

Trinity College Dublin

Board Meeting 27th January 2021

Document for consideration under Section A

Confidentiality status:				
Board members only:	Confidential College circulation only:x Unrestricted:			
Title:	Trinity Futures Discussion Paper			
Author:	Bursar & Director Strategic Innovation on behalf of the Trinity Futures Group			
Date of Document:	19 January 2021			
Purpose:	To discuss the Trinity Futures paper			
Link to Strategic Plan (if relevant)				
Previous consultation /consideration:	College committees: Executive Officers (May 2020; October 2020; December 2020) Council (November 2020) Undergraduate Studies Committee (December 2020) Various fora: Faculty STEM Executive; Faculty AHSS Executive; Faculty HS Executive Presidents SU/GSU CSD group FSD group ASD group Trinity Teaching & Learning Union Representatives (IFUT; SIPTU; UNITE) School Executives (Engineering; Creative Arts; Social Sciences & Philosophy) Fellows			
Action required of Board:	To <u>discuss</u> the Trinity Futures paper and <u>approve</u> the proposed next steps			

Trinity Futures Discussion Paper [updated - Jan 2020]

1.0 Introduction

Since the Covid-19 pandemic arrived in Ireland in March 2020, Trinity has made a rapid and essential transition to alternative modes of working. This has been an emergency response to an emergency situation and has relied on different ways of working, learning and interacting across the College community. Some, though not all, elements of change that are introduced in adversity may also be beneficial for the future. In that context, it is timely for the Trinity community to discuss the medium- to long-term opportunities, as well as constraints and other issues, arising from the collective experience of Covid-19.

First and foremost Trinity is a place of learning and scholarship. Trinity's place in the world is influenced through the quality of its graduates and the influence and impact of its academic research and scholarly inquiry. Many current and future societal challenges, including geopolitical shifts, rapid technological advances, climate, health and inequities will rely on the ability of Trinity's staff to generate new knowledge, ideas and solutions. The collegial nature of Trinity, its sense of community, the institutional dialogue on matters of significance and interpersonal connections are enshrined in Trinity's culture and traditions. The Covid-19 emergency has reinforced the need to protect these shared values.

Furthermore, Trinity's Estates Strategy (2018)¹ has previously recognised the special nature of the physical campus and the importance of the on-campus experience. A key principle in considering the future of Trinity is that innovation and new ideas should augment, not erode, extant strengths, values and culture.

Over the last decade the investment in technology has increased across many sectors and the use of technology has been pivotal in Trinity's ability to sustain its activities during the current pandemic. The opportunities associated with responsible and appropriate use of technology need to be balanced against any unintended consequences. For example, how do we avoid excessive screen time and overburdening staff and students with too much

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¹ https://www.tcd.ie/strategy/documents/tcd-estates-strategy.pdf

content? How do we ensure that authentic relationships are fostered within our community? How do we ensure that the quality of the university learning experience is sustained and enhanced? How do staff and students carve out time for self-reflection in a hyperconnected digital age? What level of engagement with technology-enhanced learning is appropriate for Trinity given that this is not an online university?

The Trinity Futures Group was established in May 2020 (see Appendix 1 for Terms of Reference) to develop a high-level discussion paper to consider Trinity in a world beyond Covid-19. The Group considered whether innovation catalysed by the pandemic could support Trinity's performance across a range of parameters in the longer term, including teaching and research; ensuring equality, diversity & inclusion; use of our estate; environmental responsibility; alleviating accommodation and commuting pressures for our staff; institutional financial security.

This overview discussion paper sets out the deliberations of the Trinity Futures Group and identifies a number of issues that require more detailed consideration, including the epistemological framing of technology and work practices as well as international trends in the higher education environment. If any of the suggestions are considered worthy of further deliberation then Board could establish working groups to work them up into specific proposals for Board's consideration.

2.0 Adaptable & Flexible Work Practices for the Future

During the pandemic the majority of Trinity staff worked temporarily from home and the *Procedure for Leave and Working Arrangements during COVID-19 Outbreak* was approved by the Executive Officers Group (EOG) in April 2020. Staff feedback suggests a significant interest in Trinity exploring the hybrid working model in more detail to enable **flexibility** as to where, how and when staff do their jobs². Adaptable & flexible working would include

² 78% of respondents to a recent Trinity survey expressed a preference for hybrid/flexible working in the future.

both working from home full-time, or part-time (hybrid working) and, potentially, working flexibly in an off-campus Trinity Hub (Hub-working).

