Technology Enhanced Teaching and Learning (online and face-to-face)

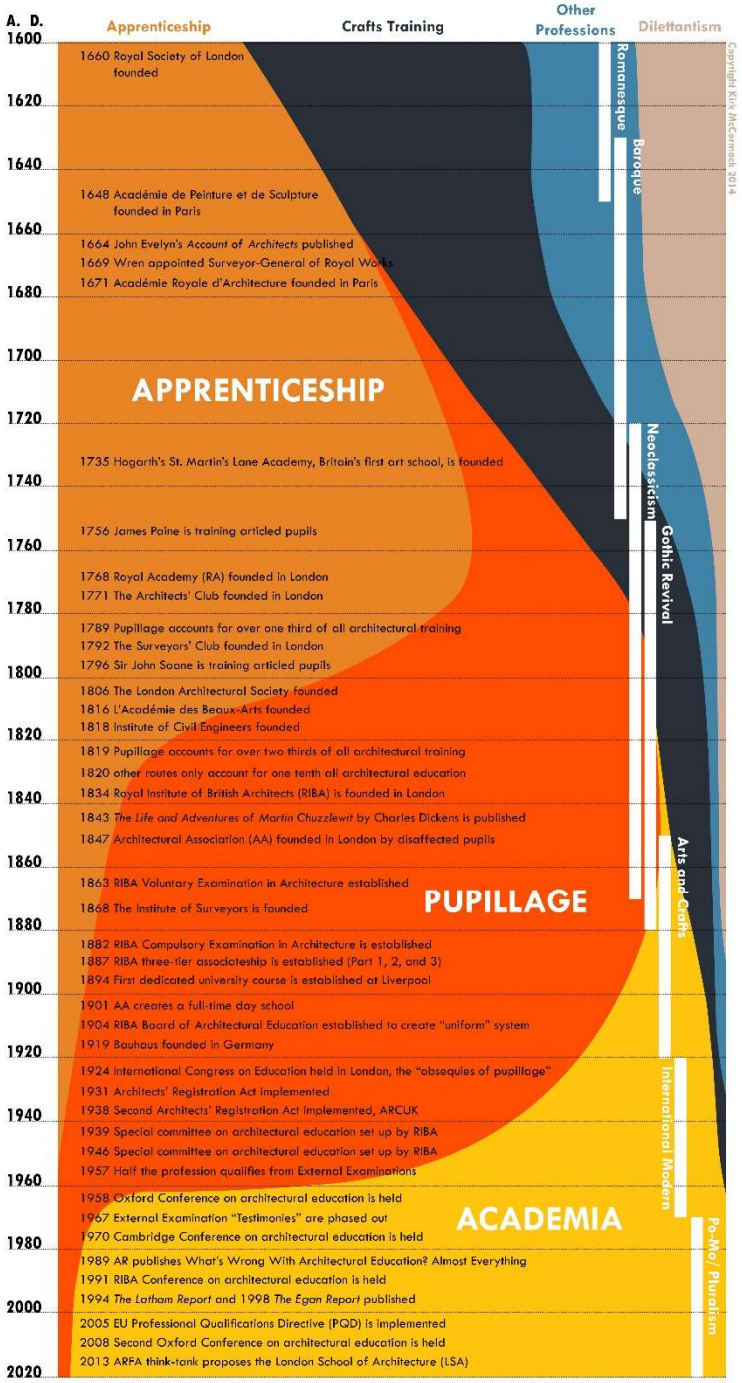
Avoiding Pecksniffian Pupillage...

