

# Expressive Arts

The school's ambition is for the curricular areas within each learning zone to maximise the opportunities for thematic learning. Creating learning zones rather than labelling areas for a specific subject will enhance the collegiate feeling between the curricular areas. Visual links between learning spaces that are open to each other through use of breakout and shared space promotes the coming together of different subject classes in the same space. The Assembly Hall when not in use for assembly will be a great opportunity for Expressive Arts subject areas to come together in a flexible space or use for informal breakout and timetabled activities.

Storage is important for this zone, each curricular area's storage requirements are very different and will need consideration at interior design stage.

Getting the acoustics right is really important for this zone due to its creative nature. Places to be noisy and places to be reflective or have creative discussion are required, separations, e.g. between Art and Music are important to prevent disturbance.

## Art & Design

The Art & Design department has two Art studios and a kiln room. It is important to ensure the Art department feels part of the Expressive Arts learning zone this could be done through visual links such as wayfinding/wall art to create a sense of identity for the learning zone.

This is a creative space and should be designed to promote creative flow and collaboration and should allow for the learners' work to be celebrated. There is potential to create a gallery in the stairwell that links the two floors within the zone (such as the image above right).

Natural daylight is very important in the art studios to create a bright environment, easy clean furnishings in messy areas, practical washing areas and good storage should all be considered in the design.

Art & Design and Design Technology have established links and practice between the departments; there is also potential to collaborate with Computing Science. Where possible this should be considered in the design.

### Breakout Areas

Bringing shared resources out creates more space in the studios and brings the workspace into the breakout for independent working (photo right). This shared support area will also allow for shared storage of large equipment, folios, paper stretching sinks and specialist equipment that would not necessarily be replicated in each studio.

Space strategies' spatial allocation for Art studios has been tested against the following which should be considered when defining the layout (plan above right)

- Perimeter benching to window wall to house large, deep sinks with material storage underneath
- A variety of table types (seamless project tables, modular desks, fixed height benches) and configurations (individual, small group, large group) display

The design should facilitate quick and easy access between this shared resource area and the studios.

### Advanced Higher Students

The breakout area should work with two main studios and provide a quiet area off the main circulation for Advanced Higher/Senior working which could also be used as a 3rd teaching space.

### Access to the outdoors

Art & Design will be a regular user of the outdoors. It is important to provide the department with easy access to outdoor spaces that are designed to enhance these opportunities. Along with destination spaces for a class visit, a designated messy and well ventilated outdoor art space should be designed in for breakout with a potential outdoor store for resources. Art will also be able to move up their staircase or the main staircase to access the Terrace for learning experiences.



from Google image search



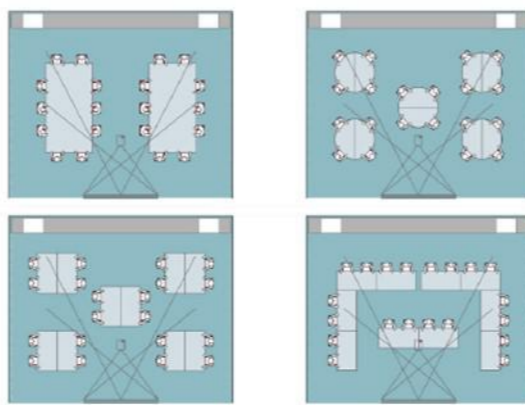
image from Bertha Park



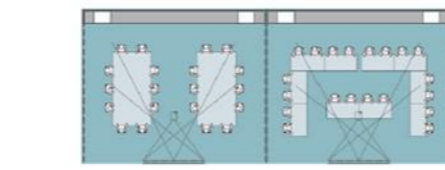
### Technology and design

It is important the digital design enhances the links between technology and expressive arts as there is a requirement for drama to be doing more technical work and art and music have strong links with technology.

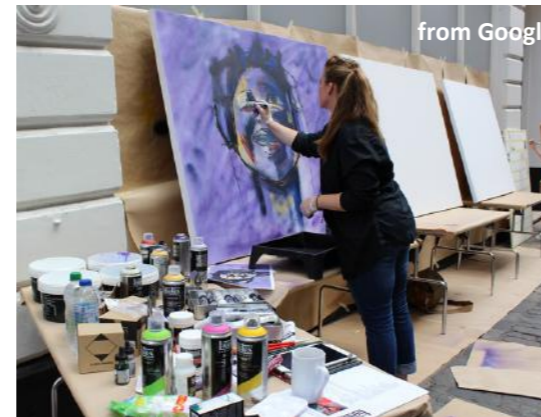
This learning zone can benefit from useful and flexible design features such as a green wall (as pictured above) in a recording studio or breakout. Interactive screens in the drama, music and art studios will enhance opportunities for learning.



Art Studios : 67.5 sq. m tested in a number of configurations



Shared resource "spine" for resources which can be shared across 2 studios



from Google image search



# Music

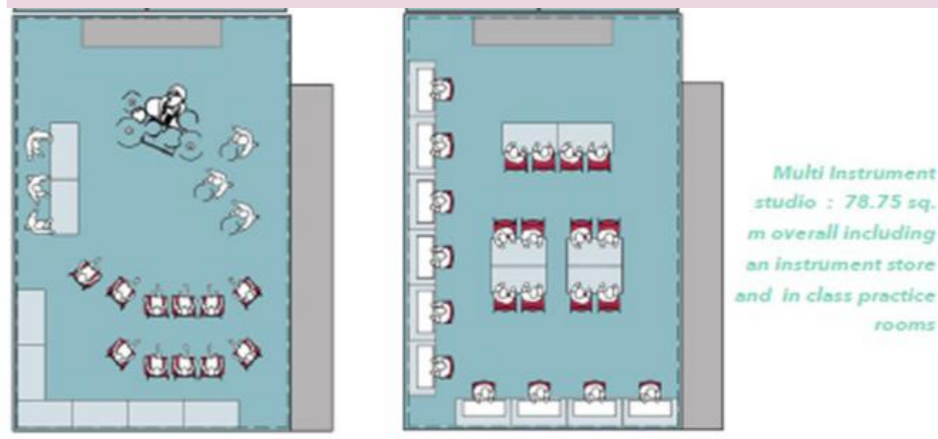
Two multi-instrument rooms have been allocated for Music teaching along with a four individual practice spaces and a recording studio. Space Strategies' suggestions are based on the principle of a multi-instrument approach to curriculum delivery rather than the whole class accessing keyboards at the same time.

Space Strategies' space planning tests for Music teaching spaces look at half the class using keyboards at any one time. This principal has been embraced in other schools as one which allows for greater flexibility in student choice and opportunity as fixed keyboards limit flexibility for other opportunities within the classroom.

Storage allocation for instruments is preferred to be accessed from the corridor; the storage solutions within the space allocated will need to be carefully considered to maximise the number of instruments accommodated.

Space Strategies' planning tests against the footprint include the following in regard the teaching spaces: (layout below)

- Multi-instrument teaching with flexible desks to provide theory and keyboard work (e.g. 1400mm length to accommodate a standard keyboard). Students would be able to use the music breakout space to do individual practice or make use of empty practice rooms.
- The provision of deep storage wall to the corridor wall of the classroom for instruments should be provided.



Multi Instrument studio : 78.75 sq. m overall including an instrument store and in class practice rooms

We are working towards 4 small practice rooms and 1 large practice room.

Getting the acoustics right for Music is very important, learners can also play some instruments in the collaborative spaces using headphones .

### Recording Studio

A soundproof recording studio has been briefed and could be similar to the image (left). With a window between it and the large practice room linking these spaces together.

Space Strategies advise that in many of the schools they briefed by the demand for a recording studio has been extended beyond use by Music and Drama with the likes of English, Media studies, and RME all expressing a desire to use such a space.

Record and playback is seen as a very valuable aid within the many areas of skills development. The community could also be a key user of such a space.

## Drama

The drama studio will work with the stage to create two studio spaces. The plan (right) shows key items required within the studios and examples of flexible layouts. The flexible wall would be from the stage onto the assembly hall.

Light and easily “flipped up” and rack stored tables should be considered for the drama studio to allow theory use and use as a creative movement focused open space (see photo of QHS below right).

Lighting rig needs to be moveable, our expectation is that an expert company such as Blacklight (who work with our schools currently) will spec the music and theatre studios with the preferred options in terms of advancements in new technology.

