



# Fit for the Future

Design for PE & Sport

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# Fit for the Future

## Design for PE & Sport

# Introduction

## Introduction

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'Fit for the Future' has been developed in order to encourage all those involved in Building Schools for the Future to:

- Transform rather than simply modernise their learning environments for PE & Sport
- Create solutions which meet the needs of all Learners and the wider community
- Ensure designs are fit for purpose both now and in the future
- Develop a range of differentiated provision across the estate rather than a 'one size fits all'
- Maximise opportunities for community and club use
- Be prepared to take calculated risks and develop innovative design concepts



This document aims to challenge current thinking, provoke discussion and provide advice. It will be particularly relevant to BSF PE & Sport Stakeholder Groups in their role supporting schools to translate their vision for PE & Sport into a design brief.

Fit for the Future will be most effective when used during Strategy for Change - after your vision for PE & Sport has been produced and before the submission of the Outline Business Case.

It will also be a useful resource for all those involved in delivering design solutions for learning environments such as Architects, Landscape Architects, Contractors and Suppliers.

### **The document consists of 4 parts:**

**Part 1** – From Vision to Design

**Part 2** – The BSF Design Journey

**Part 3** – Sample Design Solutions for 4 Imaginary Learning Centres

**Part 4** – Summary of Key Points

# Fit for the Future

## Design for PE & Sport

# Part 1

# From Vision to Design

## From Vision to Design

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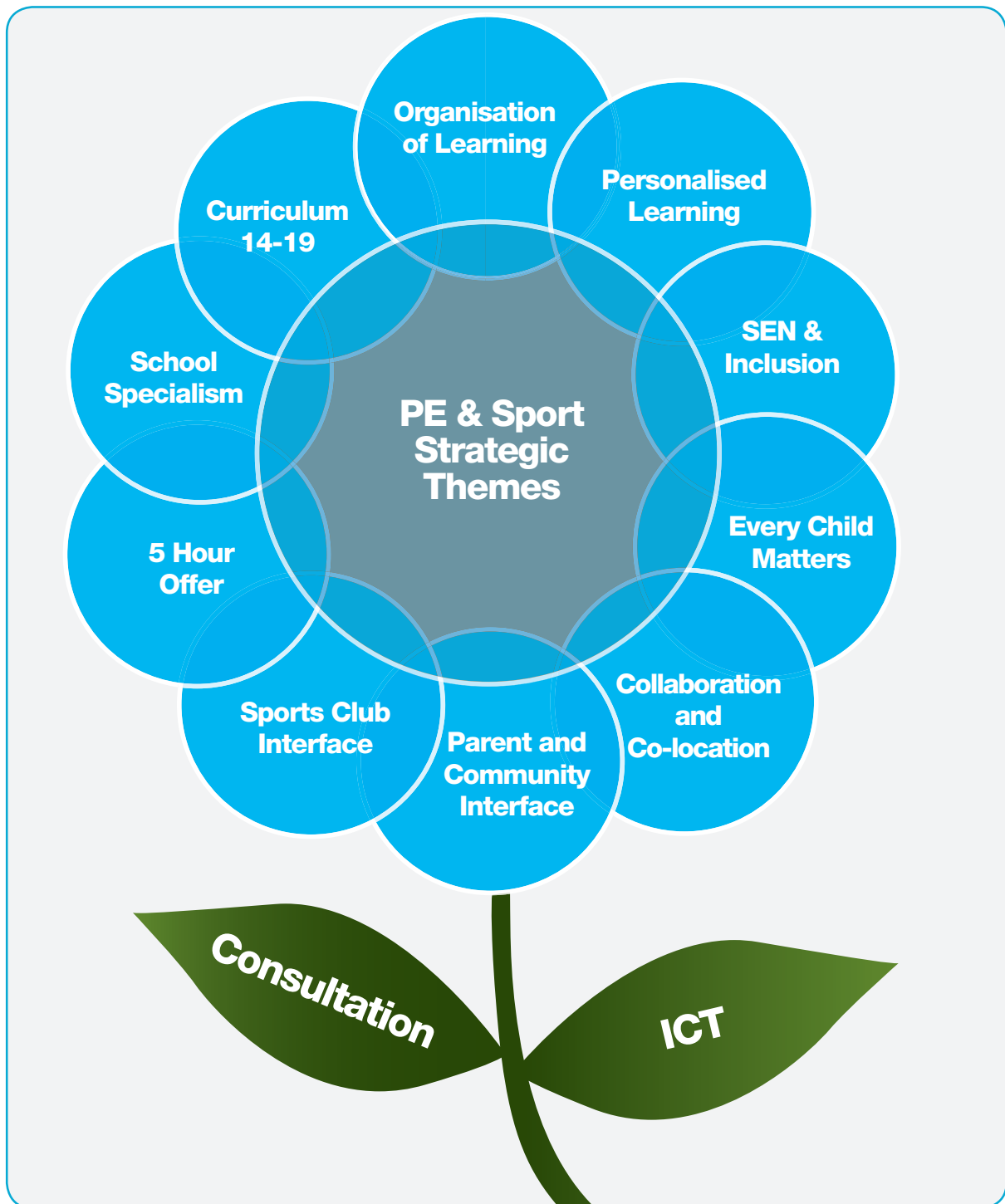
One of the challenges of BSF is translating a vision into design principles which deliver your aspirations. It is important that the design brief reflects and supports your Strategy for Change.



The following section asks key questions regarding your vision for PE & Sport (at school or Local Authority level) and then provides some examples of key design considerations.

There are 12 key themes (in no particular order) for you to structure your discussion. These themes are not exhaustive, but reflect some of the key headings within the Strategy for Change guidance.

There are 10 themes which each have some inter-relationships (demonstrated in the petal diagram on the next page) and they are all underpinned by an ICT strategy and meaningful consultation process (indicated as leaf structure on the diagram).



Each theme is explored in turn, but considerations should also be made to how they relate to each other. Your own requirements should develop from your answers to the key questions.

Theme → Key Questions → Examples of Design Requirements

# 1. Organisation of Learning

## Key Questions:

How will learning be organised?

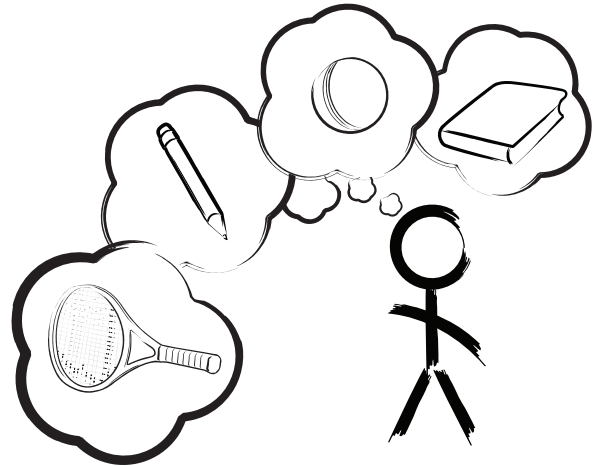
What will the PE curriculum look like?

How will you tackle underperformance in PE?

Will you focus on core skills and competencies rather than specific activities and lessons that could change more quickly?

What relationship will PE & Sport have with other subject areas?

How will you organise learning to incorporate the use of outdoors?



## Example Design Requirements:

Will PE & Sport benefit from being part of a creative learning or Healthy Living Zone / Faculty with some shared learning spaces?

Will there be the need for physical activity areas linked to wider learning across the site?

Will there be 'in between' spaces or opportunities to transfer between the indoor and outdoor quickly?





## 2. Personalised Learning

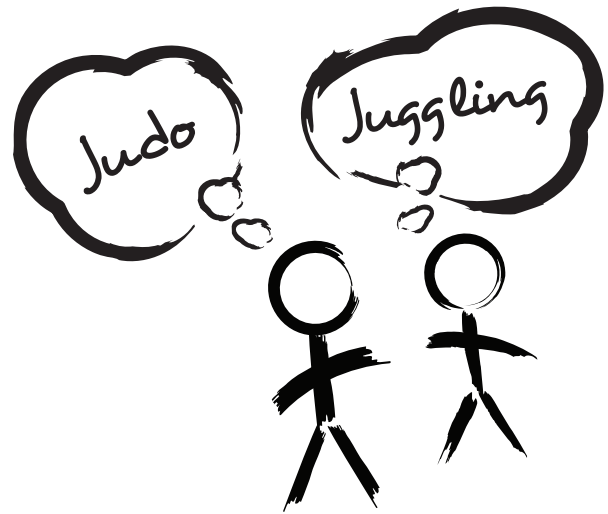
### Key Questions:

How will PE offer a more personalised learning experience?

Do indoor and outdoor spaces offer enough flexibility to allow for student choice and changes in trends?

Will students be able to record their own progress and share data and learning journeys with other staff and students?

Will there be opportunities for learners to work at their own pace?



### Example Design Requirements:

Will there be facilities for non-team games and non traditional sports to engage learners with low levels of participation?

Will there be small specialised spaces for Sporting Excellence and one-to-one coaching opportunities for Gifted and Talent Students?

Will external teachers, coaches, athletes, experts etc., have an area they can feel ownership of and use intermittently?



## 3. Curriculum 14-19

### Key Questions:

How does the delivery of the Sport and Active Leisure Diploma fit in with the broader 14-19 strategy across the authority?

How and where will the Sport and Active Leisure Diploma be delivered across your LA area?

Has the lead site considered how and where the 3 main diploma elements – Individual, Industry and Community will be delivered?

How will students from other schools access the diploma lead site both physically and virtually?

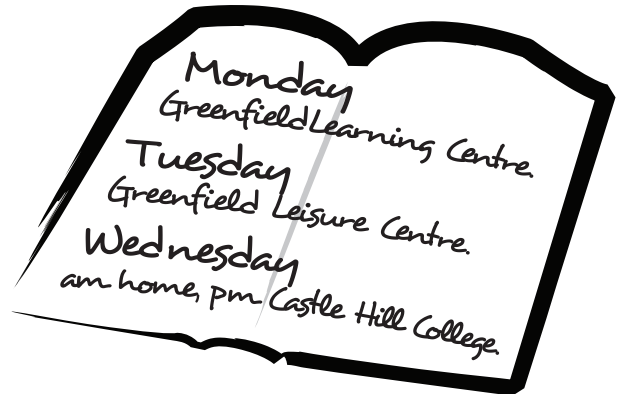
How will students work with and learn from local leisure providers?

### Example Design Requirements:

Will students accessing the diploma from other sites require their own social area?

Will the management areas of the PE & Sport provision accommodate students learning leisure management?

Will any ICT or equipment provision be required on other sites?



## 4. SEN and Inclusion

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### Key Questions:

How will PE & Sport offer an accessible and inclusive experience for all learners and the wider community?

How will access to a range of provision on offer across your local authority estate support inclusion, diversity and choice and remove barriers to participation and achievement for all in the community?

How will you ensure PE & Sport provision is physically accessible and encourages integration?

How will you utilise ICT to support diversity and access in your PE & Sport offer?

### Example Design Requirements:

Will there be access to gaming technology and sensory equipment in practical spaces?

Will your accessible changing link to your main changing areas?

If you are a co-located SEN/Primary/Secondary provision, are your PE spaces shared?



## 5. ECM

### Key Questions:

How will BSF support all five outcomes in Every Child Matters? In particular how will 'Staying Healthy' be reflected specifically through the PE & Sport provision?

How can informal and formal physical activity and play be promoted and encouraged across the whole site, both in and outside of the learning day? Consider links to sustainable plans, spatial plans, travel policies, DCSF Play Strategy, Manifesto for Learning Outside the Classroom etc.

What opportunities are there for young people and the wider community to discuss, record and reflect on their personal health through the use of ICT?

