UCC LIBRARY SPACE MASTER PLAN

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

Library
Leabharlann

DATE:

2019

Master Plan

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DRAFT

MASTER PLAN VISION

DRAFT

To set out the requirements for library space development and refurbishment for the next decade.

INTRODUCTION

The Library of the Future is a place where people are at the centre. People desire spaces where they can gather, where they can learn, where they can live and play. The library of the future is equipped to empower people towards knowledge. Through technology-rich amenities, organised cultural and exhibit spaces, and a mixed-use approach to learning that incorporates everything from entrepreneurship and makerspaces to flipped classrooms and nap pods, library services of the future will meet people where they are. The library of the future will allow our users transform themselves into the many iterations of the imagination.

Continuous development ensures UCC Library is a contemporary multi-media library, information and knowledge management system. It is a competence centre for all questions concerning information and media literacy, media provisioning and brokerage, and provides information searches using modern technology. It is a meeting place of minds that stimulates creation, knowledge and creativity.

Over the next decade, UCC library needs to be revitalised, refurbished & reimagined to stay current and meet the changing needs of the University community.

Additionally, projected growth in student numbers as well as the expanded footprint of the University into Cork city places a need for further expansion and remote library presence. The creation of this master plan maps out the future library spaces needed.

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UCC LIBRARY SERVICE

A library was established at University College Cork in 1848 and remains core to the mission of the university, which is 'creating, understanding, and sharing knowledge, and applying it for the good of all.' The library actively supports and provides the information resources, high-quality spaces, services and capability necessary to deliver on its mission. Today, UCC Library is served by two library buildings - the five-storey Boole Library located at the heart of the campus on the south-side of the historic Quadrangle, and the Brookfield Library located over two floors in the UCC Brookfield Health Science Complex.

UCC also currently holds strategic partnerships with Mercy University Hospital Library and Cork University Hospital Library Services. Our spaces, collections and library services are oriented to meet these primary needs in an effective and efficient manner.

Boole Library

The original Boole Library Building was designed by Murray Murray Pettit Architects and opened in 1983. The five-storey building was clad in striking horizontal precast concrete units in strong contrast with the 19th century stone Quadrangle buildings. An Eastern wing clad in copper and glass was jointly designed by SBRA Architects, Boston, and Wilson Architecture, Cork, and was completed in 2007 to bring the footprint of the library to a total of 18,000 square-metres.

The Boole Library remains one of the busiest buildings on campus, with an average of 5,000 daily visits during busy semester times. These visitor numbers will only increase as the library continues to develop programmes, initiatives and spaces that enrich the academic experience.
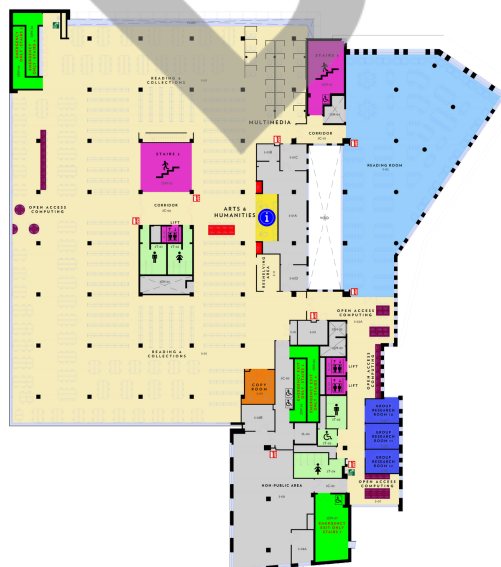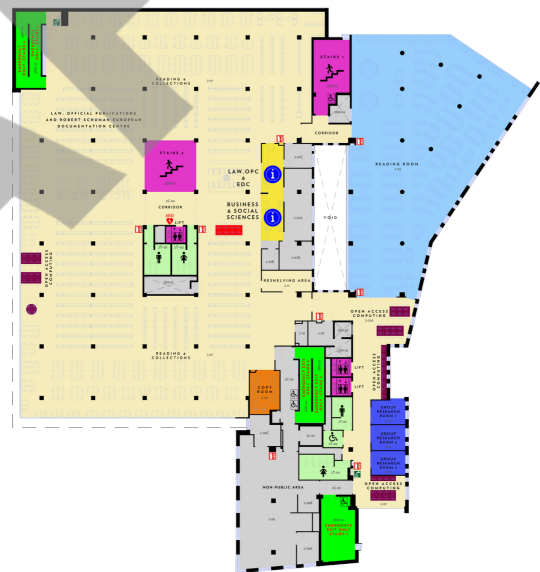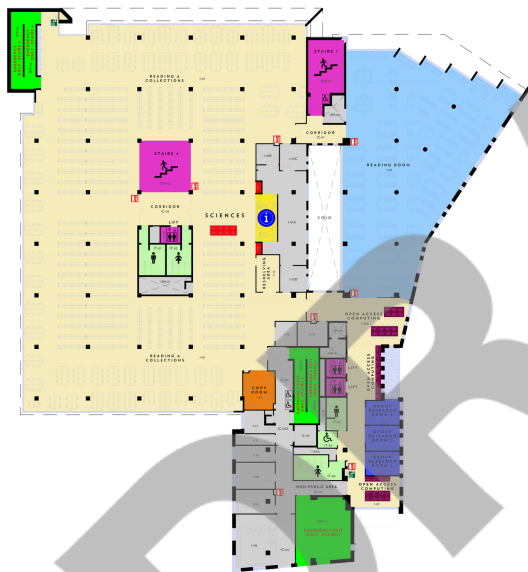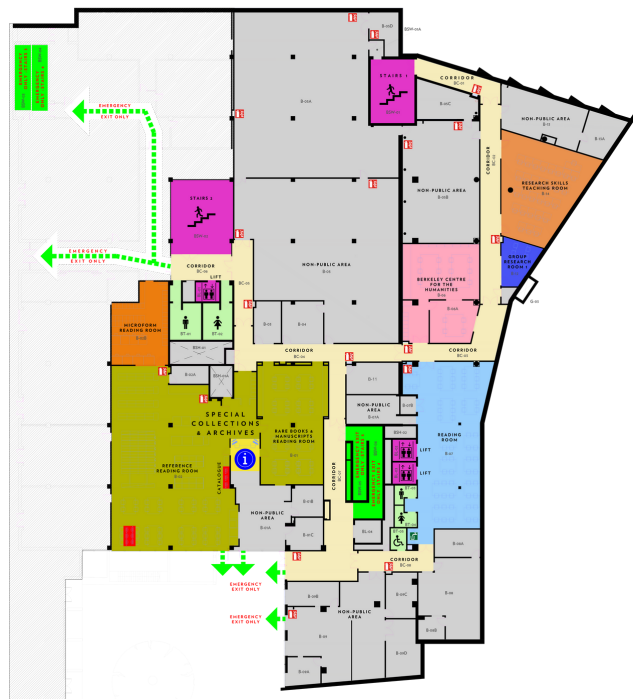
Current Boole
Library Floor Plans

Top left: Q-1 Floor (basement) Level
Top right: Q Floor (ground) Level
Middle left: Q+1 Floor (first) Level
Middle right: Q+2 Floor (second) Level
Left: Q+3 Floor (third) Level.

BOOLE LIBRARY OBSERVATION STUDY

Library Entrance

Access to UCC Library is by swipe card access at the entrance (pictured above), with priority given to UCC affiliates. In the case of the Boole Library, the building is regularly used for public and community events, and is considered by many to be at the heart of the campus. Although occasional visitors and non-UCC affiliates are accommodated, the current access control system might be considered restrictive and uninviting.

Service points

The 2007 Boole Library extension was designed to provide multiple service points throughout the entire building. Coupled with additional security/library operative desks on the Q floor, and a separate designated service desk in the Special Collections and Archives area, it can be confusing for library users who are unsure where to seek assistance.

Clockwise, from top left: Defunct library service desks/information points on Q+1. Q+2 and Q+3.

Significant efforts have been made in the last 10 years to consolidate and simplify the number of staff service points, and today, the desk on the Q Floor (pictured on previous page) acts as the primary combined service point. This has resulted in defunct public points throughout Q+1, Q+2 and Q+3 (pictured above) which could be repurposed for additional user spaces.

Reader Spaces

The Boole library houses over 2400 reading spaces throughout the building. The individual study spaces in the original Boole library building (below, left), although popular, do not provide variety or modernity expected in a modern library.

The dedicated research skills teaching room, a necessity in a library, consists of rows of hard-wired desktop computers, and does not lend itself to flexible, student-centred teaching practices.

Emerging Technologies

The library continually considers new and emerging technologies, and how they might be integrated into library services for its users.

The introduction of lendable laptops (right) has proven popular with students, with demand for loans frequently exceeding the 70+ laptops available.

The library has also introduced new technology-based services, such as 3D printing, as part of its core services. The group-study rooms are all equipped with large-screen projection capabilities, and the library has been retrofitted with power sockets throughout the building. The library has introduced interactive technologies such as the Google Jamboard. The library also collaboratively unveiled the Library Studio - a one-touch video and audio recording facility with studio-quality lighting and green-screen technology to allow library users produce content for their academic needs.
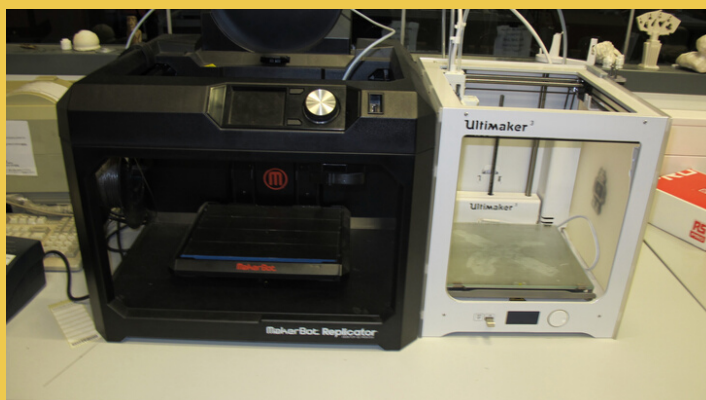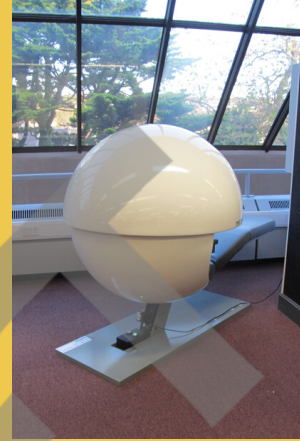

Clockwise, from top left: Google Jamboard on Q+1, The Library Studio on Q-1, and 3-D printing service on Q floor.