The drama studio and stage needs to be a black box design with blackout blinds on any windows. The design should allow students to access the studios out with timetabled classes for independent learning/practice without disturbing other classes therefore should not have to access the stage via the assembly hall or other studio.

## Stage

Opening onto the stage will allow the drama class to use the stage as a timetabled studio space or for breakout alongside use of the assembly hall.

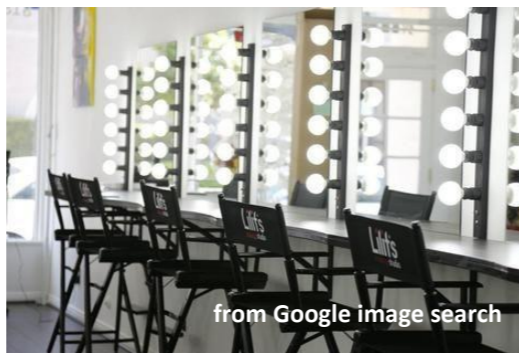
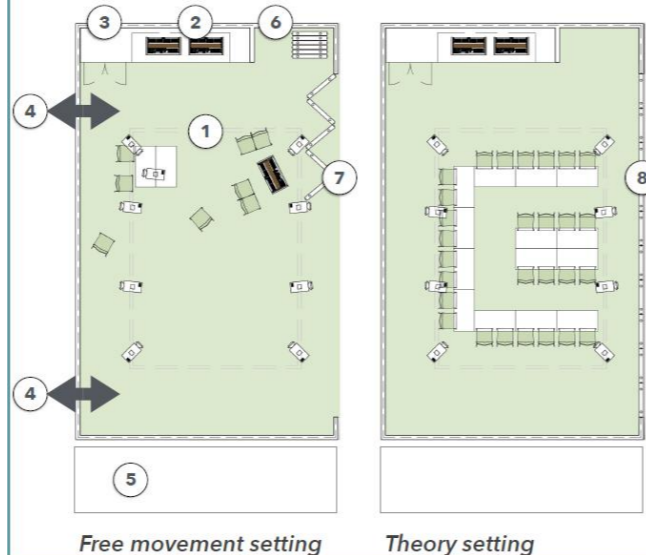
The flat stage area (part of Assembly /performance allocation) will be used as a teaching space at capacity if uptake in drama were to be retained as projections indicate. Use of the stage as part of the drama studio shouldn't be impacted by assemblies. Preference may be for the ability to sound proof and block off the assembly hall with a major portion of the stage behind like at West Calder High School. However, this needs to be easily opened/closed by teaching staff.

It is important that the Drama studio/stage opens up onto the assembly space. Through the use of a movable wall and cleverly positioned curtain tracks the stage will open to the assembly hall seating and the drama studio can be used for wing access to the stage (see photos of QHS right). This will enhance the practicality of the space for performances.

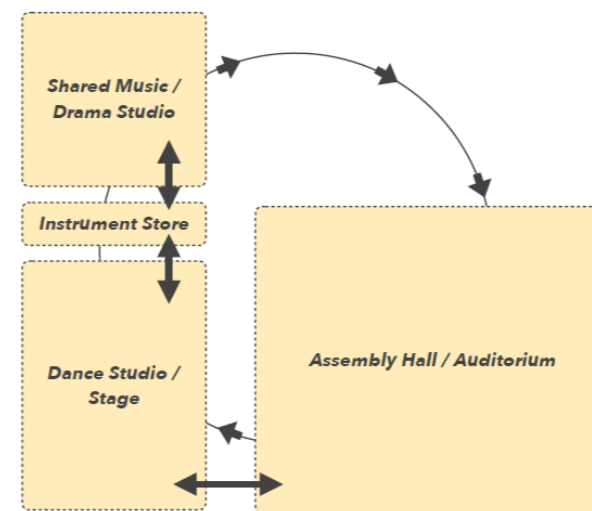
An adjacency to Music practice rooms would allow their use as changing rooms when there are performances on or in class costume activity during a Drama lesson. Privacy will need to be considered for these rooms.

## Make up space

A corner of the Drama Studio will be furnished flexibly to also accommodate a make up area for use in performance or for learning in partnership with external partners. The space would need wall mirrors, a sink and a surface which could be a high work bench that can also be used for writing by the drama class when not in use by the makeup course.



1. Lighting rig with curtain track & assembly to allow “wings” in stage setting
2. Table store
3. Tech. controls (certificate drama and FE qualifications)
4. Access to stage “wings” from accommodation to rear
5. Walk in / storage wall style instrument store - easily accessible from studio
6. Sliding / folding wall housing
7. Sliding / folding wall in open position
8. Sliding / folding wall in closed position

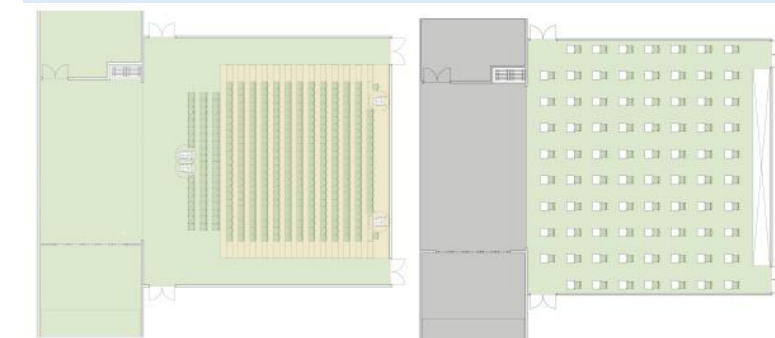


## Assembly Hall

The assembly hall can occasionally act as an informal breakout and learning plaza for the Expressive Arts learning zone when not in use for assemblies, whole school activities, etc. However, putting the bleacher seating away daily is not how they are designed to be used. Good access for Music and Drama due to the performing nature of these subjects is important.

Within the space there needs to be a sound and lighting booth behind the bleacher seating and an assembly store.

Space Strategies' diagram shows the links that can be created in this area. Careful consideration of the potential for the performance space to be used by the community out of hours is recommended in relation to its location within the learning facility, routes to and from the space and any potential implications for security if the space is to be used within school hours.

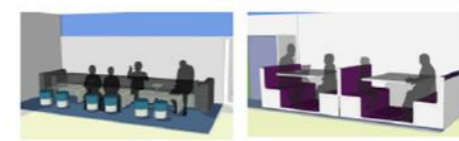
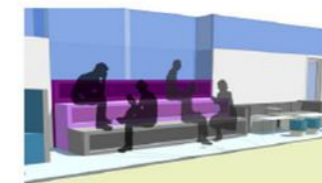
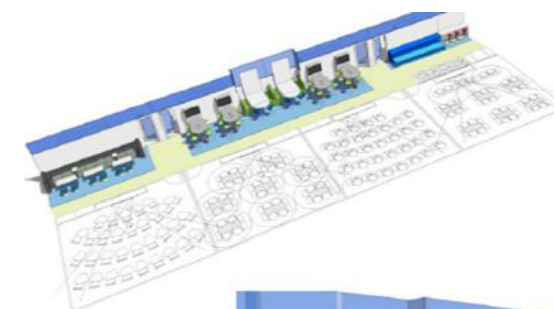


## Breakout

Breakout is essential to provide the flexible and collaborative learning experiences required for 21<sup>st</sup> century pedagogy, encouraging independence and ‘learner led’ activities. In order to ensure this strategy is embedded in learning, classroom space is allocated with a close, spatial and visual connection to the classroom areas through extensive internal glazing. Accommodation immediately outside the classroom could be a suitable approach, based on the minimum depth for one of the more popular “small spaces” 4 person group learning booths.

The breakout allocation allows a wide variety of activities to be supported including, but not restricted to: peer presentation, touchdown work space for staff, group learning & study, re-configurable space, individual study. We are not keen to pursue dining in the breakout areas due to management of the spaces.

Multiple breakout areas with different types of furnishing and spaces should be considered and distributed equally between the subjects. The breakout and collaborative areas for Drama groupwork should allow groups of 4-6 learners to work in, as their independent work is likely to involve more free movement than other curricular areas, the interior design should create more open space within the drama breakout. An example could be like the bench in the photo (right) from Bertha Park High School rather than a booth. The breakout for art should be as described in the shared resources spine in the Art & Design section.



