

C21st Schools Programme

“Shaping the future of schools in Wales”

Constructing Excellence in Wales

Milica Kitson

Chief Executive

Constructing Excellence in Wales

Outcomes from today

That you are :

- 1. Aware of this project and what it hopes to achieve**
- 2. Able to inform, input to and help to shape the delivery of 21st Century Schools in Wales**

Agenda for the day

- 0900** **Welcome – Milica Kitson, Chief Executive, (CEW)**
- 0905** **Introduction – to the C21st Schools Project – Ed Evans (CEW)**
- 0935** **Getting a school from concept to reality – Jo Larner, Head of Capital Funding (WG)**
- 0955** **A strategy for standardisation – Jane Wade (CEW)**
- 1025** **Refreshments**
- 1040** **Workshop 1 – VFM criteria - what is important?**
- 1110** **Workshop 2 – is the current way we design and procure schools effective?**
- 1140** **Feedback from Public Sector Forum – the client's view?**
- 1150** **Summing up and next steps**
- 1200** **Close**

An introduction to the 21st Century Schools Project

Ed Evans

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Overview - What I'll talk about

- Why – are we doing this?
- What – do we plan to do?
- How – do we plan to do it? And when and with who
- What will we deliver – in the end?
- How will we know if we delivered – successfully
- Questions

Purpose of the Project

To improve the **design, procurement and delivery** of the C21st Schools Programme and **maximise long and short term value for money** during the life of Band A of the programme and in readiness for Band B.

Project Context

The 21st Century Schools Programme formally commenced in April 2014. The £1.4 billion programme will result in the rebuilding and refurbishing of over 150 schools in Wales. There is recognition, however, that, in these times of constrained resources, it is vital that **opportunities are sought to extend the impact of this funding.**

Maximise and share the impact, extent and value of the investment across **Welsh communities** by designing, procuring and delivering schools to an optimum size and specification with the right facilities to provide the **right learning environment** for our children but within a **reduced but deliverable cost envelope.**

Workstreams

To provide a consistent approach to the design, procurement and delivery of Welsh educational buildings within the 21st Century Schools programme and securing greater value for money by :

- 1. Optimising design standards**
- 2. Optimising procurement processes**
- 3. Optimising delivery models**

Via strong and clear evidence base

Delivering the project

Programme

- 2 years – up to Oct 2016

Approach

- 3 stages:
 - Review – data collection, benchmarking
 - Develop/Propose – standards, best practices
 - Implement – change management

Resources

- People – Ed, Jane, others
- Pounds - £400k
- Work packages

Delivering the project

Risks

- Poor engagement
- Political
- Market conditions

Engagement

- Long list of stakeholders – CLAW, WLGA, ADEW, WGov, F/w mgrs, suppliers
- Input, engage, inform

Extensive communications

- Reports, seminars, forums, social media, etc
- Briefings, workshops, individual/collective meetings

Governance

- Delivery via CEW - Reporting to Programme Director C21st Schools

Deliverables

Common outputs :

- Review of current costs and qualitative data
- Suite of cost and qualitative benchmarks

Optimising Design :

- Design toolkit/guidance/specification – staged development and issue
- Implementation plan to share outputs

Optimising Procurement :

- Report on current procurement models
- Proposed procurement model
- Implementation plan to share outputs

Optimising Delivery :

- Report on current delivery models
- Proposed delivery model
- Implementation plan to share outputs

R&D : Linking educational attainment to building environment

What will success look like?

- More schools
- Greater flexibility
- Greater certainty
 - Time, cost and quality
- Community benefits
 - Greater economic opportunities
 - Greater training and upskilling opportunities
- Long term cost effectiveness
 - Reduced energy consumption
 - Reduced maintenance costs
- Better educational outcomes?

Questions?

Ysgolion yr 21ain Ganrif
21st Century Schools



Llywodraeth Cymru
Welsh Government

www.cymru.gov.uk

21st Century Schools New Business Case Approach

Jo Larner

Band A

- £1.4 billion investment over five years
- Funding split – 50% Welsh Government,
50% Local Authorities / Others
- Rebuilding and refurbishment - Over 150
schools &
colleges
- All 22 Local Authority Areas to benefit

Main Aims

- Reduce numbers of poor condition school and college buildings
- Reduce surplus places
- Reduced running costs = more resources to invest in our learners
- Includes provision for Welsh medium and Faith education

Business Case approach

- **Full Business Case** - projects > £5M

3 stage development –

Strategic Outline Case (SOC)

Outline Business Case (OBC)

Full Business Case (FBC)

- **Business Justification Case** - projects < £5M

A single stage document

Business Cases

Iterative approach

- SOC – **strategic**. Justification, investment objectives, short list of options, management structure
- OBC – **outline**. Commercial strategy, analysis of shortlisted options, match funding and spend profile
- FBC – **full**. Finalised management structure, benefits and agreed contract

Business Case – Welsh Government consideration

3 Stage process:

- **Business Case Scrutiny Group** – policy leads and technical specialists
- **Capital Panel** – Chaired by Director General DfES, DfES Directors & appropriate advisors
- **Ministerial Approval**

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- Changing economic climate underlines need to maximise value for money
- Releasing potential to invest in more schools and colleges
- CEW help drive better design/ delivery and more efficient procurement

Revised business case guidance

- In response to feedback from partners
- More focused approach - concentrates on what needs to be included
- Streamlined process – targeted questions, templates for all business case stages with word counts
- Fully compliant with Better Business Case model