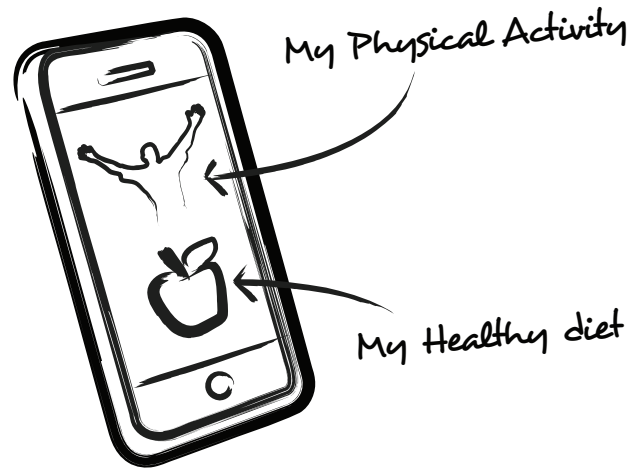
How can the facilities address community health concerns such as obesity, diabetes, smoking cessation etc?

### Example Design Requirements:

Will dining areas, vending and food gardens encourage healthy eating?

Will ICT allow health and fitness to be monitored across the learning centre and beyond?

Will there be informal play areas designed into social spaces?



## 6. Collaboration and Co-Location

### Key Questions:

Will the co-location of services or other external partnerships contribute to your PE & Sport vision?

Where and what will the services look like?  
E.g. Library and Information Services, PCT Health Centre etc.

### Example Design Requirements:

Will there be joint workspaces for staff and shared circulation, and ancillary spaces to reduce costs and encourage integration?

How will signage, pathways and access routes ensure the service is well used and has a high profile?



## 7. Parent and Community Interface

### Key Questions:

How will BSF increase opportunities for community participation?

What will community sport look like?

What are the planned community use arrangements for each site?

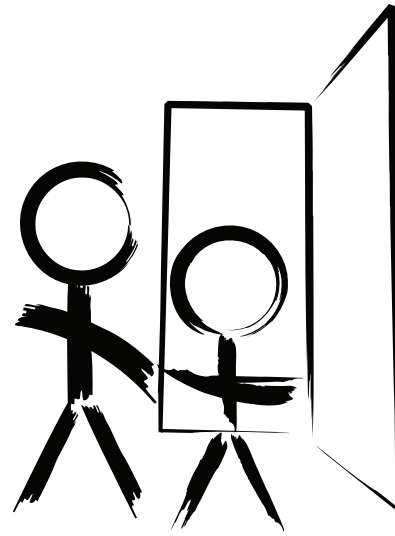
How will members of the community access the facilities during and outside of the normal learning day?

How will technology support community access?

### Example Design Requirements:

Will your design reflect community management arrangements such as community reception and office, cleaning and equipment storage, deliveries, booking administration etc?

How will technology support community access? For example will biometrics or smart cards be used to gain access to zoned areas and collect health data? Will intelligent lighting and heating systems be used to control areas efficiently? Will members of the community be able to book activities through a centralised on-line booking system?



## 8. Specialisms

### Key Questions:

How are school specialisms reflected in the Education and Design Briefs?

How is your specialism/s driving achievement and performance?

Are there opportunities for cross-curricular working and the specialism leading learning?

What are the role of your specialism/s in the estate strategy?

How can other learning centres and the community benefit from any specialist opportunities a particular learning centre may provide?

### Example Design Requirements:

Will the specialism be clear as you approach and enter the site?

Will the specialism drive the layout of spaces and focus of resources?

Will the specialism offer facilities and experts that can be accessed by other learning centres?



## 9. 5 Hour Offer

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### Key Questions:

How will the 5 hour offer for PE & Sport and other relevant national and local authority expectations and targets be achieved?

How will you encourage participation beyond the school day?

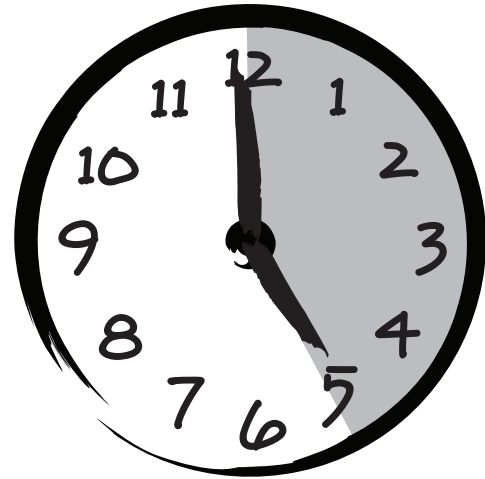
How will you signpost to off-site opportunities?

### Example Design Requirements:

Will there be a zoned area used for activity beyond the school day?

Will the pitches be constructed to a suitable standard for the expected hours of use per week?

Do the indoor and outdoor spaces offer suitable storage for clubs and community groups now and in the foreseeable future?





## 10. Sports Club Interface

### Key Questions:

What role will activity and sports clubs play in the delivery of your PE & Sport vision and your wider community sports development plans?

Are there formalised arrangements in place between specific clubs and learning centres (or vice versa)?

Have the specific requirements of National Governing Bodies of Sport, clubs and groups being hosted by learning centres been incorporated into the design?

Is there sufficient infrastructure in place to accommodate club and where appropriate higher level coaching/training and competitions?

### Example Design Requirements:

Will the practical spaces reflect NGB technical requirements regarding dimensions, run offs, floor specification, lighting levels, accessibility needs etc

Do the changing rooms provide flexibility for hosting a competition? E.g. are they dual sex? Are they team size? Is there separate official changing?

Will there be club storage, spectator viewing, refreshments and social areas provided?

7am - 4pm	Learning Centre
4pm - 6pm	Extended Schools
6pm - 10pm	Club Use etc



## 11. ICT

### Key Questions:

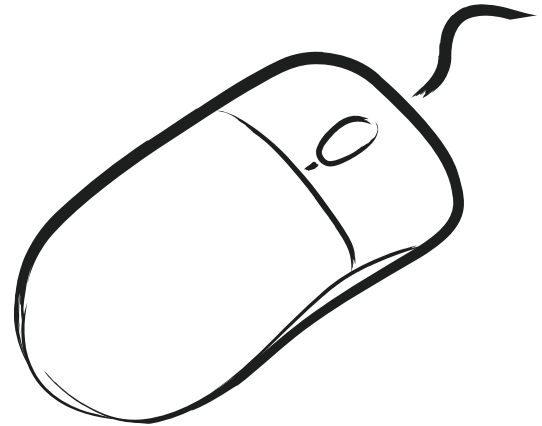
How will ICT support learning in PE and sport?

How will ICT enhance learning opportunities in the internal and external PE space?

Is ICT embedded into the infrastructure so that it can be accessed quickly and effectively and is it sufficient to support a range of groups at the same time?

How, where and when will learners performances best be recorded and then reviewed/ analysed?

How can ICT provision be used to support community sports development?

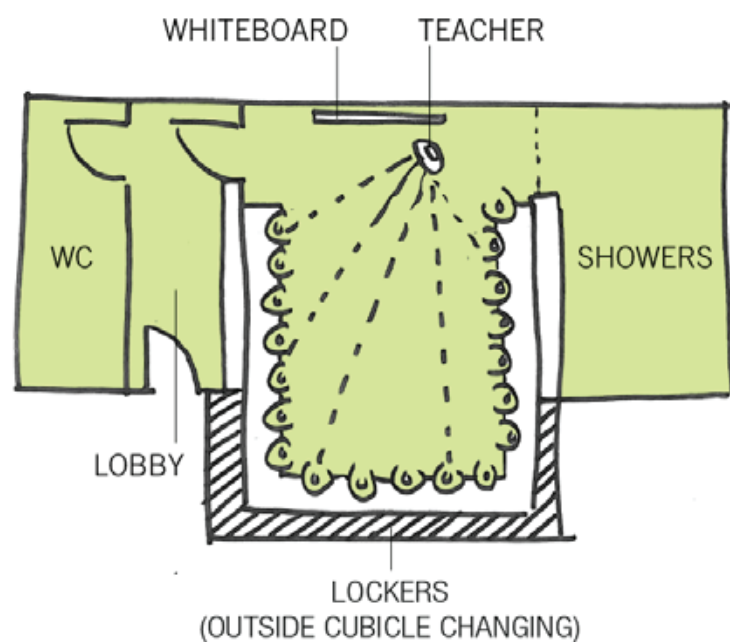


### Example Design Requirements:

Will there be video analysis and instant playback in practical spaces?

Will changing areas be used as a briefing area with ICT provision?

Will there be wifi coverage across external PE spaces and a covered outdoor space?



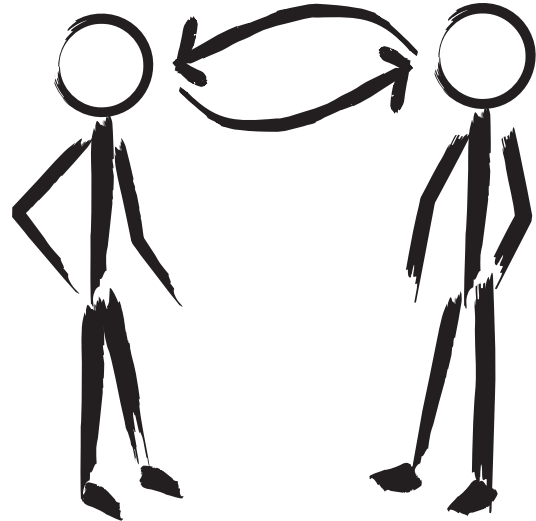
## 12. Consultation

### Key Questions:

Have current and future students and the wider community been consulted on their PE & Sport related needs?

What outcomes are there from the PE & Sport Stakeholder Groups dialogue with their respective networks?

Have the needs of young people and the local community been considered, particularly with regard to privacy issues, accessibility and cultural needs as well as attitudes to body image / body confidence?



### Example Design Requirements:

Will the changing rooms have cubicle showers? Mirrors? Hairdryers?

Will there be viewing into practical spaces? If so can it be screened off if need be?

Can the foyer / circulation area also be utilised as a café, coaching or teaching space at different times of the day?



# Fit for the Future

## Design for PE & Sport

# Part 2

# The BSF

# Design Journey

## The BSF Design Journey

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This flow chart outlines the key milestones in the BSF process and provides advice regarding design related actions.

### Readiness to Deliver

At 'Readiness to Deliver' phase, time should be taken to review your current PE & Sport estate provision and to assess their condition and appropriateness for delivery of high quality PE, the 5 hour offer and community needs.

It is also a suitable time to reflect on your current estate strategies and policies and to check you have the right evidence in place to support design proposals.

#### **Surveys and assessments of current provision:**

Condition?

Fit for Purpose?

#### **Check:**

Up to date Playing Fields Strategy?

NGB needs?

Leisure Facility Strategy?

Sport England Facility Planning Model and other strategic planning tools?

## The BSF Design Journey

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### Strategy for Change

During 'Strategy for Change' you will need to formalise your vision for PE & Sport and start to translate this into clear design requirements including generic design principles across the whole estate and specific requirements for individual learning centres. At this stage the PE & Sport Stakeholder Group should develop a relationship with the Technical Adviser and Client Design Adviser.

It is also important to consult with Sport England's regional planner on any indicative site layouts.

What are the generic key design principles across the whole estate?

What are the specific design requirements for individual learning centres?

Work with the BSF Technical Advisers and Client Design Adviser as they develop design options for appraisal

**Check:**

Consult with Sport England on indicative plans

Any objections? Any conditions?

## The BSF Design Journey

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### Outline Business Case

At Outline Business Case there are key design documents which will need to be completed at both Local Authority and School Level:

The Education Brief will outline design implications for your PE & Sport vision. There should also be input into wider activities (not just PE & Sport) regarding Curriculum modelling and scenario testing, group sizes and formats etc.

Accommodation Schedules – these indicate what indoor and outdoor spaces you will provide and how you will use your sq.m. allocation.

Area data sheets - which provide detailed specifications for each PE & Sport space.