Kirk McCormack
Programme Chair of BSc (Hons) Architectural Technology
TU Dublin

The HISTOMAP

FOUR HUNDRED YEARS OF ARCHITECTURAL EDUCATION

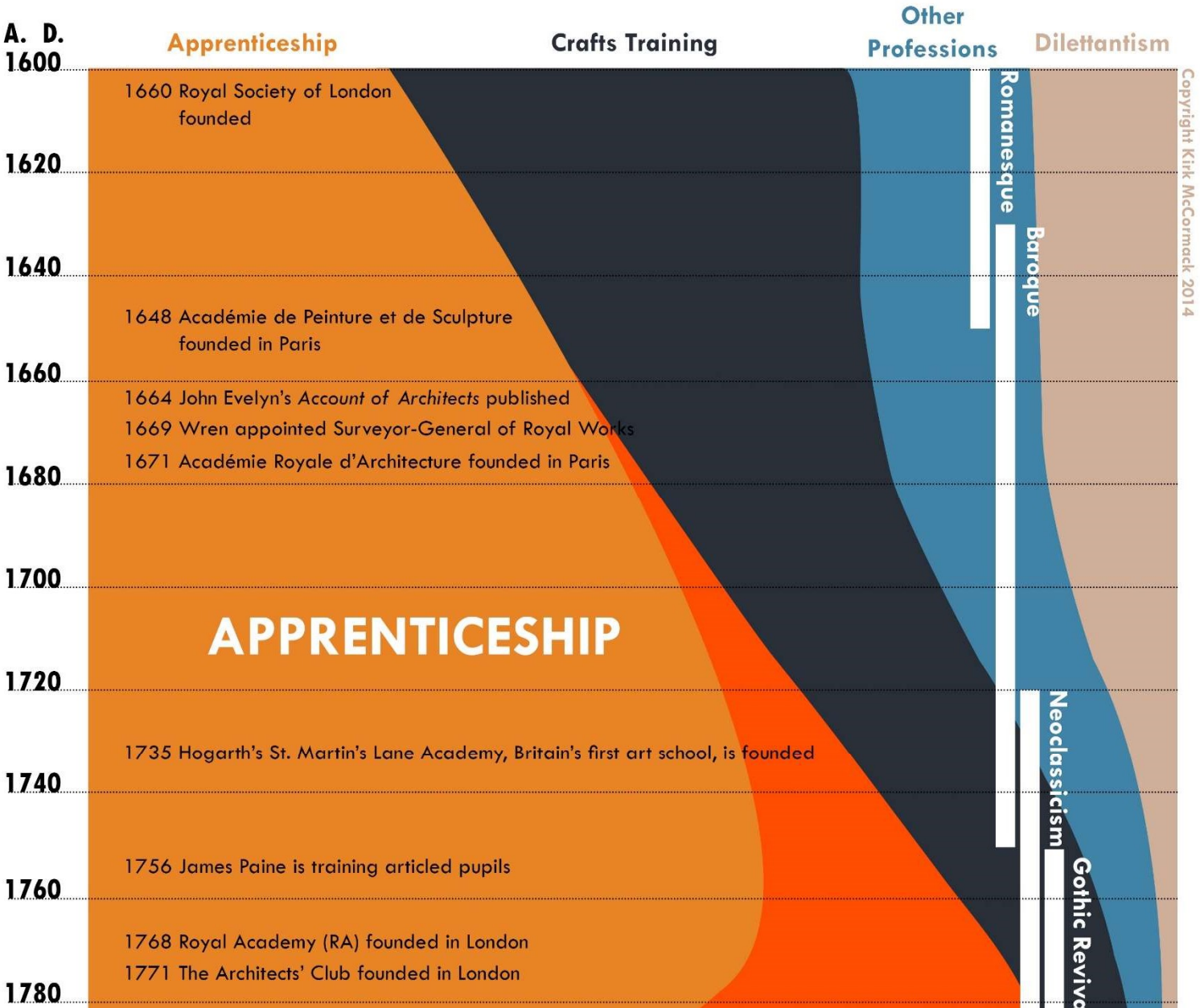
RELATIVE POWER OF ROUTES TO QUALIFICATION AS AN ARCHITECT THROUGH TIME

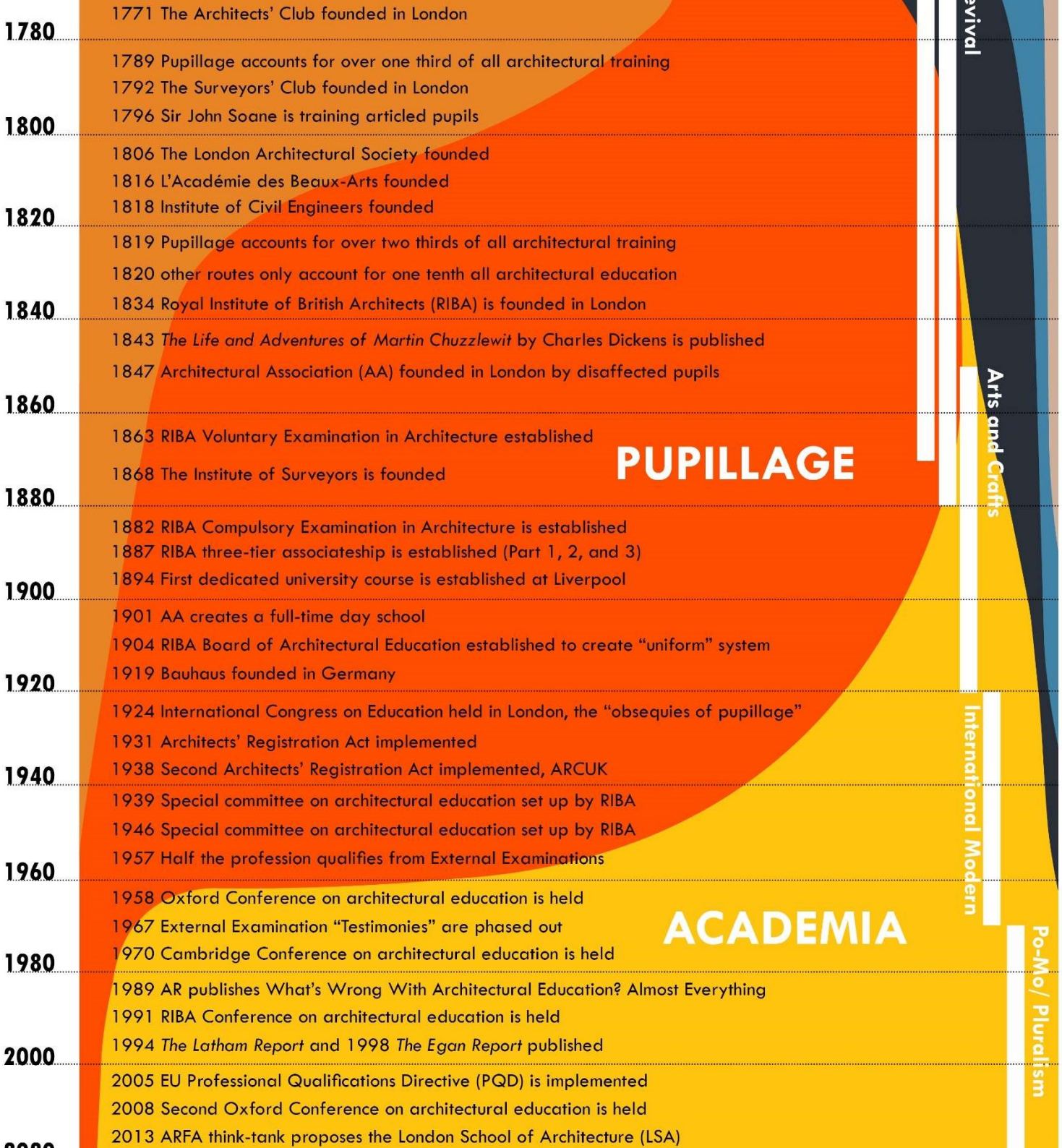


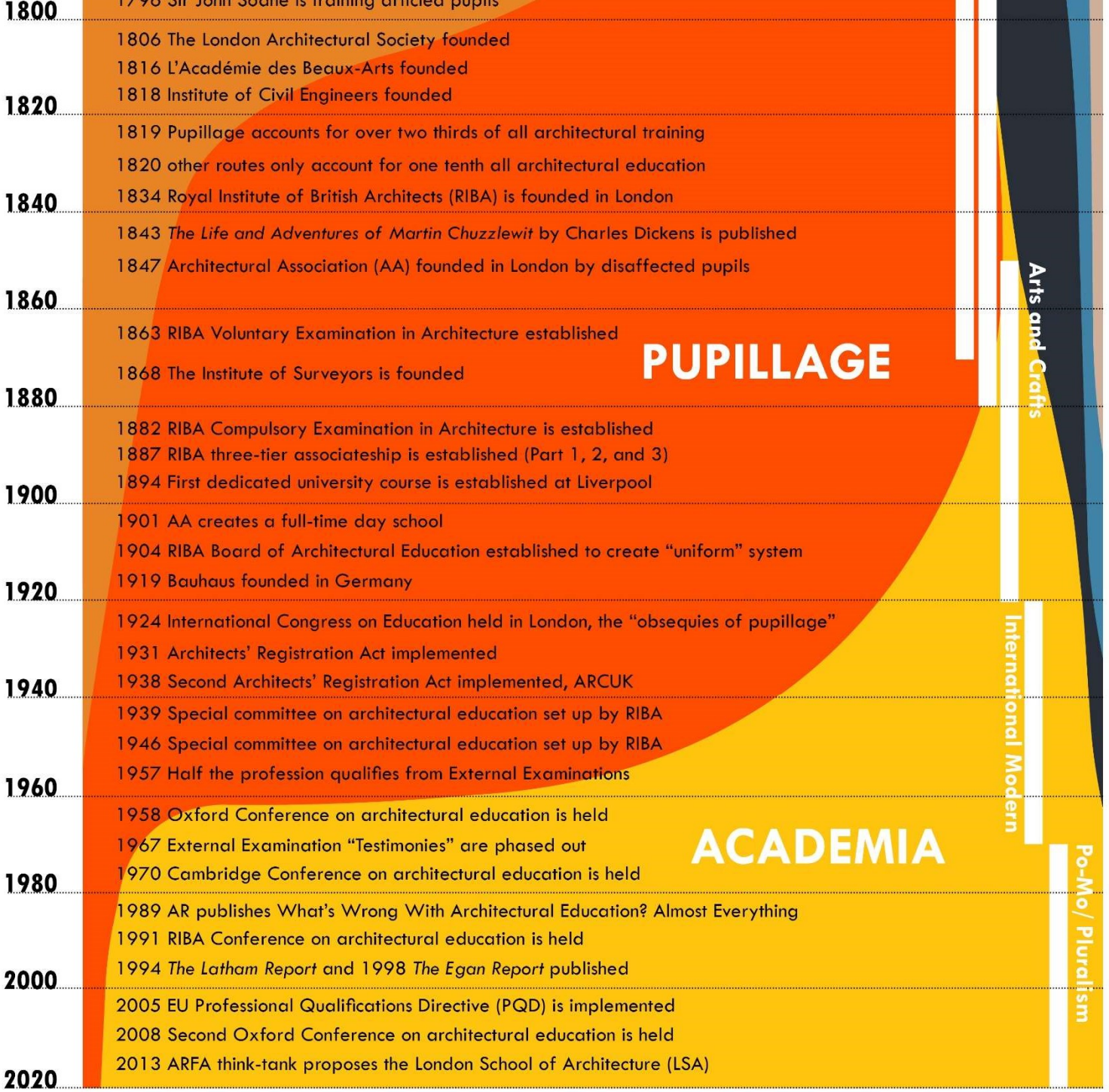
The HISTOMAP

FOUR HUNDRED YEARS OF ARCHITECTURAL EDUCATION

RELATIVE POWER OF ROUTES TO QUALIFICATION AS AN ARCHITECT THROUGH TIME



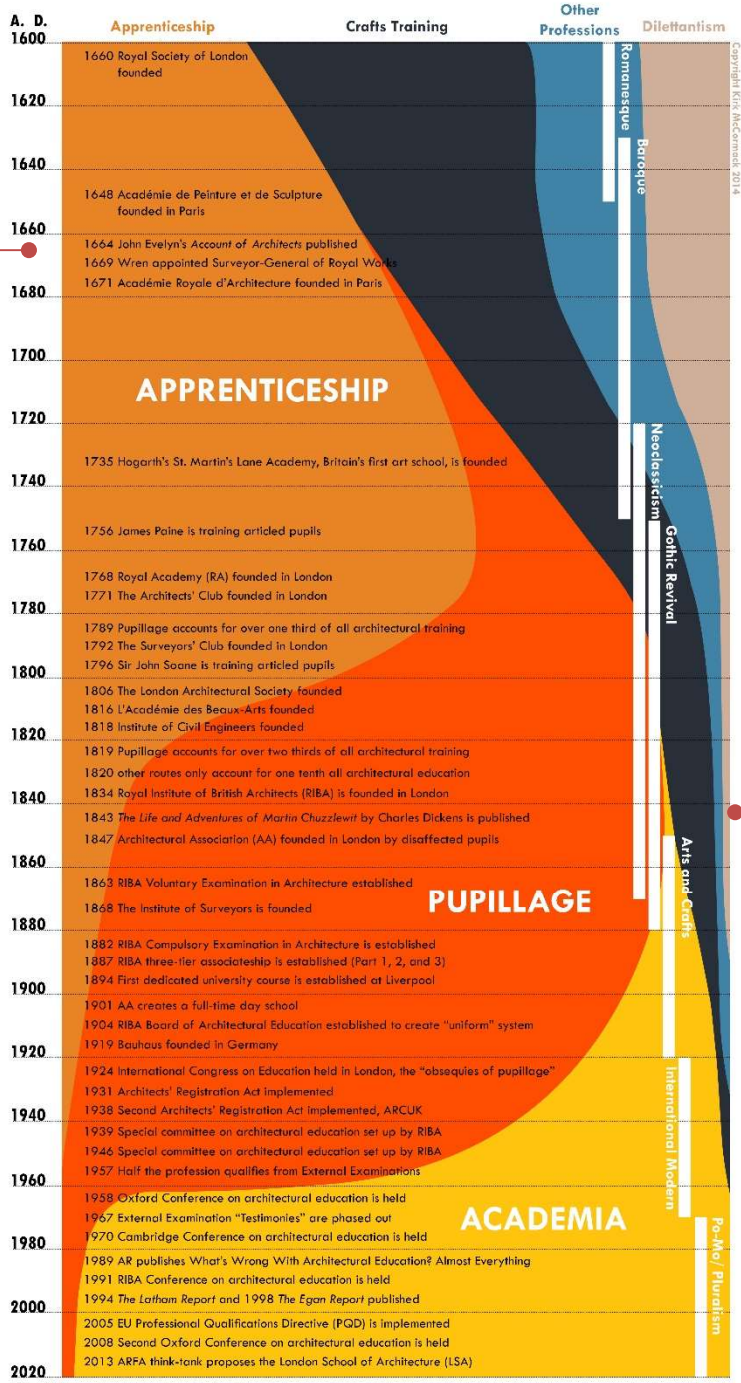

1780
1771 The Architects' Club founded in London
1789 Pupillage accounts for over one third of all architectural training
1792 The Surveyors' Club founded in London
1800
1796 Sir John Soane is training articled pupils
1806 The London Architectural Society founded
1816 L'Académie des Beaux-Arts founded
1820
1818 Institute of Civil Engineers founded
1819 Pupillage accounts for over two thirds of all architectural training
1820 other routes only account for one tenth all architectural education
1840
1834 Royal Institute of British Architects (RIBA) is founded in London
1843 The Life and Adventures of Martin Chuzzlewit by Charles Dickens is published
1847 Architectural Association (AA) founded in London by disaffected pupils
1860
1863 RIBA Voluntary Examination in Architecture established
1868 The Institute of Surveyors is founded
PUPILLAGE
1880
1882 RIBA Compulsory Examination in Architecture is established
1887 RIBA three-tier associateship is established (Part 1, 2, and 3)
1894 First dedicated university course is established at Liverpool
1900
1901 AA creates a full-time day school
1904 RIBA Board of Architectural Education established to create "uniform" system
1919 Bauhaus founded in Germany
1920
1924 International Congress on Education held in London, the "obsequies of pupillage"
1931 Architects' Registration Act implemented
1938 Second Architects' Registration Act implemented, ARCUK
1940
1939 Special committee on architectural education set up by RIBA
1946 Special committee on architectural education set up by RIBA
1957 Half the profession qualifies from External Examinations
1960
1958 Oxford Conference on architectural education is held
1967 External Examination "Testimonies" are phased out
1970 Cambridge Conference on architectural education is held
ACADEMIA
1980
1989 AR publishes What's Wrong With Architectural Education? Almost Everything
1991 RIBA Conference on architectural education is held
1994 The Latham Report and 1998 The Egan Report published
2000
2005 EU Professional Qualifications Directive (PQD) is implemented
2008 Second Oxford Conference on architectural education is held
2013 ARFA think-tank proposes the London School of Architecture (LSA)
Arts and Crafts
International Modern
Po-Mo/ Pluralism


1800
1796 Sir John Soane is training articled pupils
1806 The London Architectural Society founded
1816 L'Académie des Beaux-Arts founded
1818 Institute of Civil Engineers founded
1820
1819 Pupillage accounts for over two thirds of all architectural training
1820 other routes only account for one tenth all architectural education
1834 Royal Institute of British Architects (RIBA) is founded in London
1840
1843 The Life and Adventures of Martin Chuzzlewit by Charles Dickens is published
1847 Architectural Association (AA) founded in London by disaffected pupils
1860
1863 RIBA Voluntary Examination in Architecture established
1868 The Institute of Surveyors is founded
PUPILLAGE
1880
1882 RIBA Compulsory Examination in Architecture is established
1887 RIBA three-tier associateship is established (Part 1, 2, and 3)
1894 First dedicated university course is established at Liverpool
1900
1901 AA creates a full-time day school
1904 RIBA Board of Architectural Education established to create "uniform" system
1919 Bauhaus founded in Germany
1920
1924 International Congress on Education held in London, the "obsequies of pupillage"
1931 Architects' Registration Act implemented
1938 Second Architects' Registration Act implemented, ARCUK
1940
1939 Special committee on architectural education set up by RIBA
1946 Special committee on architectural education set up by RIBA
1957 Half the profession qualifies from External Examinations
1960
1958 Oxford Conference on architectural education is held
1967 External Examination "Testimonies" are phased out
1970 Cambridge Conference on architectural education is held
ACADEMIA
1980
1989 AR publishes What's Wrong With Architectural Education? Almost Everything
1991 RIBA Conference on architectural education is held
1994 The Latham Report and 1998 The Egan Report published
2000
2005 EU Professional Qualifications Directive (PQD) is implemented
2008 Second Oxford Conference on architectural education is held
2013 ARFA think-tank proposes the London School of Architecture (LSA)
2020
Arts and Crafts
International Modern
Po-Mo/ Pluralism

The HISTOMAP

FOUR HUNDRED YEARS OF ARCHITECTURAL EDUCATION

RELATIVE POWER OF ROUTES TO QUALIFICATION AS AN ARCHITECT THROUGH TIME



1664
John Evelyn's "Account"

But how much did it cost to "train" as an architect?