# Health & Wellbeing

The school's ambition is for the curricular areas within each learning zone to maximise the opportunities for thematic learning. Creating learning zones rather than labelling areas for a specific subject will enhance the collegiate feeling between the curricular areas. Links between the curricular areas should be created where possible.

## PE

Area allocation for sports accommodation is in line with the authority standard and takes guidance from [SportsScotland](#) the following internal spaces are being provided:

- A four-court sports hall at 646 m<sup>2</sup>
- A Gym Hall at 266m<sup>2</sup>
- A Fitness Suite at 105m<sup>2</sup>
- A Dance studio at 180m<sup>2</sup>
- A four lane swimming pool

**Storage** allocation is slightly higher than the standard area allocated by the authority. This is due to the assumption that there are likely to be additional demands for storage to accommodate community users.

The swimming pool and fitness suite will allow access to community sports and leisure throughout the school day working efficiently alongside the school's timetabled spaces. The rest of the sports facilities will be available outside of school hours.

Daytime use of the pool and fitness suite will be timetabled annually by the school and the community manager (to be confirmed), the circulation of learners through/around public spaces must be considered within the design in terms of security.

## Outside sports

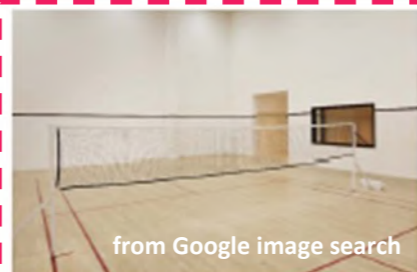
A 3G pitch will be provided which is an upgrade from the school's current astro. [The guidance for playing fields by SportScotland](#) suggests for 1000 students two rugby pitches (9,282m<sup>2</sup> each) and one football pitch (8,736m<sup>2</sup>) should be provided the requirements will need balancing with ambitions to create a learning landscape.

An athletics track would enhance the sports provision and could be incorporated into the playing field line markings.

Access from outdoor changing to the 3G pitch to be via hardstanding and access to changing from grass pitches should avoid impact on other spaces due to mud/debris.

An area of hardstanding that can be flexible for use as a multi-use games area, all weather outdoor learning and pop-up activity space is a priority in the landscape design.

Installing some outdoor fitness equipment near the sports block could create a free and fun space for learners and the community to get fit. Being close to the sports facilities also allows fitness instructors and teachers to take groups outside to use equipment if desired. This provision is part of the ambition to create active play areas.



from Google image search

## Gym Hall

An additional gym hall has been included to enhance the provision for inclusion and the relationship that Woodlands school wants to continue with Currie CHS in regard to sports. The gym hall should be designed in line with the [guidance by SportScotland](#).



from Google image search

## Dance Studio

The dance studio is generally used as a multipurpose sports like gymnastics, it doesn't need to be in direct adjacency to the stage/assembly. It should be designed in line with the [guidance by SportScotland](#).



from Google image search

## Fitness Suite

The fitness suite should be designed in line with the [guidance by SportScotland](#).

Community access to the fitness room would be timetabled during the day and outside of school hours.

An increased area to 200m<sup>2</sup> has been provided to allow better provision for the community and encourage use.



from Google image search

## Games Hall

The games hall will be able to accommodate one or two classes at a time and should be designed in line with the [guidance by SportScotland](#).

Links to digital and theory classroom need to be explored. To be able to use recording equipment in the halls to film a match and then playback in theory classroom or direct in the hall would be a useful tool to support teaching. A large empty space on the wall and ceiling projector is a potential solution along with Bluetooth speakers, but would require mitigation against vandalism and protection from sports equipment.

This space will likely be required to accommodate the exams under SQA conditions and will need this to be considered in the design.



from Google image search

## Pool

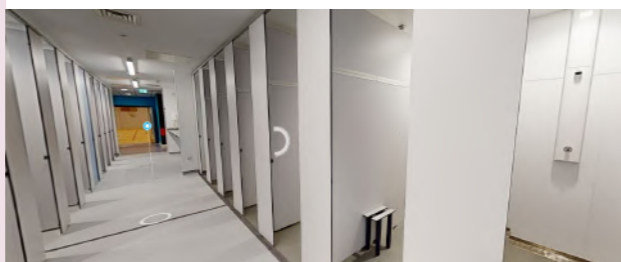
A four lane Passivhaus swimming pool will meet the needs of the school, local schools and wider community and should be designed in line with the [guidance by SportScotland](#).

To maximise flexibility and function for a four lane pool, a movable floor is recommended in the SportScotland guidance.

Any shared use of the pool by the community would be outside school hours.

The pool would be run by Edinburgh Leisure, a collaborative annual timetabling of the school and public sessions will determine the community use during the day and will be visible on their website. This will allow the public to see the regular daytime public swim sessions.

This resource will be a benefit to the local schools such as Woodlands and cluster primaries who will timetable use of the pool.



## Changing Rooms

The school will have dry changing (general purpose) and wet changing rooms (for the pool). In addition there will be an outdoor change provision with easier access to the outdoor sports facilities. The design should follow the [SportScotland guidance for changing rooms](#) however, this recommends the team changing approach and we are instead moving toward individual cubicles for 'dry' changing in a 'changing village' style. This move has been lead by student feedback on previous projects and offers privacy for individuals and is more inclusive.

Lockers are provided outside the cubicles to allow change over at community use. Due to the 'changing village' being able to accommodate fewer people, at least one pair of team changing units should be provided to cater for community team events and to provide for overflow numbers should all cubicles be used during curricular PE.

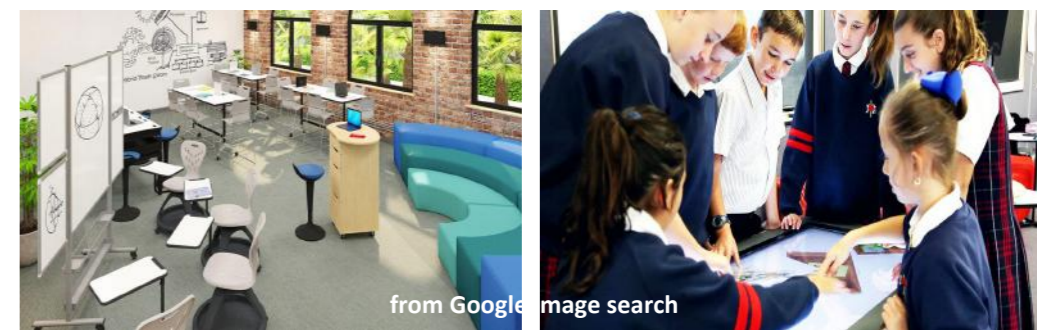
Feedback suggests that fewer users now shower, so some cubicles do not need showers. In the Queensferry plan, (above) the dry changing village arrangement is mirrored, allowing a gender split if required. The 'corridors' between cubicles can be passively supervised in similar fashion to the new student toilet layouts in schools.

For community and other use, enough changing rooms will be needed to allow changeover time in the timetable for community and school use (separate and secure changing rooms would be needed for safeguarding).

At least one accessible changing facility, a male and a female staff changing facility should be provided. Swimming pool (or 'wet') changing should be designed in a 'changing village' arrangement.



from Google image search



from Google image search

## PE Theory

This learning space should be a flexible environment allowing collaboration, analysis and investigation it should have the ability to move furnishings out of the way to create space for activities. This learning space works in a similar way to the breakout areas for CDT, allowing movement between practical and theory areas during a lesson; so a close adjacency between the sports halls and the theory space is key.

A variety of writeable surfaces should be provided.

Digital provision is important to be able to record and playback (including live playback) between the halls and theory space. The school would rather use this digital approach to allow the learners to watch what's happening in the hall live rather than have a viewing window from the classroom into the hall

# Health Food Technology

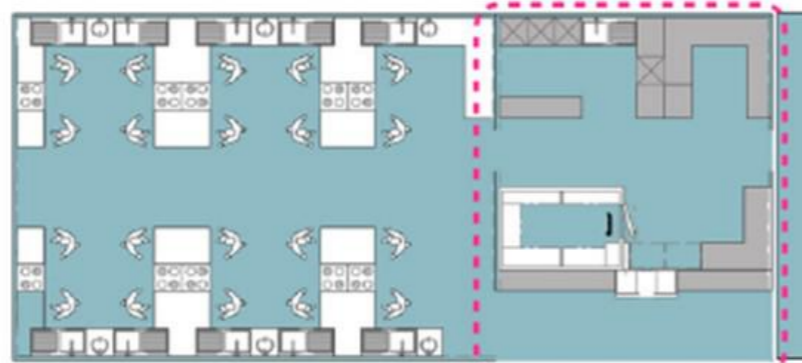
This area requires two teaching kitchens that allow direct access to a kitchen garden with potential for outdoor dining. The spaces should link up with a prep and storage space that is visible to create further learning opportunities (linked to Creativity & Employability).