It is important to get the detail right and ensure any specific technical requirements of particular sports are incorporated.

Your BSF project team will be required to submit a letter from Sport England outlining their position regarding any loss of playing fields on the relevant sites.

**Check:**

Requirements of specific sports, and level of competition.

## The BSF Design Journey

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### Final Business Case

During the procurement phase it is important that design solutions presented by Bidders and later Preferred Bidders fulfil your requirements.

Consultation on designs for individual sites will need to happen regularly from concept diagrams through to detailed design plans. Make sure you check the number on the drawings to ensure you are always commenting on the most up-to-date version. It may be a useful exercise to carry out a theoretical 'walk through' of a site as a potential user, including a young person and member of the community.

Think of the drawings in their 3DM form and ask questions regarding the height dimensions as well as length and width.

The Stakeholder Group should ensure they provide support for and work closely with Schools as the clients.

Do design solutions meet your requirements?

Assess bidders against your key design principles

#### Check:

With Sport England Design Guidance notes ([http://www.sportengland.org/facilities\\_\\_planning/design\\_guidance\\_notes.aspx](http://www.sportengland.org/facilities__planning/design_guidance_notes.aspx)) satisfy yourself that designs continue to meet both curricular and community requirements.



## The BSF Design Journey

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### Post Occupancy

Once the learning centres have been constructed and are operational, it is important to evaluate how well the building is working against Key Performance Indicators and Design Quality Indicators

Any learning points should be fed back into the design process for future schemes

Post occupancy evaluation

Does the design deliver against your KPIs and DQIs?

**Check:**

What can you learn from the process to inform future school design?

# Fit for the Future

## Design for PE & Sport

# Part 3

# Sample Design

# Solutions for

# 4 Imaginary

# Learning

# Centres

## Sample Design Solutions for 4 Imaginary Learning Centres

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Four different scenarios were developed for FICTIONAL learning centres and David Morley Architects were then invited to produce concept designs demonstrating potential solutions to the PE & Sport requirements. The design responses will provide inspiration to both clients and the private sector and should be viewed as concepts rather than detailed design layouts. Please note that the themes and solutions in this section do not cover all the issues and elements to be addressed when planning and designing PE & Sports spaces on school sites. It is envisaged that there will be future editions to this publications which would focus on additional areas such as sustainability.

### The design process:

The design process involved formulating teams of architectural staff ranging from partners to year-out students, each with experience of sports and physical education environments.

### The key questions that arose were:

What de-motivates a PE student?

What makes a PE student happy?

Which skills should be delivered through PE in schools?

What curriculum overlaps are there with other subject areas?

How can we encourage active life styles?

How can we encourage young women into sport?

How can we make being active fun?



## Key Themes

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Emerging themes were discussed and distilled into concepts for the site and interior spaces:

### The Site – Themes

#### Indoor / Outdoor

Rethinking traditional indoor activities can provide an additional asset to the school. For example, replacing the sports hall with a covered multi-use games area, and creating an attractive sheltered space conducive to learning.

Other features might include covered outdoor areas which open out from indoor curriculum areas. These spaces can provide a unique venue for activities rooted in the school's education vision, delivering opportunities for personalised learning and group activities. Outdoor spaces can be shaped, equipped and resourced to provide agile learning environments.

Technological capabilities, such as wi-fi, are provided, and the students can learn skills from primary sources relating to PE, Science and Food Technology.



## Key Themes

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### Exploiting Level Changes

There are many ways in which level changes can transform the school environment, either by using the existing site topography or by creating new features that re-use the site materials or vertical surfaces of the building.

Possible features may include performance spaces, and tiered seating for spectator sports and outdoor lessons.

Outdoor adventure activities and mountain biking require level changes and can encourage students to engage with nature. Climbing and traversing through the school grounds can help develop students' core skills.



### Healthy Lives - Grow, Cook, Eat

Engaging young people with the natural environment through active learning and participation in growing fruit and vegetables can be an effective tool to encourage healthy eating habits and an active lifestyle. An allotment area within the school grounds provides an opportunity for growing food, a curriculum overlap with the teaching of food technology. The flow from garden to kitchen, which is in turn linked with an external dining space, demonstrates a clear association for young people between the source of their food and healthy living. Grow, cook, eat.



## Key Themes

### Interior Spaces – Themes

#### The Hub Concept

This is about the ability to unite and encourage people to be active whilst avoiding focus on formal sport as this can often be a deterrent. The Hub aims to engage with young people by exploring environments with different connotations, such as arcades, malls and markets. The focus is on increasing the role of the school within the community.



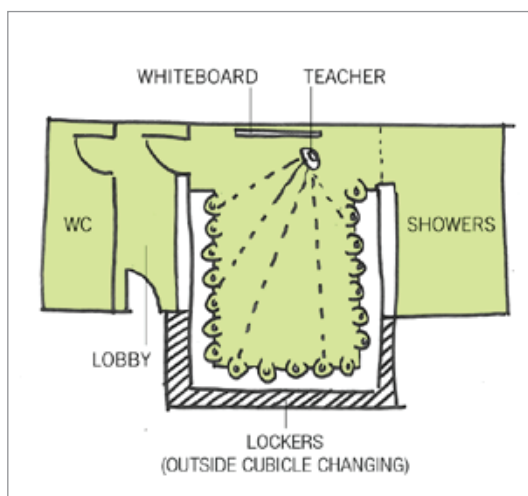
#### The Changing Studio

The first impression of PE is often the changing rooms. They can be very poor quality in schools, unsavoury places that you wouldn't want to spend time in and can be intimidating. The sport is often hidden away in a solid-walled box.

By reordering the experience increased visibility can be given into the sports spaces, adding excitement and a sense of the purpose to the space. It is important that viewing into activity spaces does include privacy blinds for specific group needs.

By adding a café or other use into the mix as well, you can help to break down traditional barriers to participation. An analogy with retail can be employed- changing rooms accessed off the shop floor for example could be reflected on a learning site as changing rooms off the activity studios.

The sketch shows the potential flexibility of changing rooms as an area to brief students before taking part in PE and as an additional teaching area.



## Key Themes

### Interior Spaces – Themes

#### Beach / Park

Playing sport and exercising on the beach or in a park is less formal, easier to access and seems to encourage activity through a fun environment. This is a theme picked up on for the site, but could this be replicated inside a school?

Indoor changes in level and a flexible environment can suit individual pursuits such as jogging, or group sports such as football, cricket, and volleyball.

This theme explores the potential to make use of the spaces between and around buildings and outdoors for physical activity, including vertical spaces for climbing, sliding and skate boarding.



#### Interactivity

Technology can be used to harness data, analyse the impact of exercise for cross curricular use and be applied to the study of sports science in schools.

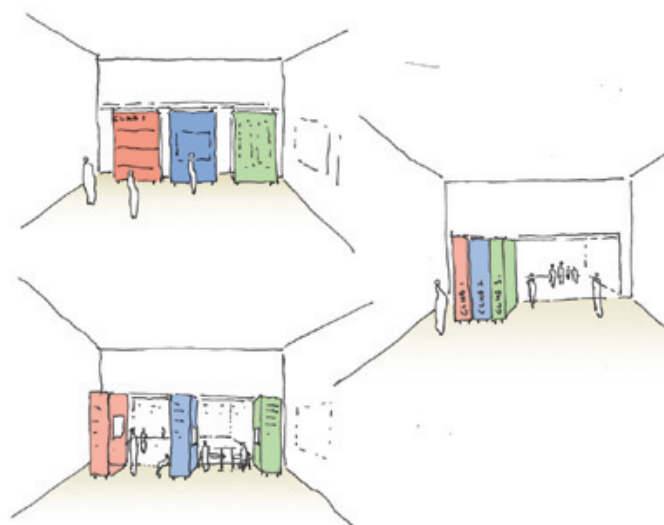
Today's pupils are digital natives; we can tap into their natural use and interest in technology, and it can also be used to make exercise fun.



#### Plug and Play

Effective storage is an important requirement of making sports spaces flexible. One idea is to have a very plain and simple sports hall and use an inventive storage system to customise it for particular sports and community use.

The sketch shows a set of mobile storage units which can be plugged into the sports hall to customise it. They can be 'owned' by community groups, allowing them to have secured storage on site and wheeled into place when needed. These units can also form walls; create learning spaces; and be used to display students' work.



## Learning Centre A

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**Specialism:** Performing Arts

**Build Type:** 60% refurbishment 40% new build

**Site details:** Tight urban site

**Key priorities:** Girls at KS4, Aesthetic Activities, addressing Childhood Obesity, Family Learning, Healthy Lifestyles, Dance, changing provision

**Curriculum Focus:** Thematic Curriculum, Creative Learning Strand

**Partnerships:** Dance Company

Setting A is an inner city Performing Arts College which will be retaining and refurbishing 60% of its existing buildings and demolishing and rebuilding 40%. The site is quite a tight urban location with limited outdoor space. Its vision for PE & Sport involves increasing participation by girls at Key Stage 4 through incorporating greater opportunities for aesthetic activities as highlighted in a recent consultation with young people at the school and from primary schools in the local School Sports Partnership.

As part of the wider corporate vision for BSF there are targets relating to childhood obesity and healthy schools. These will be addressed through a family learning approach to healthy lifestyles. Activities taught are wide ranging, therefore a range of flexible multi purpose spaces are important. There is a local authority run Leisure Centre half a mile from the site with which there is a good relationship formalised through the work of the PE & Sport Stakeholder Group.

The school specialises in Dance and this is currently delivered through both Performing Arts and PE curriculum. The future vision places Key Stage 3 provision within a thematic curriculum co-locating Performing Arts and Physical Education within a Creative Learning Strand. The school has a relationship with a professional Dance company that runs successful dance clubs for young people and the wider community. Flexibility with regard to performance areas is therefore important. As a performing arts college there is also an emphasis on displaying work by students in 2 and 3 dimensional formats making best use of multimedia.

Consultation with young people has raised the issue of inadequate changing facilities. In particular the lack of privacy with regard to changing and showering is a major concern and does not support the needs of particular cultural groups.