1842
Whittock's "Parents Guide"

A TABLE

OF

TRADES, PROFESSIONS, AND CALLINGS,

SHEWING THE

APPRENTICE FEES USUALLY GIVEN (WHEN ANY),

AND THE

SUMS REQUISITE FOR COMMENCING BUSINESS IN EACH:

WITH REFERENCES TO THE PLACES WHERE ANY OF THESE ARE MENTIONED IN THE PRECEDING PAGES.

TRADE, PROFESSION, OR CALLING.	Pages where Mentioned.	Apprentice Fee.		Capital Required.	
		£	£	£	£
Academy or Seminary		25	to 100	250	to 500
Accountant and Arbitrator		50	to 100	200	to 300
Accoutrement and Belt-maker	283				
Agriculturist	1	100	to 200	500	to 2,000
Agent: viz. (*See* also, Broker, Factor, Salesman).					
——— 1. Army		100	to 200	1,000	to 3,000
——— 2. General		20	to 50	100	to 500
——— 3. Navy		-	-	100	to 250
——— 4. Irish Linen		50	to 100	250	to 1,000
——— 5. Shipping and Custom House		20	to 50	150	to 300
Anchor Smith	407				
Appraiser, Furniture-broker, and House-agent	8, (459)	10	to 30	100	to 300
Apothecary	5, (131)	100	to 500	250	to 500
Architect, or Surveyor (which *see*)	10, (323), (416)	150	to 500	500	to 1,000
Artist	15, (362)	100	to 250		
Ass-skin Pocket-book-maker.					
Attorney at Law [with stamp duty]	12	250	to 350	500	to 1,000
Author and Editor		250	to 500	100	to 250
Armourer (*See* Brazier).					
Auctioneer	8	50	to 150	500	to 1,000
Aurist (and *see* Surgeon)	15				
Backgammon Table-maker (*See* Chess-board).					
Back-maker	16, (161)	10	to 25	150	to 250
Bacon-dealer and Smoker (and *see* Factor)		5	to 10	100	to 250
Baker, Bread and Biscuit	16	10	to 25	200	to 500
———, Biscuit (fine), and Fancy Bread	18	15	to 30	100	to 200
———, Gingerbread	19	10	to 20	100	to 150
See Muffin, Cook, Confectioner.					
Barrister (and *see* Counsellor)		250	to 500	1,000	to 1,500
Band-box and Hat-box-maker		5		20	to 30
Banker	20, (280)	150	to 250	5,000	to 20,000
Barber, Hair-dresser and Cutter (and *see* Wig-maker)	24, (426)	5	to 20	25	to 100
Basket-maker	27	5	to 10	40	to 100
———, French and Dutch—and Turnery Warehouse		5	to 15	100	to 200
Bead, Feather, and Flower-manufacturer		15	to 50	100	to 250
Bedstead and Wooden Chair-maker	91	15	to 25	50	to 150
Bed, Mattress, and Palliasse-maker		20	to 30	200	to 500
Beef a-la-mode shop		-	-	80	to 150

£1,500 in 1850's money!

"The youth desirous of becoming an Architect should be liberally educated, and in addition to the Latin language, he should be master of French and Italian; have some knowledge of mathematics, geometry and drawing. The premium required with a pupil by a respectable master is from two to five hundred pounds: the youth will also require a considerable sum for the purchase of books, instruments and drawing materials. He must, during his apprenticeship, learn to make architectural drawings from admeasurement, also to sketch picturesque buildings, columns, etc., he must be careful in observing the proceedings of workmen in every branch of business connected with buildings."

But…

"When he is out of his pupilage… he should spend a few months in Italy, to study the remains of the ancient masters, and the works of masters of a more recent date."

"...it is almost impossible for a man in the middle walk of life to afford the money to enable a youth to work his way in this arduous pursuit. If he have not the advantage of a capital to live on till he succeeds in business, the pupil, after he is out of his time, obtains employment as a drawing clerk in an Architect's office: and, during his leisure hours, makes plans and drawings for small builders, or is employed to measure and value their work. Some, by this means, get into extensive business.

The precursor of the technologist?

£1,920,000 in today's money!

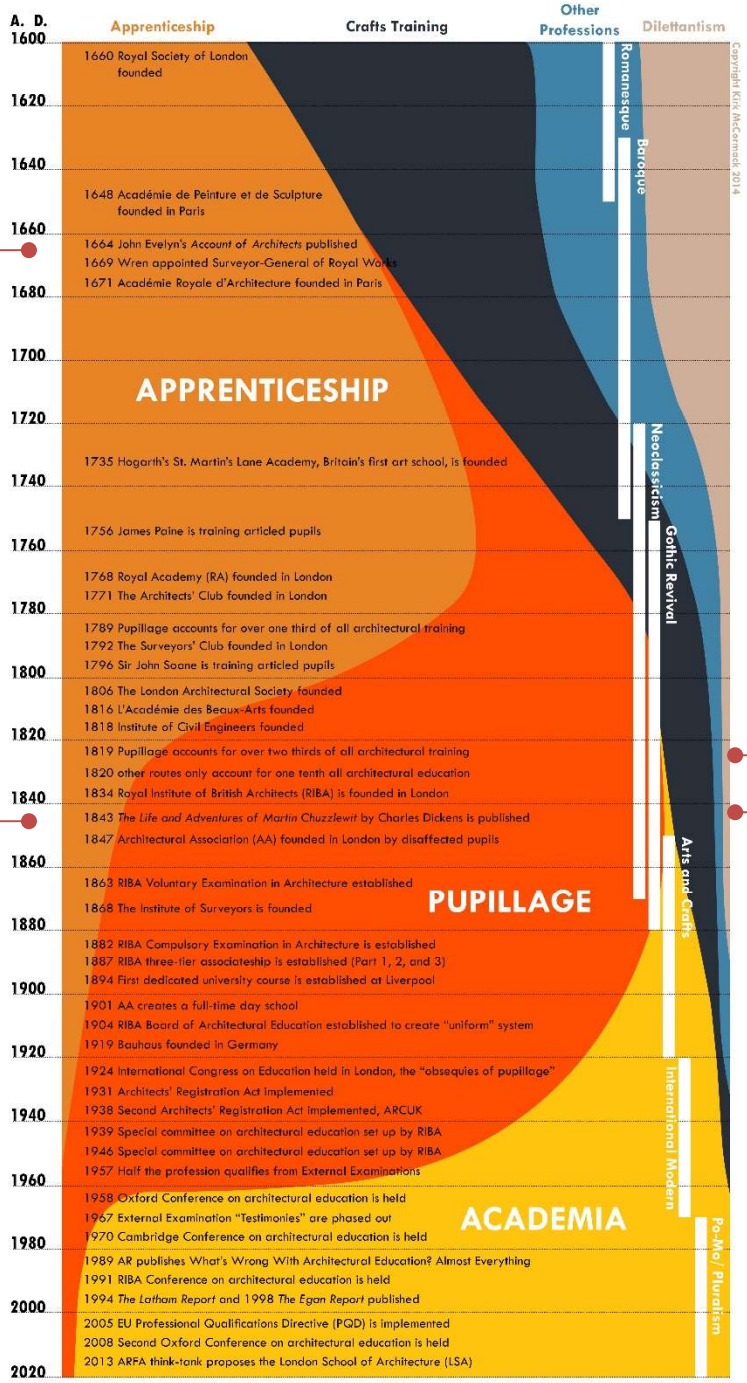
(see calculations below)

http://longform.ie/how-much-did-it-cost-to-train-as-an-architect-in-the-1800s/

The HISTOMAP

FOUR HUNDRED YEARS OF ARCHITECTURAL EDUCATION

RELATIVE POWER OF ROUTES TO QUALIFICATION AS AN ARCHITECT THROUGH TIME



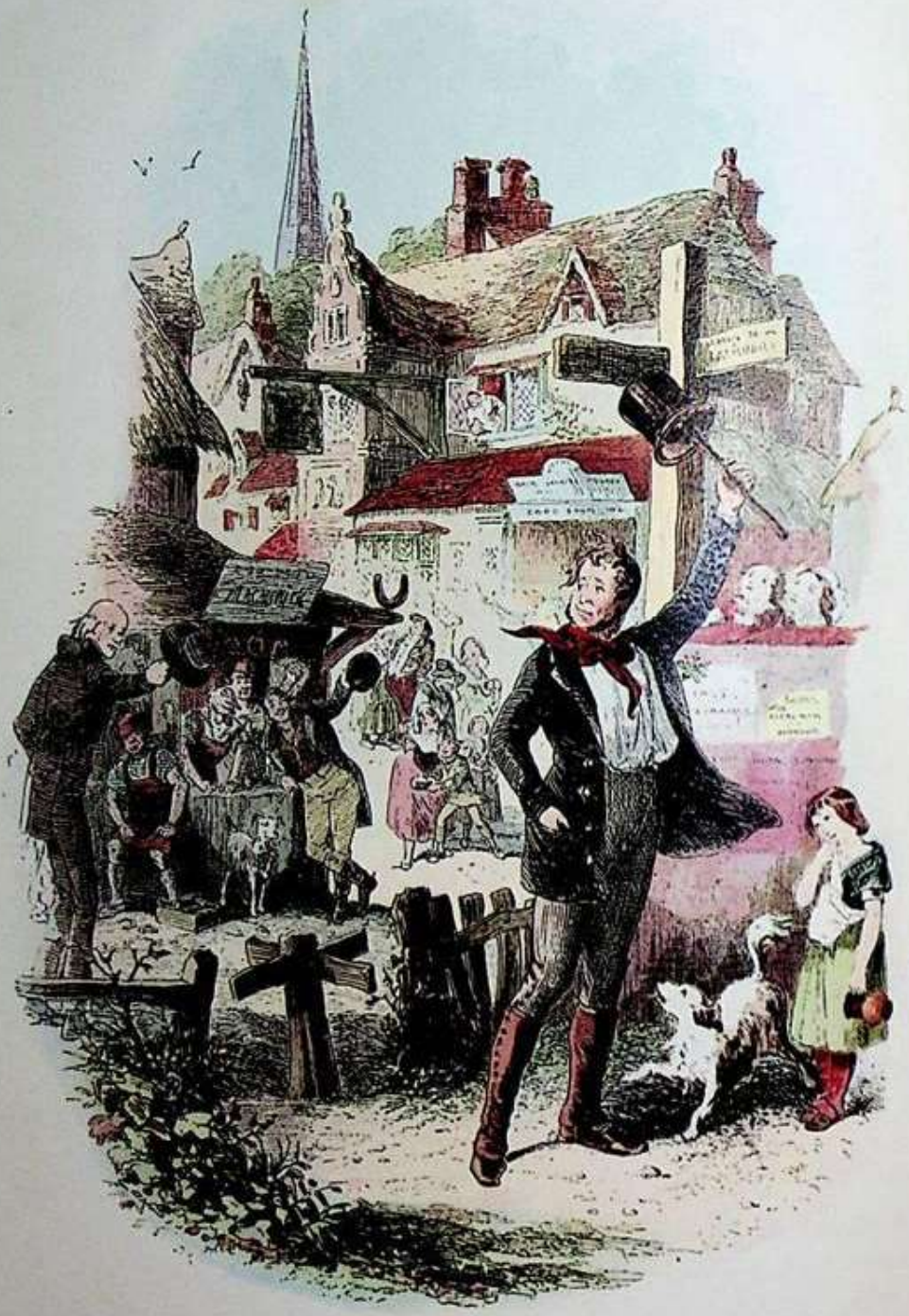
1664
John Evelyn's "Account"

But how much did it cost to "train" as an architect?