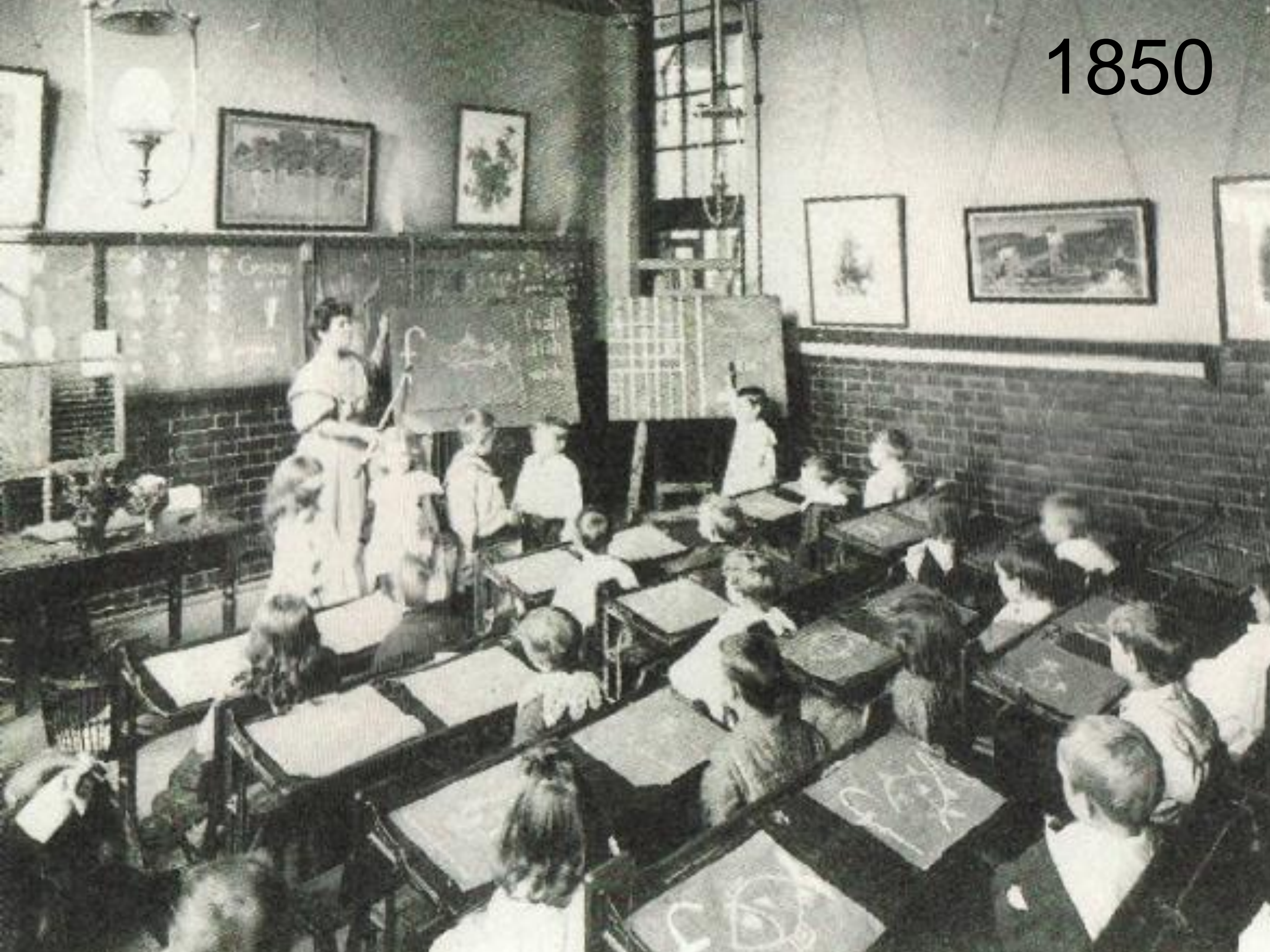
The way forward

- Pilot ended on 30 November
- Feedback reviewed and any changes incorporated into the document
- Guidance now finalised and prepared for publication
- Continuous improvement

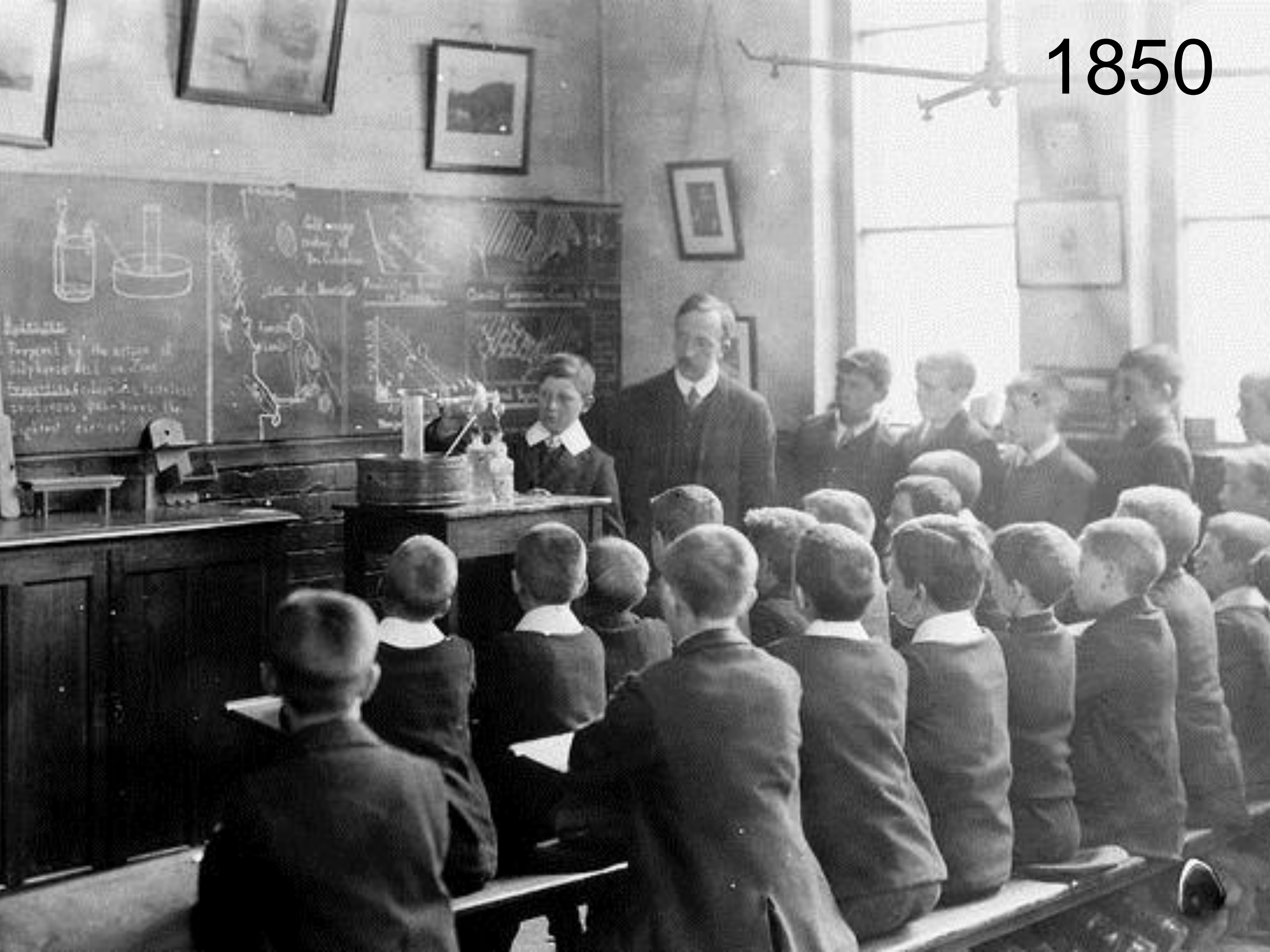
Optimising school designs for greater value for money