The integration of technologies into library services and spaces is a critical element for modern library services in UCC.

New Spaces

UCC Library has developed its variety of spaces within the library buildings over the past number of years.

Clockwise from top left: The Skills Centre on Q-1; Energy Pod on Q+3; The Creative Zone on Q, and The Study Pod on Q+1.

The technology-rich Creative Zone has introduced modern furniture design, collaborative workspaces and co-created event space to excellent effect. The expansion of the Skills Centre, a support service for student success and retention, although administered outside of the library, is housed in a flexible, modular and inviting space within the Boole Library. UCC Library has also introduced rejuvenation spaces with the Energy Pod on Q+3 and the sound-proof Study Pod on Q+1 primarily for users with sensory processing sensitivities.

Guiding

PRINCIPLES

UCC Libraries is influenced by a number of principles, trajectories and emerging best practices that guide decisions about improved and expanded library services and spaces, and allow for new and updated ideas to be included in the infrastructure.

Library Strategic Plan, 2018-2022

The Space Master Plan progresses the UCC Library Strategic Plan 2018-2022 under the following strategic themes:

Theme 3: Create engaging, delightful user experiences across physical and virtual spaces

Action: Develop technology-rich, interdisciplinary learning and teaching spaces that foster experimentation, co-creation and collaboration.

UCC Strategic Plan, 2017-2022, and UCC Civic Engagement Plan 2017-2022

The Space Master Plan also supports and advances strategic priorities within the university. As stated by Professor Patrick G. O'Shea, President of UCC, "we are a university in the community, of the community, and for the community." Objective 4 of the University's Civic Engagement plan calls for leveraging "UCC Library's strong public brand to further develop community partnerships and support the scholarship and practice of engagement, continuing its archival supports to the region, its exhibitions and Treasures Gallery, and increasing public physical accessibilty." This Space Master Plan outlines the vision for this increased accessibility and for spaces such as the Treasures Gallery.

Additionally, the master plan advances the University's efforts in its overall Strategic Plan in Goal 3 - Create value for our community through an international outlook and informed and creative engagement on local and global issues, and Goal 5 - Strengthen the Infrastructure and resource base, which calls for enhanced facilities for UCC Library.

INFLUENCING CONCEPTS

A number of key concepts influence the development of the Master Plan project. These combine specific aspirations of UCC Library with other key emerging best practices across the library profession. These changes are social, pedagogical, technological, administrative and operational.

LIBRARY AS A COMMUNITY SPACE

The library aspires to be one of the few spaces on the campus that is welcoming and accessible to all. By creating open, unrestricted public spaces with social, learning and creative dimensions, the Q floor of UCC's Boole library will be a place for the entire Cork community to enjoy.

Cafe, retail, exhibtion and signature gallery spaces will make UCC Library a destination space for inspiration and creativity.

INTERDISCIPLINARY COLLABORATION

The library is a "neutral", cross-disciplinary space within the University, making it the ideal place to share, create and celebrate interdisciplinary knowledge, and cross-fertilisation of ideas and collaboration.

The library is committed to providing spaces, services and technologies that empower and enable the entire UCC community in interdisciplinary inquiry.

PRINT COLLECTIONS

Advances in digital publishing have had a huge impact on library collections, but the library as a repository of printed materials is still an important remit. However, infrequently-used materials occupy substantial volumes of space that limits the library's capacity to develop new types of spaces and services. The library has a responsibility to balance the challenge of facilitating unique, distinctive and important print collections while developing additional spaces and services.

KNOWLEDGE CREATION

As the University curriculum adapts and transforms, expecting collaborative, interdisciplinary and innovative research outputs, the library will take the opportunity to faciliate all forms of knowledge creation within the undergraduate and postgraduate research lifecycle. Technology, spaces and library services will be developed to allow researchers build capacity and skills in digital, information and new media literacies.

NEW TYPES OF SPACE

As the library facilitates innovative new practices, resources and outputs, the need for new, flexible and adaptive spaces becomes paramount. Additionally, to facilitate these new outputs, library staff also need space to collaborate, consult and work across disciplines. The master plan calls for new, modernised, innovative spaces for both library users and library staff.

THE EXPANDING UNIVERSITY

With predicted growth in student enrolment numbers, as well as an expanded University reach across the city, the need for an expanded library footprint is imminent. The 2008 addition to the Boole library is no longer suffcient to support the volume of learners, and the Master Plan calls for an expansion of the Boole Library. The development of satellite campuses in the city centre and beyond also calls for library presence in new academic buildings currently in development.

APPROACH

The UCC Library Space Master Plan outlines four distinct phases for the development of library services and spaces. While these phases are somewhat chronological, they are also interdependent and interconnected. Over the next decade, UCC library needs to be revitalised, refurbished, reimagined and expanded to stay current and meet the changing needs of the University community.

Phase 1 – Q Floor Redesign & Treasures Gallery

UCC library aspires to create a welcoming, inclusive and unrestricted space for the entire community by completely redesigning the Q floor of the Boole library. The redesigned floor will encompass social spaces by creating a cafe and retail hub, exhibition and performance spaces, technology-enhanced creative spaces, an attractive and welcoming entrance that connects the library back to the campus Quad, and the development of a signature Treasures Gallery to showcase and make accessible the special and unique cultural collections of the University. The Treasures Gallery will be enhanced by a multimedia room to enrich the community's experience of viewing these treasures.

Phase 2 – Technology-rich Spaces

UCC Library aspires to facilitate new forms of scholarship by creating technology-rich spaces that facilitate collaboration, co-creation and innovation across disciplines. The creation of technology-rich spaces within the library elevates the possibilities with teaching, learning and research, and positions the library as an innovative learning laboratory. UCC Library will be model for our peers, and an example of the innovative use of technologies in libraries for the consumption, production and dissemination of information. This phase also includes the relocation of core library services to the Q+1 floor of the Boole library. The reconfiguration of library staff spaces throughout the Boole library building is necessary to facilitate new modes of collaborative and modern library services.

Phase 3 – Collections & Storage Facilities

Like any modern, leading and responsive library, UCC Library must balance the need for storing and making available physical materials and collections with the need to develop and repurpose library space in response to increasing demand for additional library reading spaces. The Master Plan sets out a vision for refining open stack collections combined with a purpose-built storage and conservation solution.

Phase 4 – Expanded footprint

The 2008 extension to the Boole Library is no longer sufficient to support the expected growth in enrolment as well as the increasing demand on reading spaces from the University community. This Master Plan calls for a feasibility study to expand the footprint of the Boole Library. Additionally, this Master Plan calls for a proposal which outlines how UCC Library will provide library services, both physical and virtual to the students and academic community in satellite locations, e.g. CUBS, the Dental School, as the University extends its geographic footprint.

Phase 1

Q FLOOR REDESIGN & TREASURES GALLERY

Q FLOOR REDESIGN

Within Boole Library there will be a range of functional areas – visitor and UCC user areas and library staff accommodation. Boole Library currently accommodates partners such as the Instructional Design team, the CPPD team, Blackstone LaunchPad, the Assistive Technology Lab, and the Skills Centre. The library remains one of the busiest buildings on the campus, with an average of 5,000 daily visits to the library during busy semester times. These visitor numbers will only increase as the library continues to develop programmes, initiatives and spaces that enrich the academic experience.

It is envisaged that public visitor access will be extended to the Q Floor in its entirety (apart from staff areas). Access control will be re-located or redesigned to permit UCC registered users only to access the remaining floors of the Library on Q-1, Q+1, Q+2 and Q+3. The redesigned Q floor will be a community space, providing social, learning and creative spaces for all.

Q Floor Entrance

The only entrance to the Boole Library is located on the Q Floor. The entrance will be opened up to make it more welcoming and inviting to the public, and to encourage visitors to the library exhibitions, Treasures Gallery, book shop and café. Visitors will be able to enjoy a range of multimedia and interactive displays in an engaging and comfortable environment. They will be free to mingle with the student body who will continue to avail of the services offered on this floor. These services include self-issue, self-return, laptop loans, information point, group study rooms, Creative Zone, seating areas, high-demand print collection, and printing.

Welcome & Enquiry Desk

The Welcome Desk on the Q Floor will be a consolidated space for all event, welcome and direction queries from Boole library users.

Features:
- Much smaller than current desk
- Two person capacity with small adjoining staff space
- Accommodates library event staff and student IT help.

Group Study Rooms

Group study rooms are in high demand in the library. Currently there are two technology-rich group study rooms available for student use. The redesign of the Q Floor would allow for up to 10 group-study areas. Web booking is available by the students. These are intended, in future, for community and public booking in specified low-usage times.

Creative Zone

The Creative Zone is a large, flexible, technology-rich area hosting workshops, seminars, conferences, poetry/book readings, student group work and individual work. It is bookable in its entirety or in zones. When not in use, the Creative Zone is open for student use. Currently, the demand for the Creative Zone is very high – likely due to the lack of similar spaces available elsewhere. The realisation of this space master plan is expected to ease the current pressure on the Creative Zone, thus allowing greater student usage of this space.

Features:
* Contains Blackstone LaunchPad – entrepreneurial centre which is open to students, alumni, staff and faculty offering coaching, ideation and venture creation support. Needs to be fully accessible to the public given the nature of the events happening in this space.

Cafe, Retail Space

The Boole library building currently lacks a retail space as well as a place for refreshments. The redesign of the Q Floor allows for café and bookstore retail spaces, open to the public. There is no obvious meeting point in the central campus. The library would provide this focus.

Performance, Exhibition & Auditorium Area

The Boole library is centrally located on campus, making it a prime space for public performance, exhibitions and other events. The performance areas and auditorium will be a space dedicated for public performance events, and will cater to a maximum audience of 200 people. The space will also serve as a social gathering space when not configured for performances.

Quiet, individual Space

Members of the public who wish to use the library space for their own private research or study may use individual spaces outside of peak-use times. Peak-use times are the 4 weeks prior to the exam periods in semester 1 and 2.

TREASURES GALLERY

Since its establishment in the 1840's, University College Cork (UCC) has collected documentary, scientific, and cultural artefacts for use primarily as resources for teaching and research. A selection of zoological and geological material was placed on display from 1849 until the 1960s, when the space in question was reconfigured for use as lecture and reading rooms due to increasing student numbers.