In December 2019, the Department of Enterprise, Business & Innovation published *Remote Work in Ireland – Future Jobs 2019*³. The report noted that remote working was more prevalent in the private sector than in the public sector. However, the Covid-19 experience is stimulating the public sector, including universities like Trinity, to consider future work practices.

2.1 Principles of Adaptable & Flexible Work Practices

Adaptable & flexible working is about people and culture change. It is about bringing about flexibility in the way people work though providing appropriate culture and leadership, technology and workspaces.

A comprehensive and strategic approach is required to support innovative working practices and is based on the following principles:

- Work takes place at the most suitable locations and at the most appropriate times, respecting the needs of the task, the individual, the team and University requirements.
- A shared and agreed approach to balance the freedom to choose with the responsibility to meet objectives
- Simplified collaboration and connectivity virtually everywhere means sharing information and working with others regardless of location
- Where appropriate, space is allocated to activities, not individuals. A recent example
 of this is the new professional services hub in Trinity Central which was completed
 earlier this year and houses units from within the Corporate Services Division.
- A Flexibility First approach where flexibility is the norm rather than the exception.
- The processes staff are asked to work with are continuously challenged to make sure they are fit for purpose
- Managing people focuses on productivity and outcomes rather than presence

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³ https://dbei.gov.ie/en/Publications/Publication-files/Remote-Work-in-Ireland.pdf

 Collegiality, collaboration and connection of the Trinity community must be supported and respecting the importance of physical connection and staff wellbeing.

The potential benefits of adopting Adaptable & Flexible Working include:

- Less time and cost for staff commuting to work
- Reduced negative impact on the environment from commuting
- People having more choice about when, where and how they work, supported and connected by effective and appropriate use of technology
- People have the opportunity to lead more balanced and healthier lives
- The costs and environmental impacts of work is reduced as space is shared and used more efficiently
- Greater productivity and effectiveness

Potential Downsides:

- Social isolation
- Risk of a two tier system being created
- Public-private blurring
- Cost of working from home to the employee (e.g utilities bills)
- Would require investment in home working environments
- Connectivity issues

If Trinity is to facilitate flexibility for staff in the future, a set of principals would need to be agreed and a range of supports and policies would be required to address the downsides noted above.

2.3 Getting the policies right

All existing policies and guidelines would need to be reviewed in the context of Adaptable & Flexible Working, for example:

 Flexible working policies should address not only legal requirements but actively promote Smart Working to address work-life balance and organisational performance

- Health, safety and security policies need to reflect the more diverse working environments
- Equality, diversity and inclusion policies can be stronger if people can work
 more flexibly
- Provision of relevant training including people management, teamworking skills and digital skills
- Recruitment policies need to encourage managers to offer smarter flexible work styles wherever practicable.
- Onboarding of new staff in an area with high level of hybrid working
- Support and guidelines for Managers
- Staff wellness initiatives need to be available, including strategies to safeguard the division between work and home life.
- Appropriate equipment for use at home needs to be provided
- Safeguarding collegiality, social networks and inclusion
- Steps should be taken to ensure effective and appropriate work practices and cultures. One suggested example arising from consultation on this document was for a pilot embargo of emails being sent over the weekend.

3.0 The Trinity Estate for the Future

The university currently occupies c. 319,000m² of space and approximately 37,750m² is used for office space and associated support space. Depending on the extent of hybrid working that Trinity may experience in the future, a reduction in the number of staff and activities based full-time on campus at any one time offers an opportunity to reimagine how space is designed, adapted and used. Given that the demand for space currently exceeds its availability, the adaptation of existing space could provide a sustainable way in which to create new space for research, spaces for undergraduate and postgraduate students and meeting spaces. Some preliminary ideas for how space could be adapted are outlined in Appendix 2. For staff engaged in hybrid working (with a reduced proportion of their working week based on campus), provision of space to connect with their colleagues on campus may be more important for some staff than a dedicated office. It is understood that the type of on-campus space and frequency of access that staff require will depend on the nature of the work being undertaken.

New ways of working may also impact future experimental research. Within the next 10 years, it is estimated that automation, data analytics and iLab approaches will facilitate more sharing of expertise, equipment and resources⁴. Digitalisation will continue to enable the decentralisation of science across spatial borders, facilitate dissemination of knowledge to society and enable experiments to happen across facilities. The full impact of this on Trinity is not yet understood but further developments in automation, for example, would be expected to increase research productivity and Trinity must continue to invest in the most up-to-date research infrastructure.