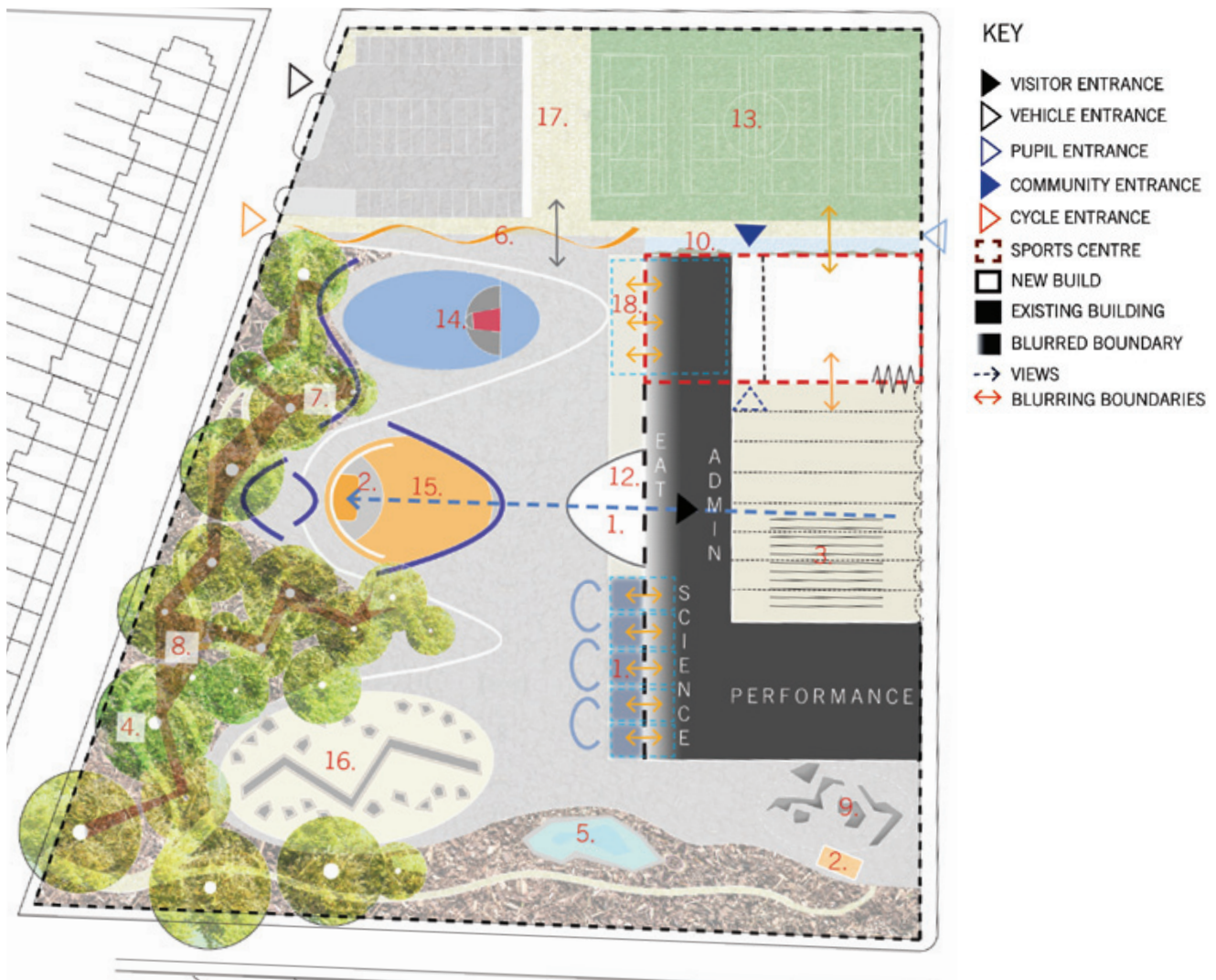


# Learning Centre A

## Design Response

The learning Centre entrance is approached via a covered courtyard which opens up to the adjacent sports hall. This creates one large flexible performance space able to house the entire school for a community event or production.

## The Site:



### INDOOR-OUTDOOR

- 1. OUTDOOR LEARNING (COVERED) W. SERVICES + RESOURCE (SMALL-MEDIUM-LARGE)
- 2. PLAYGROUND STAGE
- 3. PERFORMANCE SPACE (COVERED)
- 4. NATURE TRAIL
- 5. SCIENCE POND

### LEVEL CHANGE

- 6. CARVE WALL
- 7. OUTDOOR ADVENTURE
- 8. TREE HOUSE
- 9. GREEN GYM
- 10. CLIMBING WALL

### HEALTHY LIVES

- 1. OUTDOOR LEARNING WITH GROWING AREA
- 12. OUTDOOR EATING (COVERED)

### ACTIVITIES

- 13. MUGA
- 14. BASKETBALL HALFCOURT
- 15. PERFORMANCE/ LARGE LEARNING
- 16. SEATING/LEARNING
- 17. COVERED BIKE STORE
- 18. OUTDOOR GYM

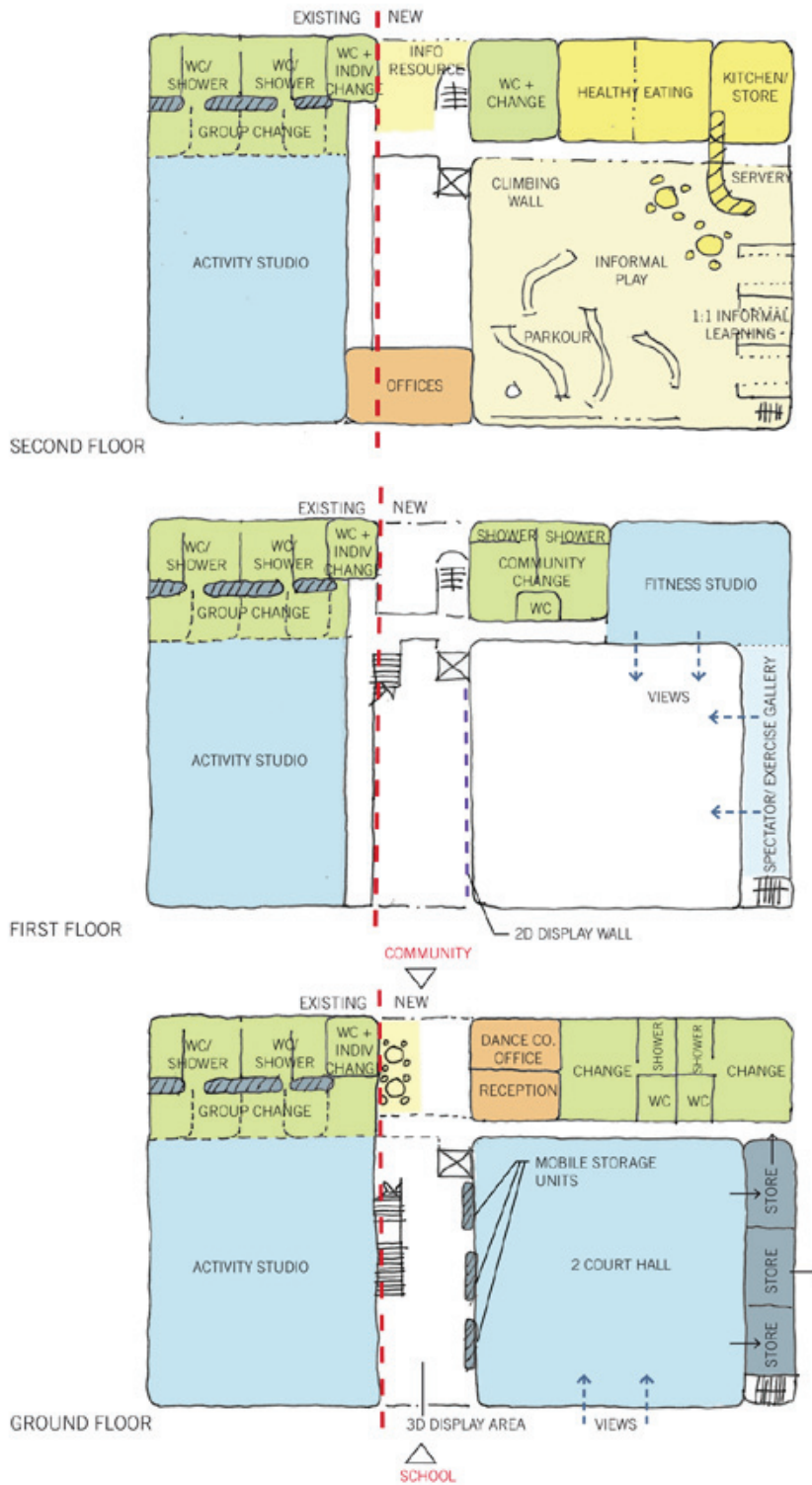
## Learning Centre A

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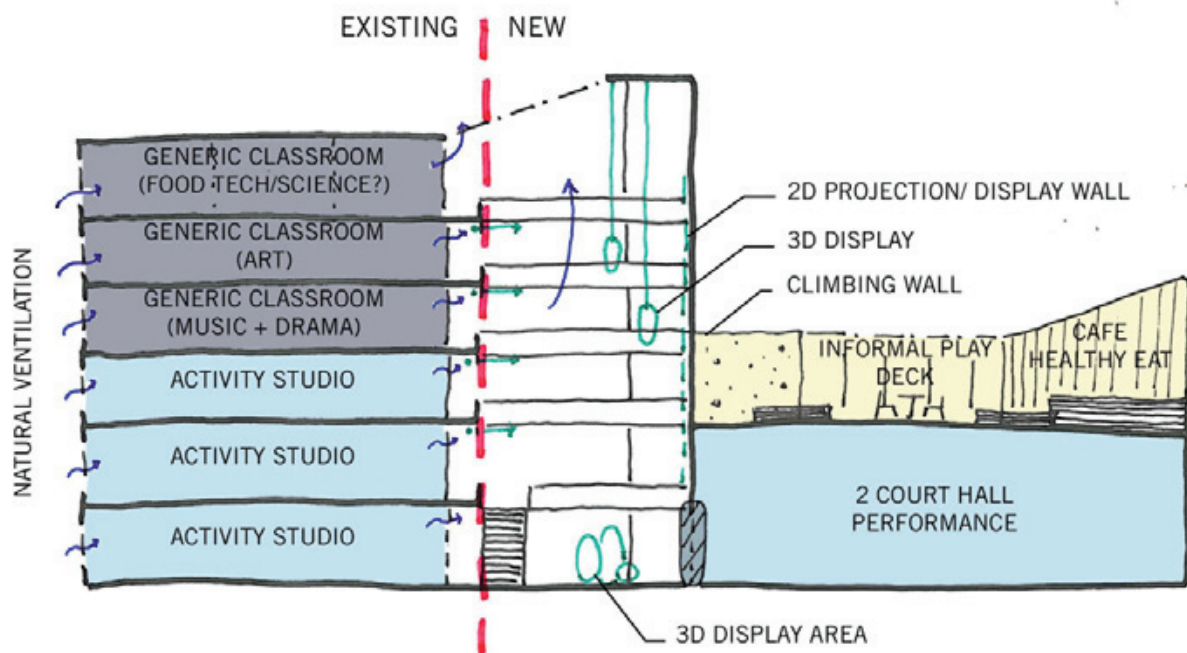
- Outdoor learning spaces are located close to the building to create an easy flow from the interior and blur the distinction. Outdoor spaces are shaped, equipped and resourced to suit specific curriculum needs and encourage active engagement.
- A hierarchy of different sized outdoor spaces are driven from the education vision and range from small spaces for individual learning through to large whole-year or whole-school spaces.
- The main external spaces are divided between naturally landscaped areas- including trees for nature walks and outdoor adventure, the hard landscaped areas which have multiple zones. By dividing these areas into activity zones the aim is to encourage activities and discourage exclusion.
- Level changes have been used to divide the playground into zones with the use of the carve wall (which can be traversed and clambered through), informal outdoor gym area, climbing wall and amphitheatre.
- To incorporate the themes, there are areas for healthy outdoor eating and opportunities to engage students with the natural environment. These include: outdoor classrooms, a playground stage, performance space, and a nature trail.
- More formal activity zone areas are marked out for multi-use games areas, basketball, performance, and seating.