The University regularly displays material from its collections at a variety of locations throughout the campus, often in adapted spaces but more usually as part of programmed exhibitions at the Glucksman Gallery and the Boole Library. However, there is little scope for retaining manuscripts, books, paintings, sculpture, and historical memorabilia from the UCC collections on a more permanent display on campus.

The University has taken a strategic decision to secure a permanent exhibition space which is capable of displaying treasures from the UCC collections as well as items on loan from other institutions. The Treasures Gallery will be a fully secure and serviced space of approximately 100m² which would provide for display and interpretation of approximately 12 to 15 artefacts. The space will be publicly accessible in the library building, which will be capable of managing such a facility with appropriate security, environmental control, and visitor services.
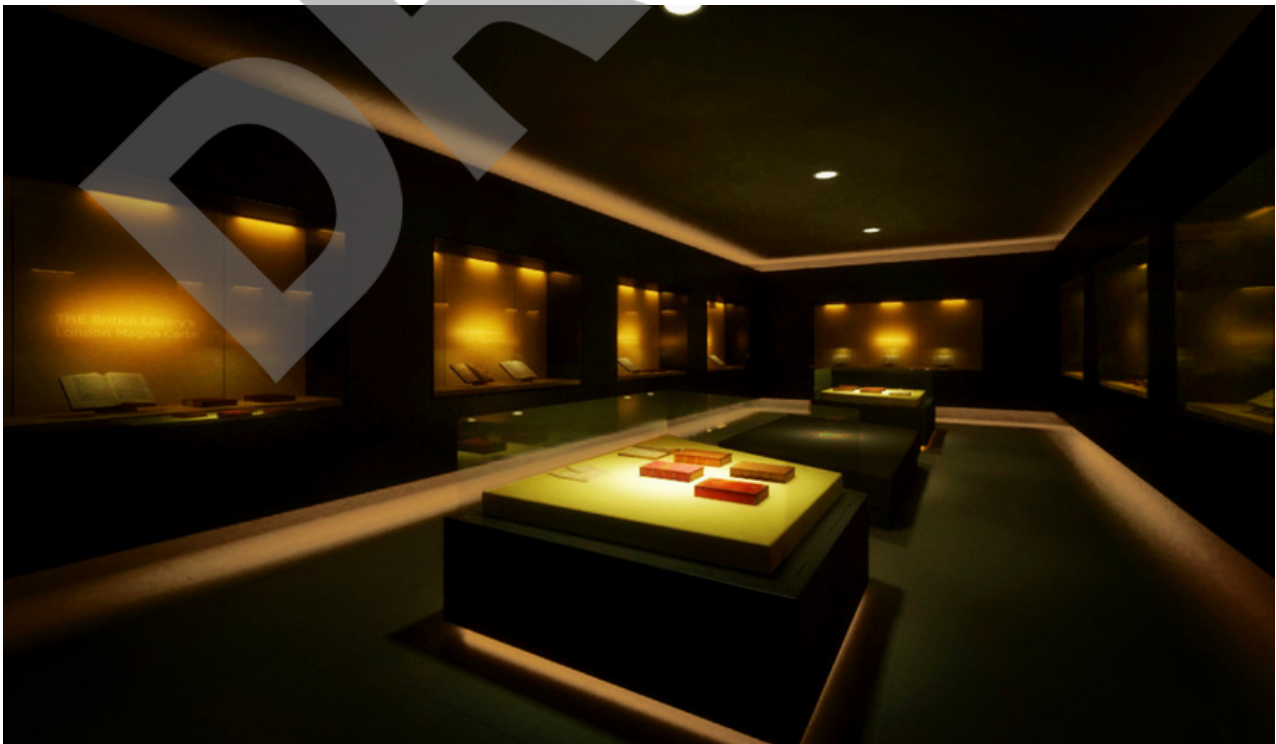

Figure: Early Architect's simulation Treasures Gallery interior

Context

UCC has assembled many valuable and unique documentary and physical artefacts over the 173 years of its existence. These include rare and original maps, manuscripts, early printed books, and archival material, such as The Regensburg Manuscript Fragment (12th century), The George Boole Papers and An investigation of the Laws of Thought (1854), Civitates Orbis Terrarium Vol I-VI (1572-1671), The Great Book of Ireland (1991), unique Irish silverware, and original plate, furnishings and vestments for the construction of the Honan Chapel (1916).

These and other potential materials merit wider public appreciation than is currently possible given the University's limited exhibition facilities.

Inter-Institutional Linkages

UCC enjoys linkages with many other universities and cultural institutions internationally through its research and teaching activities. Opportunities exist to collaborate with these institutions through the short and long-term reciprocal loan of artefacts. However, UCC is constrained from accepting offers from such institutions at present primarily by not having the appropriate security and environmental conditions in which to display borrowed material. The proposed Treasures Space would remedy this deficiency and open up prospects for further collaboration.

Regional Benefits

Cork has made great advances in recent years with the development of major cultural attractions. Enhancements at the Crawford Gallery and Cork Public Museum have significantly improved access by citizens and tourists to Cork's artistic and historical heritage. The award-winning Glucksman Gallery has deepened appreciation of contemporary art in an academic setting while also strengthening public engagement through the medium of art with cultural and civic issues. However, a significant gap exists in Cork and Munster's heritage portfolio in the form of a space capable of exhibiting major documentary artefacts (manuscripts, archives, rare books) and physical artefacts of high value, such as might be found in a major Museum or collecting institution. Not only is there no permanent display of UCC's treasures, there is no opportunity for Cork and regional citizens to view in Cork the kinds of artefacts held and displayed at the National Museum of Ireland, National Library of Ireland, Royal Irish Academy, or Chester Beatty Library.

UCC's Treasures Space aims to fill this gap and to provide Cork and the wider region with a facility that has the capacity and expertise to mount exhibitions of treasures from UCC and other collections. UCC possesses the curatorial expertise in visual art, manuscripts, archives and heritage to develop and manage such a facility. The University has a strong strategic commitment to greater public engagement through cultural heritage, and this is a key step in that direction.

Benefits

A new Treasures Space at UCC will:

- provide opportunities for members of the public, school students, and cultural tourists to appreciate primary historical material and important artefacts at first hand.

- strengthen collaboration with other regions and institutions through the reciprocal loan of important national and international artefacts.

- Improve the attractiveness of Cork as a location for investment.

- Increase public footfall to the University College Cork campus and support the university's public engagement strategy.

The realisation of a state-of-the-art Treasures Space at UCC is fully supported at all levels within the University. It would establish Cork as a viable alternative for exhibitions of important artefacts held by the national cultural collections almost exclusively in Dublin. It has the potential to transform public appreciation and understanding of important historical and cultural treasures and it would establish the University as an important and responsible custodian of the great material achievements of human intellectual and artistic endeavour.

DRAFT

Phase 2

TECHNOLOGY-RICH SPACES

Q+1
REDESIGN

The library seeks to lead the campus to reimagine what work might be completed within a library, and aims to provide spaces and technology that foster collaboration, co-creation, experimentation, wonder and play. The creation of these technology-rich spaces allows students and learners transition to a new role as knowledge creators. These spaces allow allow for creativity and collaboration as a default mode of work.

By creating these technology-rich spaces, the library will actively seek opportunities to collaborate with academic staff to integrate technology into teaching, as well as opportunities to marry technology, library collections and interdisciplinary research opportunities. The creation of technology-rich spaces within the library elevates the possibilities for teaching, learning and research, and positions the library as an innovative learning laboratory.

UCC library will become a leader within the University for the development of technology-rich interdisciplinary learning and teaching spaces.

Contained within are a number of technology-rich learning and teaching spaces that the library will develop. By repurposing a significant portion of the Boole Library's Q+1 floor, the library will provide, maintain and operate a Virtual Environments Lounge, a Digital Makerspace, a Media Creation Studio, a Library Learning Lab, Idea Lounge, Immersive Zone, Faculty Lounge, and modernised student spaces. These spaces, while standalone and independent, have the potential to work together as part of the learner's creation process from ideation, prototype and experimentation, towards the final output and showcase process. These technology-rich spaces have the potential to facilitate innovative research outputs – from conception all the way to realisation.

While the Q Floor of the Boole Library will be opened up the wider community, the use of facilities on the remaining floors, including these new spaces on Q+1, will be available to UCC affiliates only. Access to each of these floors will be by UCC swipe card at entry and elevator access points.

TECHNOLOGY-RICH SPACES

Virtual Environments Lounge
- Room-scale VR experience
- Range of VR Headsets
- VR Content

Digital Maker Space
- 3-D design, scanning, printing
- 360º camera
- Arduino & Raspberry Pi
- Sewing machine & other creation technologies

Media Creation Studio
- Audio Mixing & Production
- Creative Suite for Multimedia Design
- Computer Lab

Library Learning Lab
- Active-learning classroom
- Learner Pods/Zones
- Writable Surfaces/Connected Screening

Immersive Zone
- 360º data projection
- Room-scale immersive experience
- Theatre lighting and aural experience

Idea Lounge
- Large-scale data visualisation wall
- Flexible space
- Showcase space

Faculty Lounge/Research Commons
- Collaborative, social
- Interdisciplinary space
- Rejuvenation space

Modern Student Study Spaces
- New & emerging furniture testing
- Modern, flexible and comfortable
- Individual & collaborative spaces

Proposed technology-rich spaces for Q+1

VIRTUAL ENVIRONMENT LOUNGE

Virtual and augmented reality technologies allow for heightened experiential learning opportunities within the University context. Additionally, VR provides new, interactive and immersive ways of consuming information and media. Immersive virtual and augmented technologies are an effective way to communicate key concepts in teaching, and to showcase research outputs. In a connected University setting intentionally marrying teaching and research, this technology promotes active participation in enquiry and exploration. VR and AR technologies also allow students to curate their creative, technology-rich outputs and showcase them to a wider audience.

The library will lead on enabling virtual and augmented educational spaces using dedicated technology and space for virtual education. The virtual environment lounge within the library will be a dedicated space for students, researchers and staff to engage in virtual and augmented reality experiences for education, art and gaming. Visitors will make use of the tethered or untethered virtual experiences, with pre-selected simulations, games and other content accessible. Use of the Virtual Environment Lounge will be reserved through the library's room booking system, and users will take part in a short orientation tour of the Virtual Environments Studio prior to their first virtual experience. The Virtual Environment Lounge will be equipped with a dedicated, high-end gaming PC for tethered virtual experiences, as well as untethered headsets, for less intensive, more accessible virtual experiences. A large, flat screen TV monitor can be used to mirror a VR headset's view.