**A strategy for
standardisation**

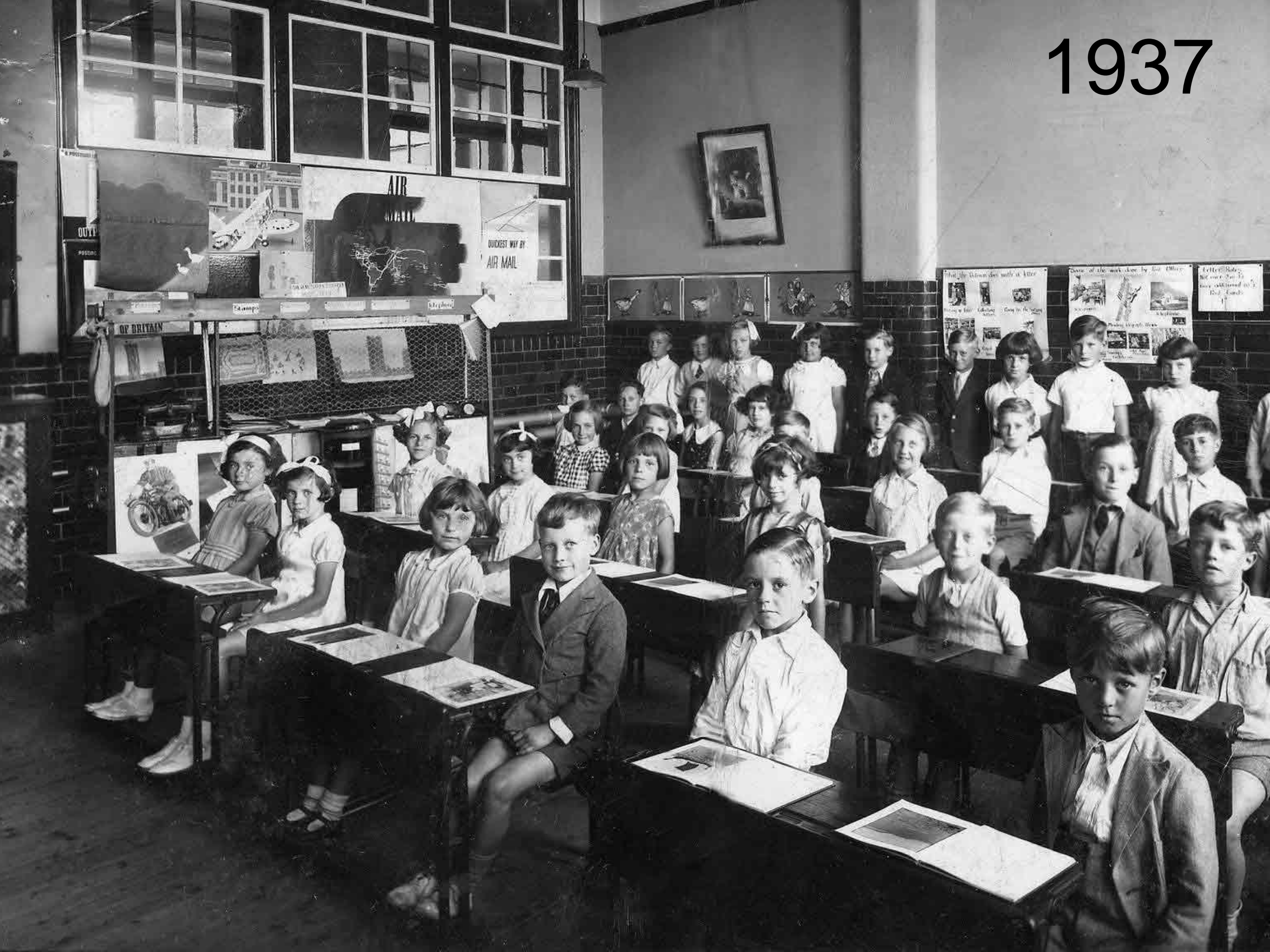
1850



1850



1937



1950



1957



MEANING OF 46,209-4 WAYS
4 ten thousands 40,000 6 thousands 60,000
6 thousands 6,000 2 hundreds 200
2 hundreds 200 2 tens 20
2 tens 20 2 ones 2
46,209 46,209
462 hundreds 46,200 462 tens 46,200
462 tens 46,200 462 ones 46,200
46,209 46,209