3.1 An off-campus Trinity Hub

For some staff, working from home may be conducive to a hybrid working model. An additional approach is to consider an off-campus Hub to provide modern, flexible, collaborative and efficient space. There are a number of precedents where organisations, including universities, have opted to decentralize certain activities. There are a growing number of regional hubs that provide space for remote working (approx. 300 in Ireland in 2019), often co-located with community enterprise centres. However, only 50% of those currently collaborate with third level institutions. A number of Regional Enterprise Plans are actively facilitating and promoting regional hubs in order to provide opportunities for regional employment and growth.

There may be an opportunity for Trinity to issue an "expression of interest" to explore potential partnerships with local authorities to procure a building that could be used as a Trinity Hub in some regional location where office accommodation is better value for money and where residential housing is more affordable. This could be of benefit to staff to move closer to the Hub and reduce commuting times or to relocate outside of Dublin for a better quality of life, and it provides an opportunity for regional development where a region or town may benefit economically form the presence of high-quality jobs. A regional Hub is also likely engage potential students and positively impact access to higher education for those from financially disadvantaged backgrounds. Such a move would assist the University

⁴ https://www.arup.com/perspectives/publications/research/section/future-of-labs

in its commitment to greater diversity and inclusion. Consultation, communication, trust, involvement and buy-in would be key if the Trinity Hub concept is to be successful. An off-campus Hub could be a phased endeavour. For example, a potential initial requirement includes remote storage but requirements may expand over time to include other professional functions, academic outreach and collaboration with local enterprise. The concept of a Trinity Hub would require further analysis on the points discussed above to determine if it is a viable option for Trinity's longer-term future.

3.2 The Future of the Main Campus

Some of the historic campus buildings that become vacated as a result of hybrid working could be returned to their original use as residential rooms or other space typologies (Appendix 2). The overall development of the campus should be considered in the context of a masterplan and the extant Estates Strategy. A number of important points emerge from these considerations:

- That space becoming available on campus may not be contiguous and therefore a level of space reorganization would be necessary
- The overall use of relinquished space should be considered in the context of an integrated campus masterplan which takes a longer-term view of campus development opportunities
- Some space on the campus should be made available for face-to-face staff
 collaboration/meetings to support the smart working model

4.0 Future of Digital Learning

Covid-19 has prompted an unprecedented adoption of technology to deliver courses and facilitate assessment across the higher education sector in Ireland and throughout the world. Staff and students have learned new skills and digital instruction to varying extents is likely to endure in many universities even when the pandemic is over. Further change that we cannot ignore is that large technology companies have started to move into the education market; for example, Google is now offering bespoke online courses as a route to employment and potential partnerships between major tech companies and top universities

in the US has been mooted as a new disruptive business model⁵. However, it remains to be seen how successful such partnerships on the global higher education sector will be, and the University's independence and commitment to educational standards must always be our guiding principle.

Trinity will need to consider how to position its academic offerings in the post-Covid context. The future of Trinity may be an evolving blend of physical and digital learning ("phygital") with implications for pedagogy, space, infrastructure investment, responsiveness to student demand and education & technology research.

4.1 Undergraduate

The Trinity Futures Group DOES NOT recommend a move towards a fully online undergraduate degree. Rather, digital learning should support the face-to-face undergraduate curriculum because the value of a Trinity education goes well beyond the classroom - peer engagement, involvement in clubs and societies and developing life-long personal relationships are core components of the on-campus Trinity experience.

The Strategic Plan (2020-2025) already includes the goal to "Implement a full-spectrum digital learning strategy by 2022" though a Digital Learning Strategy. The inclusion of digital content and engagement in undergraduate modules can be provided via the existing learning management system to include online content, lecture capture, collaborative group activities, online polling and student-led discussions, and online assessments. The Digital Learning Strategy will shape how technology can support the curriculum to enhance the learning process, student engagement and student experience. The effectiveness of new modes of delivery to support the curriculum will need to be evaluated and pedagogical research will have role in determining the requirements of technology.

Whether online content is delivered via synchronous or asynchronous methods will vary across modules. Synchronous delivery allows for more student engagement during the class but also requires students to have internet access at a specific time. Asynchronous delivery allows for more flexibility in the timetable and students can access the material at their

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⁵ https://nymag.com/intelligencer/2020/05/scott-galloway-future-of-college.html

convenience. A blended learning approach, underpinned by appropriate pedagogy, is likely to feature more prominently in future curricula.

Large capacity classrooms and lecture theatres constitute 5, 700 SqM of space across 37 rooms. If lectures for very large classes were predominately moved to online delivery than that space could be repurposed to create more flexible spaces. Since most of the large lecture theatres are tiered, their adaptability would arise from installing new furniture to facilitate collaborative learning. Refer to Appendix 3 for examples of how the traditional lecture theatre can be reconfigured to accommodate both a traditional large lecture and also a collaborative learning environment. It is worth noting that the consultation process has identified that a number of Schools will continue the traditional lecture format within their curriculum in the future, while other Schools may move some lectures online. While the requirement for large lecture theatres is likely to continue in the immediate future, the demand for timetabled bookings may reduce overall.