1843
Dickens' Martin Chuzzlewit

1819
Pupillage is 2/3 of all training.

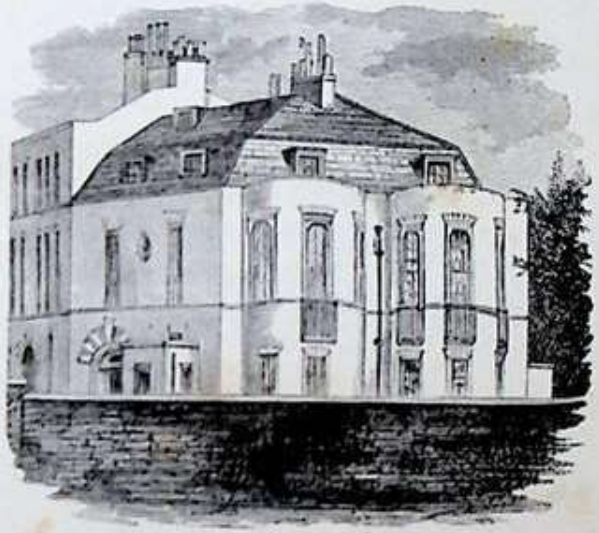
1842
Whittock's "Parents Guide"



MARK BEGINS TO BE JOLLY UNDER CREDITABLE CIRCUMSTANCES.

THE LIFE AND ADVENTURES OF MARTIN CHUZZLEWIT

By CHARLES DICKENS



DICKENS'S HOUSE IN DEVONSHIRE TERRACE

WITH ILLUSTRATIONS BY HABLOT K. BROWNE ("PHIZ")

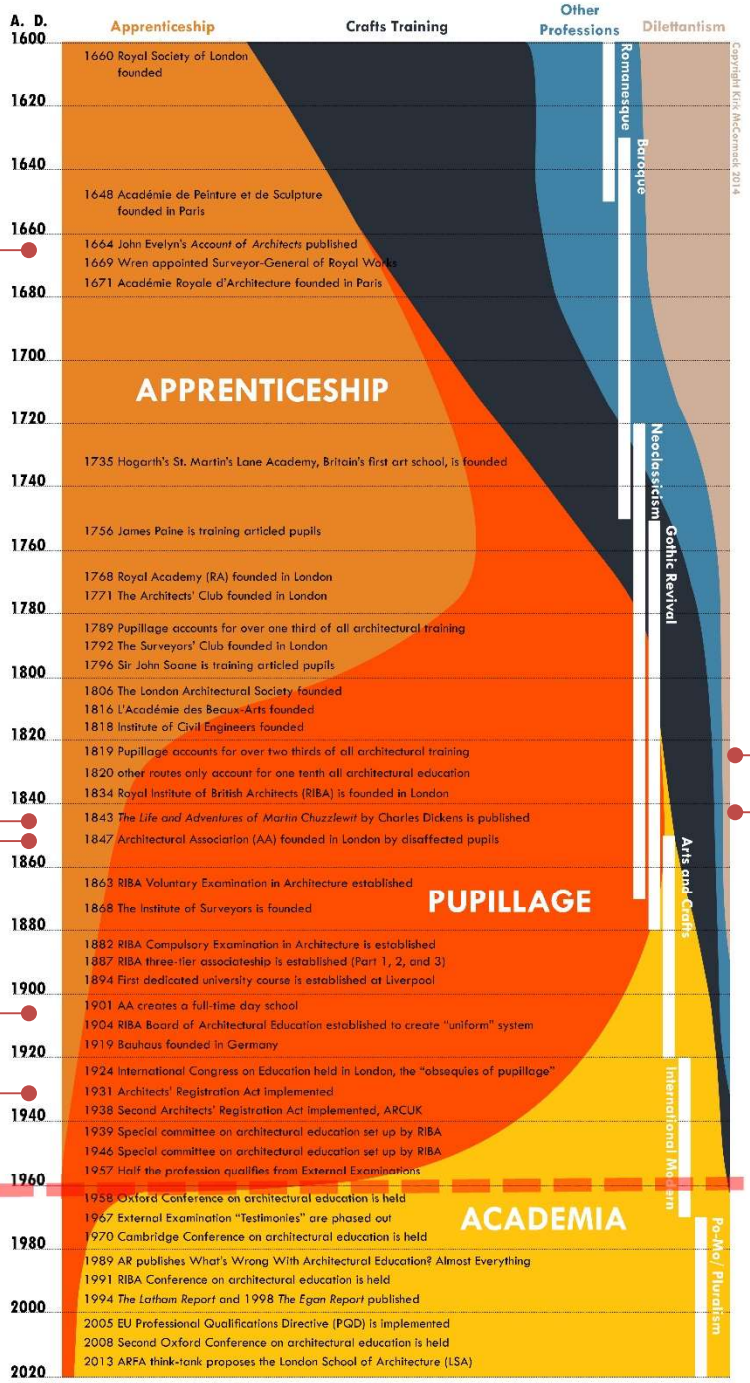
LONDON
THE CAXTON PUBLISHING CO.

"When your mind requires to be refreshed, by change of occupation," said Mr. Pecksniff, "Thomas Pinch will instruct you in the art of surveying the back garden,

The HISTOMAP

FOUR HUNDRED YEARS OF ARCHITECTURAL EDUCATION

RELATIVE POWER OF ROUTES TO QUALIFICATION AS AN ARCHITECT THROUGH TIME



1664
John Evelyn's "Account"

But how much did it cost to "train" as an architect?

1843
Dickens' Martin Chuzzlewit

1847
AA founded in protest

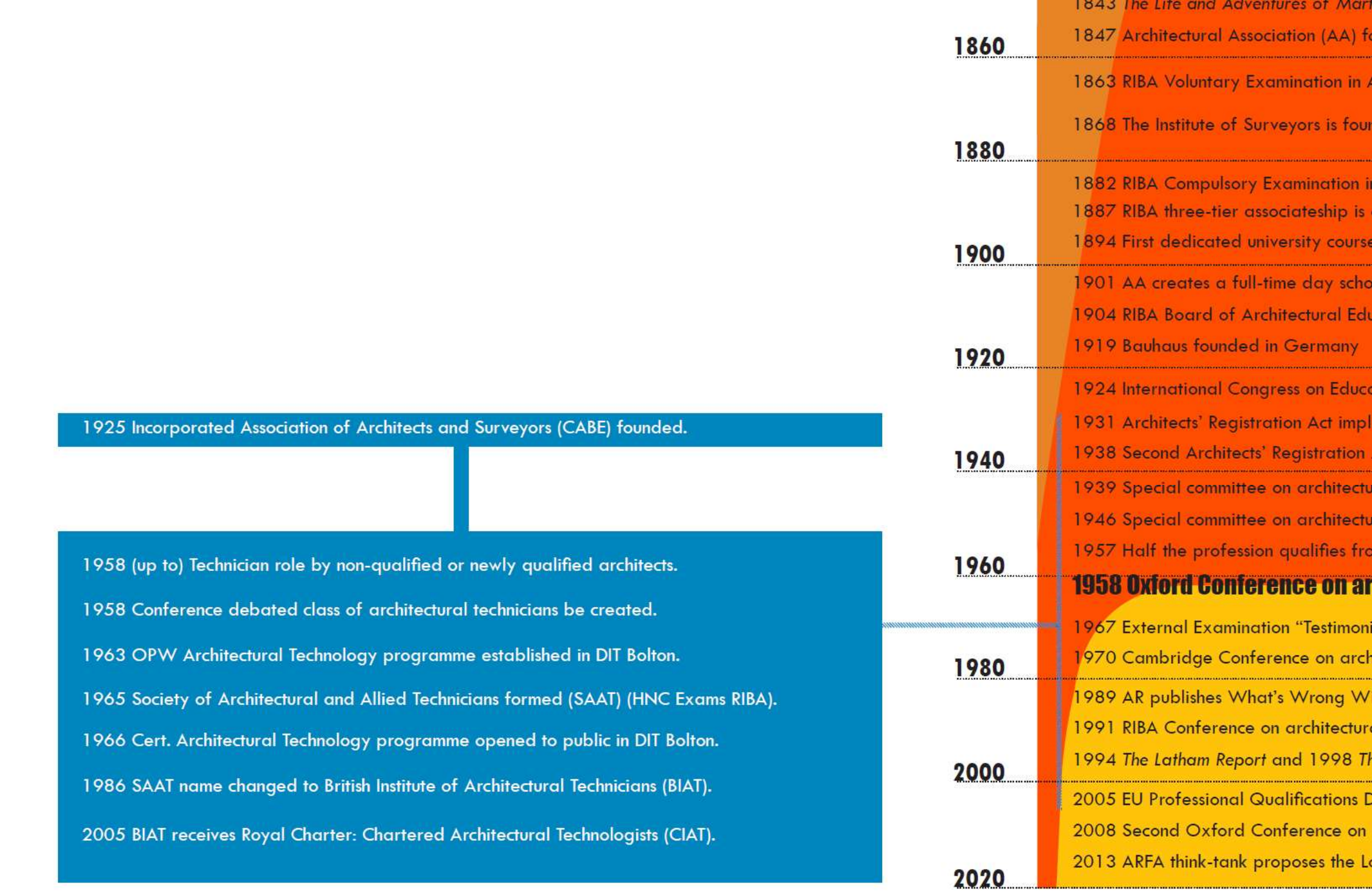
1904
"Uniform system"

1924
"Obsequies of Pupillage"