PROPER FRACTION

ST THOMAS
AQUINAS
GRADE 5
ROOM 10
MARCH 1957

1984



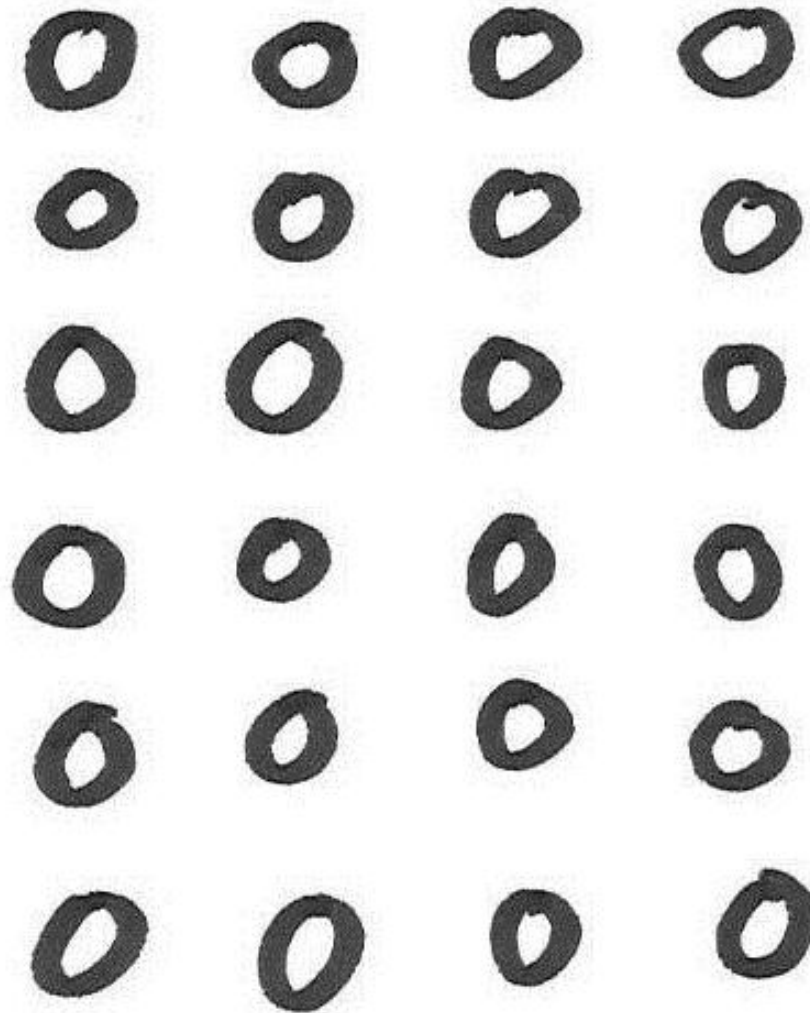
2014



teacher



class



Warm

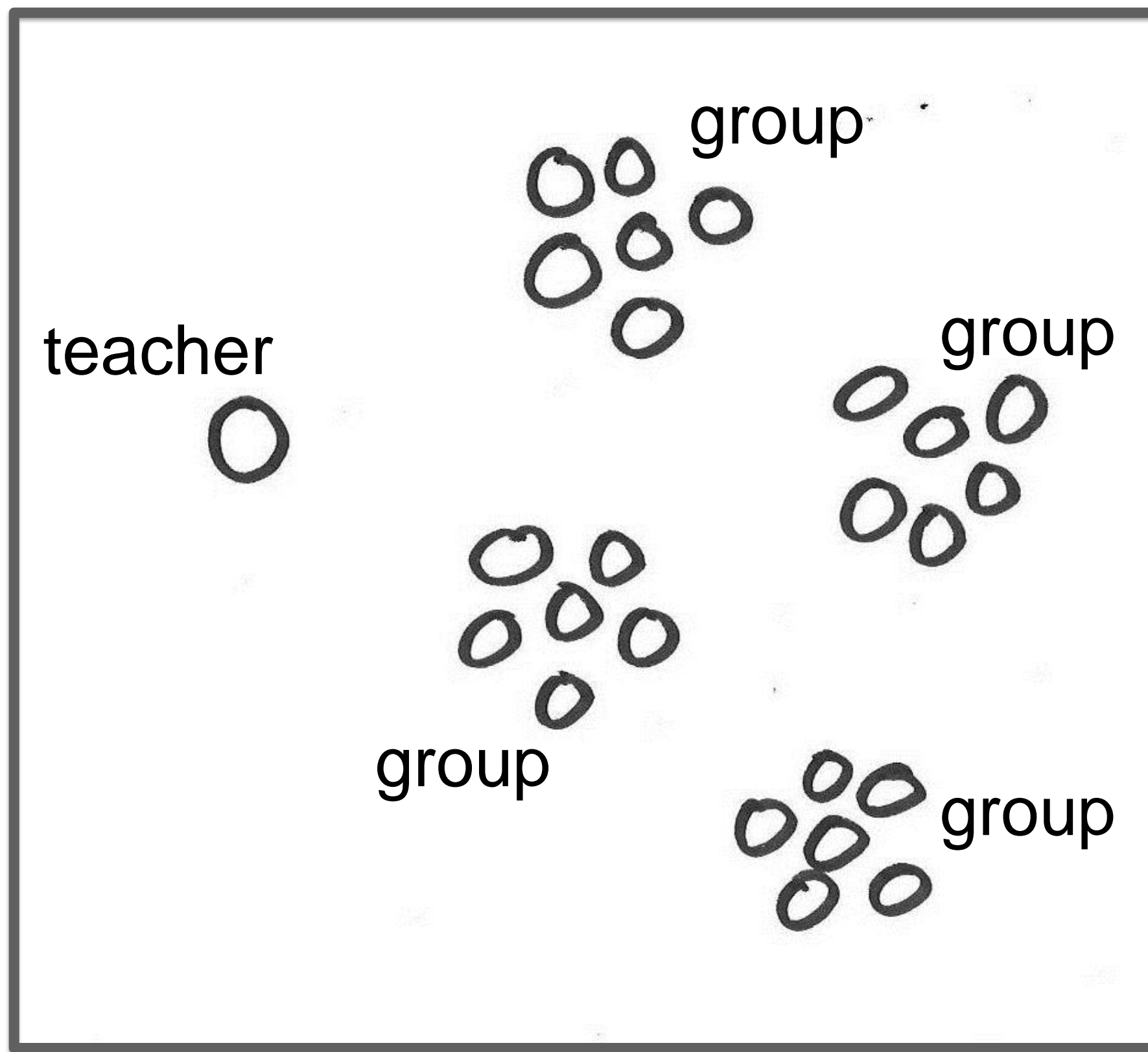
Dry

Light

Acoustics

Flexible

Ventilated



Bespoke
Contextual
Responsive
Engaged

Standardised
Unresponsive
Unengaged
Flat pack



Design
Solutions

Expensive

Inexpensive

Evelyn Grace Academy

Brixton, South London

Zaha Hadid



Evelyn Grace Academy

Brixton, South London

Zaha Hadid



Bespoke
Contextual
Responsive
Engaged

Standardised
Unresponsive
Unengaged
Flat pack



Design
Solutions

Expensive

Inexpensive

Piggott School

Reading

Portakabin





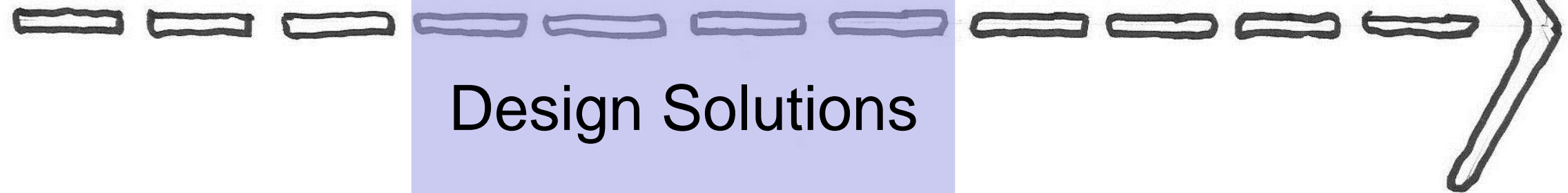
Terminology

Modular
Off-site
Standardised
Template design
Optimised
Pre-fabricated
Pattern book



Bespoke
Contextual
Responsive
Engaged

Standardised
Unresponsive
Unengaged
Flat-pack



Design Solutions

Cost
effective

A cost effective kit of parts

Component
solutions



Whole building
solutions

Specifications
Ironmongery packs
Wall types
Common junction details

Ventilation strategy
Standard classroom layouts
Standard WC layouts
Door pattern types