Space Strategies' planning tests (plans right) within the teaching kitchens are based on:

- 10 No. Cookers (1: 2 student ratio)
- 10 No. Sinks
- 6 No. hand wash sinks
- Benches to provide 800 x 600 mm work area per student with room for stools to be situated underneath when cooking

It is recommended that an element of information display be incorporated within the teaching kitchens.

Due to the amount of prep-work staff do in HFT and the distance between the Health & Wellbeing areas within the building; creating a workspace in the prep/breakout area will allow staff to work flexibly in their area when they want to.



Teaching Kitchen : 78.75 sq.m Food prep : 54 sq.m



# Hospitality

The vision for dining at the school is to provide a variety of options for staff, students and visitors, this also creates a choice of dining spaces for the hospitality course to make use of.

These spaces will aid the school's ambition for their Hospitality course which has increasing numbers aspirationally and career wise working towards hospitality. Students have gone on to achieve an MA in Hospitality and within the curriculum this has expanded into S3. The chosen dining space would be needed during the school day for assessments so should be flexible.

The school has a number of community opportunities that could be enhanced using these spaces to allow students to run events within a professional context. Use of the catering kitchen, to utilise resource and provide a real-life experience for the curriculum and for effective engagements within shows, etc. can provide the thematic learning and real-life learning experiences.

Use of the catering kitchen by the hospitality course can be done out with busy catering times; as such will be timetabled for afternoon/evening. Pre-lunch service and morning break is when the kitchen is at its busiest and would not be suitable for sharing with a class. Afternoon lessons and out of hours will be the most suitable for learners to use the catering kitchen.

From the catering kitchen, events can take place in the adjacent dining space, the interior design should explore flexible options in how to make the area feel private. The café and adjoining informal seating can also be used, as can the outdoor dining area.

Providing a dining space adjacent to the teaching kitchens within the kitchen garden; such as on the roof terrace would provide an additional space for the hospitality course. Diners would get an amazing view, eating food cooked by students while being surrounded by the food they're eating growing in the garden (Inspiration image top left). For learning this would be a place to be proud of that encourages a field to fork ethos and connects students with the natural world and where their food comes from.

Circulation of students between the teaching and catering kitchens should be considered however, it will not be used very frequently so the adjacencies of these two areas are not a high priority.



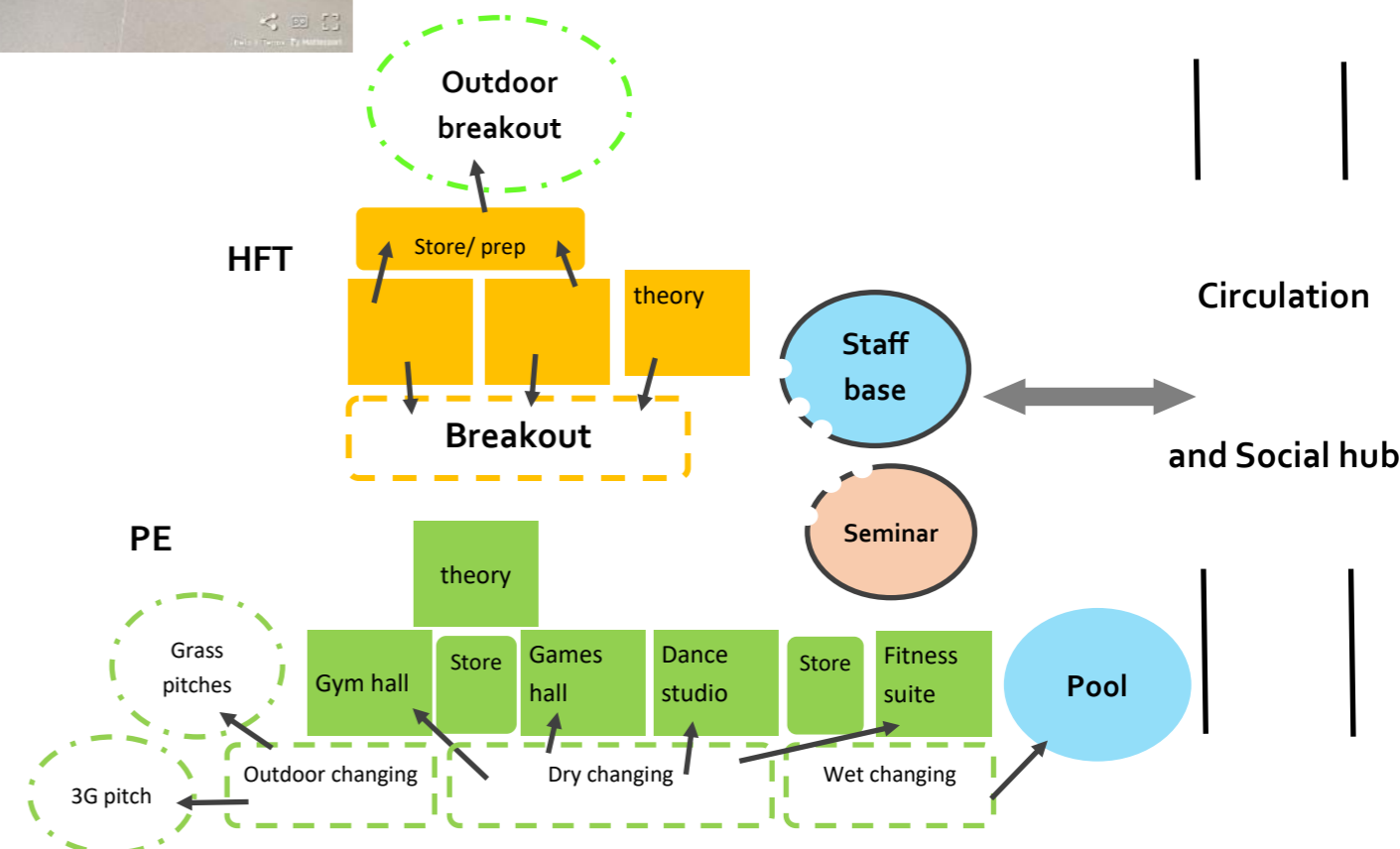
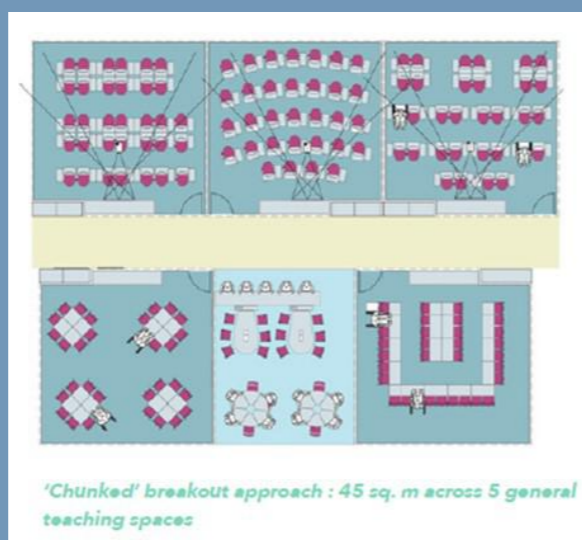
# Breakout

Breakout is essential to provide the flexible and collaborative learning experiences required for 21<sup>st</sup> century pedagogy, encouraging independence and 'learner led' activities.

In order to ensure this strategy is embedded in learning, a minimum of 16% of classroom space is allocated with a close, spatial and visual connection to the classroom areas through extensive internal glazing.

**Breakout for HFT:** there is a requirement for learners to be able to move quickly between practical and theoretical activity within the course of a single lesson. An approach which 'chunks' breakout allocation together within HFT in order to create spaces which can be easily accessed from practical space should be explored. (layout right)

Breakout for PE will be the theory space.