4.2 Augmented and virtual reality – a futuristic view

The application of augmented and virtual reality to education is at a very early stage but expertise exists within Trinity's V-SENSE team and start-up company, VOLOGRAMS. Current research within that group is also investigating AltspaceVR as teaching platform and comparing its effectiveness to class room teaching. The augmented and virtual reality technology support simulated training across a range of areas. The costs to support virtual reality will likely be a barrier in the short-term but augmented reality does not require expensive hardware. Immersive technology is an area in which Trinity has strong research expertise that could be harnessed to develop innovative educational approaches as part of the Digital Learning Strategy. However, the Trinity Future Group recognized that while these technologies have much to recommend them, they are unlikely to displace fully, or even significantly, the in-person teaching delivered by academics.

4.3 Postgraduate

Plans for the Trinity Postgraduate Renewal Project are underway and will have a strong emphasis on microcredentials, life-long learning and flexibility. Based on feedback from this

year, a large pool of data exists that will help to prioritise next steps in terms of programmes and opportunities to vary the format of existing offerings.

Postgraduate taught courses are often aligned to career development of a more mature audience who have already had their on-campus undergraduate experience. Trinity currently offers 7 fully online postgraduate courses but there is potential to expand this offering and respond to student demand. Online courses that have some on-campus component (blended courses) is another model that could be broadened and the Human Capital Initiative⁶ will allow Trinity to expand its activity in this domain.

In considering how Trinity could expand and enhance its postgraduate online offerings a few key points are:

- Ensuring adequate student demand for new courses
- Opportunity for more part time options, noting that the take up for online part time options is quite high in the US.

Recognizing the demand and value of traditional on-site offerings, also:

- Opportunity for hybrid models, with some remote and some on-campus aspects
- Align to the renewal of postgraduate education, outlined in the Strategic Plan (2020-2025)
- Requirement for systems to support flexible PG registration; accumulation of credit;
 self-service record tracking; automated processes

4.4 Requirements to Support Digital Learning

Trinity Futures considered the likely requirements to support digital learning. While some requirements are part of existing plans or emerging business cases, other requirements will need to be explored in more detail as part of a new Digital Learning Strategy, as per the College's Strategic Plan (2020-2025).

Technology

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⁶ https://hea.ie/skills-engagement/human-capital-initiative/

- o Provide an agile VLE (BlackBoard re-tender due in 2021)
- o Analytics Engine to analyse and provide feedback on student engagement
- Lecture Capture technology in all Teaching spaces on Campus and in Remote
 Hubs. 'studio in a box' (Webcam, Microphone / Headset) for lecture material
 preparation or synchronous sessions.
- Immersive Lecture Theatres ("Mashme" is currently being installed in the Trinity Business School)
- SITS Reconfiguration to support non-campus learner administration (Fully online Registration and enrolment without generating Student Services fees; management of course quotas; module billing). This will facilitate the provision of micro-credentials.
- Digital Learning Innovation Labs & production studios to provide a test-bed for new approaches and technologies.
- Significant investment in IT infrastructure

Pedagogy

- Utilise the expertise within Trinity Teaching & Learning, including the IUA
 Enhancing Digital Capacity Project, and Trinity Online Services Ltd.
- Immersive reality: consider the opportunities and engage with existing Trinity research expertise in this field from the School of Computer Science & Statistics.
- There are a range of ways in which expertise from Learnovate could be used to support Trinity in technology-enhanced education (Appendix 4)
- Opportunities to offer micro-credentials, such as those to be developed via the Human Capital Initiative
- Offer micro-credentials that respond to unemployment-related inequalities in society that have arisen due to Covid-19
- Ongoing capture of data to evaluate the effectiveness of technology as a support to the curriculum

Policies

 Quality Standards for online courses, including the QQI Blended Learning Standards

- Digital marketing approach (aligned to PAC strategy)
- Lecture Recording Policy (accessibility support) and relevant intellectual property (IP) policies.
- Licensing for remote access to e-books

Staff

- o Identify or establish a role to provide strategic leadership in digital learning
- o Upskilling and support for staff in digital learning
- Appropriate access to learning technologists
- Support in assessing student demand
- Create a community of practice for online learning

5.0 Future of Digital Trinity

Many of the digital initiatives that have been underway over the past 7 years have resulted in the digitisation of various services to support the way in which Trinity conducts its administration. Trinity has one of the largest single site WiFi networks in Ireland, enabling a number of digital services and engagement with students and academics on campus. This network, combined with the deliberate 'cloud-first' and 'mobile-first' strategy, allows us to be better placed to service the expectations of digital natives and bring efficiencies to the University. Recent projects under the current "Digital Trinity" programme include Trinity Electives, Online Module Enrolment, Web Transformation (content management system), Data Transformation (customer relationship management) and Unified Communications.