External envelope solutions
Whole buildings
Superstructure solutions

A cost effective kit of parts

Component
solutions



Whole building
solutions

Constrained



Flat greenfield

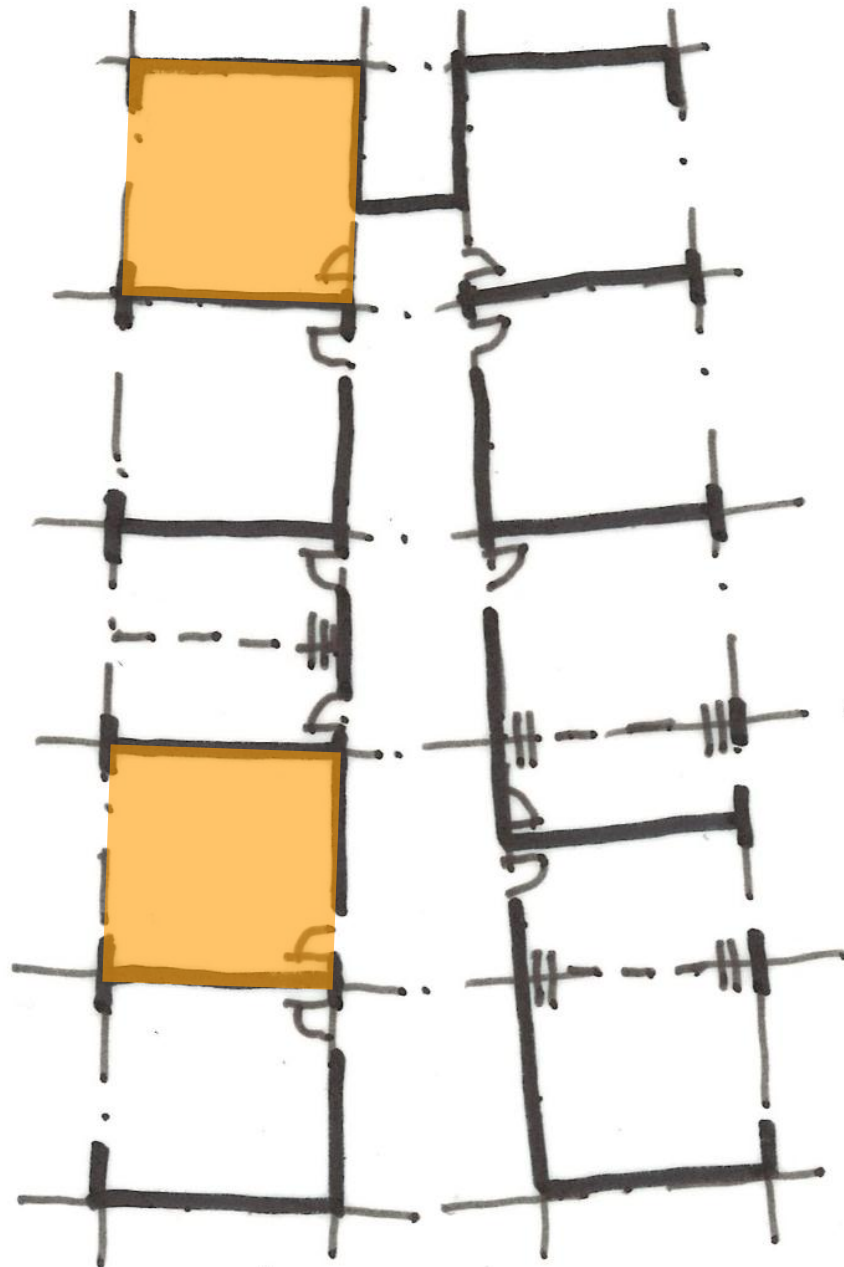


A standard kit of parts



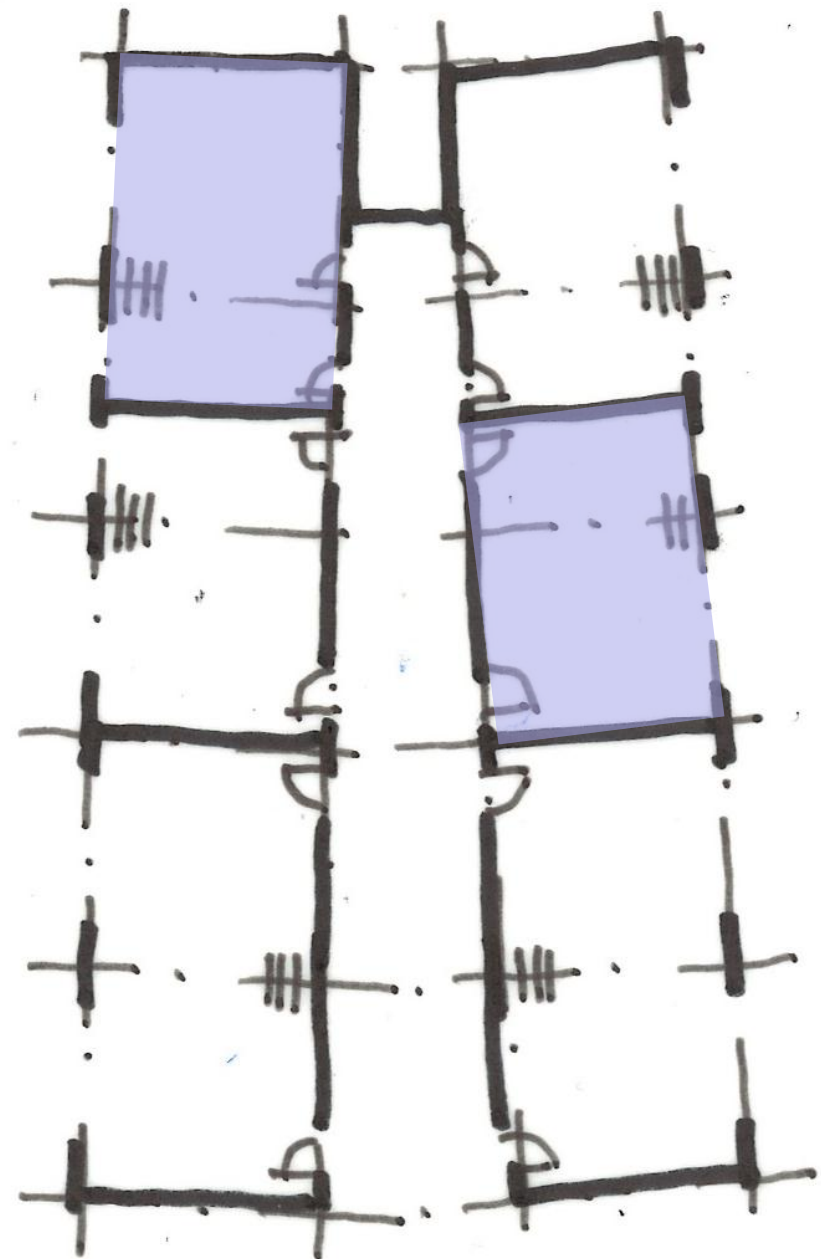
A standard kit of parts