# Integrated Support

## Enhanced Support Base

a dedicated room in a quiet location, ideally located near an entry point separate from the main entrance, to support learners presenting with anxiety and/or emotionally-based school refusal who will use this space as part of a planned alternative/ flexible timetable. This room should be a standard classroom size. It should have ICT and AV equipment as for a standard classroom and should also have kitchen facilities. Furniture and furnishing should be flexible and planned as with recently refurbished Language and Communication Classes.

Not to open directly onto stairs

Noise and odour avoidance (cut off from the kitchen area)

Wider corridors for circulation

The new school should include a class for learners with ASD/LD; this would be a maximum of ten learners at any time and would offer opportunities for inclusion within a mainstream setting for learners with complex additional support needs, as well as opportunities for reverse integration. This space should be no smaller than a standard primary classroom size. Furniture and furnishing should be flexible and planned as for the refurbished Language and Communication Classes.

Features include:

- Accessible toilets/facilities close by
- Kitchen/kitchenette

A small portion of retreat space (for the rest of the building) has been requested to be placed into the ISZ to create an enclosed breakout from the Enhance Support Base. (see breakout)

Should have easy access to the garden.

## PSE Classrooms

These spaces should be standard classroom size for delivering the Personal & Social Education (PSE) curriculum. They should be fitted with appropriate technology e.g. smart screen and flexible FF&E. A flexible partition between these classrooms is preferred to allow the space to be divided into two spaces or kept as one. This provides the flexibility to host larger groups of students, presentations from partners, etc.

## Storage

PPRs/child protection records need to be in a lockable store.

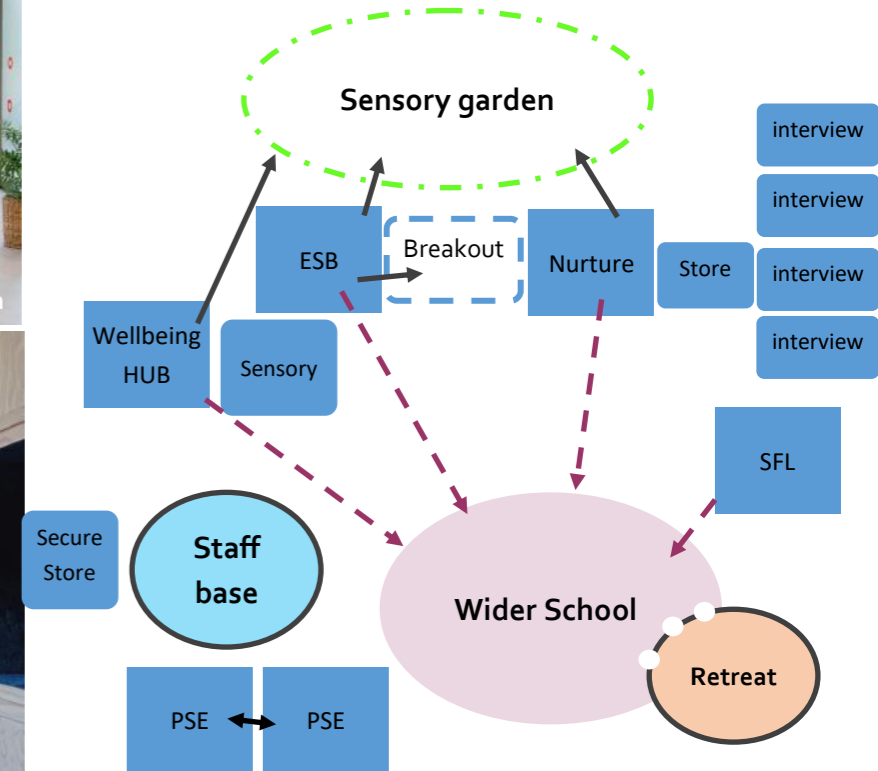
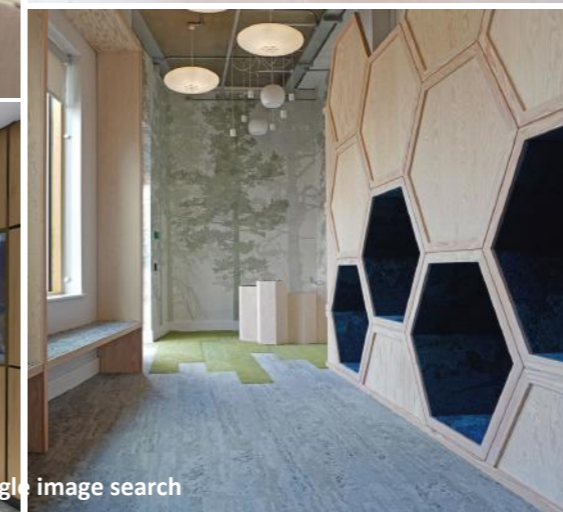
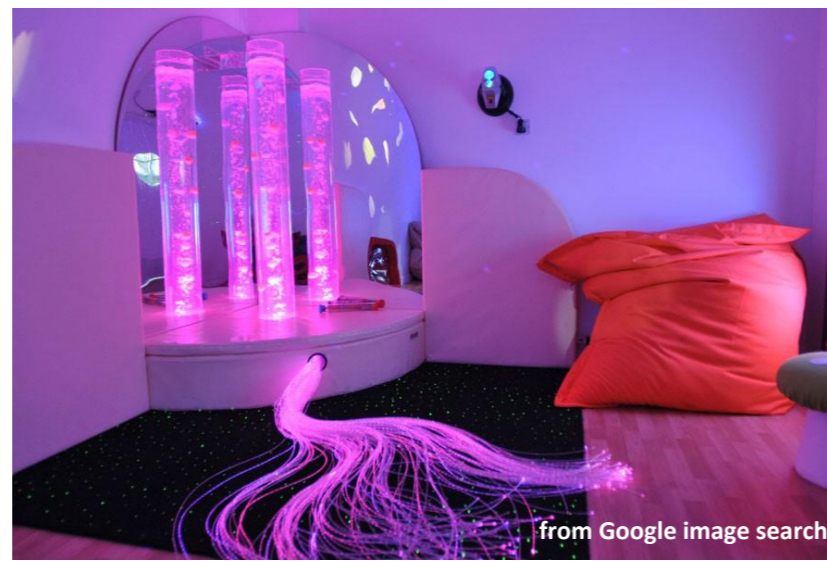
## Support for Learning Classroom

A dedicated space located alongside the Wellbeing Hub to support learners with specific learning difficulties. Ideally this room should be a standard classroom size and should have ICT and AV equipment as for a standard classroom, as well as classroom furniture to accommodate up to 10 learners.

SFL have been indicated as a group that can move more freely into the plazas and breakout and use the school spaces.

## Sensory Room

A Sensory Room located within the Integrated Support Faculty will enhance the learning environment, supporting dysregulated learners to self-regulate and re-engage in learning and facilitating 'time-out' as part of planned support for learners. This should be located near ESB and Wellbeing Hub., with [internal lighting/outdoor picture panels](#).



## PSL Workspace

This workspace is where the Pupil Support Leaders (PSLs) will be based. This space will store active student records, along with a workspace for the current 3 PSLs, although with the increased roll enough space for a 4<sup>th</sup>. This will have a workstation, with access to appropriate IT access to work with their caseloads.

## Interview Rooms

4 individual spaces that can be used for confidential conversations within the integrated support zone, with parents/carers and students. There is no need for IT facilities however would need a desk and chairs for use. This space can also double-up as rooms for Assessment Arrangements (AAs) for assessments, final exams, etc. in line with SQA requirements.

## Nurture

A home apartment style room with a kitchen and living room that is digitally enabled to learn independent living skills.

Multi-purpose space with facilities for different situations/environments. Areas include work space, social space and kitchen facilities. Should have easy access to the garden.

## Breakout

With flexible classroom furniture and softer furnishings to provide nurturing learning spaces across the zone.