# Learning Centre A

## Interior Spaces:

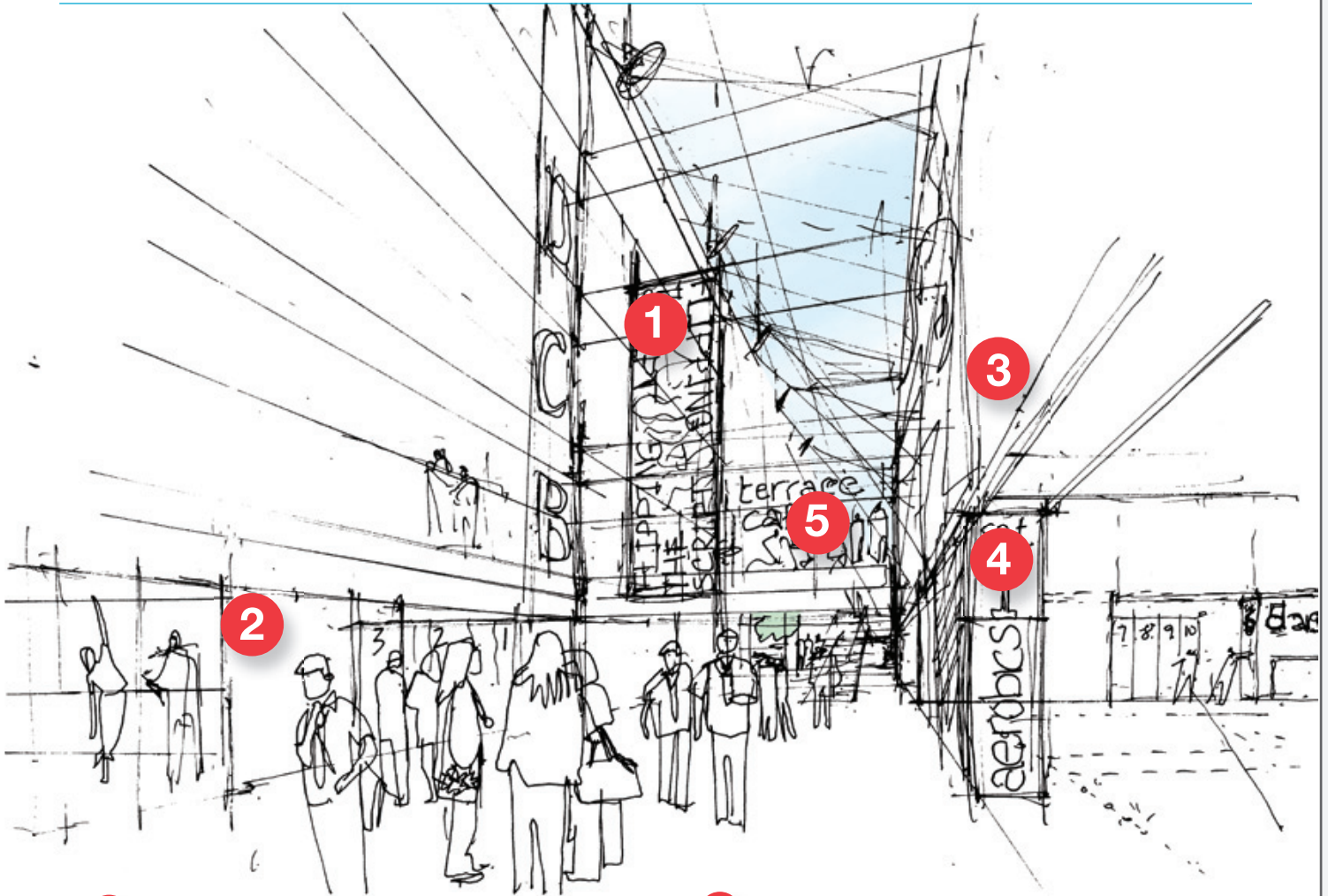


## Learning Centre A



- The new building plugs into the existing school, linked by the atrium which can be used to display 3D artwork.
- The existing multi-storey classroom blocks is converted for use as activity studios with flexible changing facilities.
- Plug and play storage facilities provide flexible use for schools and community
- The new build sports hall has its own independent changing facilities that can double up as a performance green room, or back of house.
- To maximise space efficiency on this tight site, there is an option to house a healthy eating café and informal play area on the roof of the sports hall.

## Learning Centre A



### 1 Interactivity

- Interactive projections from balconies to wall opposite
- Technology and information display
- Resource area for self learning

### 2 Changing Studio

- Flexible for briefing
- Become part of activity zone
- Can also be storage

### 3 Beach / Park

- View to roof terrace above
- Informal play zones
- Areas for informal learning  
1:1 spaces

### 4 Plug and Play

- Flexible display / projections
- Flexible storage solution
- Change space by plug elements

### 5 Hub

- Surrounded by sport / activity
- Cafe and resource provides added reason for use of space
- Community and dance company access
- Can be opened up as part of performance space

## Learning Centre B

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**Specialism:** Technology

**Build Type:** 20% new build 40% minor 40% major refurbishment

**Site details:** Suburban Area

**Key priorities:** ICT, Independent research, Fitness and Performance

**Curriculum Focus:** PE/Sports Science

**Partnerships:** Clubs and coaching

Setting B is a Technology College in a Suburban area that will receive 20% new build 40% minor refurb and 40% major refurb as part of BSF. As a technology college, they will be seeking to maximise the potential for ICT to transform teaching and learning and in particular put young people in the driving seat with regard to managing their learning. The PE department will be closely linked to Science and will be wifi enabled (including external areas) incorporating significant opportunities for students to carry out independent research and monitor and interpret the data they collect relating to their personal fitness and performance. They will retain their existing sports hall and convert an existing gymnasium into a studio space with storage and mezzanine area. The present changing rooms will be increased in capacity to accommodate existing clubs. ICT facilities will also benefit clubs and will improve coaching opportunities.

### Design Response

Just 20% new build area here is used to transform the school's PE Sport facilities. A new link is created with the adjacent science labs for sports science, and new changing rooms provide high quality learning environments which are ICT enabled for interactive de-briefing and learning.

# Learning Centre B

## The Site:



### KEY

- ▶ VISITOR ENTRANCE
- ▷ VEHICLE ENTRANCE
- ▷ PUPIL ENTRANCE
- ▷ COMMUNITY ENTRANCE
- ▷ CYCLE ENTRANCE
- ▭ SPORTS CENTRE
- ▭ NEW BUILD
- ▭ EXISTING BUILDING
- ▭ BLURRED BOUNDARY
- > VIEWS
- ↔ BLURRING BOUNDARIES

### INDOOR-OUTDOOR

1. OUTDOOR LEARNING (COVERED) W. SERVICES + RESOURCE (SMALL-MEDIUM-LARGE)
2. SCIENCE GARDEN
3. PERFORMANCE ANALYSIS
4. INTERACTIVE MUSIC PADS
5. MATURE TREES

### HEALTHY LIVES

8. GROW-COOK-EAT
9. OUTDOOR EATING PAVILION/ LARGE LEARNING
10. ALLOTMENTS/ GLASS HOUSE/ STORAGE

### LEVEL CHANGE

6. SPORTS SEATING/LEARNING
7. PLAY SCULPTURES

### ACTIVITIES

11. MUGA (POSSIBLE FLOODLIGHTS)
12. BASKETBALL HALFCOURT
13. TENNIS COURTS (POSSIBLE FLOODLIGHTS)
14. TRIM TRAIL
15. COVERED BIKE STORE
16. PERFORMANCE SPACE

## Learning Centre B

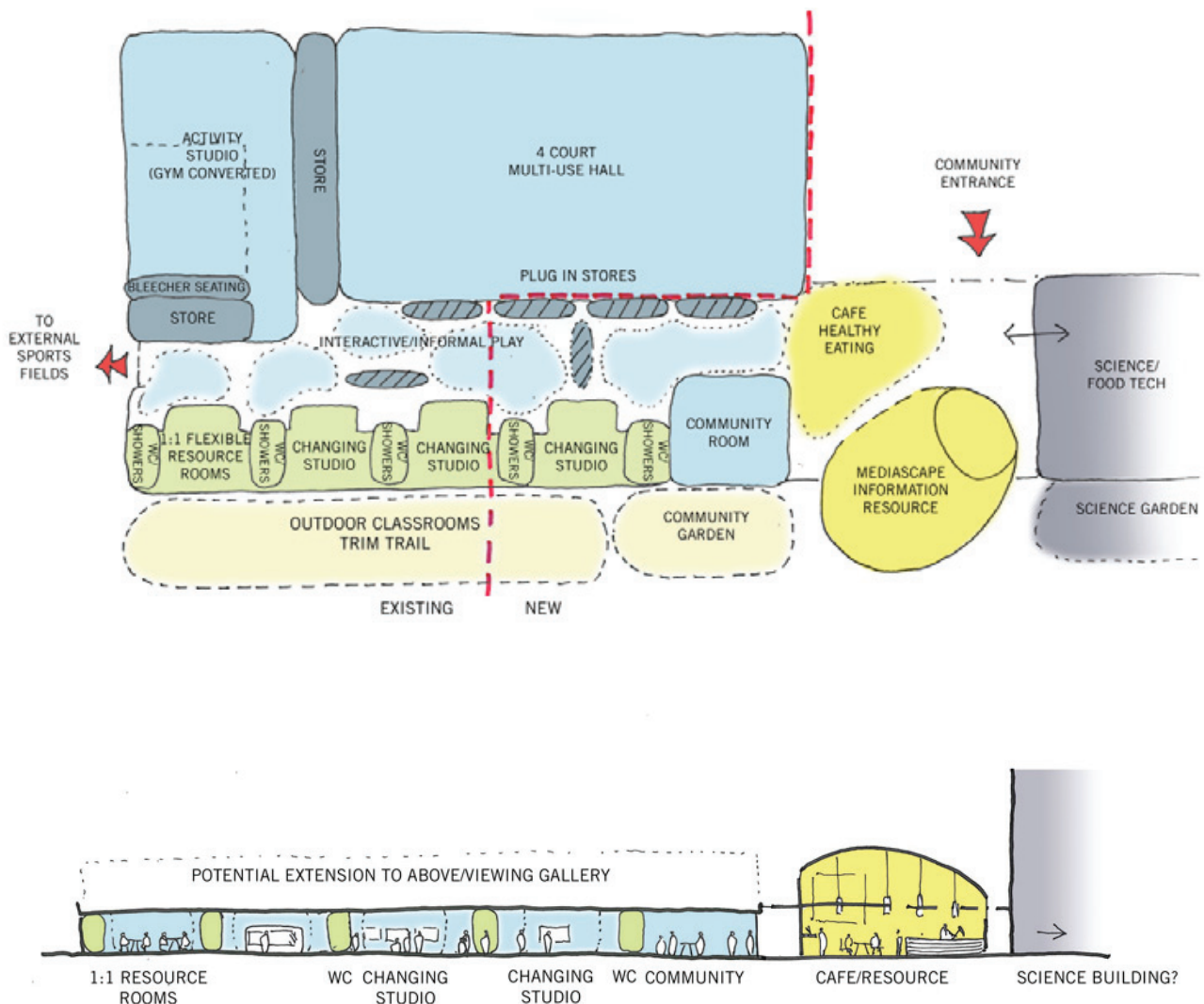
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- The ICT rich sports centre, combined with a close link to the formal sports activity surfaces, encourages a modern sports performance outlook, and a sports science edge.
- Interactive activities such as music pads are included in the informal play areas
- The exploitation of level changes includes tiered seating that addresses the sports pitch and can be used for outdoor learning. This also helps to address planning issues relating to floodlighting.
- Adventure climbing equipment is used to engage children, and additional sports areas are provided for multi use games areas. The activities might included basketball, tennis, and a trim trail
- An important aspect of sport science is nutrition and healthy eating. The experience is encouraged through the connection between growing, cooking and eating food. In order to engage students with food technology and science, teaching spaces are linked with a science garden.



