or whatever attached, will need a protocol for how a student takes control of the screen to show work to a small group, to the whole class, or to others elsewhere. Those "using your phone or tablet" protocols need to be part of the room behaviours too.

Down to details - teaching and planning

Teaching together

No tablets of stone here - below is what has worked for others - take from it what you need. It's usually easier to start with a proven strategy and vary it, than to invent everything for yourself.:

Roles

Teaching in these spaces is different, but almost everyone reports that it is more enjoyable. At the outset it seems daunting to change, but gains include less work for the teachers, with more engagement for the learners and better outcomes. You will need to dedicate a little more planning time at the outset until you get into the routines. You will get that time back quite quickly.

Typically, there will be more than one of you teaching in and around the spaces at any one time. In this case, it is enjoyable and effective to teach together. To do so, each teacher must have an explicit role at all times: giving instructions, clarifying the extension / stretching activities, clarifying any special education and disability activities, ensuring that instructions, are understood, clarifying additional / alternative language activities answering questions, sorting out technology issues, seeking out those who are stuck because although they know what to do, they can't do it, and so on. Be clear what will be needed in your context, when it's needed, and agree who is going to do which bits. It is very important that the students are clear as to who is doing what, as well. Inevitably this will lead to unbalanced groups with different teachers - don't try to balance them up, it just seems to work fine and of course the teachers exchange their roles often enough for it all to seem "fair" in the end.

Everyone should behaviour manage at all times. This is not the responsibility of one teacher and consistency across the team matters. Students have a role here too (see family learning tables above, for example).

You can wear coloured badges to make the main roles clear to the students, or you might simply write "who is doing what" on the board - Help: Mr Jones, Lead: Ms Smith, Stretch: Dr Evans, etc. Again, consistent vocabulary is important and roles must be explicit.

As well as "what", make sure teachers know "who" they are 'responsible' for. This might change lesson by lesson or stay the same through a scheme of work. Make sure students are clear about this too.

Starter activities

…should be regular and designed to settle, to enable organisation from the outset. Remember you are generally teaching in longer blocks of time. Students start off that time with something familiar.

Other regular starter activities might included: checking the homework of a peer and suggesting one improvement, suggesting general improvements from the previous lesson, developing a learning point from the previous lesson, filling out a comic strip summarising a previous lesson etc. These "connecting" activites remind everyone of what happened last time, but also allow time to log on, settle down, get organised. Starter instructions should typically never take longer than 10 mins - this might be that initial plenary together - perhaps on the tiered seating rather than from the Attention Square though.

Technology frequently allows these more complex lessons to operate effectively, and for learning to extend beyond the conventional day, or term. Nevertheless, initially do allow time for the students to learn technology structures. Build this time in but have extensions ready for students who are already proficient and confident…

Seating plan - students move according to task and activity, but you can still stop two students working in an activity together, because perhaps your experience says they will be "difficult" together.

Although it is ideal to bring everyone together for the plenary, with such large groups it is useful to have a range of familiar smaller activities during that plenary - like the talking-in-threes of flipped learning. An all-together-plenary might not happen everyday for logistical reasons, but at least once weekly is important. You might think about other ways to share learning together too - twitter, blogging, in "house" families and so on.

Threes always works better than the pairs of "chat to your neighbour / partner" because with three students they can have distinct roles for the activity.

Be aware that there may be moments of significant noise - for example at the start when a large group all greet each other on arrival. Any familiar behaviour strategy will work to shush things down again, from simply holding up a hand and rewarding rapid responses, to having a decibel meter running on an old tablet and an agreed maximum (try 75 db, and try to reduce to 72db).

Having resource boxes on a single table makes it easier to manage transition times - scissors, chargers, pens, traffic light cards, handouts, components, colouring pens, bits of technology, glue etc.

For your first term, routine is important. The activities might change, but the basic structure of your lesson should be the same.. short starter, activities reminder/prompts, plenary at the conclusion. Or whatever regular routine you choose. You may well find that table signs (a bit like table labels at a wedding) help everyone to know what is going on, where. Just a folded A4 sheet and handwritten label is fine - don't overcomplicate.

After that first term you can mix things up a bit for variety, but with variety already in the lesson with multiple activities on offer further "mixing up" doesn't need to be developed urgently. Take time to change. Reflect.

Although teachers have distinct and clearly signposted roles, they can swap these about from day to day. Don't fall into a trap of always doing the same thing because it worked so well first time! You all need to be able to take on the different roles within the space. It is more enjoyable for everyone.

Planning together

Initially
For the first term you will plan together more than ever, so you will need to put aside additional planning time. You need to agree the schemes of work, get used to each other, produce individual lesson themes, and plan these lessons together. Different teachers can be the 'lead' for different areas, but you all need to have had input into the lesson, even in heavily overlapped project based work. The good news is: once the first term is past, it is all easier than before!

Once you have agreed your learning outcomes, focussed on how the lesson "builds", worked out who is doing what, and when, shared and critiqued each others components, then it REALLY helps to step through the whole thing and reflect on what students will be doing in their zones, or groups, or threes or whatever, and what the teachers are doing then too. You will do this more in the early stages than as the year moves on.

How will planning look after a term?
Less meetings. Or certainly much quicker ones!

You should all be fairly used to the process and know what you each need to be doing. Once the lesson is agreed, you can probably plan separately, share resources via email, critique / suggest changes / differentiate. The discussions need to be ongoing though!

The main habit is to always be planned ahead - with a team of teachers you can't "wing it" on the day - what if one of the team was absent unexpectedly? These are good habits anyway. This may seem like extra pressure at first but you will rapidly realise that you are in a better situation as one of a team of supportive colleagues.

How will planning look after a year?
As long as your team stay the same, you'll be very good about sharing the work, planning, then meeting up and stepping through how it might look.

You'll also have clear, agreed roles, so you should be very confident working in those areas. You should be saving even more planning time, through the shared work.

Final caveat:
None of this will work if one teacher does all the planning. For whatever reason.

The other teachers will look ineffective to the students, they feel and become undervalued because they do not understand the lesson structure or their role. Incipient chaos starts to creep into the room… standards and engagement drop where they should be rising rapidly.

But if the team act as a team it is wonderfully enjoyable, becomes less work, is very effective and properly engaging for the students too. You are all in this together.

But anyway, one teacher cannot manage the planning for a whole team/department without collapsing exhausted! Nor should they. One of the strengths of team planning is the variety of strength, experiences, enjoyment and ideas that a team bring to these exciting, new, effective spaces.

For more from:

Juliette Heppell, see her (free) iBook "Designing a Learning Space" or @JulietteHeppell on Twitter
Melissa Heppell, see her West Base IPACA Blog or @MelissaHeppell on Twitter
Stephen Heppell, see his website, or @StephenHeppell on Twitter