Potential Technology

- High-specification gaming computer with advanced graphics card and monitor
- Tethered Room-scale VR headset, including tracking sensors, such as the HTC Vive
- TV screen monitor with Chromecast
- 3 x untethered VR headsets, such as the Lenovo Mirage Solo
- Mixed-reality headset, such as the Microsoft Hololens, that mixes virtual and physical reality in an augmented fashion
- VR content is available in licensed and open formats. Licensed VR content from companies such as Lapster should be explored
- Soft furnishings

DIGITAL MAKERSPACE

Fabrication laboratories (FabLabs) or makerspaces provide physical spaces and various tools to allow users to ideate and create with physical and 3D materials. Bringing together plastics, textiles and other materials, the Digital Makerspace fosters skills around design, experimentation and creation. The Digital Makerspace is a place to actively experiment with, and explore, new technologies.

The library will lead on building capacity for design and exploration by providing workshops and programs dedicated to 3-D design and print, as well as other technologies. The library's Digital Makerspace will be a dedicated space for students, researchers and staff to actively explore, design and create. Visitors will make use of the range of technologies, both high and low-tech, for the creation of physical, 3-D objects. The makerspace will operate a dual service model – where students can submit 3-D models for printing by library staff, or alternatively, where students themselves operate the various technologies.

Use of the Digital Makerspace will be reserved through the library's room booking system, and users will take part in a short safety demonstration prior to their first visit. The Digital Makerspace will be equipped with 3-D printers and scanners, dedicated software, Laser cutters, carving machines, and other technologies. Ventilation in this dedicated space is crucial to accommodate appropriate airflow and to regulate temperatures.

Potential Technology

- 3-D printers (multiple models/capacity)
- 3-D scanners
- 360° Camera with tripod stand
- Computers with dedicated 3-D design software (such as SketchUp)
- Arduino
- Raspberry Pi
- Laser-cutting machine
- Lego
- Sewing Machine
- Supplies: cardboard, PLA, textiles and other materials
- Furnishings: Workbenches with a mixture of moveable seating

MEDIA CREATION STUDIO

The Media Creation Studio will be a dedicated space for users to create sound recordings, edit images and video, and create multimedia outputs.

Media Creation Studios allow users to complete rich multimedia projects in a variety of formats. Students could create a podcast, edit a movie or create a digital sound recording in the Media Creation Studio. The Media Creation Studio fosters skills in media production and editing. The library will facilitate creativity and artistic expression by providing access to professional-level media production facilities.

The Media Creation Studio can be used for both formal classes and workshops, as well as personal or individual use. The library will facilitate programs of learning by bringing skills from outside of the library to lead workshops and other opportunities.

The Media Creation Studio will be equipped with a number of high-spec computers, with licensed software such as Adobe Creative products. There will also be dedicated sound mixing equipment as well as a digital piano/keyboard. The Media Creation Studio may contain two separate zoned areas – an area for sound recording and a computer area for editing/media production.

The existing Library Studio could be relocated to within the Media Creation Studio (or expanded to include these additional features).

Potential Technology

- Audio Mixing Controls
- Speaker systems
- High-spec computers (12) with media production software (such as Adobe Creative Suite)
- Microphones (plus peripheries)
- Headphones
- Digital Piano

LIBRARY LEARNING LAB

The Library Learning Lab provides an opportunity for the library to lead and innovate on the design and utilisation of active learning classrooms on-campus. By creating a dedicated library learning lab, the library provides a dedicated space for innovative teaching and learning practices for digital and information literacy. Embracing the true ideology of active learning, the Library Learning Lab de-centralises the instructor, and places emphasis on the learners at the centre of the learning experience (both physically and metaphorically). The library will be a leader in the University for student-centred, active learning practices.

The Library Learning Lab is a dedicated active learning classroom within the library. It will replace the Resarch Skills Teaching Room on the Q-1 floor of the Boole library. It will be used primarily by library staff for embedded or stand-alone workshops. The Library Learning Lab could also potentially be offered on a stand-alone basis to academic staff who wish to explore active learning approaches in their courses.

The Library Learning Lab will provide six circular learner zones. Each circular zone will contain eight learner spaces with a dedicated computer at each area. Each circular zone will also contain a flat-screen monitor which can be used to project the instructors PC screen, or can be toggled to display a learner's PC screens at that zone. Each zone will contain multiple writing surfaces to allow group-work.

Potential Technology

- 48 learner spaces, zoned into six circular tables, each with a dedicated PC
- Mobile whiteboards and writing surfaces
- 6 flat-screen TV screens, with controls to toggle projection between devices and machines
- One instructor station/podium with PC machine, document camera, presentation equipment
- Wireless handheld microphone

IDEA LOUNGE

The Idea Lounge is a dedicated space for staff, students and researchers to share ideas, knowledge and research with large-scale projection. This is a space to showcase collaborative and individual projects, foster new connections, and spark new ideas. It is a space to inspire and connect, showcase and share. In the Connected University system, collaborative research opportunities are fundamental to the curriculum, and the library has the opportunity to showcase best research outputs. This space also provides opportunities for users to draw connections to library content on a large-scale, such as special collections and other materials.

The Idea Lounge is a place to showcase research on a grand-scale. The Idea Lounge can be used for workshops, exhibits, teaching, TED-style talks, research presentations and personal use. To that end, the room could be equipped with multiple flat-screen, multi-touch display units which are configured in a grid system. This grid system can be used to display one source at a large-scale, or multiple sources side-by-side.

Potential Technology

- 18 LCD multitouch display units (1920 x 1080px each)
- Screen control
- Presenter/PC podium
- Furniture: flexible seating arrangements to facilitate multiple set-up solutions such as: theatre style, reception style, etc.

Potential Configuration
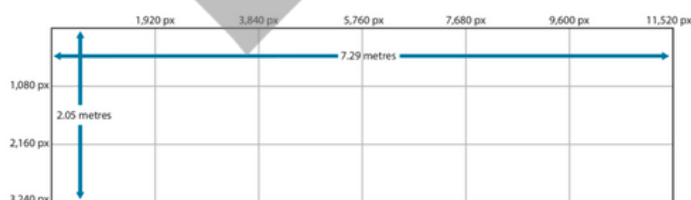
18 55" LCD monitors (6 x 3 configuration) with a multitouch glass overlay
Dimensions: 7.29 m (w) x 2.05 m (h)
Resolution: 37,324,800 - 11,520 (w) x 3,240 (h) pixels, 72 dpi
From Mount Royal University Library

IMMERSIVE ZONE

The Immersive Zone is an innovative space for 360° visualisation of content that places the learner in the centre of the visual and aural experience. This immersive learning space allows learners to experience next-level content and visualisations. The content for the immersive zone marries multiple disciplines from the start, from computer science and graphic design, to disciple-specific knowledge from specialised content. The Immersive Studio is designed to elevate the learning experience and immerse the learner into the content being discussed.

The technology set-up allows for big-data visualisation or command-centre type environments. The Immersive Zone will be equipped with a series of projectors (10) that project up to 360° video, images and simulations from a single desktop. The room also includes surround sound and theatre lighting.

Use of the Immersive Zone will be reserved through the library's room booking system, and users will take part in a short demonstration of the technology prior to their first event.

Potential Technology

- 360° data projection (through 10 separate projectors) onto 10 separate screens for a full dimension of 16,384 x 1200 pixels
- Surround Sound stereo output
- Theatre lighting
- Furniture: flexible and modular, capable of moving from classroom-style seating to less formal set-up

FACULTY LOUNGE

The Faculty Lounge is a dedicated space for researchers and academic and university staff to meet, collaborate, socialise and brainstorm. It is a space dedicated to inter-disciplinarity and co-mingling.

The Faculty Lounge contains a break kitchenette area, with tea, coffee, and snack facilities. This area is furnished using a combination of comfortable lounge furniture, as well as common-room/eatery seating. The Faculty Lounge also contains separate breakout conference rooms, with collaborative technology installed. The library will actively support interdisciplinary, collaborative efforts amongst academic staff by providing a faculty lounge that inspires creativity and co-creation.

The library will operate this space as a key and integral part of our service offerings, providing an exceptional library experience for academic staff. The Faculty Lounge will also be a place for the UCC Alumni community to enjoy.

PRESENTATION PRACTICE ROOMS

Students are often asked to give formal presentations as part of their coursework. There is a need for a dedicated space for students to practice for these formal presentations. Additionally, our users often need small spaces suitable for conducting online teleconference interviews.

The layout and furnishings of the small Presentation Practice and Conference call rooms clearly delineates and distinguishes these rooms from other larger group study rooms.

RELOCATED SERVICE POINTS

The removal of the large service desk and service points on the Q Floor of the library, as well as the development of technology-rich spaces on Q+1 provides an opportunity to relocate important information and user services (Client Services) to Q+1. The formal service desk area on Q+1 will be repurposed to combine Library Help and Information Service functions. The entire area adjacent to the service desk and the stairwell will be reconfigured to be a light and open area for thoroughfare and comfortable, welcoming seating.

Additionally, a reduced high demand collection area will be located close to the relocated client services area.

STAFF SPACES

In addition to library users, library staff are also carrying out work in new and innovative ways. With increased demand on library staff for collaborative, consultative and facilitative service provision, the space requirement for library staff is changing. Through continued revision of library operations, library staff are engaging in greater collaborative and co-creative work practices which creates a need for revised library staff spaces.

Staff spaces throughout all library buildings will be reviewed and redeveloped to create fewer single offices, and more team-based working spaces with a variety of breakout consultation areas and team meeting rooms to facilitate these changing work practices. Technology will be utilised within these spaces to better facilitate the work of library staff.

MODERNISED STUDY SPACES

Student study space is at a premium in UCC. The library is committed to providing excellent study spaces for students. The library will provide a wide variety of new, modern and emerging furniture designs and products to promote individual and collaborative study spaces. The library will actively pursue options to allow our students to continually test furniture and study spaces by partnering with various vendors and suppliers. The library will be a testing ground for modern student furniture on-campus.

