

2020-10

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Recommended Citation

Delaney, M., Archbold, A., Cleary, A., Dodd, L., Doherty, P., O'Brien, T., Ricken, J., and Waldron, M. (2020) Delivering library services in the time of crisis; Technological Higher Education Association Libraries responding to COVID-19 from March-August 2020. THE ALL IRELAND JOURNAL OF TEACHING AND LEARNING IN HIGHER EDUCATION, [online] Volume 12 No. 3. Available at: <https://ojs.aishe.org/index.php/aishe-j/article/view/531>

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Abstract.

This paper presents the experience of eight Irish academic libraries from the Technological Higher Education Association (THEA) from March – August 2020 while delivering library services during the COVID-19 pandemic. It presents a snapshot of their experience at this time outlining the challenges faced by libraries in closing their doors and pivoting to delivering library services only. For much of this time library buildings were closed to students thereby making, study desks, group spaces, PCs, access to collections and to library staff at information desks unavailable. Instead library staff worked remotely directing students to the vast array of resources available online from our library websites. Information Desks were replaced with online chat, emails, phone calls and extensive help in the form of guides made available from library websites. Libraries have been offering blended approaches i.e. mix of online and traditional resources for years but this pivot to online only, posed challenges. This article outlines how the THEA sector responded to these challenges and discusses the value of collaboration across the sector and the benefits of this collaborative approach in a time of crisis.

Keywords: Academic library, Library services, Ireland, THEA.

1. Introduction.

This article presents the experience of eight academic libraries from the Technological Higher Education Association (THEA) in delivering library services from March to August throughout the COVID-19 crisis. It outlines how the pandemic disrupted service delivery forcing libraries to re-evaluate their services and their resources. It presents a collective Irish experience and shared learning.

2. Technological Higher Education Association.

The Technological Higher Education Association (THEA) established in 2017, is the representative body for the technological higher education sector in Ireland. The sector comprises eleven Institute of Technologies and one Technological University from across Ireland. Collectively, THEA members represent over 68,500 fulltime and just under 24,500 part-time and remote students, studying and researching from levels 6 to 10, reaching across all academic disciplines and fields.¹

THEA's mission is *"to increase awareness and understanding of the unique attributes of technological higher education in order to influence policy on behalf of our members"*². THEA's approach is primarily strategic but is based on three key objectives – advocacy and representation, member networks and services to the THEA community. The Member Networks, according to THEA, seek to achieve sector-wide engagement, harness the talents of the THEA community and increase strategic capacity within the sector.

3. THEA Libraries.

One of the key member networks is that of the Librarians. The Head Librarians from the THEA members have a long-established member network. Head Librarians automatically sit on the THEA member network, meeting four times a year, chaired by a representative Vice-President for Academic Affairs (Registrar). The THEA Librarians network actively advocates for THEA and

¹ <http://www.thea.ie/facts-and-stats>

² <http://www.thea.ie/strategy/>

its members. The network represents in excess of 250 library staff from across the sector; library staff that support and collaborate with students and staff. In addition to physical meetings, THEA Librarians meet informally, discuss, share and work collectively to advance and develop library and library related issues in the Irish and international higher education environment. Many librarians sit on various working groups and committees spanning the higher education landscape. THEA libraries, in common with other THEA groups actively participate in shared projects, shared services, consortia purchasing and various other projects and initiatives of mutual sectoral benefit.