Standard classrooms

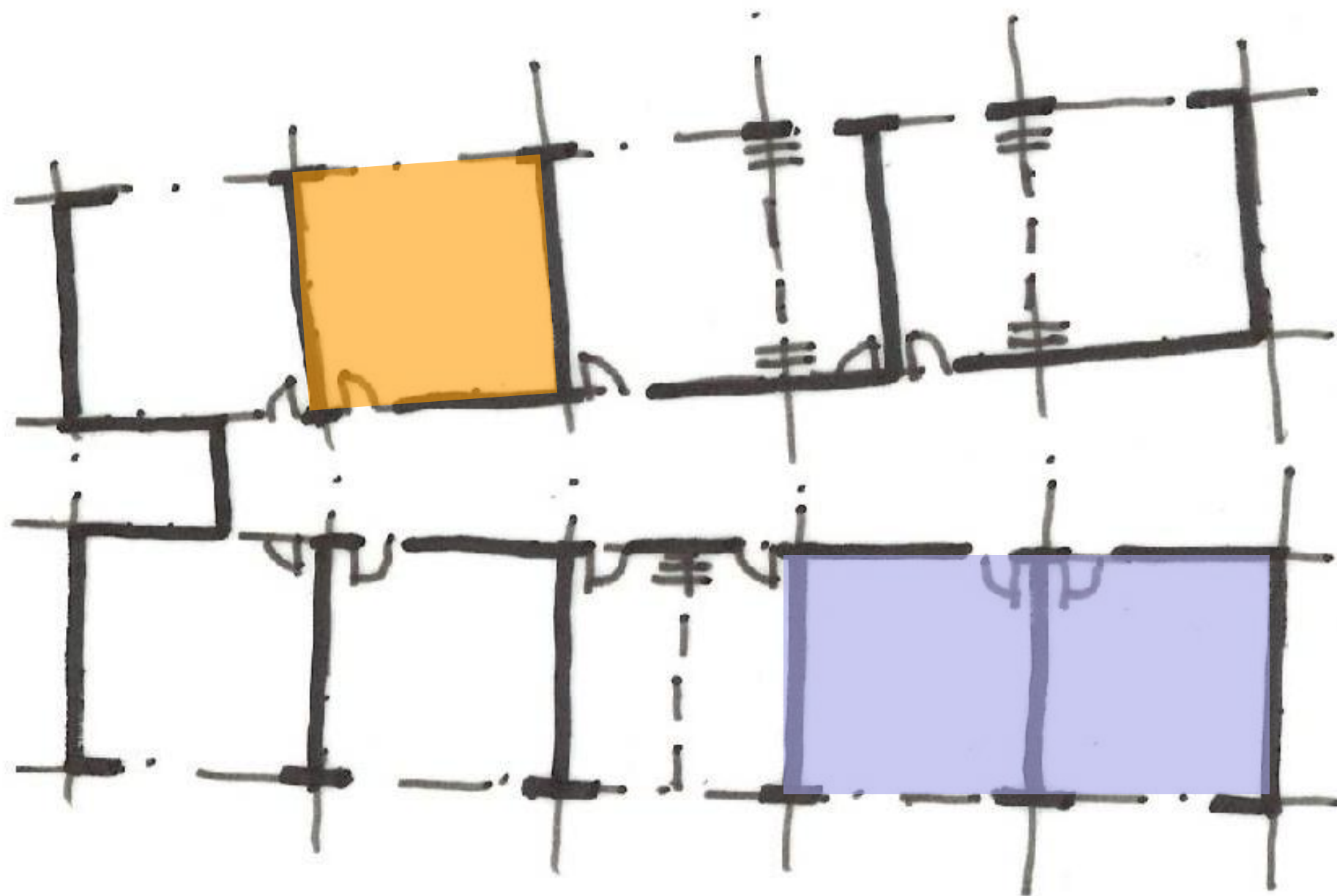


Standard school blocks

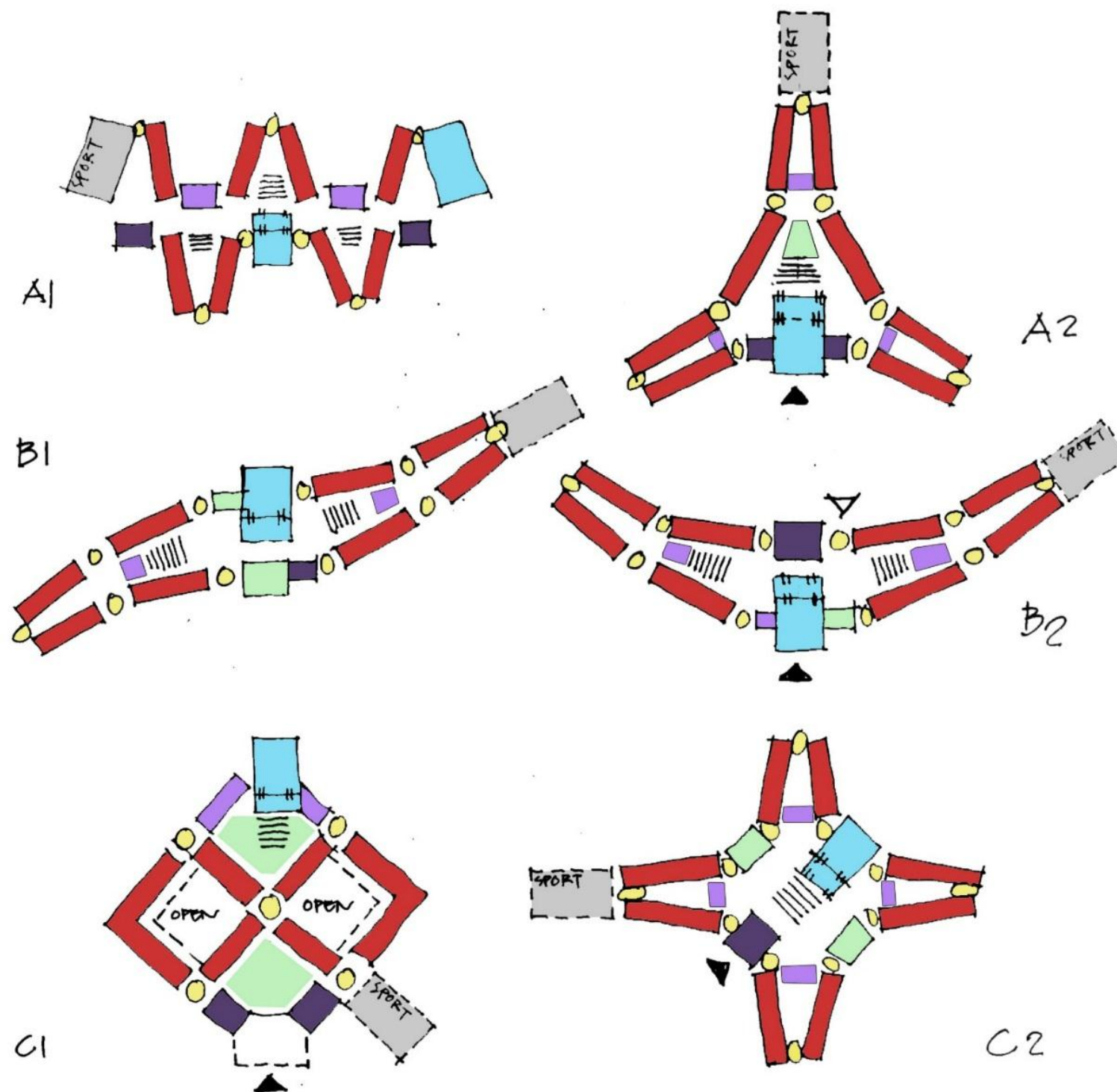
Standard science labs



A standard kit of parts

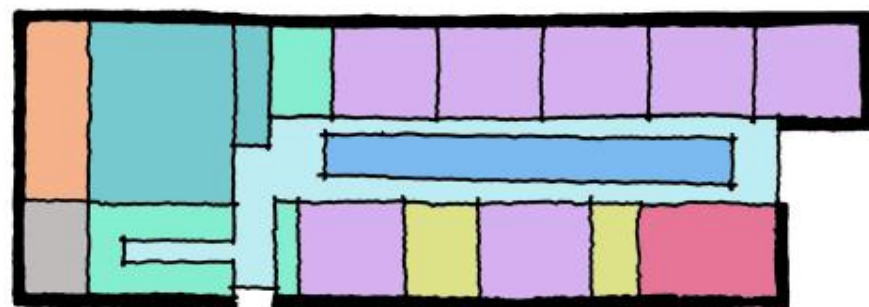


Flexibility

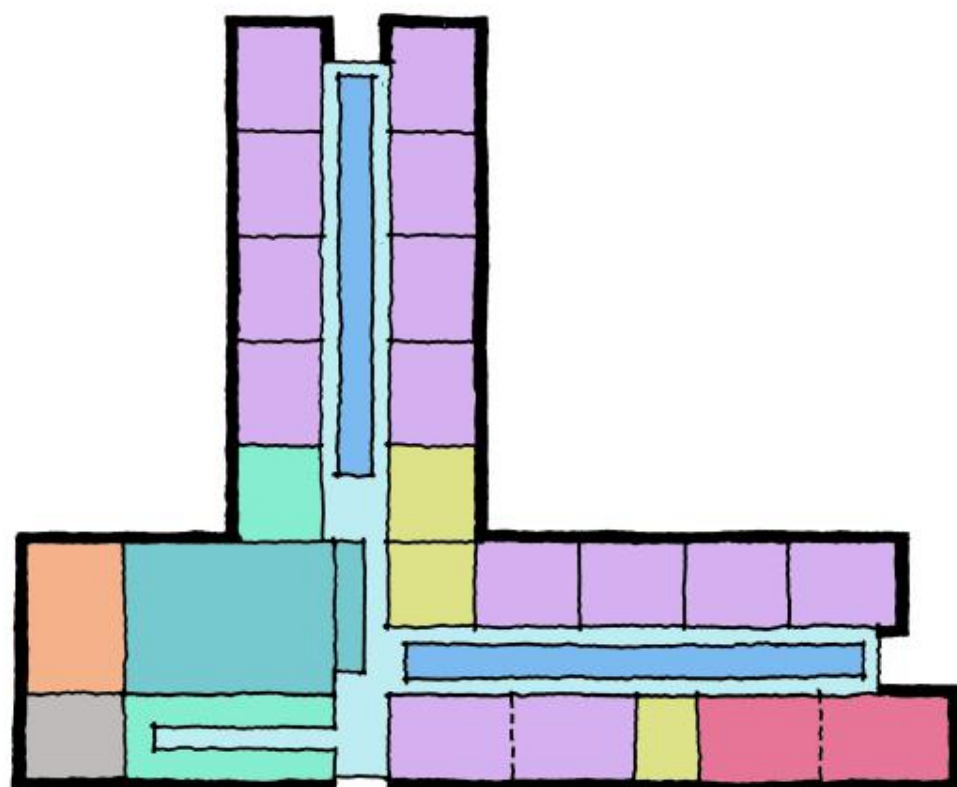


Flexible
Adaptable
Responsive