The way in which our students study and work is rapidly changing. Library users need space for a variety of reasons, and the requirements on space is dependent on the particular task at hand. The library will embrace these requirements by providing new, less formal and open spaces where students can come together, huddle and collaborate on work in the library's open spaces. These huddle spaces will be a mixture of technology-enabled and technology-free. The redesign and relocation of central services to Q+1 will change the culture of this entire floor. Active, creative and audible energy is to be embraced, and these informal group huddle areas are an integral part of this.

FUTURE DEVELOPMENTS

The creation of innovative technology-rich spaces is the beginning of a continual, iterative process, rather than the culmination of our efforts. The library aims to continually evolve and develop these learning spaces and studios to ensure that they remain responsive, innovative and dynamic. The library will continue to explore and investigate new technologies for inclusion within these spaces, so that the library is viewed as a learning laboratory, giving our learners continued access to new and emerging technologies.

Phase 3

COLLECTIONS & STORAGE

LIBRARY OFF-SITE FACILITY

The current Library off-site storage located at Pouladuff Road is no longer fit for purpose. It is a repurposed shoe factory with some plant modifications (heating) which are now no longer operational and therefore the Library is not in a position to place collections there. Originally this facility housed approximately 12km of library stock primarily books, periodicals and newspapers. The collection has been downscaled somewhat with a large collection of unprocessed collections (approximately 2km) having been removed. There is currently approximately 10km of shelved stock in the store and it is full to shelved capacity.

A new Library off-site facility will not just fulfil traditional storage requirements. The needs of the University and its collecting strategies have developed and are more complex than they were 20 years ago.

Key elements of a new facility should support the preservation and care of collections and include:

- A modular construction to facilitate extension. Collections held off-site will increase as lesser used collections are decanted from the main Library building as the footprint required for new library services in the main library building increases. This also applies as University collecting increases and diversifies in terms of its Unique and Distinctive Collecting (UDCs).

- Environmentally controlled storage spaces to meet a range of collection storage needs from film to paper materials. Using the best environmental cost effective solutions for long term storage (100 years) - HVAC or other modern environmental responsive solutions. See BS EN 16893:2018.

- Processing spaces of adequate size and special flexibility to manage the accessioning, cleaning and possible remedial conservation work on collections. This would include an isolation space for contaminated collections, and deep refrigeration (-40C) for decontamination, or disaster recovery purposes, and space for unprocessed collections (warehouse racking).

- Processing spaces of adequate size and special flexibility to manage the accessioning, cleaning and possible remedial conservation work on collections. This would include an isolation space for contaminated collections, and deep refrigeration (-40C) for decontamination, or disaster recovery purposes, and space for unprocessed collections (warehouse racking).

- Staff work areas and offices (workstations) for input and processing of collections (4 persons) including network and Wi-Fi facilities.

- Reprographics unit to manage deliver of requests for off-site print material (Document delivery) including IT infrastructure.

- Scanning and photographic unit with photographic studio equipped to photograph large documents (plans, maps) as well as artworks.

- Storage spaces disaster recovery materials (enough to cope with medium scale issues), housing materials e.g. archival packaging.

- A consultation room for 6-8 readers with scope to view larger items from collections housed off-site.

- Security envelopes and perimeters around and inside the building to protect against fire, natural disaster, theft and other malicious damage.

- A vault for housing items of high value or items on loan to the University compliant with standard BS EN 16893:2018.

- Loading and delivery bay with capacity for medium trucks and lorries.

- High-density shelving storage space for approximately 20km of physical collections to meet current capacity requirements and that of the next 10 years. Physical library collections are increasingly varied and shelving should facilitate the appropriate storage of a range of types of material. This ranges from books, archives in archival boxes of varying sizes, journals, maps, plans, drawings, sketches, artwork, photographic collections (analogue, including negative and print formats), magnetic media, vinyl records, newspapers, ephemera, fabric materials and clothing, historic artefacts, digital hardware/software to exhibition materials. Ideally these high-density areas might be divided to reflect storage requirements of various types of collections, and specific service needs e.g. Archives differing from printed books, maps and drawings from bound material, film/negatives and slides from paper.

The compacts should be of various depths from 300mm to 500mm, allowing for the storage of large elephant materials stored flat, and for the insertion of filing cabinets for specific materials e.g. 3D artefacts. Accessible delivery service to the reader and user on main campus.

Phase 4

EXPANDED FOOTPRINT

SATELLITE CAMPUSES

The University is undergoing rapid and expansive development, extending its footprint across the city. With the future development of Cork Undergraduate Business School (CUBS) facilities in the centre of the city, as well as the Dental School facilities in Curraheen, Bishopstown, and the proposed Medical Education Centre on the Cork University Hospital campus, UCC students will be distributed widely throughout the region. The library has a responsibility to provide equitable library and study facilities to all constituents of the University. As the library continues to develop its collections and services with advanced digital technologies, the need for remote physical library collections arguably wanes. However, the demand for study and reading spaces continues to be paramount. As the University expands its footprint throughout the region, the need for remote study spaces contained within these new academic buildings emerges.

The library will develop a comprehensive proposal that will outline how UCC Library will provide library services, both physical and virtual to the students and academic community in satellite locations. This proposal will include the requirement for dedicated reading and study spaces within proposed new academic buildings in satellite locations.

BOOLE LIBRARY EXPANSION

The 2008 expansion to the Boole library brought the footprint of the building to 18,000 square metres, but this expansion no longer meets the needs of the UCC community. Continued increased demand for reading spaces, as well as the development of new spaces and services and a projected growth in student enrolment means that the Boole Library is continually at maximum capacity. Additionally, climate controlled storage areas for special, protected and rare collections are at capacity. This Master Plan calls for the expansion of the Boole library to address these and other needs of the UCC community for modern library services.

A feasabilty study, conducted by an appropriate architect and design firm, is now required to investigate the feasabilty of expanding the Boole library building. Options for exploration include an expansion at the southside of the current building (connecting the courtyard to Boole theatre) and/or an upwards expansion to the current library building.

DRAFT

FEASIBILITY STUDY

FEASIBILITY STUDY

In 2017, O'Donnell & Tuomey architects carried out a feasibility study for the Q Floor Redesign and UCC Treasures Gallery Project. This was followed in 2019 by a similar study for the Q+1 Redesign project. What follows is a rendering of the imagined spaces.

The aim of this study was to investigate the feasibilty of the spaces within the current footprint of the existing building. The feasibility study does not provide a final design, but does give a sense of where and how the new spaces and services could be located.

Q FLOOR
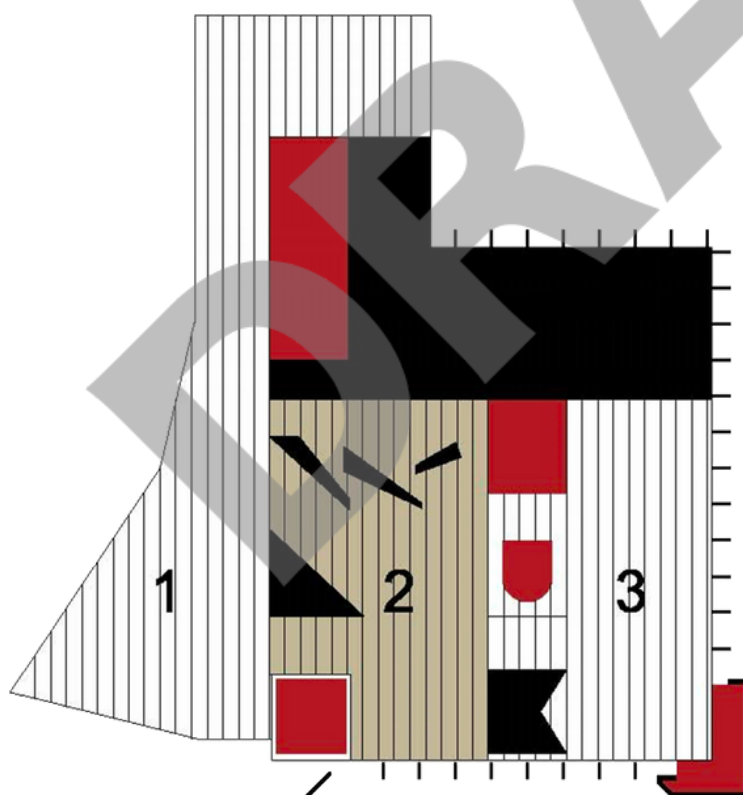
The Q Floor redesign is imagined in three distinct but ideological zones.

1. Event
Incorporating flexible multi-use space, oratorium, media space.

2. Forum
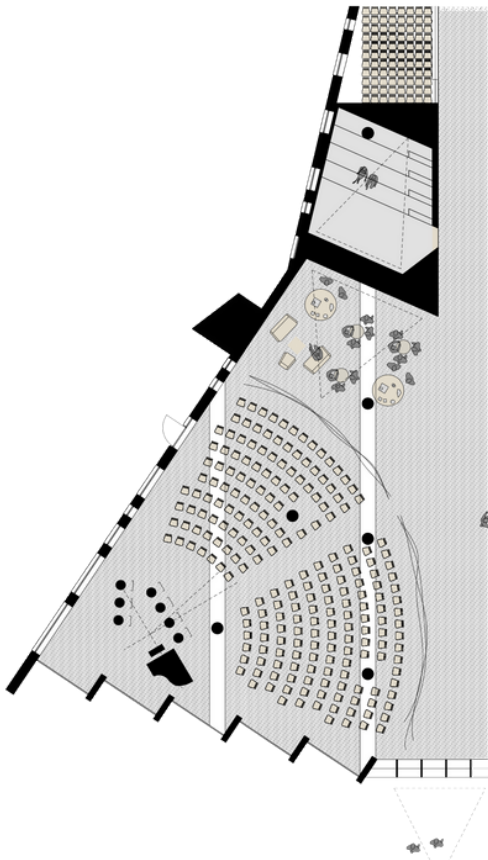Incorporating reception/information point, meeting points and Treasures Gallery.

3. Exchange
Incorporating café, bookshop, exhibition and Creative Zone spaces.

Three proposed zones, O'Donnell & Tuomey Architects

KEY

1   LIBRARY ENTRANCE
2   RECEPTION/ INFORMATION/ MEETING POINT
3   TREASURES GALLERY
4   ORATORIUM/ SCREENING AREA
5   DIGITAL NEWS/ MEDIA AREA
6   FLEXIBLE EVENT SPACE
7   CREATIVE ZONE
8   EXHIBITION SPACE
9   CAFE KIOSK/ STORE
10 BOOKSHOP
11 MAIN STAIR REVEALED- ORIENTATION
12 GROUP STUDY
13 CHAIR STORE
14 INFORMATION/ SECURITY/ STORE
15 EXTERNAL MEDIA WALL

UCC BOOLE LIBRARY

REMODELLED GROUND FLOOR (Q) PROPOSAL

O'DONNELL + TUOMEY ARCHITECTS   11 09 2017

Proposed Q layout, O'Donnell & Tuomey Architects

Event

The Event space is defined by a large flexible event space which can be used for seminars, lectures and performance.