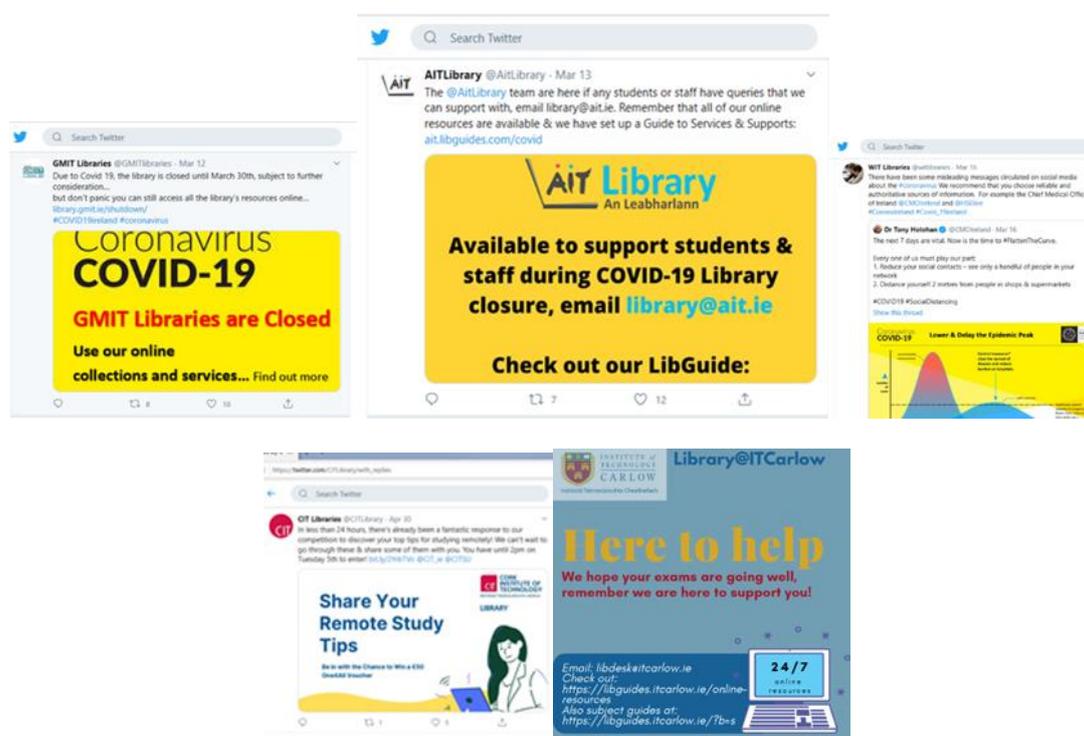
4. Responding to the Crisis.

Due to the spread of COVID-19 in Ireland, on the morning of March 12, 2020 the Irish Government announced that all schools, pre-schools and further and higher education settings should close from 6pm that day until March 29 (Department of Education & Skills, 2020). The sudden campus closures presented many challenges to the sector and little time for THEA libraries to prepare for the long-term restricted physical access to library buildings that subsequently ensued. Fortunately, THEA libraries entered the crisis from a position of strength in many instances. Well established robust digital infrastructures ensured continued 24/7 access to critical online resources in support of teaching, learning and research across the Institutes of Technology. The technical expertise of THEA library staff enabled the transition to remote working and secured the continuation of the virtual library. Cloud-based solutions were a key enabler in this regard. Newly designated and already existing webpages and online guides were promptly produced and enhanced advising library users on how to access services off-campus and other practical information. As well as advising on library content some libraries included information on resources about the coronavirus and health and wellbeing resources, including services available from public libraries (Athlone IT Library, 2020; IADT Library, 2020). These online guides from across the sector were continually updated over the following weeks and months and feedback from students and staff and usage statistics demonstrated their usefulness.

While the circulation of physical materials ceased mid-March, libraries widely publicised and reassured patrons that borrowing arrangements were extended and all fines were suspended for items due back during the closure period. Libraries also stressed that their staff continued to

be available online for academic support and to offer guidance in complex information environments. Face-to-face interaction with users was replaced with a variety of alternative online communication channels. Staff were available to respond to queries via generic email accounts, social media platforms, on Zoom, Microsoft TEAMS and online LiveChat. The range and scope of information posted on social media by THEA libraries continued to adapt as the pandemic evolved nationally and internationally. A snapshot of social media outputs by THEA libraries is captured in Figure 1 below. Many library staff also continued to offer help via a phone service and in some instances, users had the option to interact with AI chatbots. Interestingly, the preferred choice of contact appeared to be email, thus supporting the findings of the GradIreland survey, which investigated Irish HE students experiences during Covid-19.

Figure 1: Snapshot of Social Media Messaging by THEA libraries.



Another point of note was the welcome concession by the Irish Copyright Licensing Agency to some of the key terms of the Higher Education Copyright License Agreement which permitted additional copying in certain circumstances over a critical period.