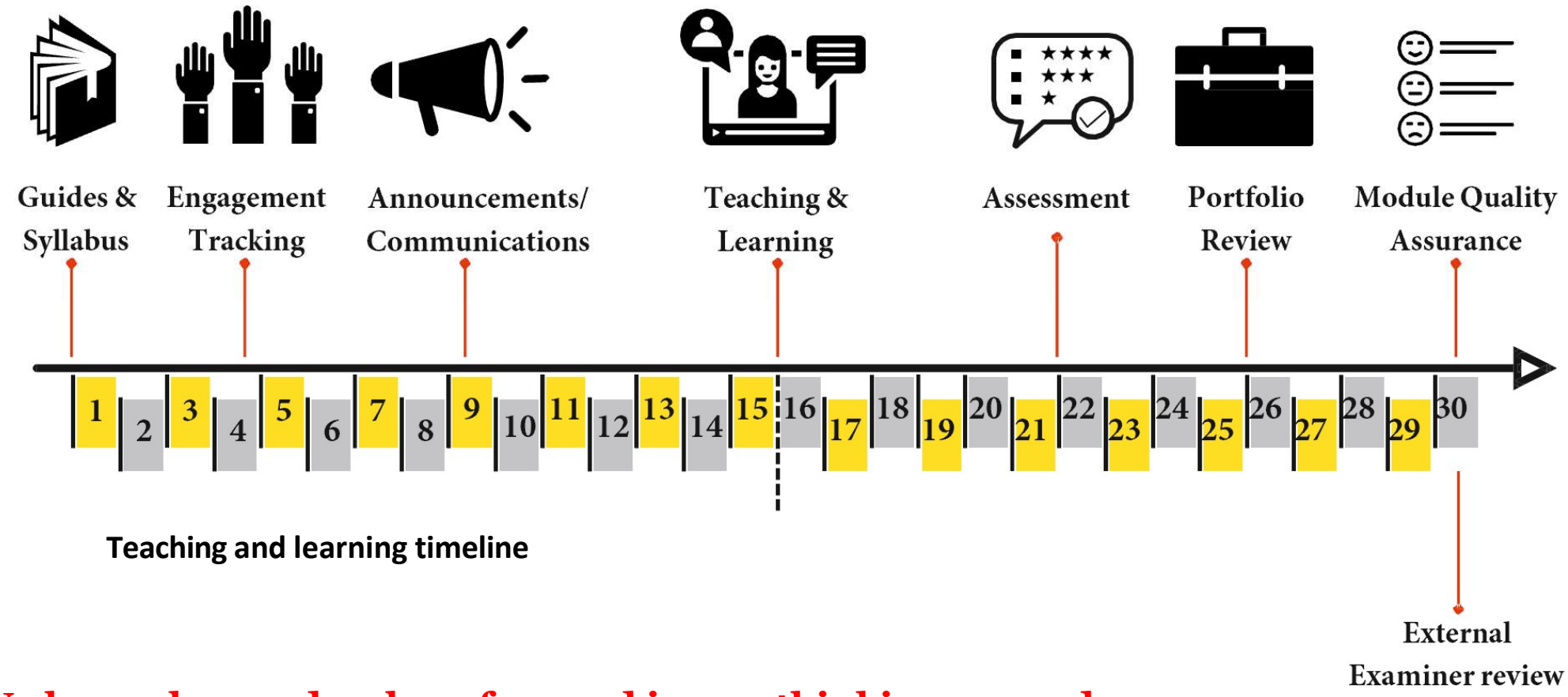
1819
Pupillage is 2/3 of all training

1842
Whittock's "Parents Guide"

RIBA phase out "external exams"


1843 The Life and Adventures of Mart
1847 Architectural Association (AA) fo
1860
1863 RIBA Voluntary Examination in A
1868 The Institute of Surveyors is four
1880
1882 RIBA Compulsory Examination i
1887 RIBA three-tier associateship is
1894 First dedicated university course
1900
1901 AA creates a full-time day scho
1904 RIBA Board of Architectural Edu
1919 Bauhaus founded in Germany
1920
1924 International Congress on Educa
1925 Incorporated Association of Architects and Surveyors (CABE) founded.
1931 Architects' Registration Act impl
1938 Second Architects' Registration
1940
1939 Special committee on architectu
1946 Special committee on architectu
1957 Half the profession qualifies fro
1960
1958 Oxford Conference on ar
1958 (up to) Technician role by non-qualified or newly qualified architects.
1958 Conference debated class of architectural technicians be created.
1963 OPW Architectural Technology programme established in DIT Bolton.
1965 Society of Architectural and Allied Technicians formed (SAAT) (HNC Exams RIBA).
1966 Cert. Architectural Technology programme opened to public in DIT Bolton.
1967 External Examination "Testimoni
1970 Cambridge Conference on arch
1980
1986 SAAT name changed to British Institute of Architectural Technicians (BIAT).
1989 AR publishes What's Wrong W
1991 RIBA Conference on architectur
1994 The Latham Report and 1998 Th
2000
2005 BIAT receives Royal Charter: Chartered Architectural Technologists (CIAT).
2005 EU Professional Qualifications D
2008 Second Oxford Conference on
2013 ARFA think-tank proposes the L
2020

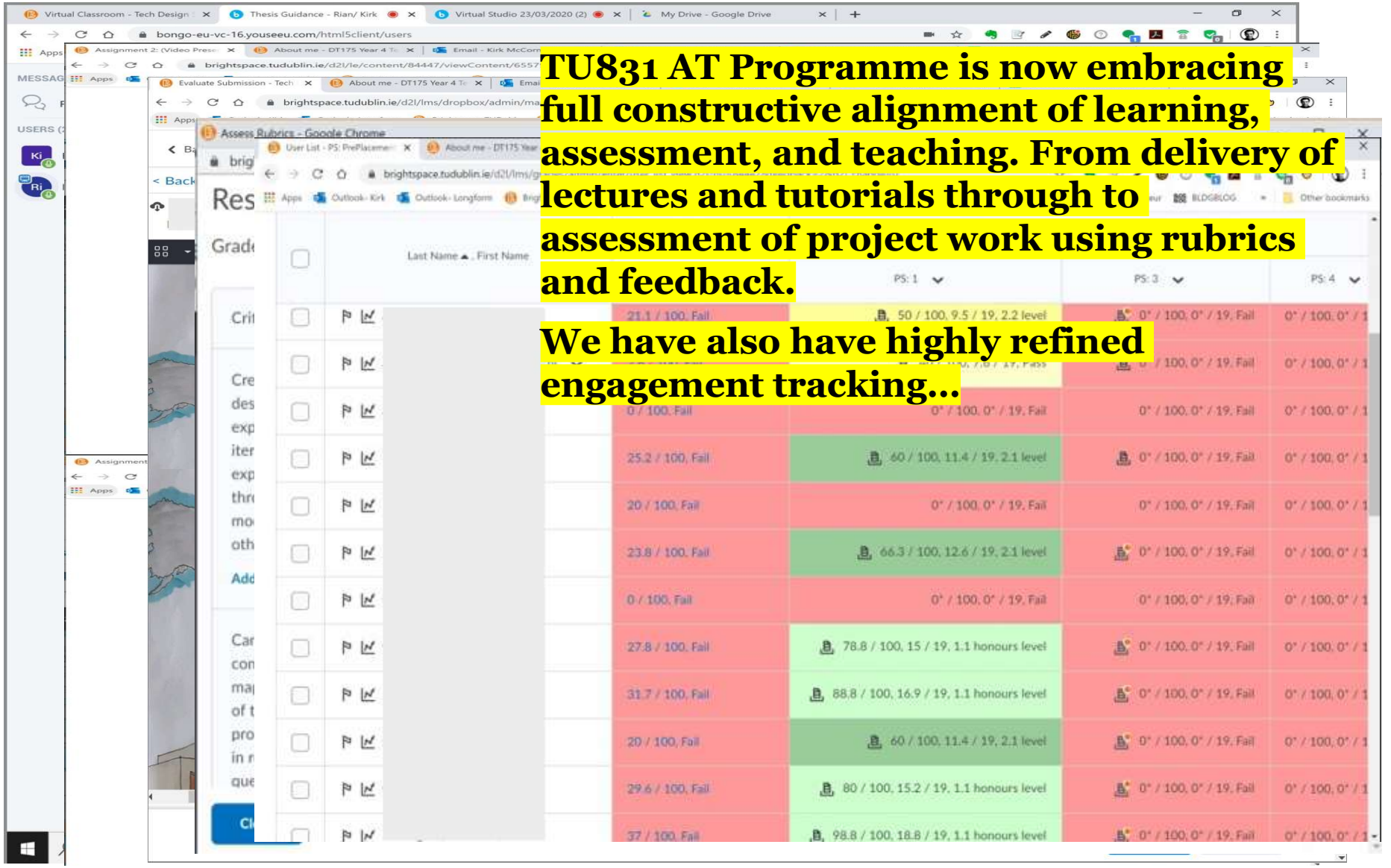
Significant progress has been made in the use of VLE's and remote teaching and learning approaches used on the Architectural Technology programme at TU Dublin.



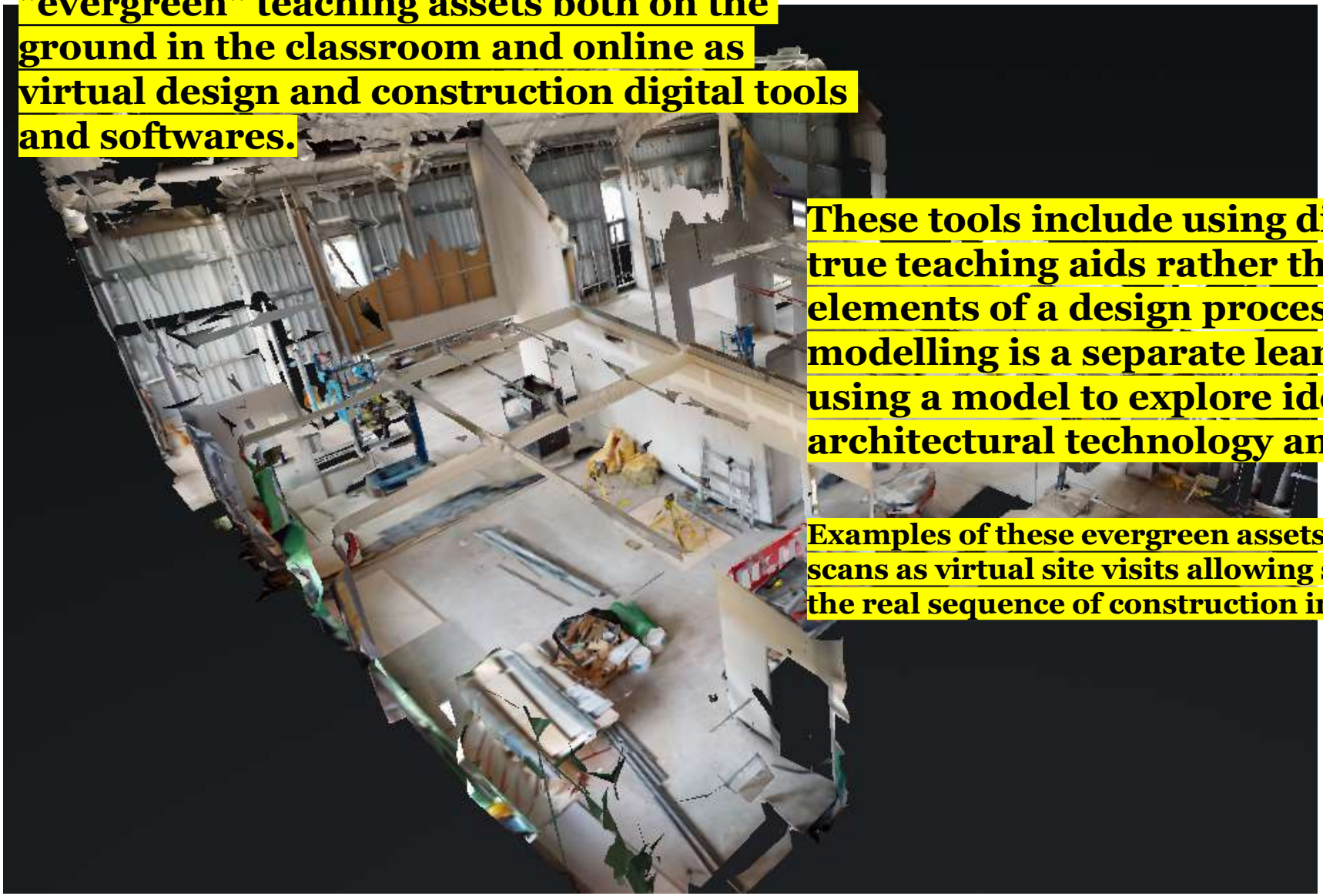
Teaching and learning timeline

We have also made a leap forward in our thinking around ideas of technology-enhanced teaching that will aid remote learning and alternative routes to qualification, like modern apprenticeships