Adjacent to the flexible event space is a digital news/media area. This serves as a social space with a large multi-screen news streaming wall. The area is furnished with comfortable seating and can be augmented with additional screens and technology for users to access newspapers and other digital content.

The Oratorium area acts as a modest screening area adjacent to the exit of the Treasures Gallery. Visitors can sit and watch creative media productions on a large scale. This space, accommodating 25 could also serve as a space for small talks, presentations and seminars when not in use in conjunction with the Treasures Gallery.

Proposed Event space, encompassing flexible event space, media area and oratorium, O'Donnell & Tuomey Architects

Forum

The Forum space contains the Treasures Gallery, a signature, permanent exhibition space for showcasing the treasures of UCC collections.

The Forum zone of the Q floor redesign also proposes an information point and reception desk that is reduced from its current provision. The relocation of reader service interactions to Q+1 allows this new information point to focus on the new activities and spaces that appear in the reimagined Q floor.
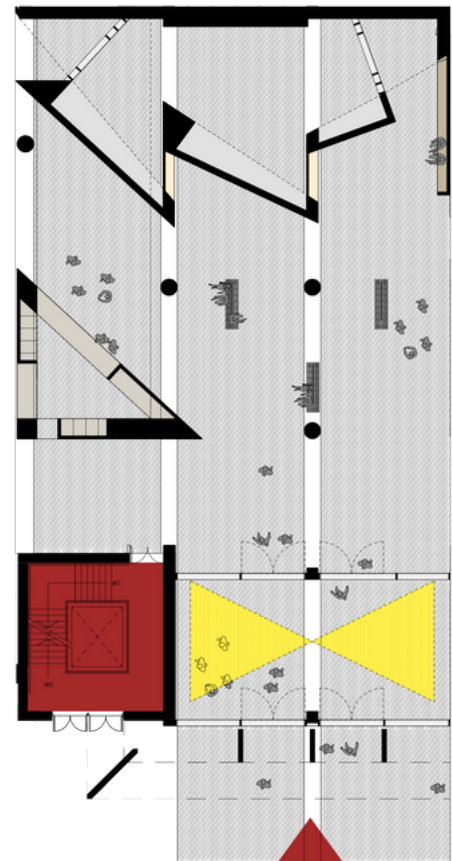
Proposed Forum space, encompassing Treasures Gallery, reception/information area and new entrance, O'Donnell & Tuomey Architects
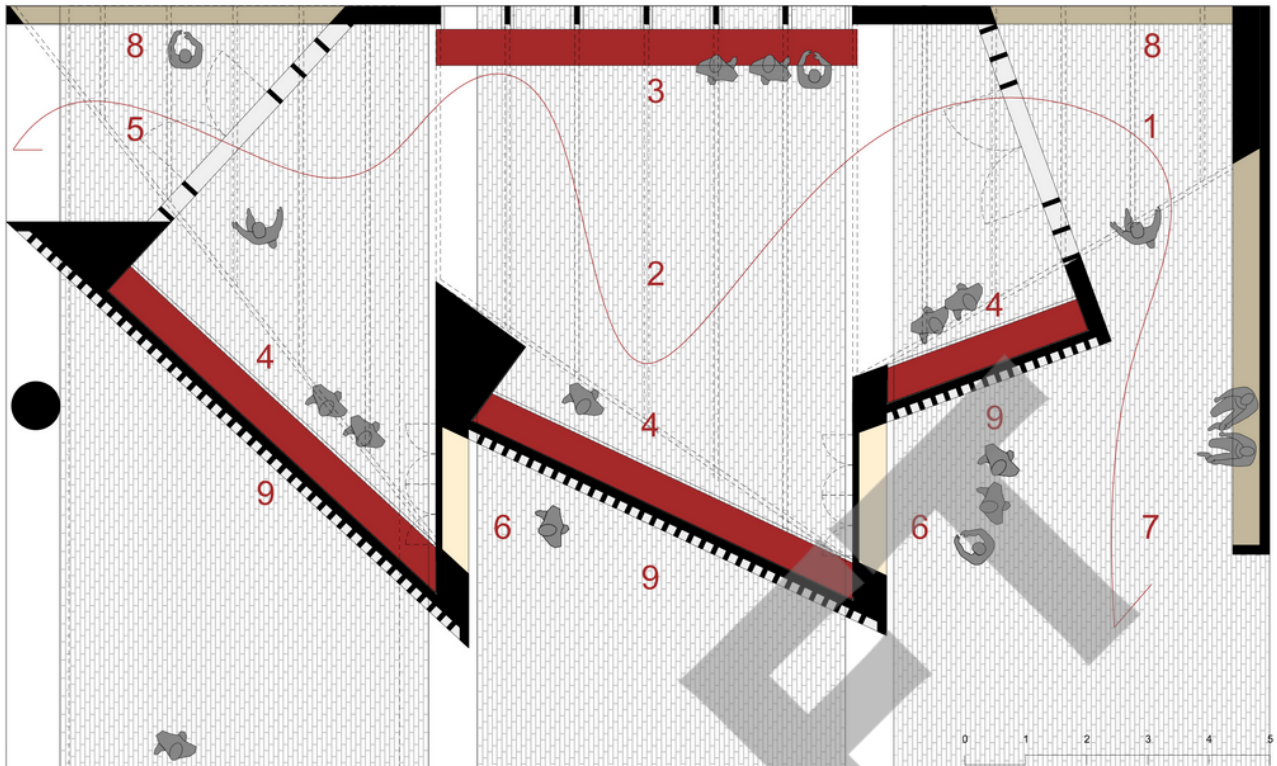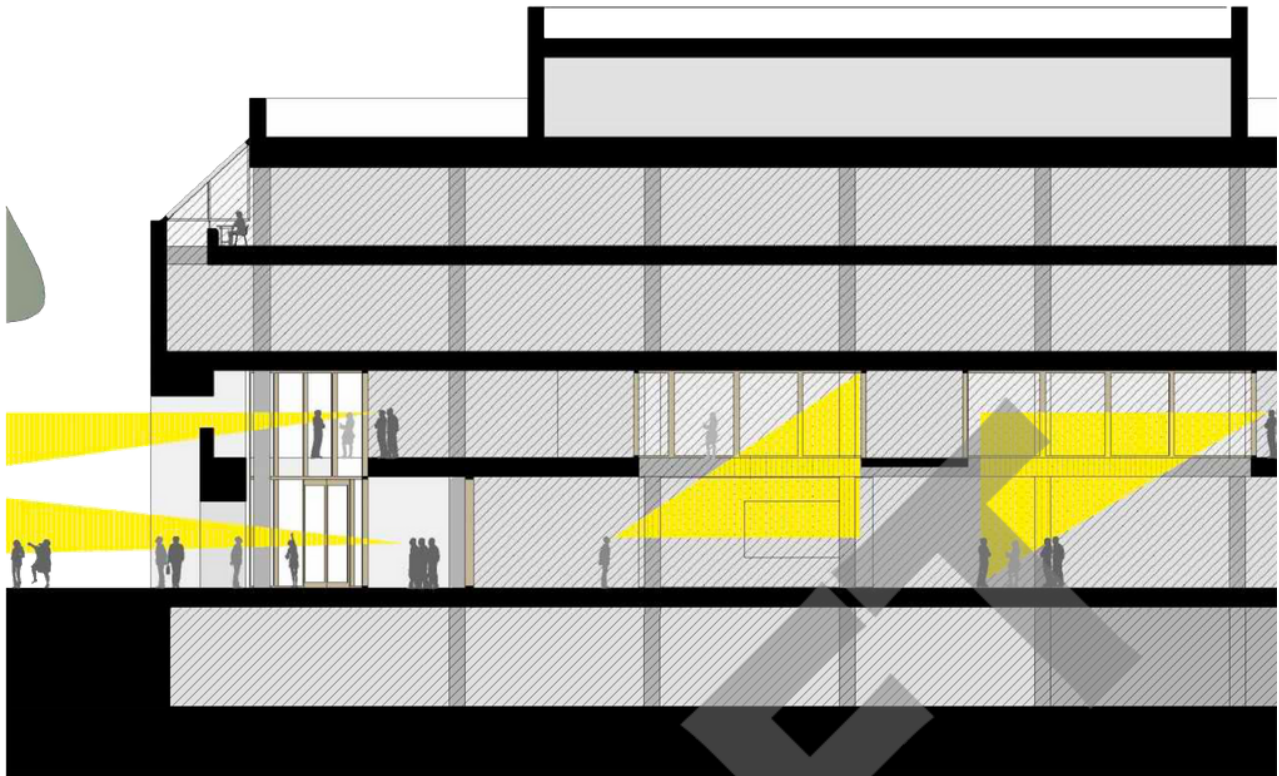
Treasures Gallery, O'Donnell & Tuomey Architects

Treasures Gallery Plan

1. Entrance   2. Exhibition Space   3. Display Wall   4. Glazed Display Units   5. Gallery Exit

6. Vitrine   7. Seat   8. Information Merchandising   9. Glowing Lattice Screen

Rendering of Interior of Treasures Gallery, Pedersen Focus

Proposed new double-height entrance, O'Donnell & Tuomey Architects

The feasibility study also proposes a new, wider and relocated entrance that has direct sight of the new Treasures Gallery. Additionally, the feasibility study calls for a double-height entrance incorporating the redesign of Q+1. This expanded and reimagined entrance is intended to connect the library with the campus Quad, and create a greater draw for visitors into the building.