5. Expansion of E-Resources.

“Academic libraries have the advantage in the pivot to all-digital services due to the already high proportions of electronic materials in their collections”. (Breeding, 2020, p.10)

The core value of democratic access has always driven THEA libraries towards accessing the most valuable electronic database products and packages within the limited budgets available to the THEA sector. THEA libraries pivoted online seamlessly and efficiently. However, the inability of most THEA libraries (with the exception of Technological University Dublin) to avail of Irish Research Electronic Library (IReL) membership further compounded this challenge. IReL is the nationally funded e-resource licensing consortium providing access to online resources to participating Irish higher education institutions. Ongoing developments in progressing the IReL debate nationally to include THEA and other libraries are very welcome.

Our libraries were compelled to explore vigorously more flexible and open online provision to enhance content to progress remote learning and research opportunities for our institutions. In response to the crisis, a variety of publishers and suppliers began offering free and enhanced access to a range of additional online resources to academic libraries, including THEA libraries. In some instances, content that was previously available via paid subscriptions was made widely available at no cost to all and in some cases additional free content was included. Publishers also offered a free transfer of limited user licenses to unlimited user licenses for some e-book titles. Over the course of the crisis, to meet the challenging increase in demand that remote delivery of teaching and learning generated, our libraries established a range of trials for new electronic resources. Further details of these trials are outlined in Appendix One. Our libraries actively monitored a multitude of Open Access resources that publishers marketed because of the COVID-19 crisis. During the crisis, the full complexity and challenges of acquiring library licenses to loan without restriction the same resource to multiple users presented. Updating our staff and students about these developments required extensive communication from library staff and this is echoed internationally (Lamphere, 2020, p. 35)

All trial resources required extensive testing and quality control checks to ensure any e-content delivered/recommended by THEA libraries worked seamlessly and reliably, especially regarding the authentication process. Unfortunately, reports of some providers being unable to deliver on

their Open Access offers surfaced with incidents of sites crashing due to unprecedented demand.

Libraries had to communicate promptly that due to Publisher restrictions multi-license access was sometimes unobtainable in a minority of titles and this could potentially impact users in a live online “*open-book*” exam setting. Any links to trial resources that were embedded in Virtual Learning Environments expired once the trial dates had expired. While some of these challenges have existed for some time, the sudden shift to online teaching across all curricula placed a spotlight on such issues, as is evident from the efforts of UK librarians lobbying for more equitable eBook access (McCluskey, 2020).

Criteria such as usage statistics, content quality (scope and peer review material), functionality, training, ease of use, search, report and personalisation features were reviewed on an ongoing basis. However, financial cost inevitably determines the retention of e-resource subscriptions, so it was challenging for our libraries to manage expectations regarding sustained access in the long-term, post crisis. The recent IReL³ review validated the advantages of economies of scale for consortium purchasing, i.e. value for money and recognised the inability of individual institutions to bear the cost of comprehensive information provision. The COVID-19 crisis exacerbated the significant challenges our libraries face due to the current inadequate level of database provision in supporting our users’ needs. Higher Education libraries also have a responsibility to implement The Sustainable Development Goals Implementation Plan 2018-2020 and, in particular, support Goal Number 4 to “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”. This national policy key objective can only be achieved if IReL is expanded without further delay.

6. Remote Working.

The shutdown on March 12 resulted in immediate and significant challenges for staff across the THEA sector, including those who work in libraries. The time spent working remotely has presented some developments. Without the need to roster staff for physical library operations, special projects were successfully progressed remotely. e.g. updating of reading lists for the

³ <https://irel.ie/strategic-review-of-irel/>

new academic term, OER projects etc. The delivery of online information literacy and more virtual services has accelerated opportunities for several THEA libraries to develop Open Educational Resources (OERs) projects (CIT, AIT). Staff continued to engage in professional development opportunities by participating in webinars online and workshops offered locally, nationally and internationally. Staff from across all grades within our eight libraries undertook 927.5 hours of CPD training while working remotely. Further information available in Appendix Two. Notwithstanding this, the pandemic has highlighted challenges. Rural WIFI, lack of IT equipment and the nature of print-based staff positions for some staff members proved to be restrictive. For example, there are many roles in academic libraries that are focused around working in the physical library spaces. Some staff spend much of their working day in front-facing roles such as at the Information Desk, answering queries from staff and students, while others spend their time processing, repairing, and re-shelving physical library materials. Ensuring these staff were able to work from home was a significant challenge.