Table 1 outlines 5 <u>sample</u> future Digital Trinity projects that could enable flexibility in course offerings, enable hybrid working and enhance effectiveness. These projects would each require a business case and be prioritised and approved via the usual governance procedures.

FUTURE DIGITAL TRINITY PROJECTS	FEATURE	Notes
DT-5	Online Registration and Module Billing for Micro Credentials, Short Courses, External Students, Staff.	Enabler of flexible course offerings

DT-6 (UC3)	Unified Communications. Remote Management of Devices and Data; Additional Security for Student System	Enabler of smart working
DT-7	Student Engagement and Analytics Data and Support Services Hyper Personal Student Information (Trinity Live)	Track student engagement to support retention and enhance effectiveness
DT-8	Machine Learning / AI Chatbots	Enhance student/staff experience
DT-9	Hybrid Committee Meetings and conferences Unified Communications & Softphones Paperless Processes / digital signatures	Enabler of adaptable & flexible working

Table 1: Potential Digital Trinity Projects for the Future

6.0 Innovation, Enterprise and Entrepreneurship

Trinity has a unique role to play in supporting and sustaining Irelands place in the world as a location for innovation, enterprise and entrepreneurship. Due to its city centre location, its neighbours are some of the world's most significant employers, the fastest growing start-ups in the country, the venture capital firms that invest in the newest firms and Ireland's strongest cultural institutions.

6.1 Entrepreneurship

Trinity has been ranked first in Europe for graduating entrepreneurs for the last five years and also ranked first in Ireland for campus companies originating from Trinity's research community that reach high potential start-up status. In planning for the future it is critical that Trinity continues to develop its expertise and engagement in this area across the broader University as well as maintaining and develops existing supports such as the availability of seed venture capital; the role of Trinity Research & Innovation in enabling campus company formation and the role of Tangent in supporting a culture of entrepreneurship across our student base.

6.2 Enterprise

Research is central to Trinity's revenue, reputation and relationships. An important ingredient in developing and sustaining this research capacity is relationships with the enterprise community. Although individual PI research is correctly identified as a critical platform for our research competitiveness; it is also appropriate to note that more and more research funding opportunities require enterprise partnership. In recent years increasing levels of both national and European funding have required partnerships and financial commitments from industry.

To enhance our relationships with the enterprise community a full and imaginative review of the mechanisms and structures which we use to enable research partnerships with enterprise needs to take place. An initial set of items for consideration is noted below:

- Professors of practise. An opportunity to encourage companies to attract or second leading researchers in their organisation to Dublin to take a faculty post at Trinity for a period of time.
- Entrepreneurs-in-residence. An opportunity for entrepreneurs and Trinity graduates
 who have succeeded in growing businesses to come back to mentor start-ups, campus
 companies, student companies and to provide inspiring case studies in the class room;
 within accelerators or incubators.
- Venture capitalist networks-in-residence. While ensuring that no venture financier has
 an unfair advantage in negotiations or is viewed as being endorsed by Trinity, it would
 be helpful if there was a cadre of experienced venture capitalists to support start-ups,
 campus companies and student companies as they raise funding and look to scale.
- Industry offerings, such as collaborative research, internship models
- Revised IP policy for enterprise partners for fully funded projects if the scale and duration of partnership is attractive
- Co-location of enterprise partners

6.3 Innovation.

Trinity must work with key stakeholders to make Dublin one of Europe's leading innovation locations through initiatives such as,

 Programming – to facilitate the meaningful interaction between innovation stakeholders.

- Inclusive growth. The Covid crisis is, most likely, going to lead to increased unemployment. Entrepreneurship could offer a new career path for people who have lost their jobs in traditional industries and the service sector and Trinity has an obligation to play a role here in supporting people to adapt and rebuild their careers.
- Collaboration. Collaboration in cities will become more, not less important, and we need to design and curate our physical spaces accordingly.
- Test-beds. Trinity can work with Dublin City to develop tools for testing innovation in the real world. University-led test beds for innovation can play a vital role in transitioning our cities.
- Alliances. Trinity must use its reputation, neutrality and convening power to organise
 and connect together the required components to a successful innovation ecosystem.
 Finance, entrepreneurs, researchers, innovators, start-ups, corporates, social
 enterprises, charities, government and the city itself. Trinity can play a vital role in
 enhancing the competitiveness of our ecosystem and indeed can benefit from this
 enhanced ecosystem through the level of funding

The competitiveness of Trinity's innovation ecosystem is the core vision underpinning the plan for the E3RI and Trinity East.