Significant progress has been made in the use of VLE's and remote teaching and learning approaches used on the Architectural Technology programme at TU Dublin.



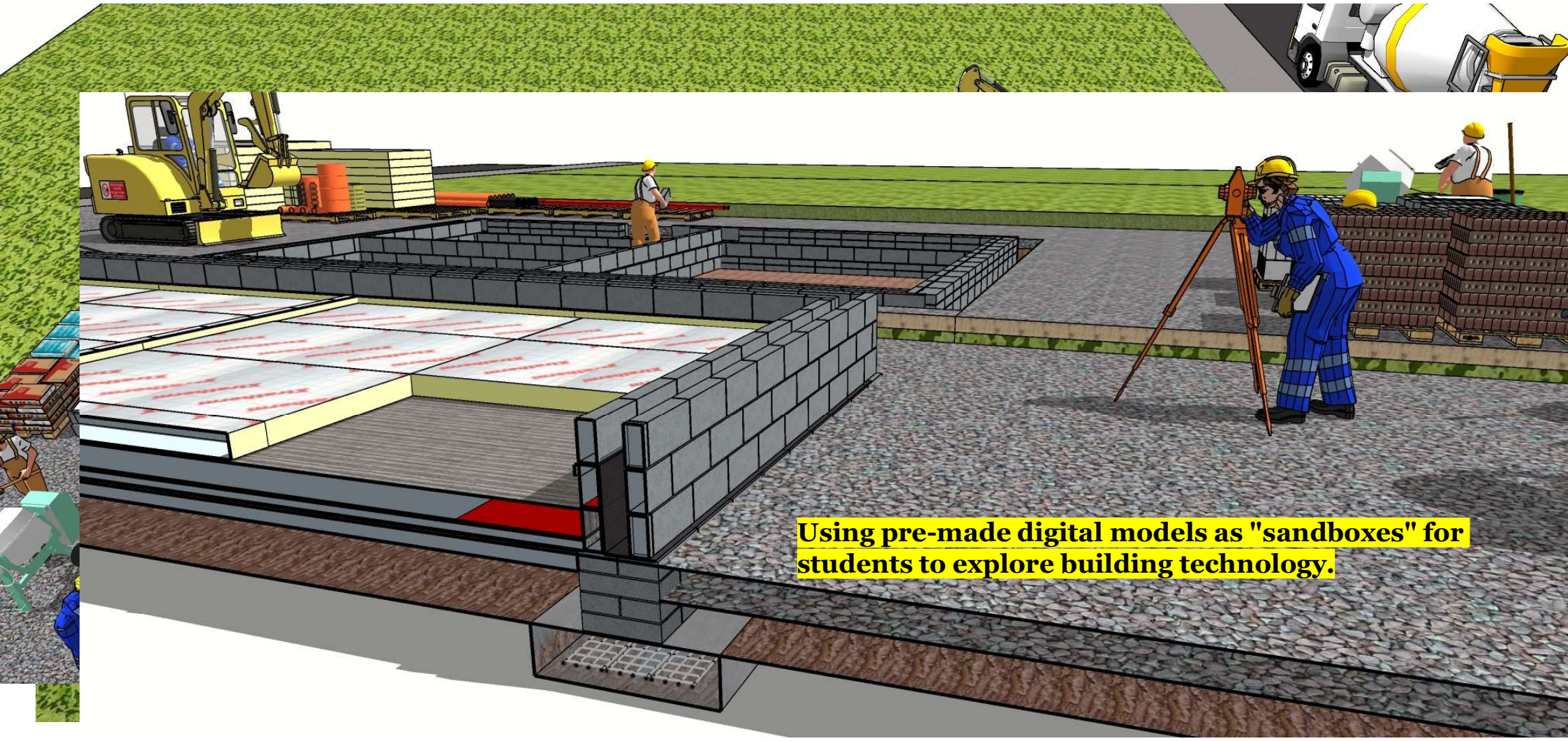
Key to this is the use of very high quality "evergreen" teaching assets both on the ground in the classroom and online as virtual design and construction digital tools and softwares.



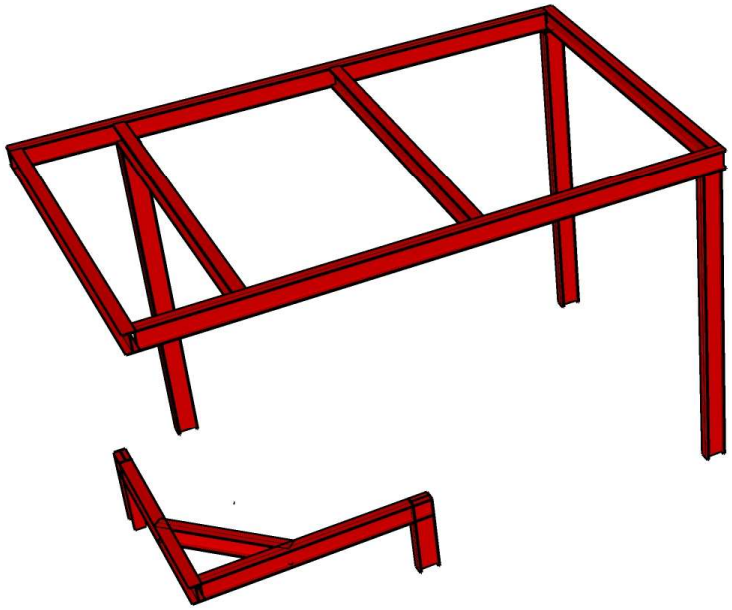
These tools include using digital models as true teaching aids rather than as just elements of a design process i.e. The act of modelling is a separate learning outcome to using a model to explore ideas of architectural technology and science.

Examples of these evergreen assets include Matterport scans as virtual site visits allowing students to explore the real sequence of construction in a very deep way.

We have also made a leap forward in our thinking around ideas of technology-enhanced teaching that will aid remote learning and alternative routes to qualification, like modern apprenticeships

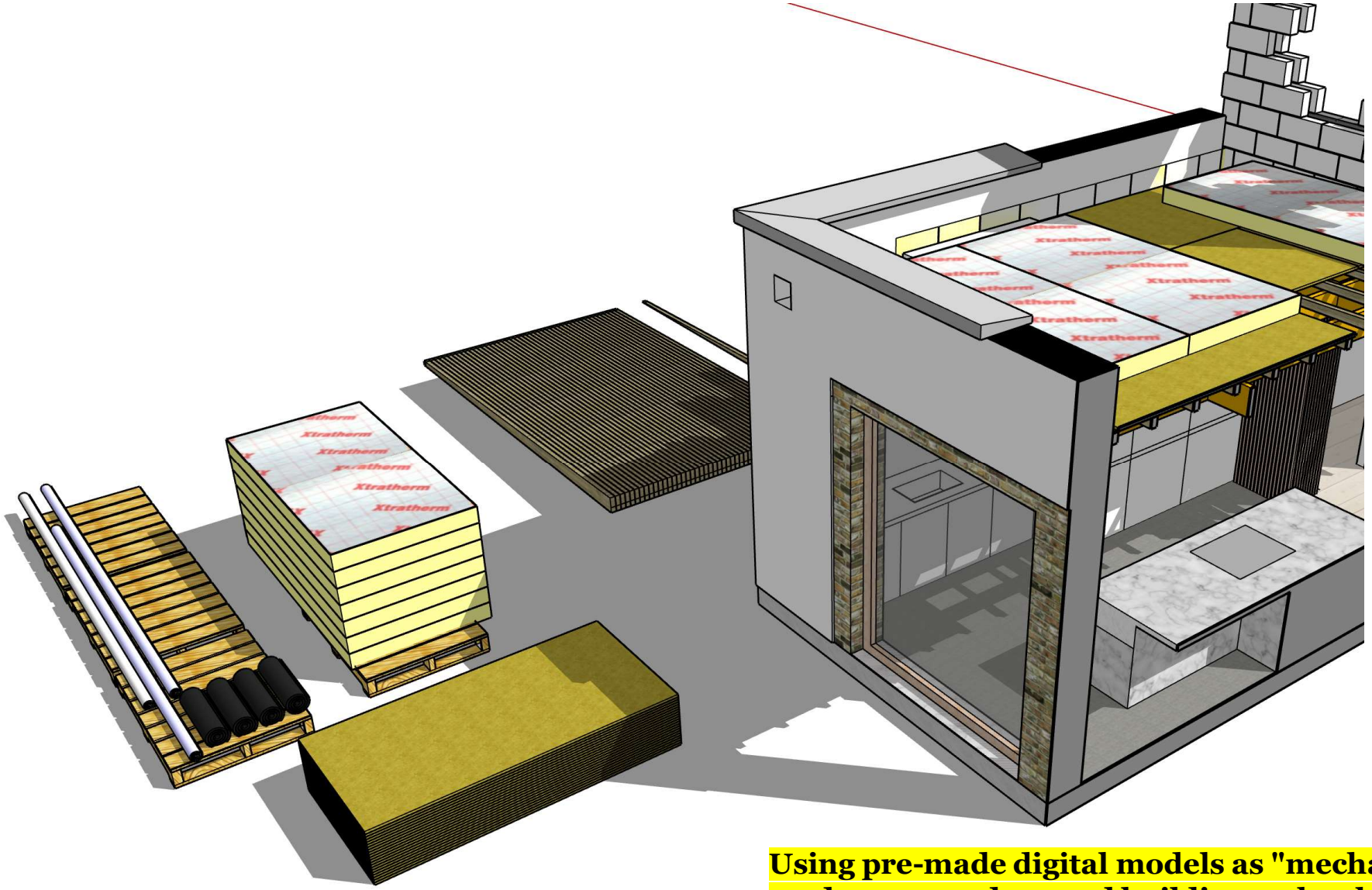


We have also made a leap forward in our thinking around ideas of technology-enhanced teaching that will aid remote learning and alternative routes to qualification, like modern apprenticeships



Using pre-made digital models as "mechano-sets" for students to understand building technology and science.