## Retreat

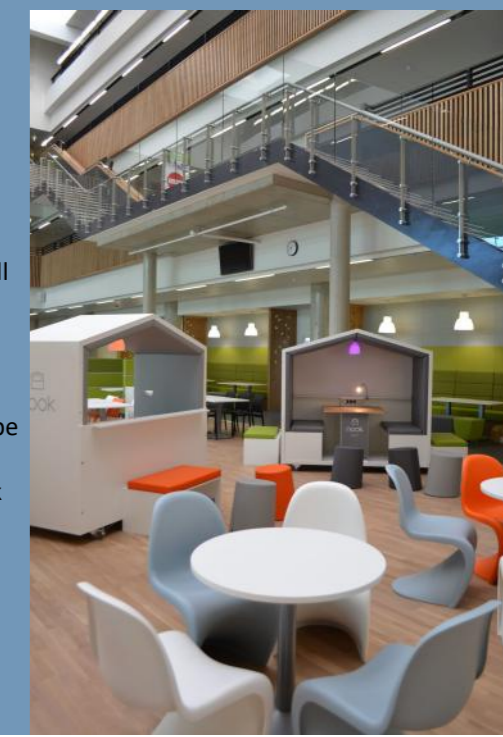
The retreat area allocation needs to be revised to provide spaces throughout the teaching and sport block that allow retreat – some of the areas shown on the plans are much bigger than we think they need to be. The allowance could be added to a breakout space in a corridor or circulation or as some of the drawings shows the little recesses between rooms – but really only need to be big enough for 1:1 or a small booth/nook. Priority is to ensure no learning zone is without a retreat area on their floor.

These spaces should be flexibly used to allow independence and break out for all - encouraging all students to work independently in small groups.

## Seminar

We do not want to "exclude" students into a room away from the teaching spaces. This area will be distributed fairly throughout the floors in the indicated learning zones as open space – this will allow it to be used more flexibly for all students and a space that is furnished for doing some work with a PSA outside of the classroom.

These spaces could be used by a couple of learners, with PSA support, along with supporting and providing opportunities for learning experiences for the Enhanced Support Base, Nurture and Wellbeing Hub students.



## Wellbeing Hub

A dedicated room in a quiet location, ideally located near an entry point separate from the main entrance, to support learners presenting with anxiety and/or emotionally-based school refusal who will use this space as part of a planned alternative/ flexible timetable. This room should be a standard classroom size. It should have ICT and AV equipment as for a standard classroom and should also have kitchen facilities. Furniture and furnishing should be flexible and planned as with recently refurbished Language and Communication Classes.

The wellbeing hub should be further from the other spaces with the sensory room beside it as this is a noisier space. Should have easy access to the garden.

# Languages and Humanities

The school's ambition is for the curricular areas within each learning zone to maximise the opportunities for thematic learning. Creating learning zones will enhance the collegiate working between the curricular areas. Visual links between learning spaces that are open to each other through use of breakout and a learning plaza promotes the coming together of different subject classes in the same space. Learning plazas will be a great opportunity for many subject areas to come together in a flexible space that they can set up for joint projects.

The Languages and Humanities zone will have two dual teaching spaces creating more flexible classroom spaces, supported by breakout and a learning plaza. Some inspiration can be taken from the 'Tony Little Centre' at Eton College which is a very interactive skills development and creativity focused environment (centre bottom left)

## English and Modern Languages

**Modern Languages** need 1:1 spaces for conversation practice these can be multipurpose spaces within breakout, classroom or learning plaza with a sense of privacy such as a high backed booth. Learning will be agile with students having 1:1 devices offering the ability to use any space in the learning zone. Throughout the learning zone teachers should be able to digitally cast from devices to screens that are moveable or fixed.

**English** does a lot of research and expect heavy use of portable technology and breakout for independent working. Close access to the LRC for research and collaboration is not prevalent as the learning plaza and breakout spaces in this learning zone should be designed for these purposes.

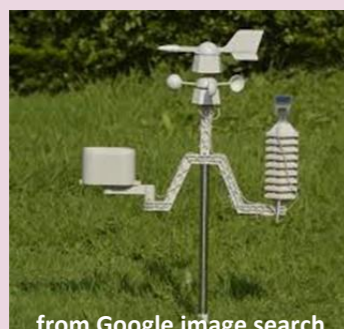
## Social Subjects

Geography works with both modern languages, Business & HFT for travel and tourism and science for environmental science so links to both the Languages and Humanities and STEM learning plazas should be explored in the design.

Geography, like Science has strong links to outdoor learning and although not identified as a priority for immediate outdoor access in the initial brief, it has since been highlighted through engagement with the school.

Geography classes should be able to access an outdoor breakout space and have easy access to the wider site for learning opportunities

Appropriate breakout and opportunities for thematic learning, will be available within the plaza, mini-plaza and Terrace



from Google image search



Example of tablet type tables used in group setting and in seminar mode



Example of petal table use in a classroom setting

### Agile spaces and dual-teaching classrooms

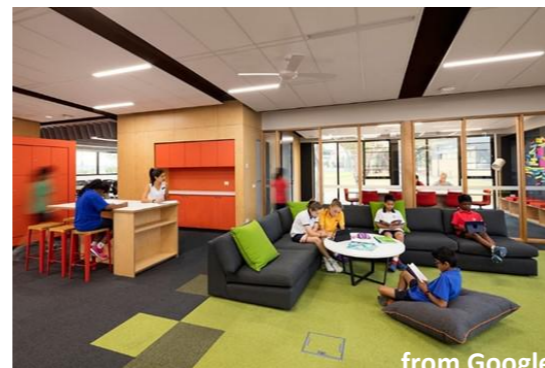
The use of dual classrooms allows teachers to be flexible in how they want to teach, in individual classes or as a larger cohort. The design should explore glazed/part glazed sliding doors that can be used to write on/display items when not open.

The interior design should explore flexible Furniture, Fittings & Equipment that enables all types of learning to take place. And consider the space typologies of the campfire, the watering hole and caves (see Types of Learning Spaces).

### Writable Surfaces

Writing is of great importance to this learning zone. The staff want students and teachers to be able to hand write as well as use technology such as interactive screens.

To enhance this ability we require a variety of writable surfaces in this learning zone. Cupboard doors, glazing, tables, walls and partitions should all be writable and these principles should be designed into the breakout and learning plazas for all zones.



from Google image search



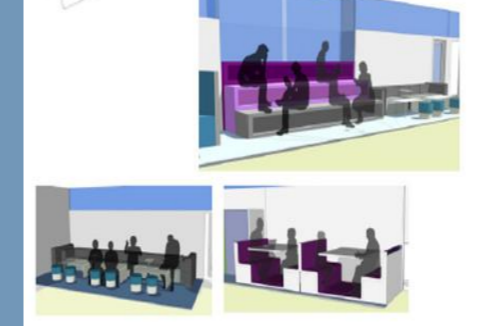
### Breakout

Breakout is essential to provide the flexible and collaborative learning experiences required for 21<sup>st</sup> century pedagogy, encouraging independence and 'learner led' activities. In order to ensure this strategy is embedded in learning, with spatial and visual connections to the classroom areas through extensive internal glazing.

The breakout allocation allows a wide variety of activities to be supported including, but not restricted to: peer presentation, touchdown work space for staff, group learning & study, reconfigurable space and individual study.



from Google image search



### Debate

Within the learning plaza a debating chamber will be included. This could be closed off in a room of its own like at Queensferry High School or created through FF&E with furnishings similar to the image below.

Students can also go outdoors and use the amphitheatre for debate.



from Google image search

## Learning Plaza

A learning plaza which can accommodate two 33 cohort classes will be included within this zone to support: paired / team teaching, thematic learning and independent learning (located on 1st floor).

A mini-plaza will be accessible, joined up with breakout area, for learning experiences joining onto the Terrace too.

The fit out and acoustics within these spaces will support their multi- functionality and is critical to their success. Screening with Furniture, Fittings and Equipment will be considered early in the design development and use of materials which assist acoustic absorption should be a standard approach.

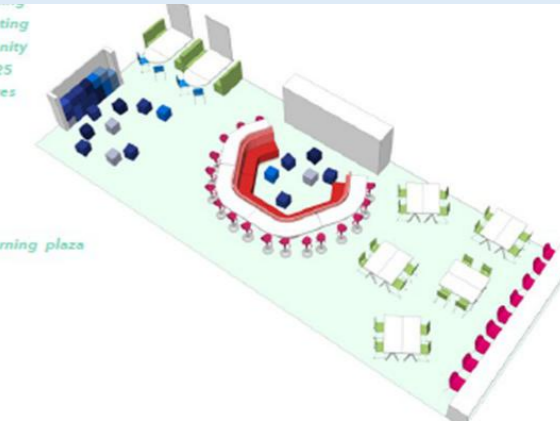
Plazas will be sheltered from large volumes of traffic, by providing them as destination points.