Rendering of Interior of Entrance, Pedersen Focus
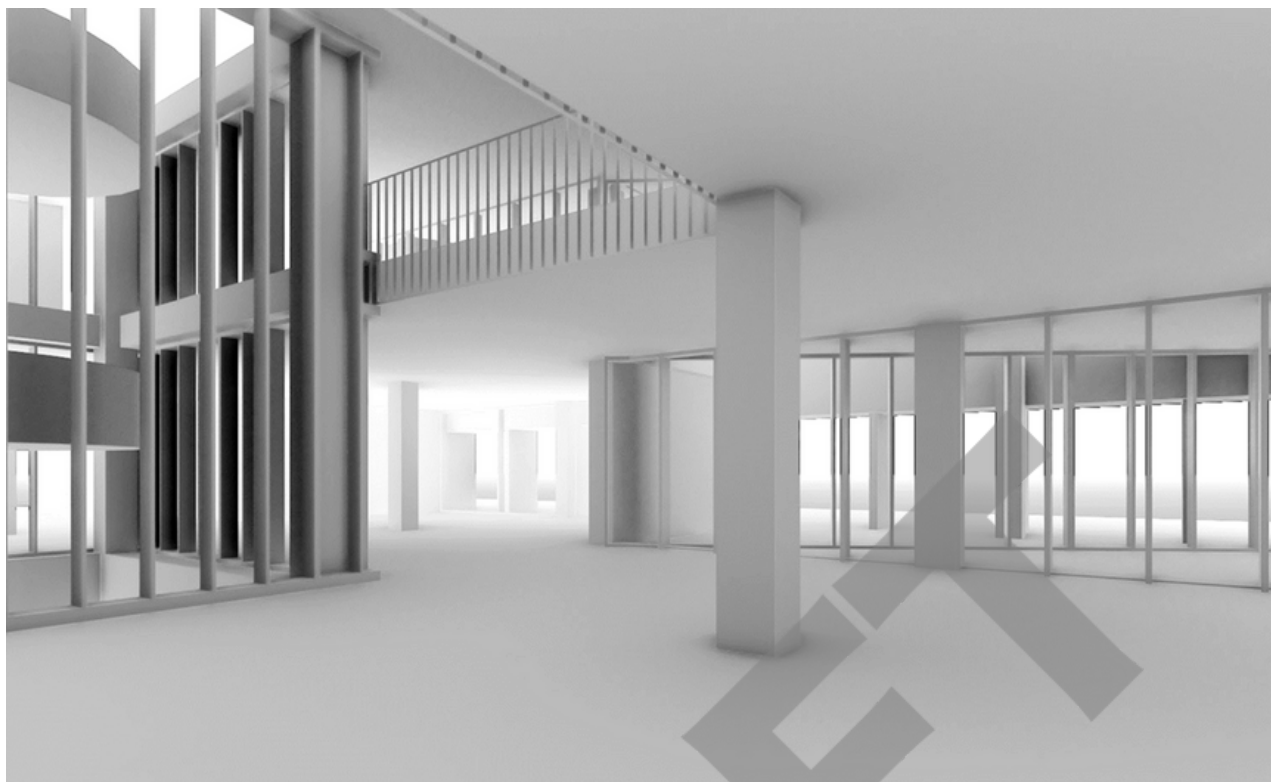
Proposed foyer facing new entrance, with exposed staircase, O'Donnell & Tuomey Architects

Exchange

The Exchange Zone encompasses a relocated Creative Zone, described as a technology-rich living room. Entirely flexible, and integrated within the rest of the Q Floor redesign, the Creative Zone remains an important feature of UCC Library spaces.

The Exchange forum also contains a relocated and expanded exhibition space, open to encourage wandering through. The Exchange zone also includes an adjacent bookshop and café retail space.
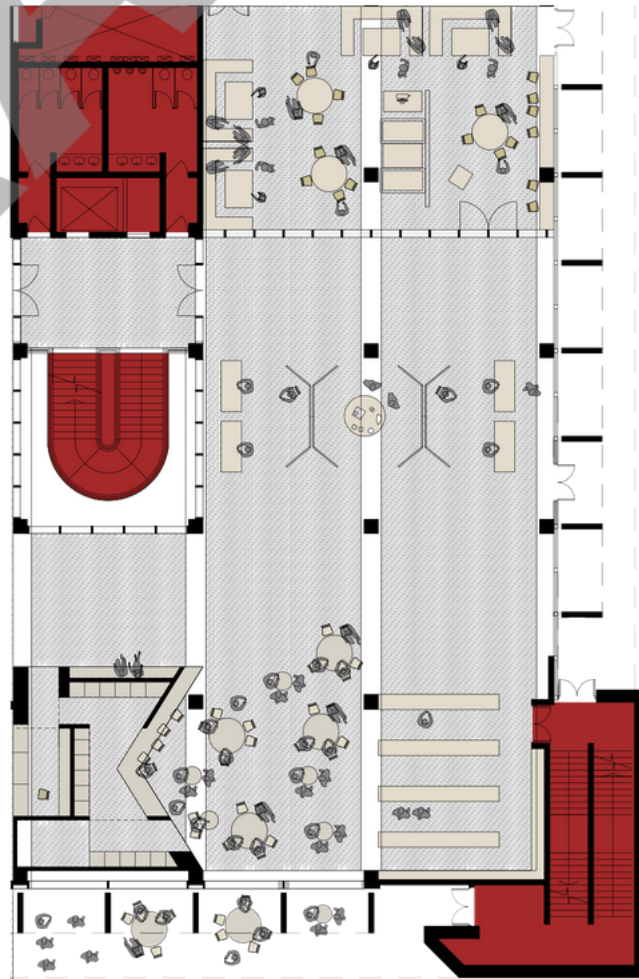
Creative Zone, Exhibition Space, Bookshop and Café retail space as part of the Exchange Forum, O'Donnell & Tuomey Architects

Q+1 FLOOR
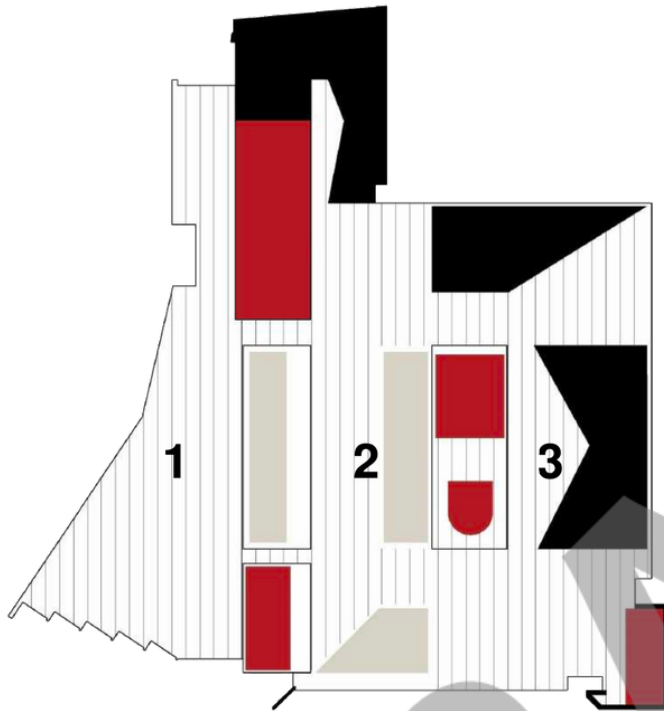
Three proposed zones, O'Donnell & Tuomey Architects

The Q+1 Floor redesign is imagined in three distinct but ideological zones.
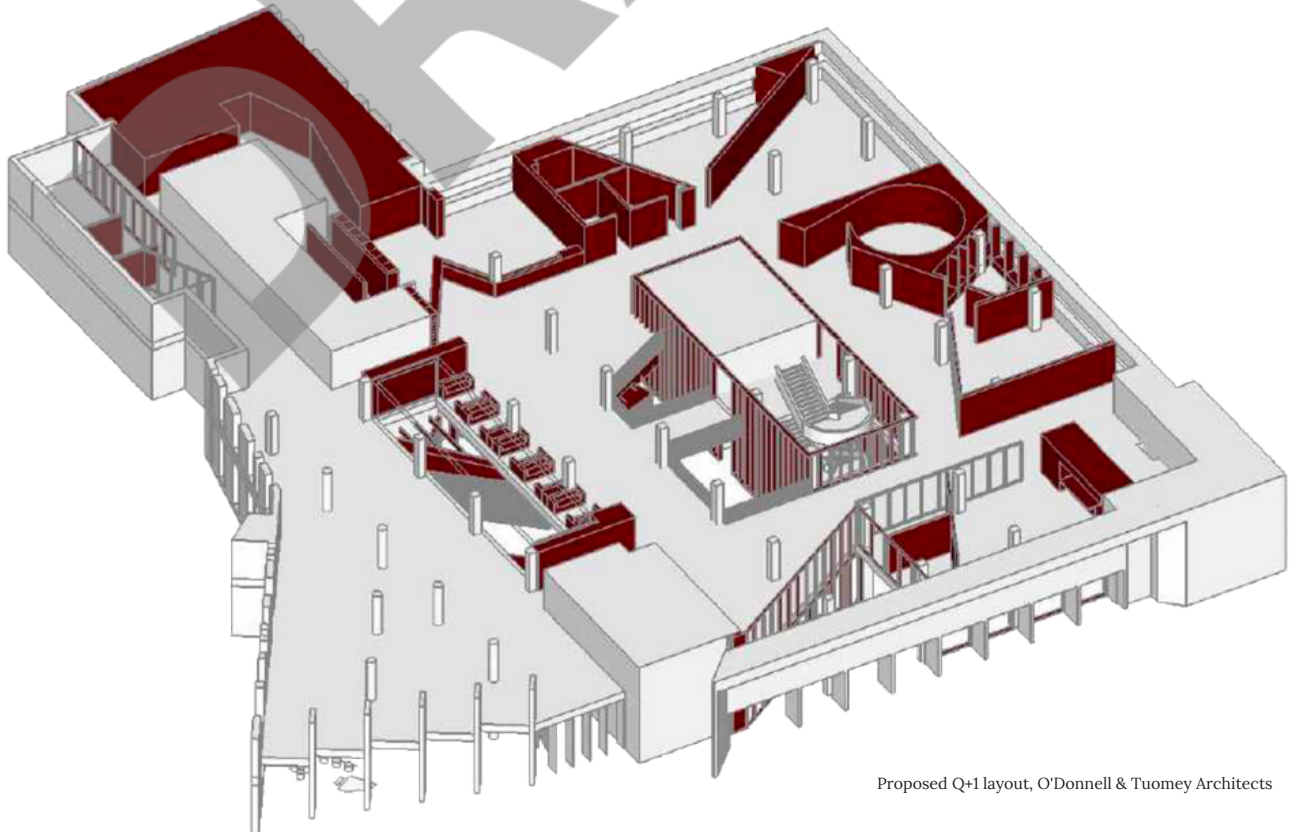
1. Reading Room
Retaining the function and layout of the existing reading room added during the 2007 addition to the Boole Library.