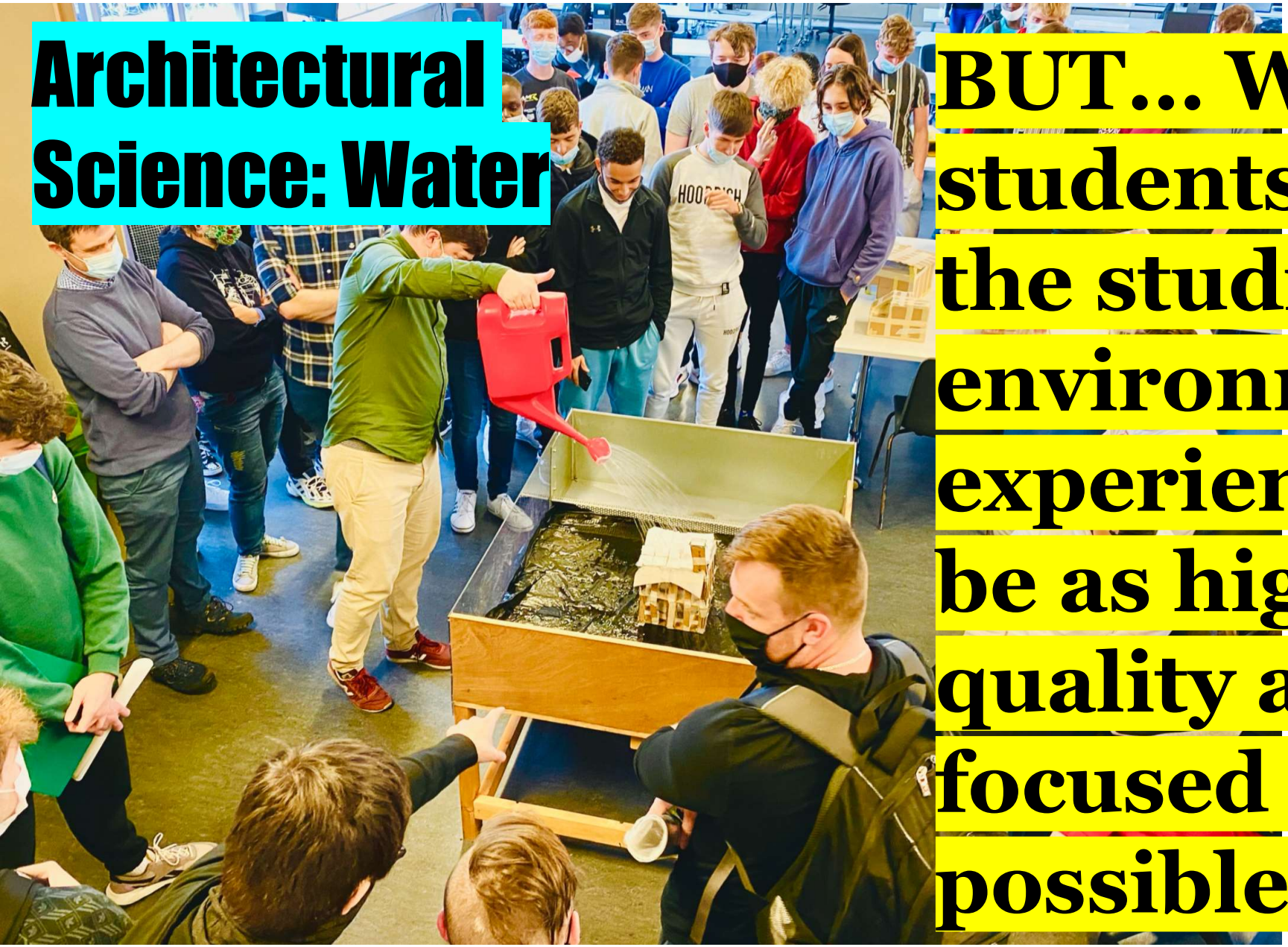
We have also made a leap forward in our thinking around ideas of technology-enhanced teaching that will aid remote learning and alternative routes to qualification, like modern apprenticeships



Using pre-made digital models as "mechano-sets" for students to understand building technology and science.

We have also made a leap forward in our thinking around ideas of technology-enhanced teaching that will aid remote learning and alternative routes to qualification, like modern apprenticeships

Architectural Science: Water

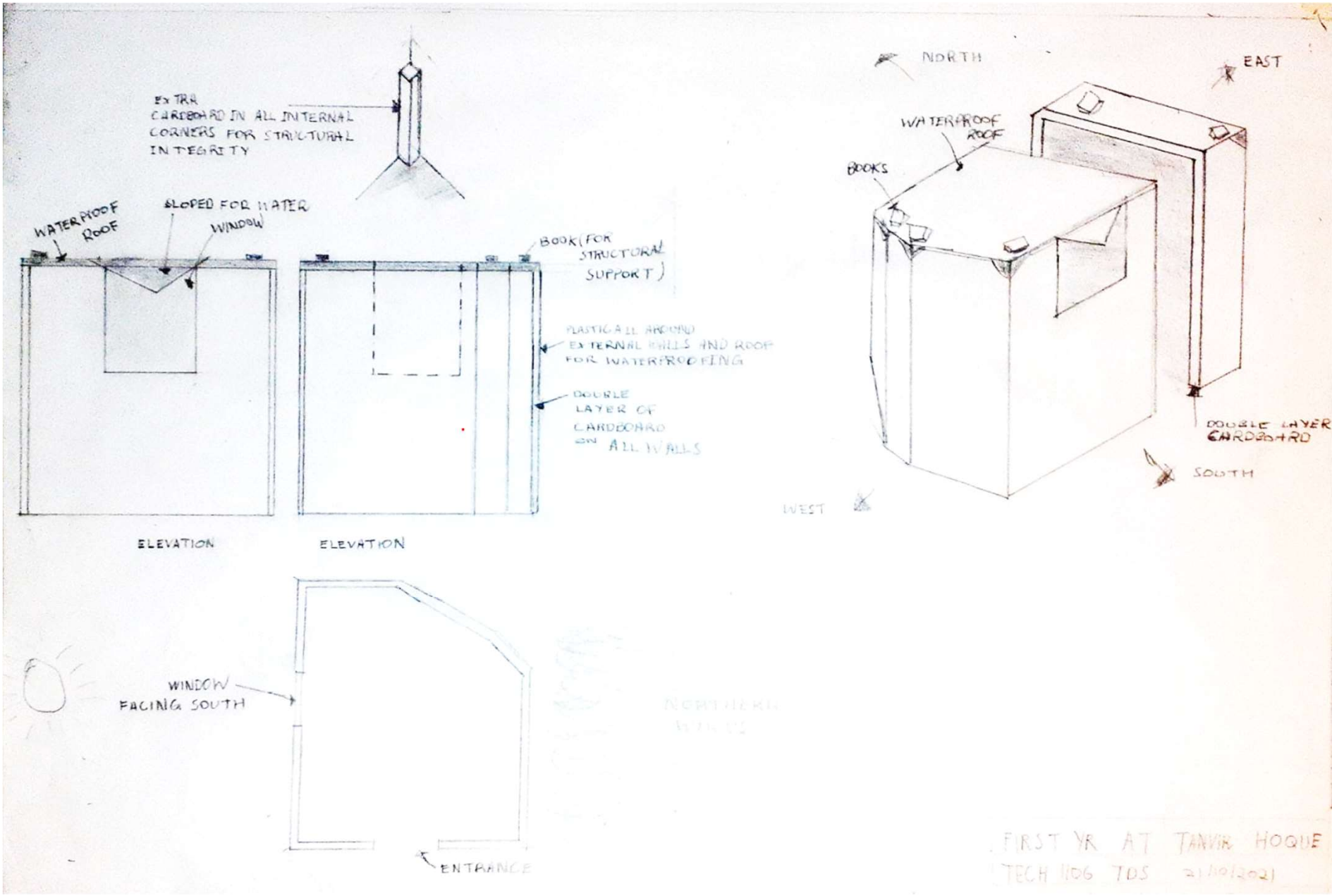


BUT… When students are in the studio environment the experience must be as high quality and focused as possible

Architectural Science: Heat

Architectural science: Light

Architectural science: Light


EXTRA CARDBOARD IN ALL INTERNAL CORNERS FOR STRUCTURAL INTEGRITY
WATERPROOF ROOF
SLOPED FOR WATER
WINDOW
BOOK (FOR STRUCTURAL SUPPORT)
PLASTIC ALL AROUND EXTERNAL WALLS AND ROOF FOR WATERPROOFING
DOUBLE LAYER OF CARDBOARD ON ALL WALLS
ELEVATION
ELEVATION
NORTH
EAST
WATERPROOF ROOF
BOOKS
DOUBLE LAYER CARDBOARD
SOUTH
WEST
WINDOW FACING SOUTH
ENTRANCE
NORTHERN WALL
FIRST YR AT TANVIR HOQUE
TECH 1106 TDS 21/09/2021

TDS WK 9 LAS

IMPLEMENTATION OF LIGHT -

- LIGHT REFECTS OFF WALLS TO REACH DARKER AREAS OF A Room
- OUR EYES JUDGE HOW DARK A ROOM IS RELATIVE TO HOW MUCH LIGHT IS IN A ROOM.
- 150 LUX OR 2% DAYLIGHT IS MINIMUN