7.0 Strategic Capital Projects

Trinity currently has a large capital programme and this paper provides a short narrative on each project. It should be noted that each project will continue to require Board approval at defined stage gates in accordance with capital project governance.

7.1 Martin Naughton E3 Learning Foundry

The Martin Naughton E3 Learning Foundry is due to be complete in 2023. It will provide an innovative infrastructure to support new ways of teaching & learning, including student collaborative projects. The building itself has been designed as a learning laboratory and a "smart building" that will use technology to collect and analyse data on building performance. As a student-centric building, the E3 Learning Foundry will cater for the student learning experience of the future. Not only will the building enable an increase in student numbers in subject areas of high demand, the project will involve a redevelopment

of the east of the college campus improving the environment for all of the Trinity population. The project has planning permission, is fully funded and the tender for the main contractor will be issued in Q4 2020.

7.2 E3 Research Institute (E3RI) on the Trinity East site

The E3RI will be a flagship research institute associated with challenge-based research across the E3 Schools of Engineering, Computer Science & Statistics and Natural Sciences under the overall theme "Balanced solutions for a better world". The E3RI will be the initial landmark building on the Trinity East campus and will make a major contribution to the Innovation District in the Grand Canal Quay area. The technical specification for the building is in preparation and will take into account the principles of the "Lab-of-the-Future". A request for financial support Government has been made and philanthropic support is substantially progressed. This project will remain relevant to Trinity's future given the importance of finding solutions to problems of sustainability, climate change, and well-being which it addresses.

7.3 Trinity East

The Trinity East project has multiple components. The pre-development phase is underway and includes property transactions and vacant possession strategies that will increase the site value. Early activation of Trinity East will support enterprise and the start-up community by providing programming and physical infrastructure; it will serve as an early step in mobilizing the innovation district at Grand Canal Quay. Governance for this was approved by Board in December 2020. An architect has been appointed for the early activation refurbishment and the programming of events is due to commence. As outlined in 7.1, Trinity's requirements of the E3RI, the anchor building on the site, are being scoped. Over the past few years, a lot has been achieved to unlock the potential of Trinity East. The future development of Trinity East, including financing options, timelines and phasing will be a major item for discussion at future Board meetings.

7.4 Old Library Redevelopment

The Old Library is a unique heritage building, housing the Book of Kells. The building urgently requires conservation and the provision of an environmental control system.

Detailed architectural plans have been prepared and the project received planning permission in Q3 2020. The environmental issues are progressive and cannot be reversed so this project will continue to be required into the future. Significant philanthropic funding has been secured and a request for government support has been made.

7.5 Trinity St James's Cancer Institute (TSJCI)

The development of a new building for the TSJCI on the St James's Hospital campus is at an early stage of planning. The Strategic Assessment Report demonstrates the growth in demand for services that is anticipated in the future and this data justifies the requirement for a new building. As plans develop, the application of tele-medicine, the principles of the "Lab-of-the-Future" and online education, including provision of micro credentials, will each be considered.

7.6 Law

The Law School's academic development plans include new areas such as Law & Technology which are highly relevant for the future and align with the E3 project. The growth in the Law School will require additional space and plans for a new building are at an early stage. The School has interest in blended courses and the new building will include facilities to support that mode of delivery.

7.7 Rubrics and Chief Steward's House

This project will create additional fit-for-purpose staff and student residential accommodation, and reaffirms that Trinity values its existence as a residential community. The Rubrics will also house collaborative research space for Fellows emeriti. Although the Rubrics is a heritage building, the project will install ground source geothermal heating to provide an environmentally-friendly, and maintenance-free heat system. The provision more college accommodation for staff will help to attract staff and help with their integration into Trinity. It will also provide residential accommodation for visiting staff, something that is sorely needed. The planning permission for this project was submitted in Q4 2020 and a construction contract is due to be awarded in Q2 2021, pending Board approval.

7.8 Dartry

The stage gates for this project are currently under review in the context of the impact of Covid-19 on Trinity's financial position. Another key consideration is the availability of student accommodation in Dublin in the years ahead and this should be routinely monitored.