The learning plaza will enhance the school's collegiate approach to teaching and learning. These spaces need to offer pedagogic opportunity which cannot easily be fulfilled in a classroom. Use of glazing from the classroom into the breakout/plaza will create an open and vibrant learning environment and create a sense of 360 degree learning.



from Google image search

tests illustrating the opportunity of the 146.25 square metres allowance



3D test of learning plaza concept



# STEM Learning Zone

The school's ambition is for the curricular areas within each learning zone to maximise the opportunities for thematic learning. Creating learning zones rather than labelling areas for a specific subject will enhance the collegiate feeling between the curricular areas. Visual links between learning spaces that are open to each other through use of breakout and a learning plaza promotes the coming together of different subject classes in the same space. Learning plazas will be a great opportunity for many subject areas to come together in a flexible space that they can set up for a joint project.

This zone includes STEM subjects; Maths, Science and Technologies (Business Education, Computing Science & Design Technology), to maximise collaborative curricular opportunities. Further exploration of thematic learning opportunities will take place, being split over three levels, however based on the one STEM stairwell.

## Writable Surfaces

We, students and teachers, want to be able to hand write as well as use technology such as interactive screens.

We are exploring the use of writeable surfaces. Cupboard doors, glazing, tables, walls and partitions could be writeable and these principles should be designed into the breakout and learning plaza.



Example of tablet type tables used in group setting and in seminar mode



from Google image search

## Maths

Maths classrooms are similar layouts to those in the Languages & Humanities Zone.

Maths have access to breakout spaces, while having immediate access to the STEM learning plaza.

This design will work to enhance the opportunities to work together within the learning plaza and breakout areas e.g. S1 STEM courses across math and science (practical application and engineering etc.)

Maths will be able to make good use of practical application in the outdoor environment and should have good access to an outdoor space with hard surfaces.

## Learning Plaza

The STEM zone benefits from a dedicated learning plaza which will support all STEM subjects. Creating a flexible space for STEM curricular areas to work together on projects enhances the learning spaces for teachers and learners to explore and create project-based thematic learning,

For the plaza we can take inspiration from "hackerspaces":

*A flexible workspace designed for people who are interested in making something together and pulling on their different skills.*

For example, the following curricular areas can come together to work on a project such as creating a computer game: Maths, Physics, Computing Science, Graphics/Design tech, Business Education (Art and English could also be involved). This collaborative space will allow teachers and students to lead this project in one area, while providing opportunities for collegiate development of teaching and learning.

Storage for equipment within this flexible project space will allow staff to temporarily store project resources when using the plaza regularly for a project.

Use of glazing from the classroom into the breakout/plaza will create an open and vibrant learning environment and create a sense of 360 degree learning.

The plaza space also provides benefits such as paired/team teaching, independent learning and can be a student and staff social or meeting space. With this in mind, the links between staff workspaces and plazas will allow staff to easily move between the spaces and enhance their thematic approach to teaching in a shared project workspace.

## Science

Science accommodation:

- 1 dual teaching lab
- 3 Standard laboratories
- 3 Compact laboratories
- An Advanced Higher preparation laboratory combined with Technicians prep and storage areas
- Breakout areas

Below right are different lab layouts which could be used in each space.

Effective links to the outdoor spaces, e.g. for Science, through external breakout, would provide opportunities to enhance outdoor learning within the curriculum (e.g. Terrace)

### Technician's workspace combined with Advanced Higher lab

The location of the technician's prep space is located for easy servicing of the labs. The ability to demonstrate effectively by locating a fume cupboard centrally opposite a peer presentation setting (carved out of breakout allocation), as long as it meets curricular requirements.

The space is being divided into the Secure Chemical Store, Technician Spaces and Advanced Higher Lab.

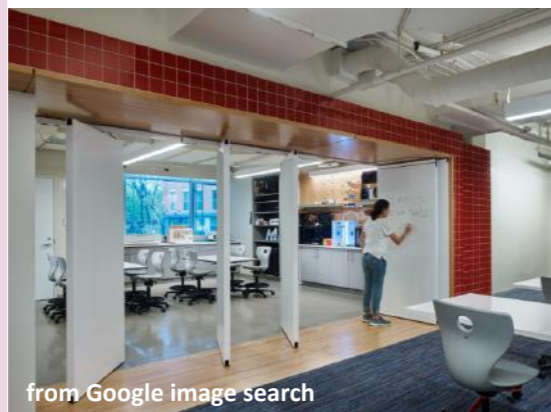
Use of glazing from the labs into the learning plaza as shown in the photograph of Queensferry High School (2nd right) promote visual links between the classrooms and allow passive supervision for groups to go between the classroom and collaborative areas.

### Agile spaces and dual-teaching classrooms

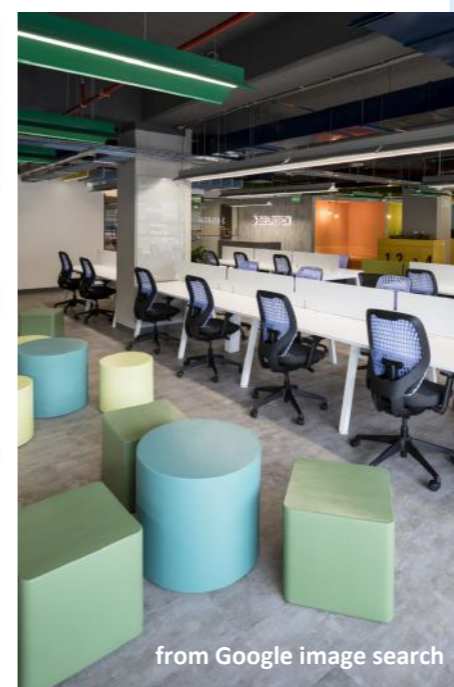
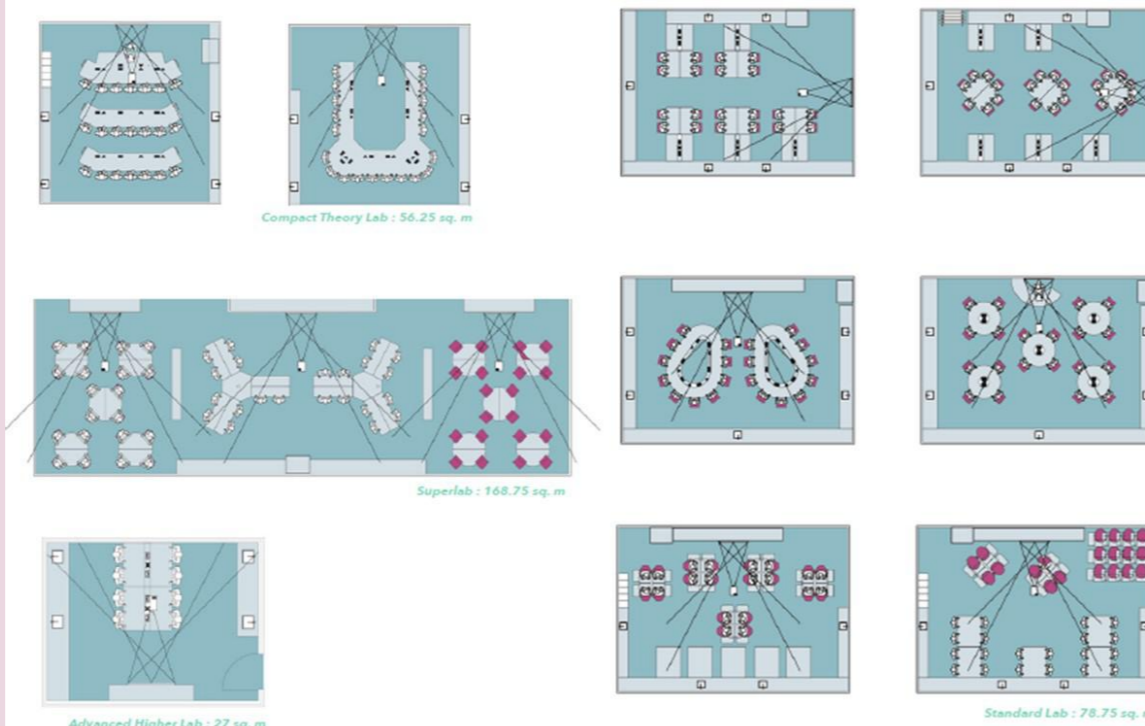
The use of dual classrooms/Labs will allow teachers to be flexible in how we will be aiming to teacher, in individual classes or as a larger cohort. Flexible options such as glazed/part glazed sliding doors that can be used to write on/display items when not open would enhance the teaching spaces.