UN-CUT

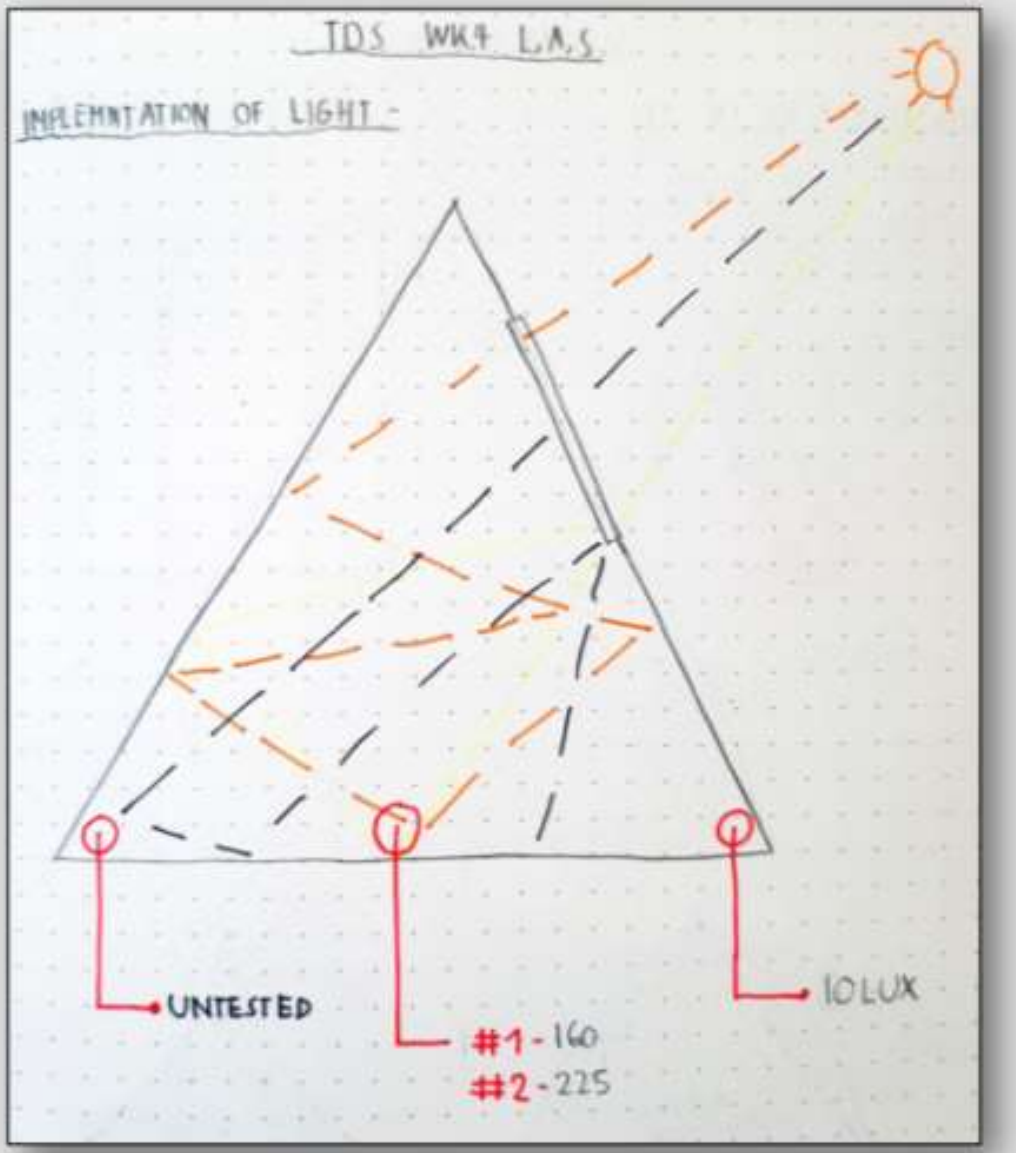
- INITIALLY WE HAD COVERED THE THE STRUCTURE WITH A UNCUT SHEET OF PLASTIC COVERING THE WINDOW
- THIS RESULTED IN A LUX OF 160

CUT

- AFTER TESTING WE DECIDED TO CUT A HOLE IN THE PLASTIC FOR THE WINDOW WITH TAPE ON THE EDGES
- THIS RESULTED IN A LUX OF 225

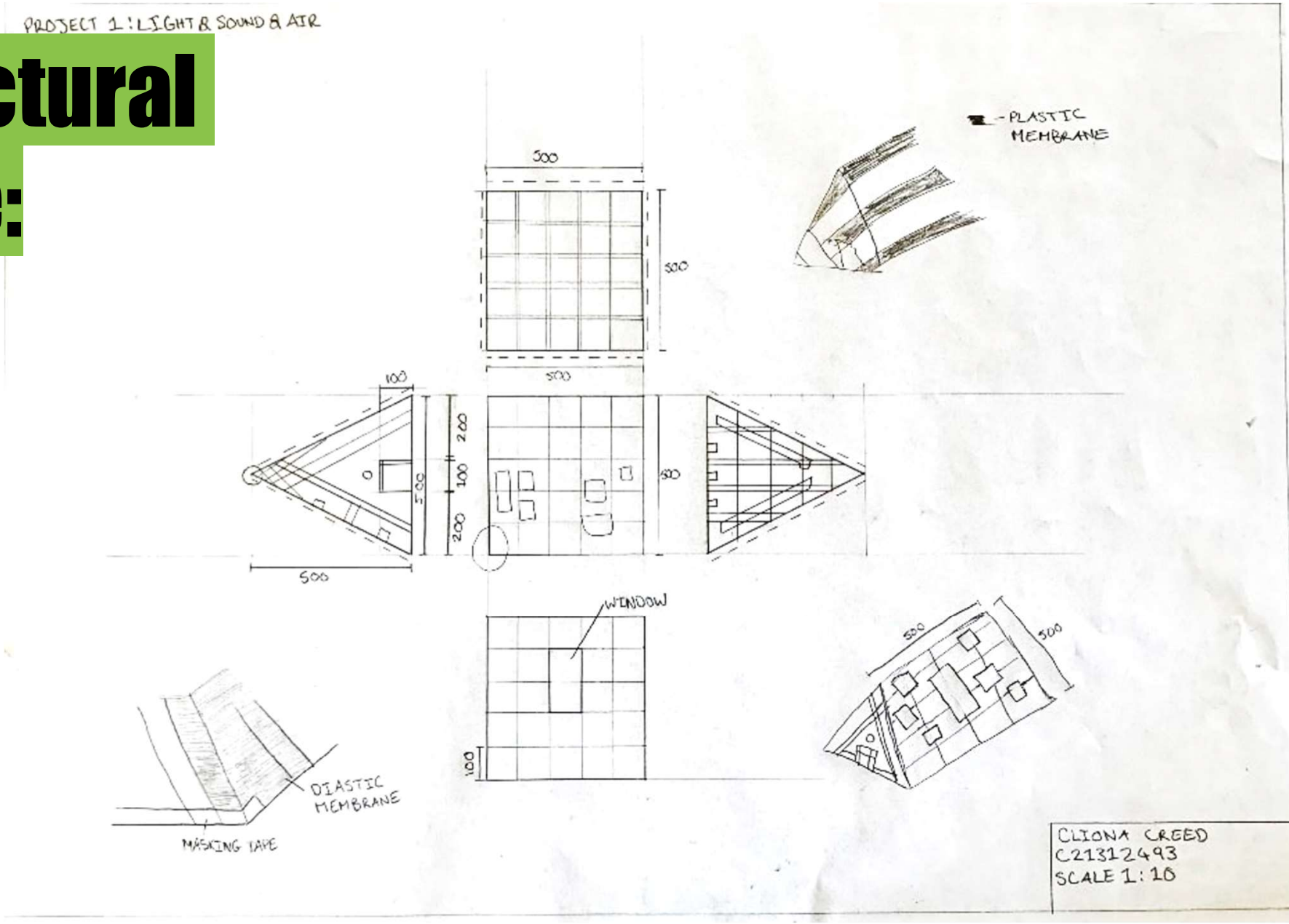
TDS WK 9 LAS

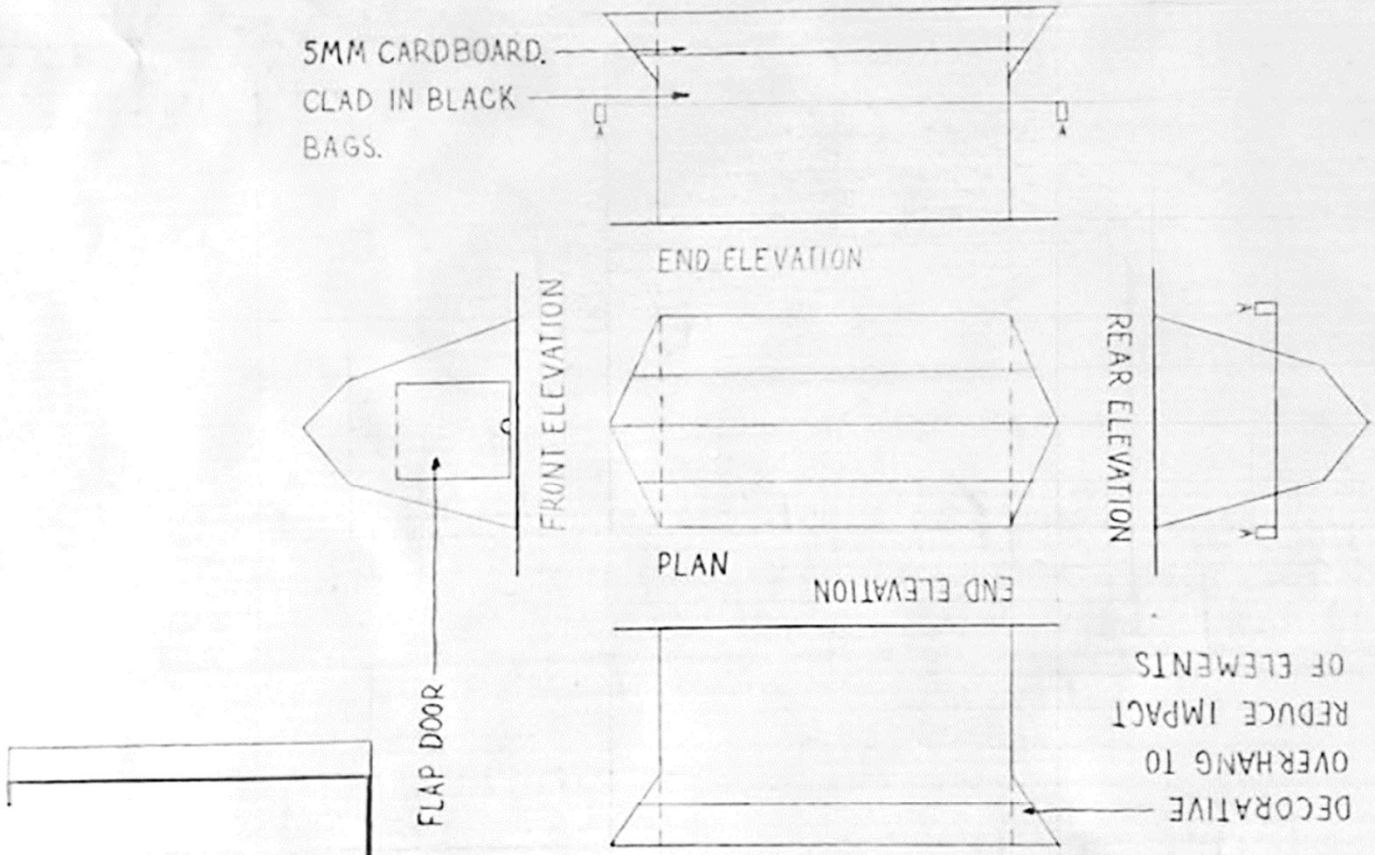
IMPLEMNTATION OF LIGHT -



Architectural Science: Air

Architectural Science: Air





PATRICK FINN
PROJECT1
EXERCISE 6
23/10/2021 1:20


°C °F
50 120
40 100
30 80
20 60
10 40
0 20
10 0
20 20
30 40
40
SHEDMATES


BUT... When students are in the studio environment the experience must be as high quality and focused as possible

Technology Enhanced Teaching and Learning (online and face-to-face)

Avoiding Pecksniffian Pupillage...

Kirk McCormack
Programme Chair of BSc (Hons) Architectural Technology
TU Dublin