7. Temporary Reassignment.

On April 1 2020, the Department of Education and Skills (DES) issued a circular to the Higher Education Authority (HEA) for dissemination to all Institutes of Technology regarding the temporary reassignment of staff during the COVID-19 crisis. The circular stated that institutions had to identify a certain number of staff who could be reassigned within the public sector during the COVID-19 crisis. Mirroring the wider public service, where approximately 70% of public library staff had been identified for temporary reassignment, THEA libraries were equally identified as a suitable source for staff reassignment at local Institute level. While this presented serious challenges for library leaders, it was also a recognition of the important role of library staff and how the specialised skill set they possess could contribute to the national effort in the fight against COVID-19. However, as efforts to suppress the virus succeeded nationally it transpired THEA Library staff were not required to be reassigned. The same held true for other initiatives across THEA campuses such as the contact tracing facility on the Galway Mayo Institute of Technology (GMIT) Campus. Due to the success of government lockdown initiatives the need for the contact tracing centre based in GMIT reduced to such an extent that it ceased operations and staff were no longer required. Should the need arise again several GMIT library staff are fully trained and available.

8. Lessons Learned.

8.1 Physical space remains important.

The physical library cannot be replicated in its entirety online due to the nature of print material and the critical need for students to have a quality driven learning environment in which to study and research remains. As O'Regan outlines COVID-19 has highlighted the need to move beyond thinking of learners in the context of a situated learning environment (e.g. within the academic institution) to consider where learners are (temporally and geographically) and what else is going on (O'Regan, 2020, P6.) The need for an inclusive convivial atmosphere in an academic setting prevails. THEA libraries endeavor to offer a holistic approach to learning and continue in seeking to create an inviting space so that students learn, collaborate and create in bespoke academic library settings. The physical environment is still highly valued. High quality IT facilities, infrastructure and WIFI is critical to all our users but human interaction is still sought after, and users continue to like that sense of belonging and community that only a physical space can offer.

8.2 Planning for the Academic Year 2020/21 is complex.

Planning over the summer turned to the academic year of 2020/21. It was recognised that measures and service adaptations to deal with the immediate library needs of staff and students at the end of term needed further development to continue to deliver blended library services into the new academic year. With guidelines from national and sectoral bodies evolving constantly, libraries started with planning for areas of known importance for the new term, namely study space, access to technology, delivery of supports online and access to collections (onsite and online). While approaches differed from institution to institution, library expertise for what would work within their spaces and services was actively drawn on in support of broader institutional planning.

As the term approached, libraries aligned with the latest guidance coming from their institutions as well as THEA more broadly. Of particular note was the Guidance published by the THEA Council of Registrars on 27th August 2020 with the updated broad principles that academic delivery for the 2020/21 year would have some on-campus delivery and a larger portion of online

delivery where possible in order to protect health and safety.

With this increasing acceptance that we will all have to live alongside the virus for the foreseeable future, libraries have included access to e-resources, engagement in online learning and the VLE as part of their planning for the 2020/21 academic year. Each library is working within its wider organisation to plan for the coming academic year and is tailoring its approaches. These approaches vary in style and across organisations.

8.3 Spaces & facilities are important for the student experience.

With the knowledge that all institutes aim to ensure that students experience as 'normal' a college life as possible, libraries were recognised as a key element of the 'on-campus' experience as well as a vital place where students meet staff, build relationships and access materials for their academic success. Libraries are planning seat capacity based on 2 metre social distancing and this has seen library seating capacity reduce significantly (to approximately 25% capacity), while also planning how to facilitate access to stacks and collections, computer and technology facilities as well as onsite staff support through the traditional library service desk. Another area of concern is the ability to contact trace. Some libraries have electronic swipe gates but others who do not are exploring new arrangements including booking systems. Pre-booking for seats as well as computers is also a measure adopted by some libraries to further control numbers in library spaces for the new academic year.

8.4 Further development of electronic resources needed.

As highlighted earlier, access to electronic collections (e-books, databases, repositories) was an early focus for libraries with many additional products trialled by libraries in the period March – May. Summer planning looked at what collections could be purchased for full availability as well as detailed engagement with academic staff to assess how core reading lists align with current e-book collections. This work is of particular priority with budgets being a major issue when considering the purchases of additional e-resources.