Creating flexible interiors that enable all types of learning to take place is a key priority along with consideration of the space typologies.

Sufficient flexible learning space will allow the combining of several classes for demonstrations and presentations e.g. large science experimentation table



from Google image search



from Google image search

The fit out and acoustics within these spaces will support their multi-functionality and is critical to their success. Screening with Furniture, Fittings and Equipment will be considered early in the design development and use of materials which assist acoustic absorption should be a standard approach.

Plazas will be sheltered from large volumes of traffic, by providing them as destination points.

The STEM learning plaza acts as a vertical and visual link between the STEM curricular areas and ties the STEM learning zone together. Visual links between the floors created by void space and interior design /wayfinding will enhance the collegiate feeling of this learning zone.



from Google image search



## Technologies

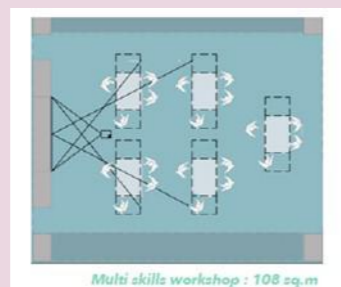
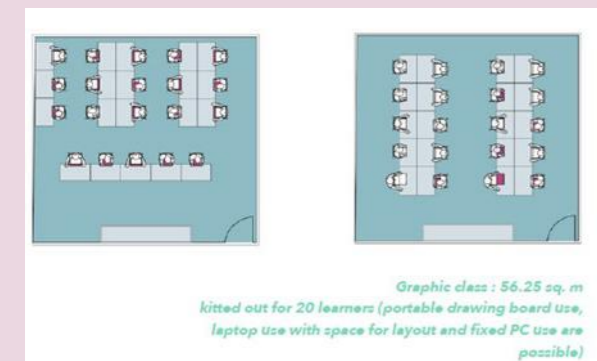
Technologies is being located over two floors in the STEM Zone. This would be providing opportunities for faculty thematic learning, while providing further opportunities, e.g. between Maths and Computing Science. We will have four dedicated ICT suites, which will work flexibly alongside breakout areas that support mobile touch down working.

## Computing Science and Business Education

There will be two ICT suites for Computing science located on the first floor. The CEC digital learning strategy is moving towards supporting digital learning through 1:1 devices, most likely iPads for all students. This will allow greater flexibility for where students decide to do their learning and opens up opportunities for touchdown ICT areas within the breakout and shared spaces as seen at new schools such as West Calder and Bertha Park (bottom right).

There will be a requirement for Computing Science to work with specific hardware/software so ICT suites that cater for this need will be provided and must be flexible to allow for changes in technology such as moves from desktops to laptops.

Business Education is a regularly has three classes timetabled at once and this will be supported with three classroom spaces. Business Education will be able to take advantage of the enhanced breakout, learning plaza (first floor), touchdown ICT areas and the Skills Space



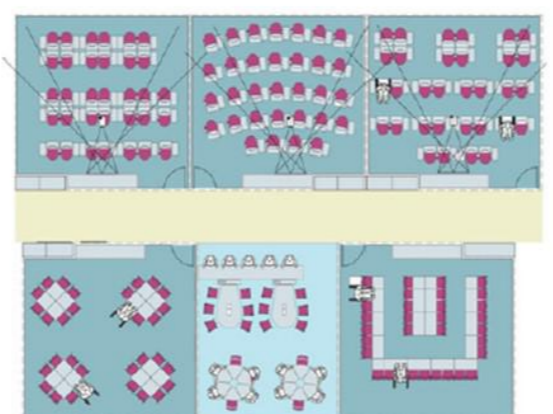
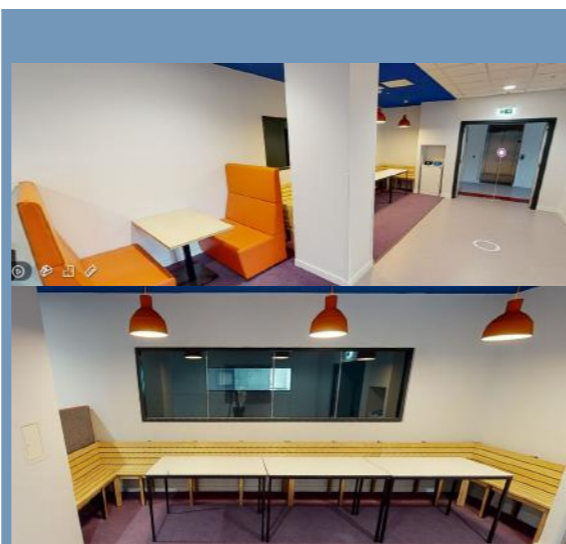
## Design Technology

The department has been designed with graphics/ICT suites and a dual workshop, similar Queensferry High School and Castlebrae High School, with the aim of providing a work-related environment for students to develop their skills in.

Each **graphics suite** has close proximity to each workshop (2 in total, can cater up to 20 students in each), with furniture to be explored later, though with opportunities for PC use and portable drawing board use. The fixed desktop PCs will be able to run complex programmes such as REVIT and adobe creative suite packages. The design of the interior of the space should allow for changes in hardware as in the ICT suites.

There is one dual workshop that has the flexibility to be used by one or two classes at a time, along with a machine room (to house the larger machines operated by staff (see below)).

Maintaining the health and safety of users in these workshops and providing the flexibility for opening this workspace into the skills space is very important.



'Chunked' breakout approach : 45 sq. m across 5 general teaching spaces

## Skills Space

The skills space is a whole school resource, essentially this is a makerspace, a flexible open workspace to make and do projects large or small. Being able to break out into this space as a collaboration area for the ground floor will be beneficial. All subjects in the STEM zone should have good links to the Skills Space as this project area aligns so well to the learning and teaching that can take place in this zone.

The Skills Space is designed as a flexible space that can be used for a range of interactive activities to engage students in skills development through project-based work within or across the curriculum, through a pop-up ethos. The space should be able to accommodate flexible use of mobile IT and have collaborative seating options while maintaining its ability to move any furnishings out of the way to create a big project area.

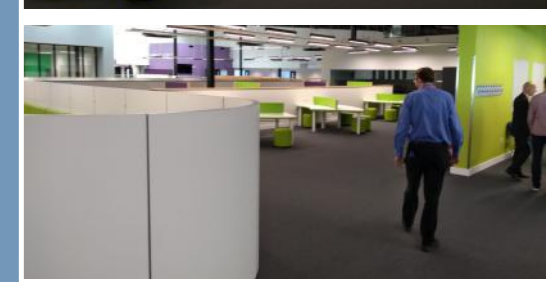
Out of hours it can be a valuable resource to the local community as a makerspace. Being able to see into this project space to show the exciting things happening within it is important. With this, the design allows the skills space to connect with the breakout and STEM staircase providing a two storey high void for STEM project construction/display which ties the learning zone together over the 3 floors.

Direct access to an outdoor yard space has also been highlighted as key to enable outdoor learning and partnership working within the construction industry.



### Agile spaces

Explore furniture, fittings and equipment designs and the use of technology for labs allowing for some fixed computers in a lab set up and some flexible spaces that can emulate creative industry office spaces. This will enhance teacher



## Breakout

Breakout is essential to provide the flexible and collaborative learning experiences required for 21<sup>st</sup> century pedagogy, encouraging independence and 'learner led' activities. In order to ensure this strategy is embedded in learning, with spatial and visual connections to the classroom areas through extensive internal glazing.

**Breakout for Maths, Science & Technologies:** is being provided immediately outside the classroom could be a suitable approach, based on the minimum depth for one of the more popular "small spaces" 4 person group learning booths. As shown in the photos from QHS (left) and other options to the right..

**Breakout for Design Technologies:** there is a requirement for learners to be able to move quickly between practical and theoretical activity within the course of a single lesson. An approach which 'chunks' breakout allocation together within Design Technology in order to create spaces which can be easily accessed from practical space should be explored.

The breakout allocation allows a wide variety of activities to be supported including, but not restricted to: peer presentation, touchdown work space for staff, group learning & study, re-configurable space, individual study.

The school aren't keen to pursue dining in the breakout areas due to management of the spaces.