8.0 Summary

Covid-19 has prompted change and innovation in higher education. Trinity has been at the heart of innovation, learning and community since 1592 and is now positioned to consider supplementation of the traditional university campus with a connected campus, offering new ways of teaching, learning and working to its staff and students, where appropriate. This should not be at the expense of collegiality, inclusion and connection as these principles must also be to the fore in Trinity's future.

9.0 Next Steps

The points raised in this paper have been discussed across 14 consultation for aand a number of feedback themes have emerged (Appendix 5). As a next step, it is recommended that:

- [1] Town hall meetings are organised to discuss the points raised in this paper with a broad range of stakeholders and thereafter;
- [2] to establish working groups, with broad representation, to explore the most pertinent points raised in this discussion paper in more detail via a process of consultation, analysis and vision.
- [3] It is recommended that the first working group to be established would focus on Adaptable & Flexible Working, with a terms of reference and membership to be brought to Board for approval.

APPENDIX 1 Trinity Futures Group

Terms of Reference

Meeting the challenges of COVID-19 has been an immense effort on behalf of the entire Trinity community. It has accelerated our learning in matters such as remote working and online teaching. It will also have some deeper and more profound effects that will only become apparent over time.

To take advantage of the learning and to produce a plan for change, it is proposed that a sub-group of Executive Officers be created as follows:

Group membership

- Bursar (Chair)
- Antoinette Quinn, Director HR
- Andrew Burke, Dean TBS
- Patrick Magee, Director ITS
- Gail McElroy, Dean AHSS
- Nessa McEniff, Director of Learnovate
- Mike Clark, Director of Campus Infrastructure
- Ruth Doherty (Secretary to the Group)

The Group will commission focused pieces of work from people internally, who will respond and provide their inputs as a priority.

The Group may engage externally, as appropriate, to inform its work. Should such external engagement require funding then a proposal will be brought to EOG for its consideration.

Terms of Reference

The Group will consider the topics listed below and will (1) collate data and survey information, where required; (2) make recommendations to EOG on potential opportunities for the future; (3) provide an overview to EOG on the issues that require further detailed analysis.

1) Remote working

- a. Create an outline of a new policy for remote working.
- b. Summarise the technology, management skills, wellbeing supports and upskilling that would be required.
- c. Consider the potential functions of the College that could be delivered via remote working.
- d. Explore the idea of a Trinity Administrative Hub remote from campus, including the possibility of locating the Hub beyond Dublin.

- i. How much space could be vacated on campus?
- ii. Is it feasible to develop a tender for County Council's to bid to provide such a facility for Trinity?
- iii. Could this facility also provide remote storage or other functions?
- iv. Consider and summarise the issues that would need to be explored further
- v. Commission specific feasibility studies that may be required to further our understanding of this model.

2) Online education

- a. Consider the inclusion of online content and online engagement in all UG programmes
 - i. Synchronous teaching
 - ii. Asynchronous teaching
- b. Consider the feasibility of restricting use of lectures for 100+ class groups and moving such material to asynchronous online delivery
- c. Consider the "flipped classroom" model in the context of (b)
- d. How much space would be freed up from (a) and (b)? How could the space be re-purposed to support small group learning or other university activities?
- e. Postgraduate:
 - Consider a more comprehensive transition, including offerings that are wholly online or "book-ended" with an on-campus component.
 - ii. Consider potential new courses for Post-COVID back to business in the economy and appropriate reskilling, aligned with the deliberations of the Emergency Financial Management Group.
- f. What technologies, upgrades and academic policies would be required to make this feasible?

3) New administrative ways of working

Consider how online meetings and greater use of IT tools could promote efficiency and agility.

4) Digital Trinity projects

Consider whether the current Digital Trinity projects need to be accelerated or adapted to meet Trinity's emerging new requirements.

5) Trinity's brand values

- a. How does Trinity's brand and values, including the Trinity Education, resonate with expanded online, part-time, executive and reskilling education?
- b. What is the role of Trinity's "residential campus" model in the future?
- c. How can "community and connection" be maintained whilst also embracing technological change?

6) Strategic future of capital projects

The group will appraise, at a high level, each of the following capital projects in the context of their relevance into the future.