2. Student Concourse
Incorporating new learning balconies, a flexible technology showcase space overlooking the Quadrangle area, and a relocated staff area and service desk.
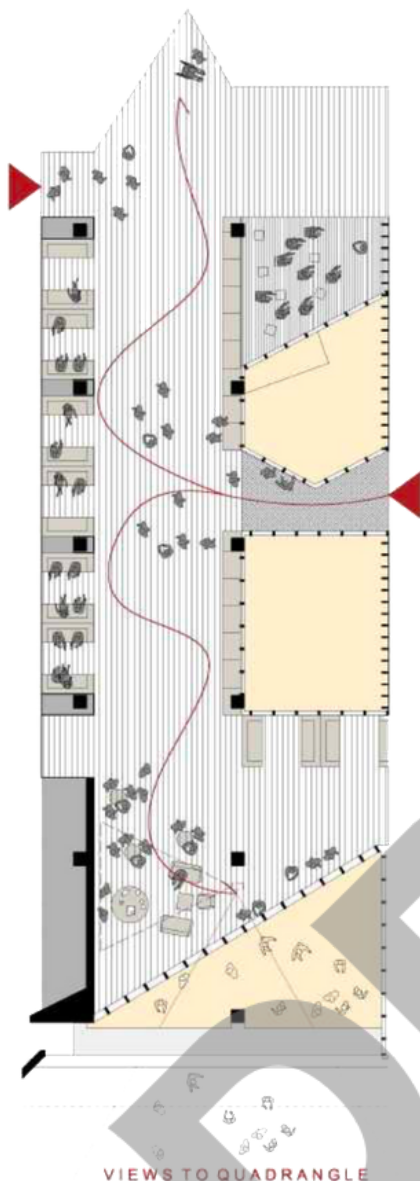
3. Media Zone
Incorporating Library Learning Zone, Idea Lounge, Immersive zone, Digital Maker Space and Academic and Staff Lounge.

Proposed Q+1 layout, O'Donnell & Tuomey Architects

KEY

1	LIBRARY DESK	11	CONSULTATION/ MEETING
2	STAFF OPEN PLAN	12	FACULTY LOUNGE
3	STAFF OFFICE	13	KITCHEN/ SERVERY
4	STAFF COMMON ROOM	14	MAKER SPACE
5	BRIDGE	15	MEDIA ZONE
6	DISABILITY SUPPORT	16	IMMERSIVE ZONE
7	WAIT SPACE	17	TEACHING + LEARNING
8	STUDENT CONCOURSE- SEATING/ MEETING/ WORKING	18	PRESENTATION PRACTICE
9	IDEA LOUNGE	19	VIDEO CONFERENCE
10	VOID TO BELOW	20	STORE

UCC BOOLE LIBRARY

REMODELLED FIRST FLOOR (Q+ 1) PROPOSAL

0 1 2 3 4 5   10   15m

O'DONNELL + TUOMEY ARCHITECTS   20 09 2019

Proposed Q+1 layout, O'Donnell & Tuomey Architects

VIEWS TO QUADRANGLE

Student Concourse

The Student Concourse area is defined by the proposed addition of two new void areas that overlook the Q Floor, and the Treasures Gallery beneath. It is proposed to expose and feature the original staircase, and to create new learning balconies that provide new spaces to congregate and learn informally. Adjacent to the learning balcony is a repurposed seating area for students to collaborate.

The inclusion of a large scale video wall and collaborative technology area overlooking the historic Quadrangle becomes a particular feature on the Q+1 floor.

Adjacent to the learning balcony is the proposed new reader services and information desk areas which will handle the majority of user questions and research help. The feasibility study also proposes the relocation of the staff common area to the rear of the Q+1 floor.
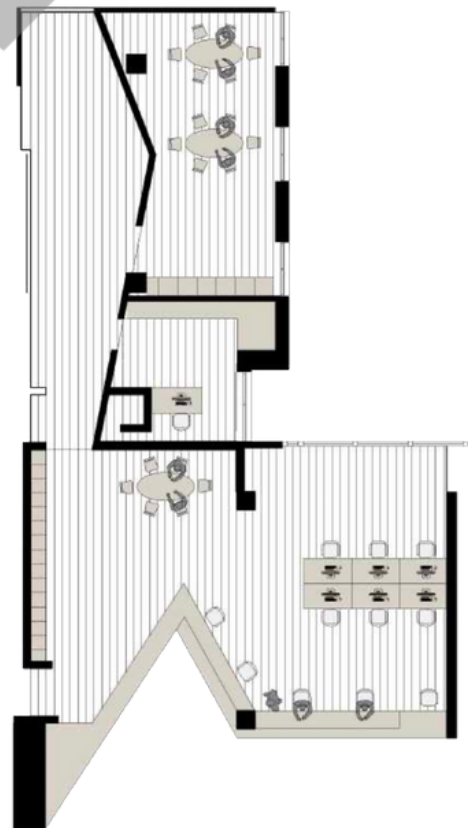
Above left, the proposed Student Concourse space, encompassing learning balconies, new void spaces, open collaborative spaces, and a technology-rich collaborative space.
Above, the proposed staff common area and main services desk, O'Donnell & Tuomey Architects.

Media Zone
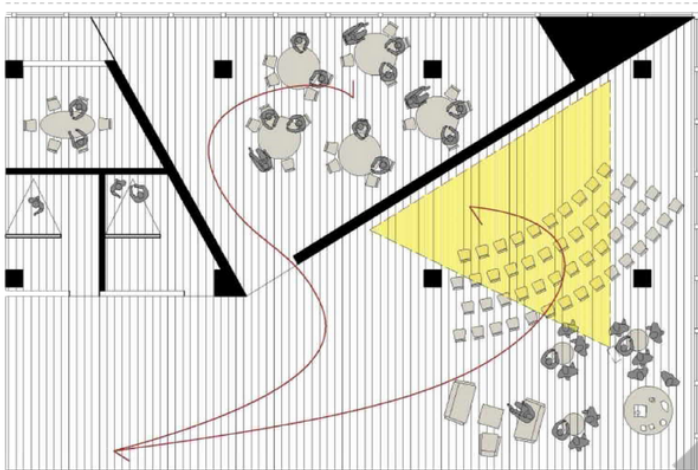
The Media Zone consists of the Library Learning Zone - a technology-rich, learner-centred classroom which will be used by library staff for innovative teaching and seminars. Adjacent to this is a modest meeting room for staff use. Also included in this vicinity are two small presentation practice rooms for library users to prepare for formal presentations.

The area is also enhanced by the inclusion of the Idea Lounge, a large, open event space with large-scale video wall which will be used to showcase research and host seminars and expert talks allowing large-scale data visualisation.
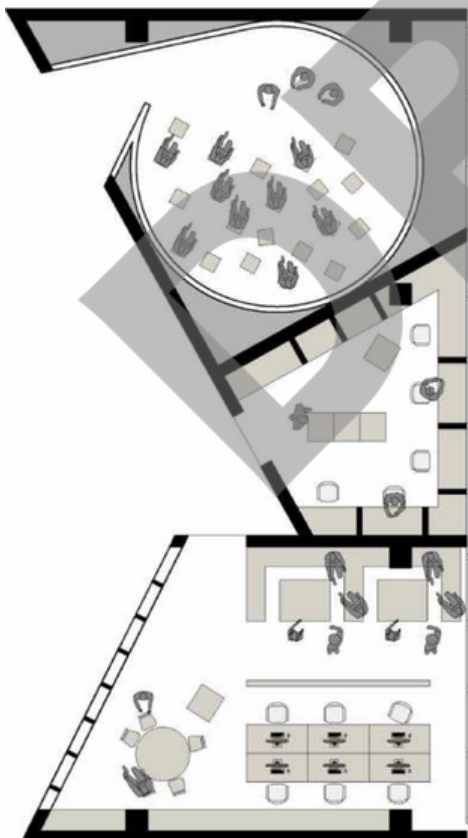
It is also proposed to include a 360° immersive studio space within the Media Zone, to allow for large-scale, continuous video and virtual reality content consumption.

The media creation studio is a space for library users to design, create and edit multimedia content, and the proposed Digital Maker Space is a creative space with intended emphasis on 3D design, scanning and printing, as well as other ideation technologies.

The feasibility study also allows for an academic and staff lounge - a space for staff to collaborate and socialise with breakout rooms and a kitchenette.
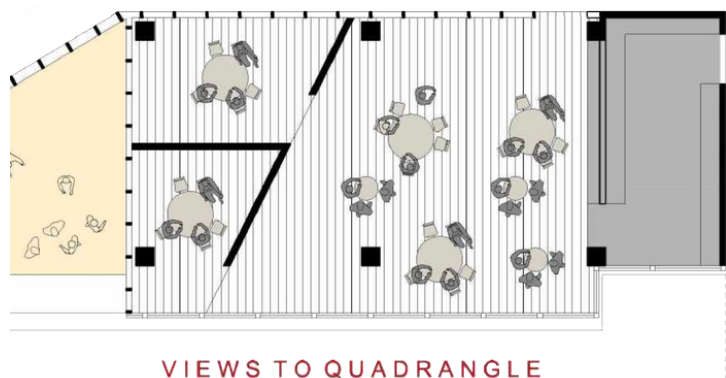
VIEWS TO QUADRANGLE

Above, the proposed Media Zone space, comprising Library Learning Zone, Idea Lounge, Immersive Zone, media creation studio, Digital makerspace and academic and staff lounge, O'Donnell & Tuomey Architects.

NEXT STEPS

The articulation of this Space Master Plan, while a significant milestone in the overall development of spaces in UCC Library, is the first step in a lengthy process. While the vision for UCC Library described within this document is in-line with best practice in international libraries, and sets a trajectory for the development of library space going forward, the need for a full and thorough stakeholder engagement process is paramount. To that end, the library will host a number of town halls and other fora for full stakeholder consultation around the vision for library space. This consultative phase will include a full communications plan, and will undoubtedly lead to further refinements and amendments to the proposed spaces.

The realisation of any aspect of this Space Master Plan will involve significant capital investment. The library will begin a series of fund-raising efforts to identify sources of philanthropic funds as well as other avenues of investment to develop the spaces and services contained within this vision. Additionally, the library will continue to iterate and prototype new spaces and technologies within its current constraints to enhance the current library services within the university.

University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

Library
Leabharlann