Versatile

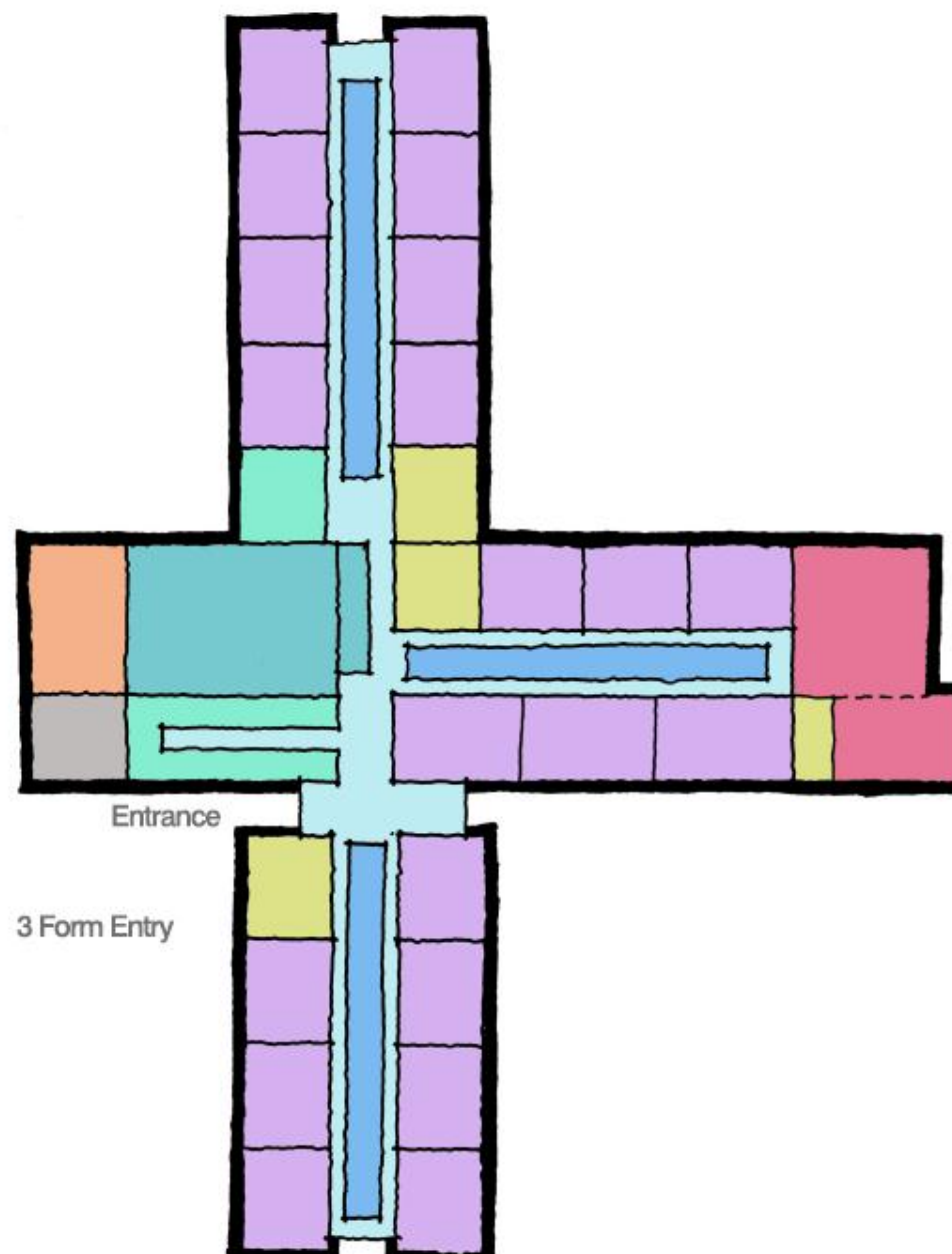
A standard kit of parts



1 Form Entry
Entrance



2 Form Entry
Entrance



Entrance
3 Form Entry

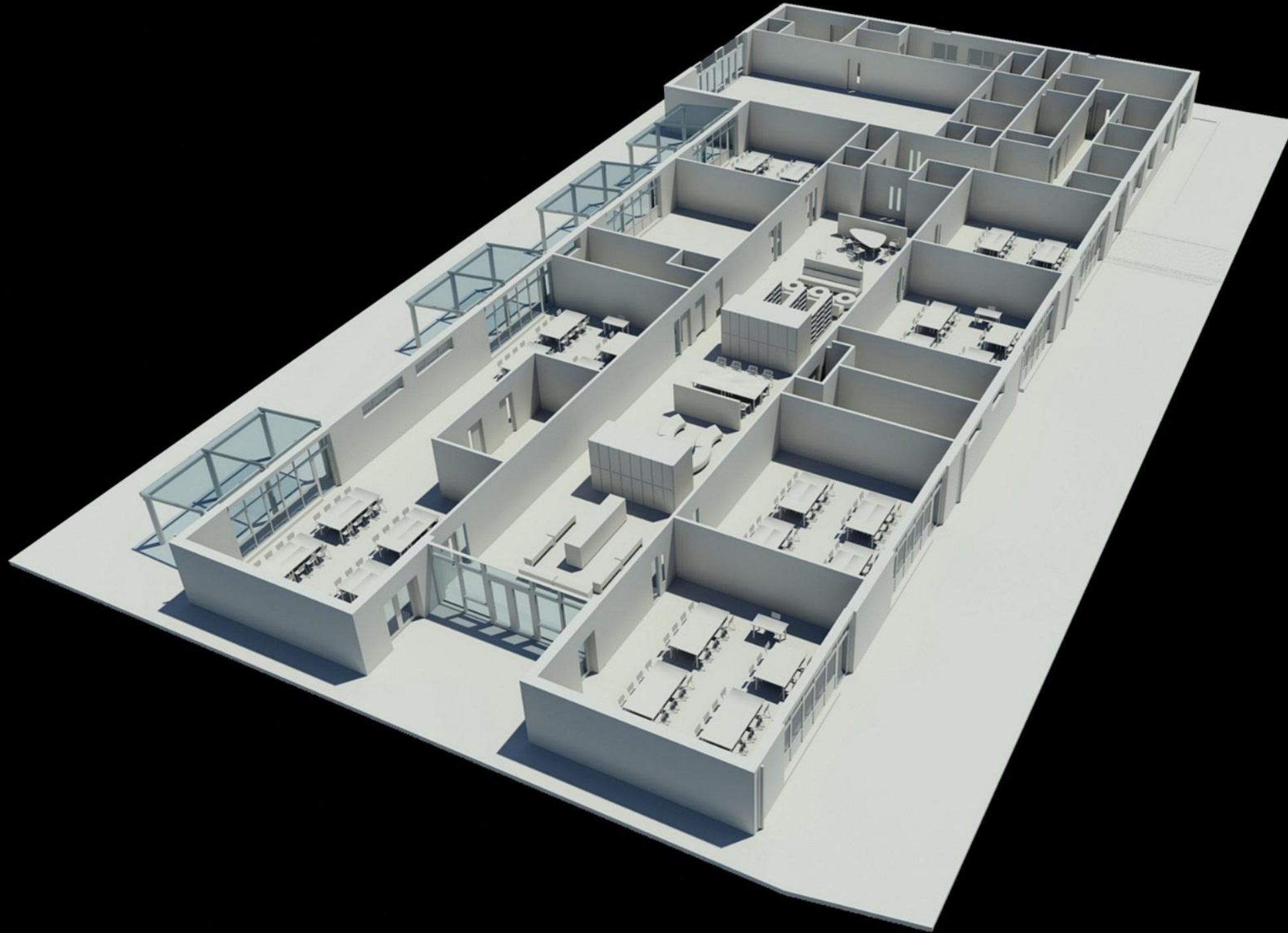
- Basic teaching
- Nursery
- Circulation
- Specialist / practical
- Staff / admin
- Hall
- Kitchen
- Plant
- WCs