- a. Old Library Redevelopment
- b. E3RI
- c. E3LF
- d. TTEC
 - i. Pre-development project
 - ii. Long-term build-out of the new campus and creation of the Grand Canal InnovationDistrict
- e. TSJCI
- f. Law
- g. Residences
 - i. Rubrics/CSH
 - ii. Dartry
 - iii. Pipeline accommodation projects

7) Data

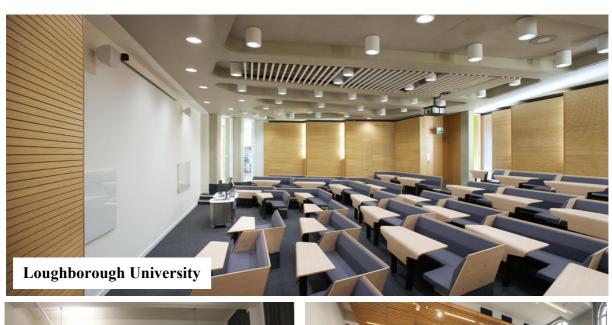
The group will commission data gathering and surveys, with a focus on staff and student experiences of online teaching & assessment, remote working and virtual meetings during the Covid-19 situation. This data will help to inform the feasibility of the modes of working that are being considered.

- a. Survey of students
- b. Survey of academic staff
- c. Survey of professional staff

Appendix 2 – Potential uses of reconfigured spaces created within the estate

- o Digital Scholarship Studio/ E-learning design space/Innovation Lab
- o Meeting additional space requirements for research
- o Interactive digital teaching spaces
- o One-stop Genius bar for IT needs and technology tutorials
- Staff workspaces and meeting spaces to support hybrid working
- Additional groups study space (to double up as meeting rooms, bookable rooms for individual study etc.), equipped for maximum flexibility
- o Low distraction study and relaxation spaces for students with sensory disabilities
- Research Support Clinics
- o Centre for Open Scholarship/Citizen Science hub
- o Informal Learning Commons
- o Active learning space (e.g. standing desks, treadmills, bicycles etc.)
- o Accommodation, where appropriate
- Undergraduate student spaces
- Postgraduate student spaces

Appendix 3 – Reworking of Lecture Theatres to Create Flexible Learning Spaces









Appendix 4 - Learnovate

Learnovate is an industry-led centre of excellence for research and innovation in learning technologies. Areas for collaboration with Trinity include:

- Online pedagogy/flipped class teaching
- Upskilling lecturers on delivery of online content
 - Learnovate has provided CAPSL with a number of guides and could further expand support if needed
 - o Guides include:
 - Engaging Content for Online
 - Supporting Students Online
 - Encouraging online collaboration
 - Facilitating online assessment
 - Flipping the classroom
 - Remote feedback
- Online assessments
 - o Two Irish based company's Learnosity and TestReach
- Motivation & online collaboration
- SkillTrack is a learning application that brings together innovative pedagogy and technology to support the practice, development and self-assessment of Key Skills/Transversal Skills.

In addition, Learnovate has created a new research area 'Accelerated digital transformation' to capture challenges industry and educators experienced in our move to remote working and learning. Topics included that may be of interest to Trinity:

- 1. Identifying at-risk learners using advanced machine learning
- 2. Onboarding in an online environment
- 3. Remote collaborative working
- 4. Remote working & learning
- 5. Micro credentials
- 6. Learning using immersive techniques (focus on low-cost immersive learning)

Appendix 5 – Feedback

The issues outlined in this paper have been discussed at the following fora:

Executive Officers

Council

Undergraduate Studies Committee

Faculty STEM Executive

Faculty AHSS Executive

Faculty HS Executive

Presidents SU and GSU

CSD group

FSD group

ASD group

Trinity Teaching & Learning

Union Representatives (UNITE; SIPTU; IFUT)

School Creative Arts Executive

School Engineering

School Social Sciences & Philosophy Executive

Fellows (x2)

School Psychology (Feb 2021)

The following feedback themes have emerged:

- Timely to have the discussion
- Support for smart working potential for hybrid working popular with many professional staff
- Merit of UG continuing as on-campus experience with blended approach
- · Flexibility afforded by digital tools
- Digital learning requires access to range of supports (e.g learning technologists)
- Strong preference to retain large lectures in some Schools, although other Schools may reduce number of large lectures
- Need further consideration of gender-specific issues
- Importance of wellbeing
- Timing not right to consider these issues, still dealing with Covid-19 and upcoming Provost elections
- Mixed views on the Trinity Hub
- Should Trinity consider an International Hub?
- Concern that the paper proposes a loss of academic offices and the impact on academic recruitment and scholarship
- Research will continue to require access to physical campus
- Lack of philosophical discussion on future of the university
- Is this a Fait accompli needs more discussion
- Risk of a loss of collegiality or two-tiered system (hybrid workers and non-hybrid workers)
- Composition of TF Group too narrow
- Future working groups should have broad representation
- Goes too far/doesn't go far enough
- Relevance of I&E section