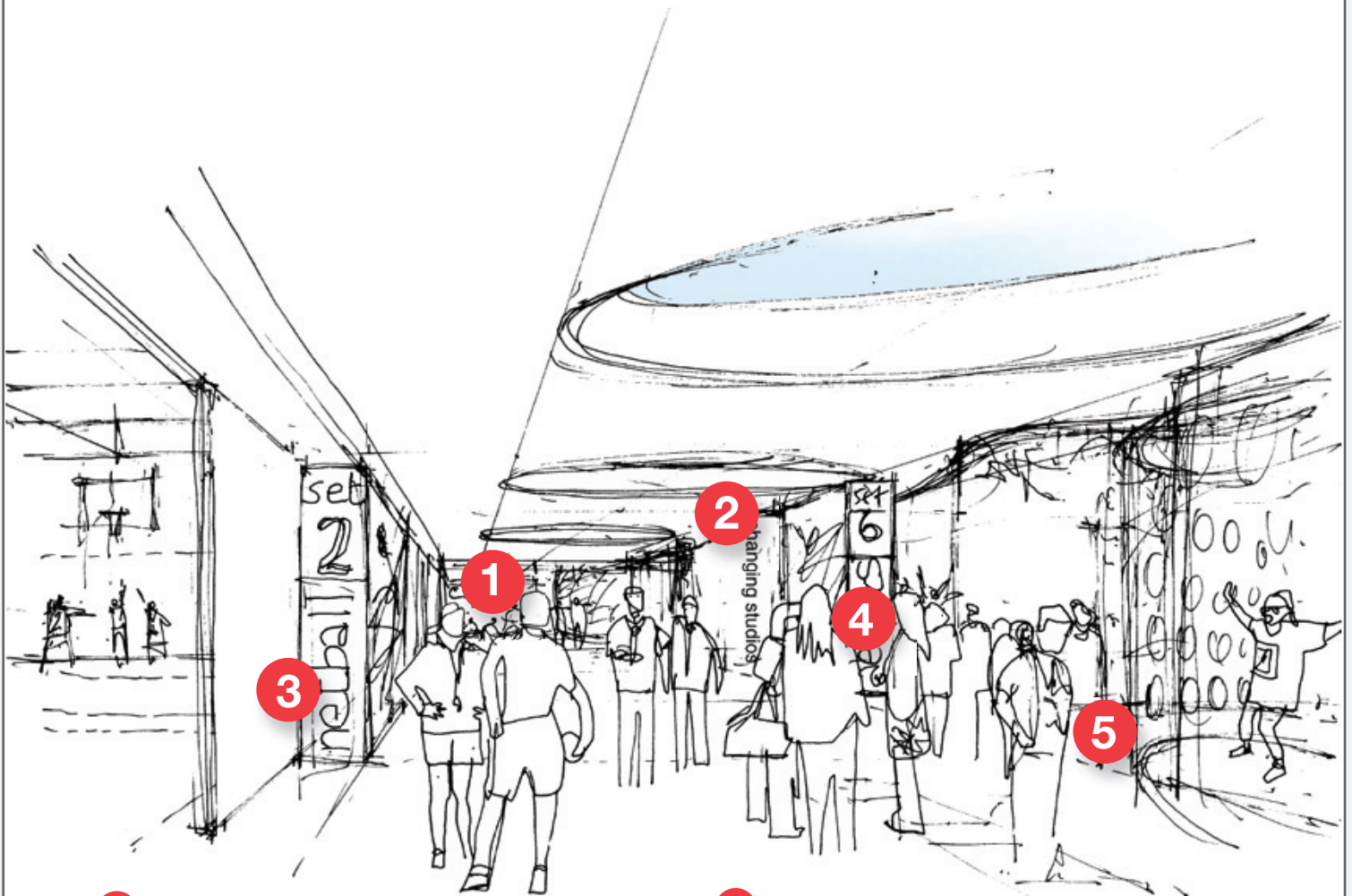
# Learning Centre B

## Interior Spaces:



- There is a strong link between the internal sports facilities and the external spaces in the learning centre, and also between the science and food technology areas.
- Existing and new build changing facilities are refurbished to suit the modern school building, with flexible use.
- Existing sports volumes are complimented by a range of plug –in storage facilities for community and school use.
- Circulation space between changing and formal sports becomes an informal learning, play and activity space.

## Learning Centre B



### 1 Hub

- Café and mediascape
- Community use
- Individual learning

### 2 Changing Studio

- Area for briefing
- Flexible 1:1 coaching
- Part of activity space

### 3 Plug and Play

- Interchangeable club storage
- Change with sport occupying hall
- Can be used as zone dividers

### 4 Beach / Park

- Informal play zones
- Group and individual activity
- Animates traditional circulate corridors

### 5 Interactivity

- Interactive technology
- Analysis available
- Animates traditional circulate corridors

## Learning Centre C

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**Specialism:** Sport

**Build Type:** 100% new build

**Site details:** : Large Rural, SEN co-located

**Key priorities:** Diploma, Leisure Hub Site, Sports Clubs, Physical activity

**Curriculum Focus:** Sport and high quality PE, coaching and mentoring

**Partnerships:** Leisure Services, Hockey Club

Setting C is a Sports College in a rural area which will be newly built on existing site and co-located with a Special School. The school will host the new Sport and Active Leisure Diploma and continue to act as a hub site for the local authority leisure services who deliver some community provision and manage sports facilities after 4pm and during weekends/school holidays. As a result the school will benefit from additional investment from the local authority (equivalent to 2 courts sports hall) to support wider community use. The school host a range of clubs at local and county level including badminton, volleyball and football. The vision is shaped by Sports College status and the use of this to drive whole school improvement. There is also an aspiration for physical activity to be used across the curriculum to underpin approaches to learning. There is a commitment to nurturing and expanding the setting's role as a hub site for a thriving school sports partnership and to forge further private sector links through the new diploma lines. The co-location of the Special School will allow students to engage in joint PE activities and use sport as a vehicle for a coaching/ mentoring programme. A primary school is also situated nearby.

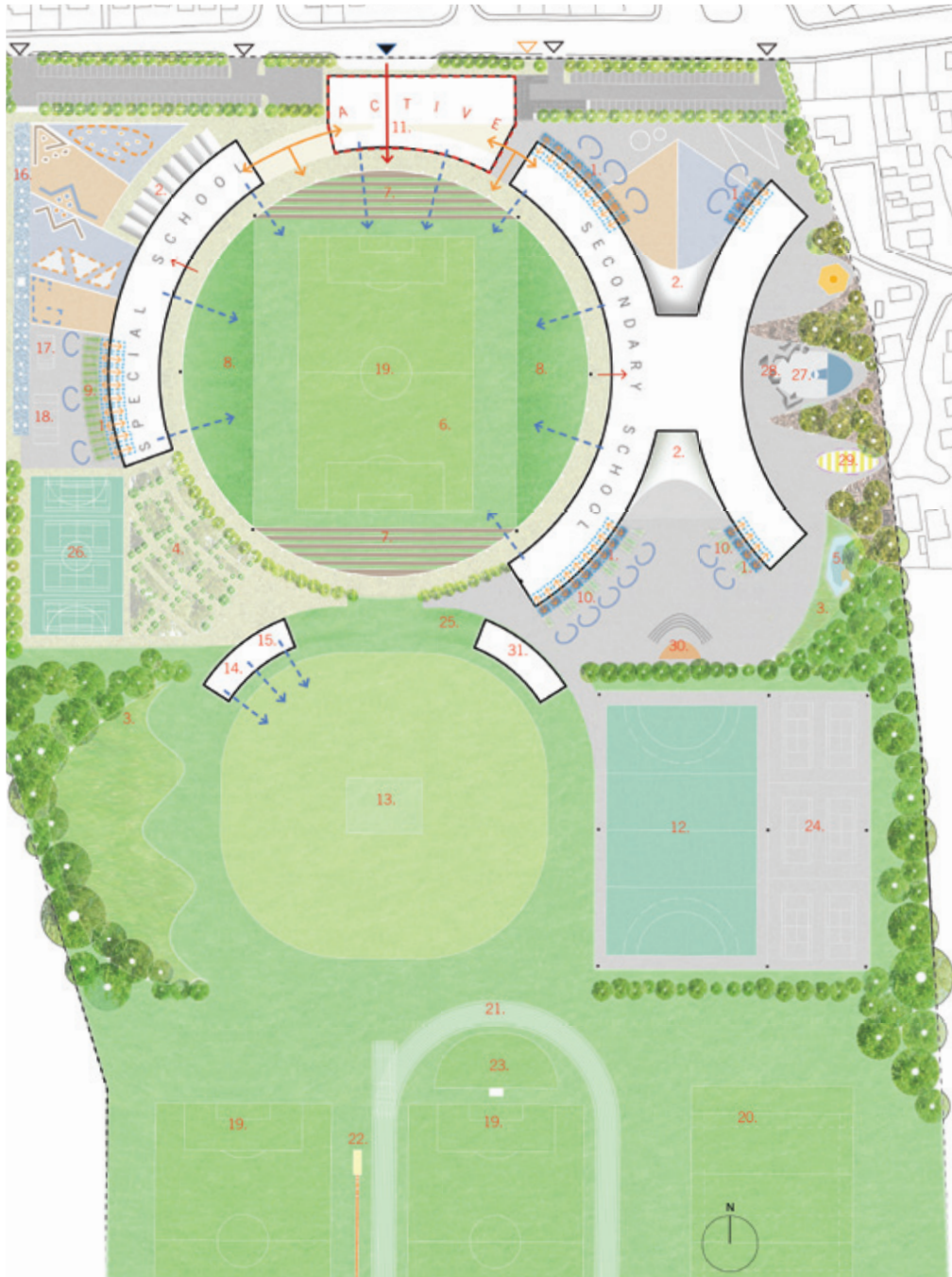
The new build will allow the school to promote their specialism and physical education, physical activity and sport will be at the heart of the new centre for learning. There will be every opportunity for students and the community to view physical education, physical activity and sport taking place.

### Design Response

This school promotes their Sports specialism by bringing the active spaces to the front of the site. Students, visitors and the community all enter the school through a reception flanked by these active spaces, with views in. At the heart of the school is a semi-sunken football pitch with the change in level providing excellent spectator opportunities.

# Learning Centre C

## The Site:



### KEY

- ▶ VISITOR ENTRANCE
- ▷ VEHICLE ENTRANCE
- ▷ PUPIL ENTRANCE
- ▷ COMMUNITY ENTRANCE
- ▷ CYCLE ENTRANCE
- ▣ SPORTS CENTRE
- ▣ NEW BUILD
- ▣ EXISTING BUILDING
- ▣ BLURRED
- VIEWS
- ↔ BLURRING BOUNDARIES

### INDOOR-OUTDOOR

1. OUTDOOR LEARNING (COVERED)
2. COVERED PLAY
3. BIODIVERSITY MEADOW
4. SENSORY GARDEN/ COMMUNITY ALLOTMENTS/ GLASS HOUSE
5. SCIENCE POND WITH DIPPING PLATFORM

### LEVEL CHANGE

6. HALF SUNK CENTRAL PITCH (POSSIBLE FLOODLIGHTS)
7. SPECTATOR SEATING/LEARNING
8. SPECTATOR BANK/LEARNING

### HEALTHY EATING

9. SEN ALLOTMENTS
10. ALLOTMENTS
11. SPORTS CAFE

### ACTIVITIES

12. FULL SIZE STP HOCKEY PITCH
13. CRICKET OVAL
14. CRICKET PAVILION
15. OUTDOOR CHANGING + STORES
16. WHEELCHAIR COURSE
17. BOCCIA COURT

18. GOALBALL COURT
19. FULL SIZE FOOTBALL PITCH
20. FULL SIZE RUGBY PITCH
21. 400M GRASS ATHLETICS TRACK
22. LONG/TRIPLE JUMP PITS
23. HIGH JUMP AREA
24. HARD TENNIS COURTS (FLOODLIT)

25. RAMPS OVER PAVILIONS FOR BMX
26. MUGA
27. BASKETBALL HALFCOURT
28. GREEN GYM AREA
29. SEATING/LEARNING AREA
30. OUTDOOR PERFORMANCE
31. MAINTENANCE STORE/ WIFI AREA