Model Primary School
Floor Plan Options



YG Nant Talwg
Vale of Glamorgan

Agilis model school

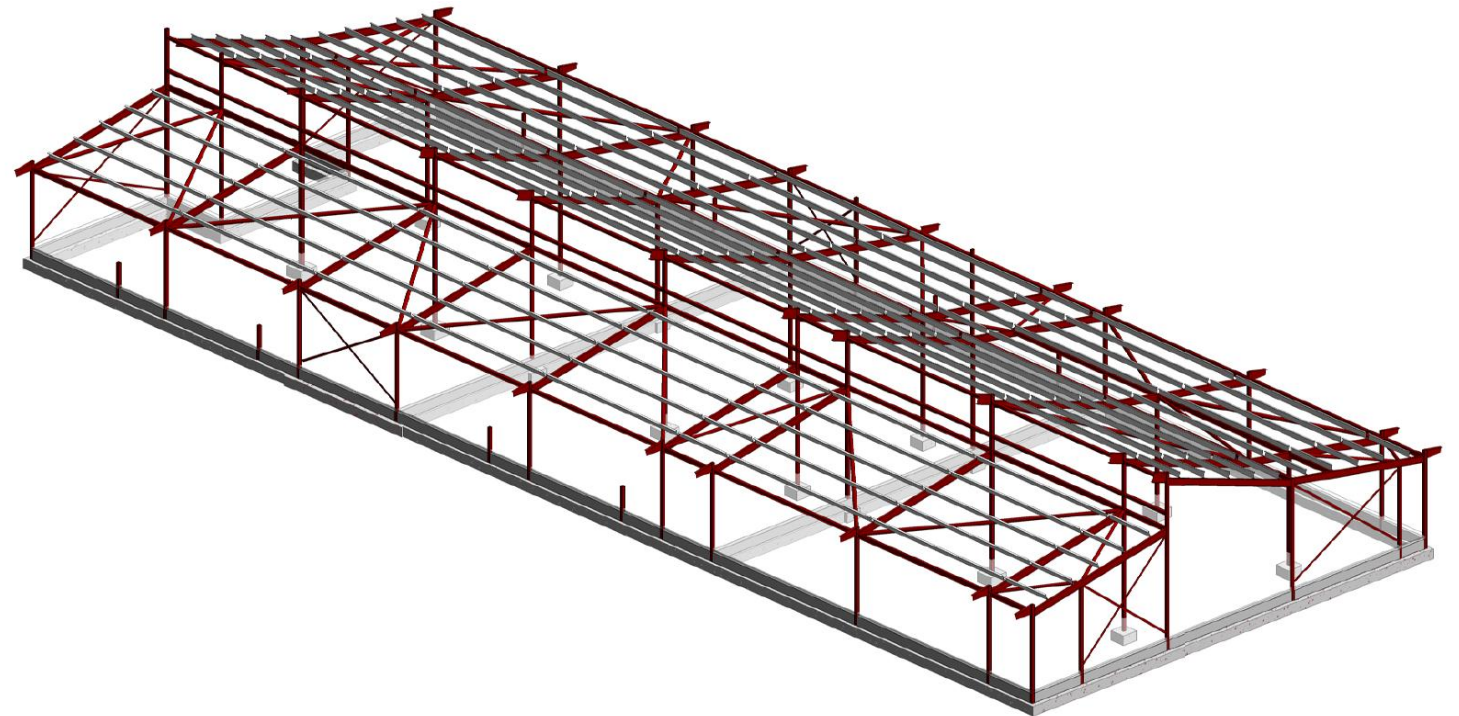
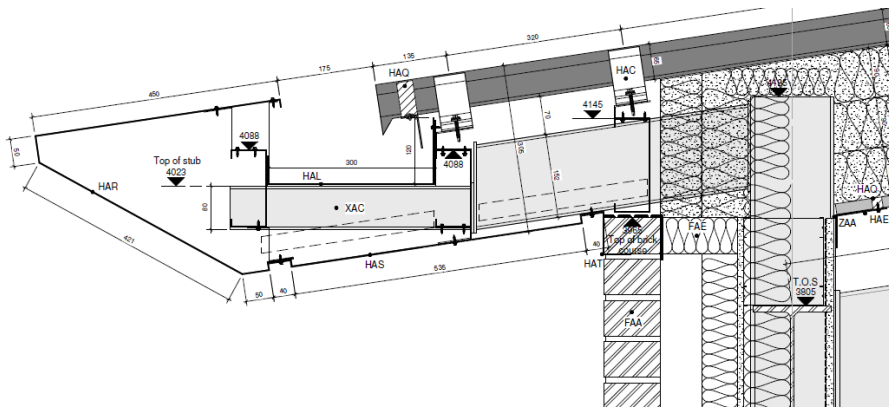


Building Information Models (BIM)

Component
solutions



Whole building
solutions



Quality

Fit for purpose

Robust

Long life

Low maintenance

Low running costs

Regulatory compliance

Building Regulations

Building Bulletins

BREEAM

Secured by Design

Design Features

Signature design

Visual impact

Uniqueness

High end materials

Personalised

Contextual

Build Quality



Falling Water

Pennsylvania, USA
Frank Lloyd Wright



Barrat Home

Questions

21st Century Schools Project

Workshop 1

What is Value for Money?

Ed Evans

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Purpose of the Project

To improve the design, procurement and delivery of the C21st Schools Programme and maximise long and short term **value for money** during the life of Band A of the programme and in readiness for Band B.

What is **Value for Money**?

Value for Money

“What is value”

Vs

“What things are valuable”

In the context of the 21st Century Schools Programme we need a common understanding of what things are valuable to us and their relative importance.

Value for Money

“What’s valuable to me may not be valuable to you”

Who is interested in value?

- Funders
- Stakeholders
- End users
- Delivery bodies
- Operators/maintainers

Value for Money Workshop 1

Consider what's important/valuable

- As many issues as you want
- Draw together into no more than 6-7 categories/themes
- Assign relative importance to each (%age)
 - Must add up to 100%
- Consensus ideal but not essential – record differences
- 20 minutes – stay on your tables

21st Century Schools Project

Workshop 2

Does the current way we design and procure schools deliver Value for Money?

Ed Evans

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Effectiveness of current approach

Workshop 2

Consider :

- The way we currently design/procure schools
- The strengths/weaknesses of current approaches
- What can the private sector do to improve delivery?
- Consensus ideal but not essential – record differences
- 20 minutes – stay on your tables

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Feedback from Public Sector Forum

The client's view?

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Feedback from Public Sector Forum

The client's view?

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DEFINING VALUE FOR MONEY

THE GUIDING PRINCIPLES

Educational Outcomes

1. Educational attainment
2. Attendance
3. User satisfaction

The impacts on educational attainment, attendance and experiences of pupils and teachers

Cost

1. Initial capital cost
2. Whole life cost
3. Income

Initial capital cost, costs over the whole life of an asset and the income that an asset can generate

Certainty

1. Time
2. Cost
3. Quality

Certainty of delivery in terms of the cost of the asset, the time to deliver it and its quality

DEFINING VALUE FOR MONEY

THE GUIDING PRINCIPLES

Specification

- | | |
|---------------------------|---|
| 1. Size | The size of the asset, its flexibility of use and the quality of the learning environment |
| 2. Flexibility | |
| 3. Quality of environment | |

Sustainability

- | | |
|-----------------------------------|--|
| 1. Energy efficiency | The long term energy performance of the asset, its adaptability to climate change and its overall carbon footprint |
| 2. Adaptability to climate change | |
| 3. Carbon footprint | |

Social Value

- | | |
|-----------------------|---|
| 1. Community benefits | The benefits to the community during construction of the asset and the longer term benefits of community use and local regeneration |
| 2. Community use | |
| 3. Local regeneration | |

Summing Up and Next Steps

Questions?