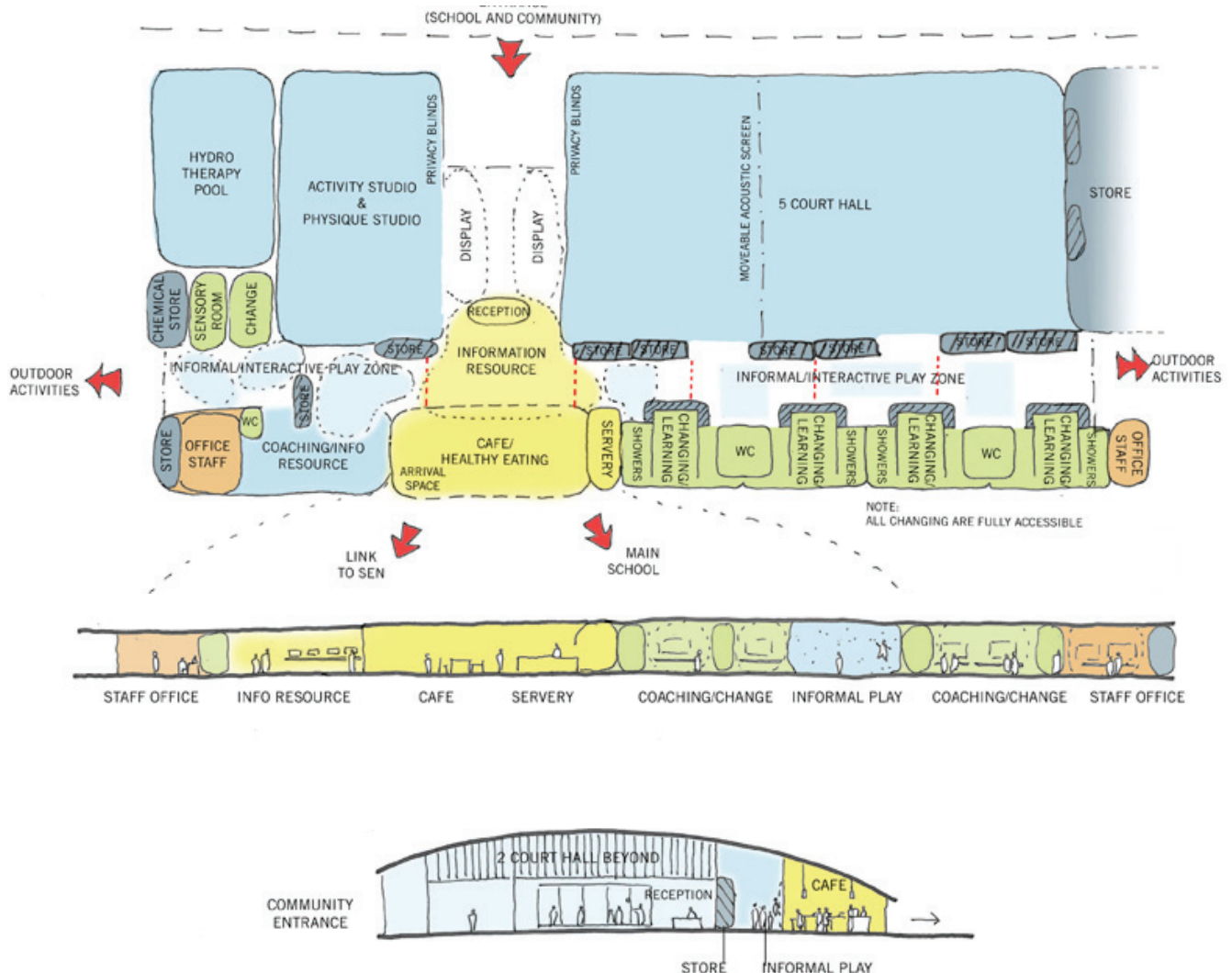
## Learning Centre C

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- The school is focussed around a full sized sunken football pitch with raised banking and viewing gallery. The teaching spaces all look out onto the gardens and outdoor spaces, linked also with outdoor areas and covered play areas to extend the learning space.
- An extensive array of sports facilities are available in the wider grounds, including a multi-use sports area, synthetic turf hockey pitch, and cricket.
- The healthy eating environment has been provided in the extensive school garden with allotments for the SEN school and the main school, and a sports café.

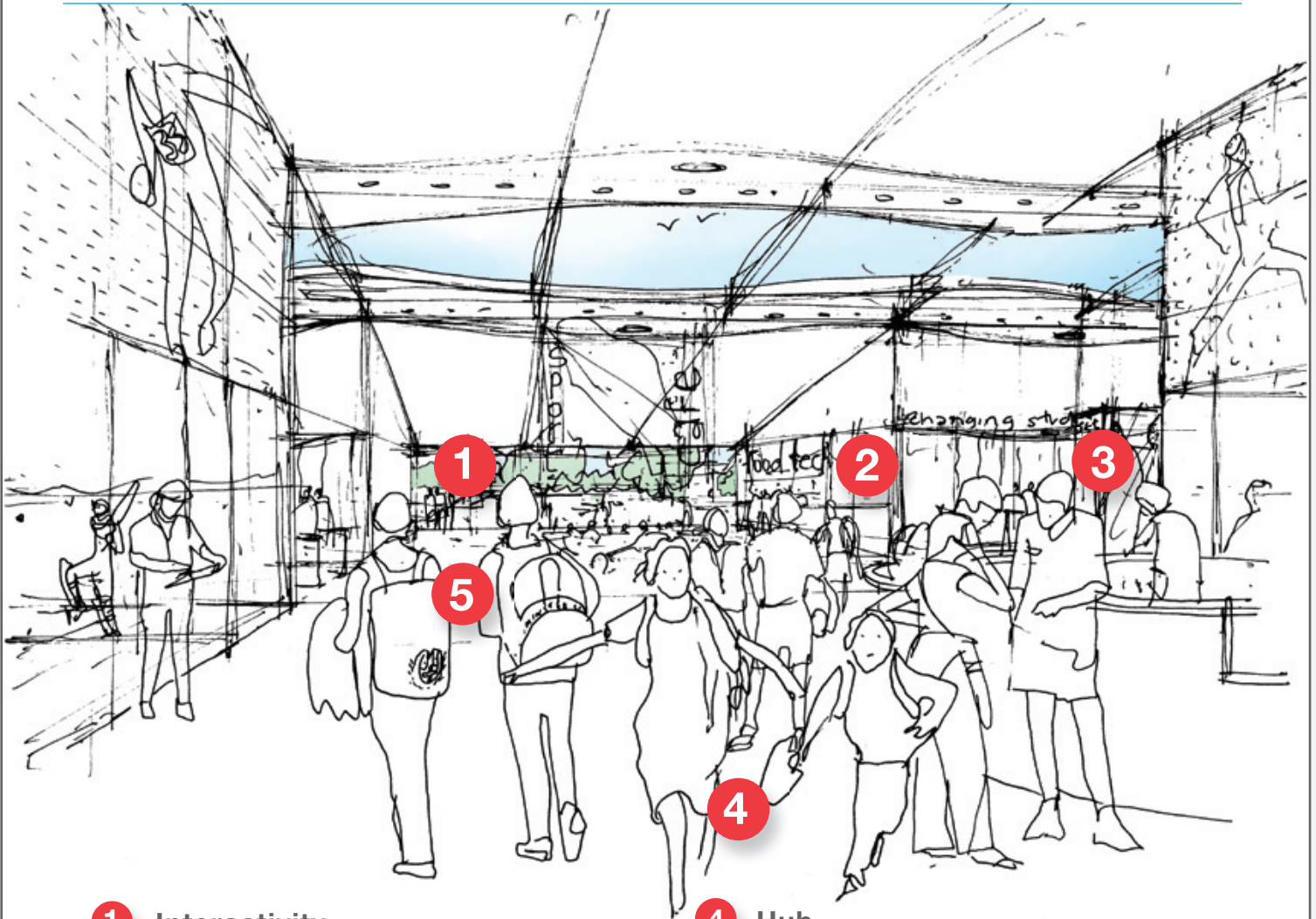
# Learning Centre C

## Interior Spaces:



- Due to the large site it is situated on, the school is kept to a single storey with the main entrance framed by the indoor sports facilities. These are complimented by a number of mobile storage facilities allowing a wide range of club use to interchange the use of the space.
- The five court hall can be divided by a vertical moveable acoustic screen.
- The main entrance to the learning centre leads into the healthy eating café which acts as a central unifying hub for the main school, the SEN school and the community.
- The circulation zone adjacent to the sports facilities can be sub-divided into informal play zones.
- Changing room facilities are designed to be used as teaching spaces and can be opened out onto the external sports facilities.

## Learning Centre C



### 1 Interactivity

- Analysis of sport
- Engaging and interactive
- Animate Circulation

### 2 Changing Studio (Beyond)

- Area for briefing
- Flexible 1:1 coaching
- Part of activity space

### 3 Plug and Play (Beyond)

- Storage as zone dividers
- Plug in's that change nature of space

### 4 Hub

- Surrounded by sport/ activity
- Café and resource provides added reason for use of space
- Can be opened up as part of performance space

### 5 Beach / Park

- Informal play zones
- Group and individual activity
- Animates traditional circulate corridors

## Learning Centre D

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**Specialism:** Business and Enterprise

**Build Type:** 100% New Build

**Site details:** : Confined Urban

**Key priorities:** Personalised learning and welfare, vocational and virtual learning, lifestyle data, address non participating

**Curriculum Focus:** Health and Wellbeing, Healthy Lifestyle Zone

**Partnerships:** PCT Health Centre

Setting D is a business and enterprise college on a confined urban site which will be 100% new build. It is to be co-located with a PCT Health Centre and will also host a small scale conference /training venue which will provide useful income generation and accommodate family learning. Current Indoor PE facilities will be remodelled under BSF; they have an opportunity to reconfigure their existing outdoor provision. Personal health and welfare (such as Teenage pregnancy, smoking, drug abuse and obesity) is a strong focus for the learning centre which the co-located settings aims resolve through the support of BSF. The setting will provide a tailored personalised learning and welfare approach which will allow young people to access a range of support and record their own progress via a learning and lifestyle data tracking virtual environment. It is expected that a large number of students at Key Stage 4 will access vocational learning opportunities through other sites and therefore a virtual learning approach will be essential in ensuring services are accessible to all students throughout their learning journey. PE will be delivered within a Healthy Lifestyles zone which will also incorporate food technology and science as well as personal health and counselling. The school have too many students currently not participating fully in PE and in particular outdoor based activities. They are prepared to develop alternative solutions to traditional court and pitch games as well as exploring options for covered outdoor areas to address participation issues. The PCT and co-location with a conference venue will provide both a research base and platform for exploring non traditional physical activities to increase participation.

### Design Response

The schools active spaces stack vertically in response to the site constraints and use creative solutions to maximise the space available for pupils learning and health. Activities wrap themselves up the building using the vertical planes (climbing walls), ramps and informal 'left over' spaces to maximum effect.



# Learning Centre D

## The Site:



**KEY**

- ▶ VISITOR ENTRANCE
- ▷ VEHICLE ENTRANCE
- ▷ PUPIL ENTRANCE
- ▶ COMMUNITY ENTRANCE
- ▷ CYCLE ENTRANCE
- ▭ SPORTS CENTRE
- ▭ NEW BUILD
- ▭ EXISTING BUILDING
- ▭ BLURRED BOUNDARY
- > VIEWS
- ↔ BLURRING BOUNDARIES

**INDOOR-OUTDOOR**

- 1. OUTDOOR LEARNING (COVERED) W. SERVICES + RESOURCE (SMALL-MEDIUM-LARGE)
- 2. COVERED ROOF MUGA

**LEVEL CHANGE**

- 3. GREEN GYM/BMX TRAIL
- 4. TREE RAMP
- 5. SPECTATOR BANK

**HEALTHY EATING**

- 6. VERTICAL ALLOTMENTS
- 7. FARMERS MARKET

**ACTIVITIES**

- 8. MUGA (COVERED OPTION)
- 9. CONSTRUCTION YARD
- 10. COVERED BIKE STORE
- 11. HARD TENNIS COURTS

## Learning Centre D

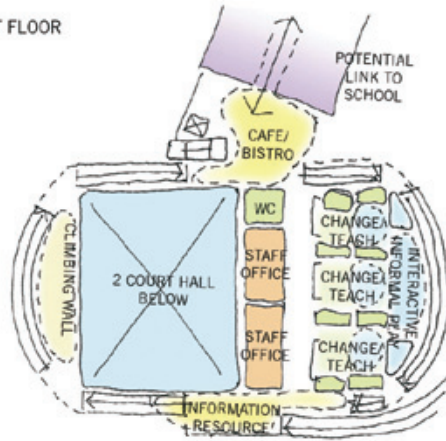
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- Students are able to engage with the grounds through outdoor classroom spaces, and a covered multi-use games area on the roof.
- Level changes are exploited to limit the removal of ground works and create areas for games such as BMX, with a spectator bank surrounding it.
- Horizontal and vertical allotments aim to engage the students with nature, and an entrepreneurial spirit is encouraged with a community farmers market based in the school playground.
- The indoor activity areas are linked with the outdoors through the rooftop sports, trim trail and a ramp winding through the trees.

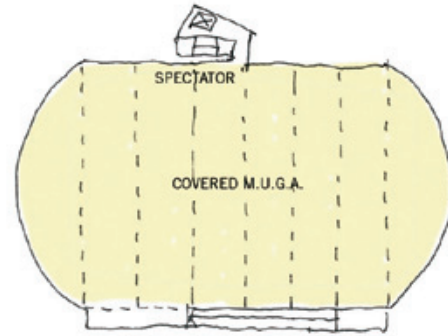
# Learning Centre D

## Interior Spaces:

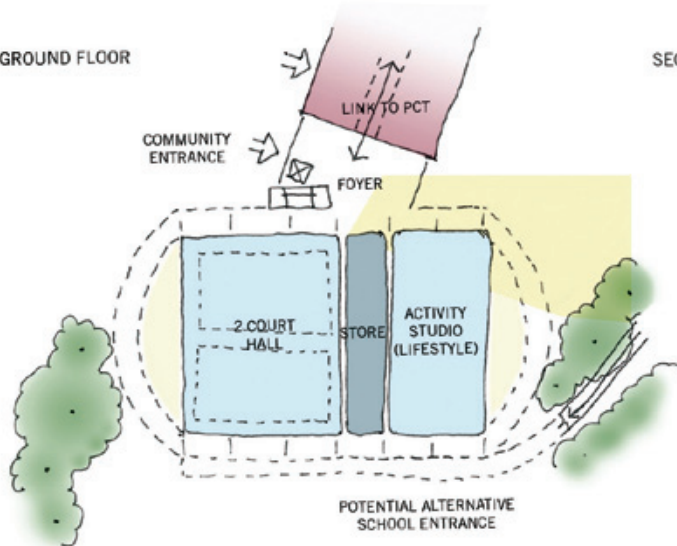
FIRST FLOOR



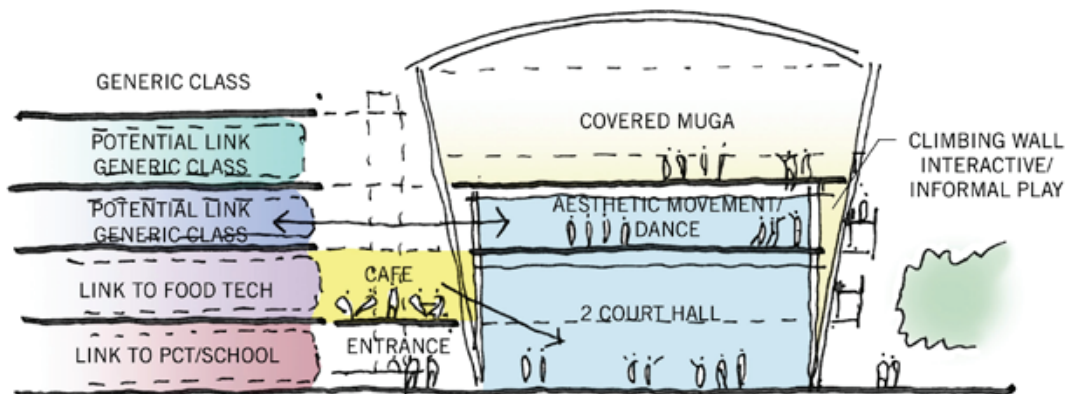
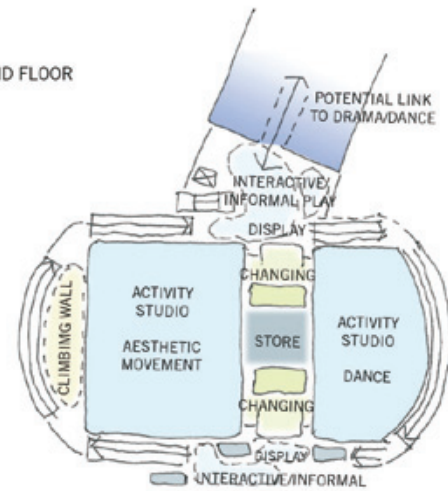
ROOF



GROUND FLOOR



SECOND FLOOR

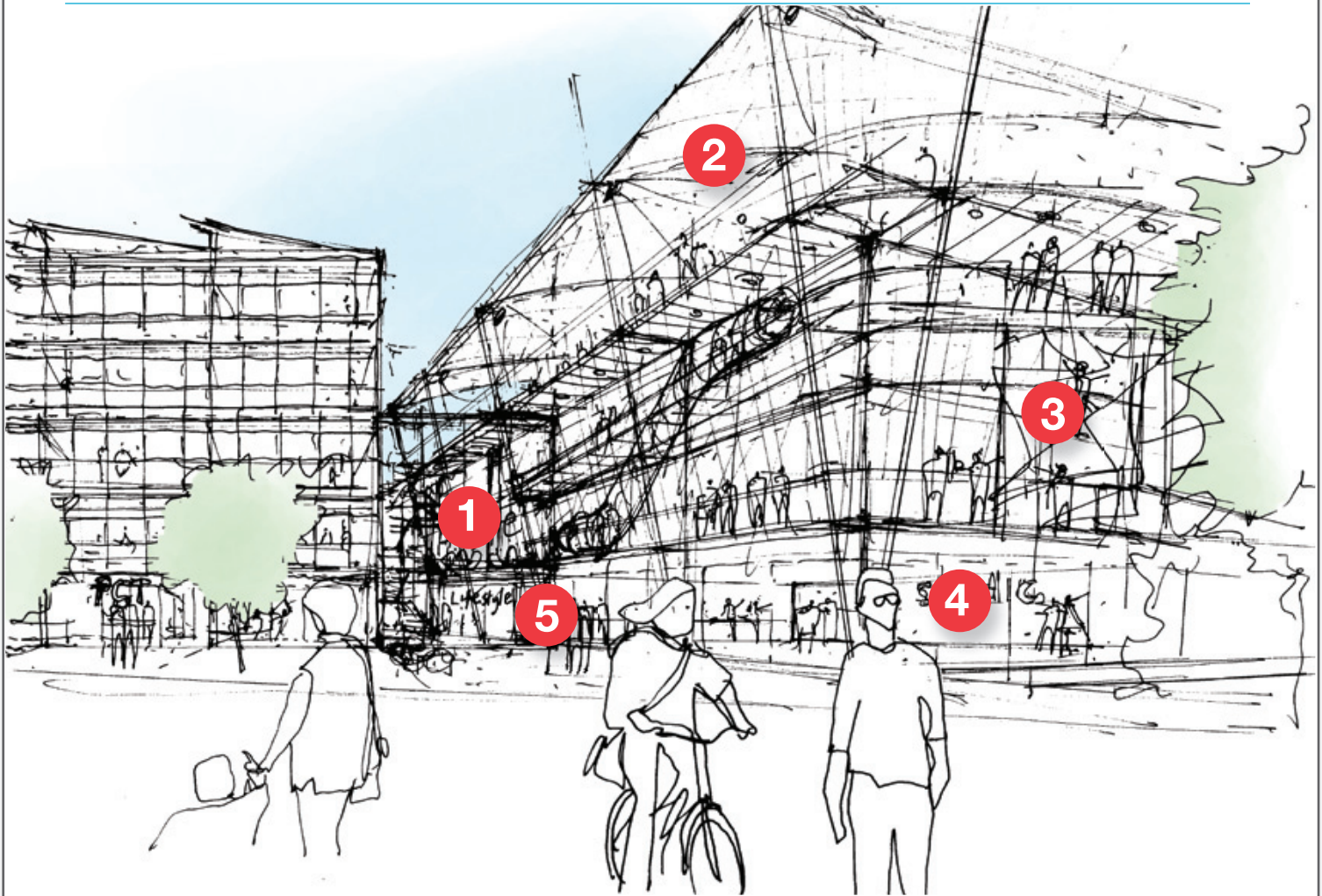


## Learning Centre D

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- The internal sports facilities are stacked so as to optimise use of the limited site.
- These formal volumes have been wrapped with ramping circulation that extends to provide space for a covered climbing wall and informal play areas.
- Each level links into the existing school facilities with the main hub of the café.

## Learning Centre D



### 1 Interactivity

- Technology and activity
- Café/ Resource for individual learning

### 2 Plug and Play

- Flexible additional play space
- Muga on roof to allow for more outdoor space
- Storage solutions which change nature of space

### 3 Beach/Park

- Informal play spaces
- Vertical play spaces
- Activity surrounds indoor space

### 4 Changing Studio

- Area for briefing
- Flexible 1:1 coaching
- Part of activity space

### 5 Hub

- Alter linear path of arrival
- Overlap with community/ PCT entrance
- Surrounded by activity

# Fit for the Future

## Design for PE & Sport

# Part 4

# Summary of Key Points

## Summary of Key Points

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### To summarise the key points of 'Fit for the Future'

- Be bold, produce a brief that will provide flexible spaces for you to develop opportunities for young people and the community – the architect's role is to then design solutions
- Put your learning setting in context, what is its' role within your learning and geographical community?
- Avoid cloning and provide a range of provision across the estate rather than 'one size fits all'. This will be a better use of resources
- Size matters so be creative, use sq. metre allocation efficiently by considering how spaces can be shared across the curriculum and how ancillary spaces can be utilised for learning and socialising
- Out of doors but not out of mind, make sure your external curriculum and community spaces are given equal thought and intention as your internal spaces
- Get your piece of the ICT 'pie', design in opportunities for ICT to support personalised learning and community access both indoors and outdoors and off site
- Think beyond your PE and Sport box, consider how the whole site can promote and encourage physical activity, play and healthy lifestyles.
- Be customer focussed, make sure your brief delivers for your learners , the community and partner organisations from the moment they enter the site.
- Don't forget the detail, get the technical specifications correct otherwise your vision will not reach its' full potential



## With special thanks to

David Morley Architects

## Acknowledgements

Association for Physical Education

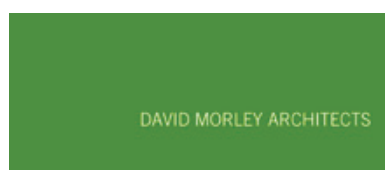
CABE

DCSF

Institute for Sport Parks and Leisure

Sport & Play Construction Association

Learning Through Landscapes



## Notes

The curriculum analysis for Part 3 was based on a traditional model but could easily be adapted and would produce similar data for alternative curriculum organisation. School data (based on 5 hour/period day, 25 hours per week) assumed School A 1250 students, School B 900 students, School C 1450 students and School D 1250 (inc sixth forms). All models based on 70% indoor model (covered MUGA acts as an indoor space)

## Further Reading

PE & Sport Resources on the Partnership for Schools website:

[http://www.partnershipsforschools.org.uk/library/PE\\_Sport.jsp](http://www.partnershipsforschools.org.uk/library/PE_Sport.jsp)

Learning through Landscapes - the national school grounds charity:

[www.ltl.org.uk](http://www.ltl.org.uk)

Sport England Design Guidance notes:

[http://www.sportengland.org/facilities\\_\\_planning/design\\_guidance\\_notes.aspx](http://www.sportengland.org/facilities__planning/design_guidance_notes.aspx)

DCSF – Inspirational School Design publications:

<http://www.teachernet.gov.uk/management/resourcesfinanceandbuilding/schoolbuildings/innovativedesign/>

CABE – Building Schools for the Future resources:

<http://www.cabe.org.uk/schools/building-schools-for-the-future>