8.5 Continued access to technology is critical.

Libraries are more than study spaces or storage for books. They provide access to computers,

devices and specialist software. Access to these services is particularly important for disadvantaged students and those living in cramped student accommodation that does not support study needs. Several libraries have facilities already set up to facilitate laptop borrowing as an added enhancement to their technology offerings. As part of the government's planning for the new year, additional funds were made available for the specific purchasing of laptops to be distributed to disadvantaged students. In several cases libraries are collaborating with student access services and IT Services to manage and administer these schemes.

8.6 Induction, Information Literacy & engagement with VLEs is essential.

Library Inductions/Orientations and Information Literacy sessions are a key staple of the usually onsite experiences in the first weeks of term. In most instances these sessions are moving to online for the 2020/21 academic year with the possibility of some onsite elements. This requires updating and adapting all current materials for both induction and information literacy sessions, and often additional training for staff in using online teaching delivery platforms as well as the virtual learning environments for each institute.

Libraries are always linked to Virtual Learning Environments (VLEs) and from the VLE students can link out to the library website and LibGuide pages to continue their browsing. With the move to hosting classes within this environment, it is expected that students will spend even more time in this space. Having more of a library presence in VLEs will support students in connecting to the resources they need for their modules.

8.7 The importance of staff safety and wellbeing.

Safety for library staff is also a critically important aspect of planning for the 2020/21 academic year. It was planned that most library staff would operate in 'bubbles' or pods to reduce the risk of spreading infection among library personnel and to ensure service continuity should a suspected case be identified. Measures for staff included adapting office spaces and the provision of appropriate PPE and sanitisation. All staff required additional training/induction before services re-commenced onsite to ensure that safety measures were met and to assess staff comfort and trust in the measures in place. Staff engagement and interaction with library users is one of the most unique aspects of library life, and one that all staff are keen to maintain

as much as possible. We know that email, social and chat services will be vital for engaging with staff and students, but when possible, personal onsite interactions will always provide an important social aspect of college life for students.

9. Conclusion.

The THEA Librarians network is an engaged group of professionals with an established record of commitment and action. When the COVID-19 pandemic materialized in early March, the librarian network was strongly positioned to respond collectively to produce a co-ordinated crisis management approach ensuring continuity of library service. The librarian network mobilised quickly, responding to common problems cooperatively. Given the extraordinary times and challenges faced, virtual meetings were established by the group to discuss plans and share experiences during the crisis. These meetings proved invaluable in responding to the initial challenges of the shutdown and offered a strong support network in planning for the reopening of library services in a changed environment. A strengthened community of practice now exists among THEA libraries and this enhanced working relationship is a welcomed positive outcome from the COVID-19 crisis. Throughout the confusion and anxiety, the network with the support of THEA became a space in which librarians could work collectively for solutions, advocate, inform, advise and question. The move to online and remote working since euphemistically described as a flip or a switch, seemed more like a somersault. The librarian network proved a tangible and reassuring space at a time of great uncertainty and apprehension. Equally important, it enabled THEA libraries to respond to the crisis at a practical level. Even if this was not always consistent and was at times reactive, the sense of a sectoral joint approach gave comfort and consistency and has ultimately benefitted the wider THEA community of library users.

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11. Appendix 1.

Institute	No. of Products	Title of Product
AIT	12	Academic Search Ultimate ACM Digital Library Bloomsbury Education & Childhood Studies Clinical Sports Medicine Collection IEEE E-Learning Library Project Muse ebooks & Journals Media Street Sage Research Methods videos Sage Knowledge Social Wirk Toolkit Bloomsbury Collection & Design Library Human Kinetics Library
IT Carlow	13	Annual Reviews (Complimentary Access) Biochemical Society journals (Complimentary Access) Bloomsbury Professional (Trial Access) EBSCO eBook Collection (Trial Access) Harvard Business Review ebooks (Complimentary Access) IEEE Online Courses (Complimentary Access) JOVE Bio Expanded Complimentary access) JSTOR (Expanded Complimentary access) On Architecture (Complimentary Access) Sage Books (Complimentary Access) Sage Reference (Complimentary Access) Sage Research Methods Videos (Complimentary Access) Sage Video (Complimentary Access)
CIT	5	Drama Online Bloomsbury Applied Visual Arts Bloomsbury Education and Childhood Studies Bloomsbury Popular Music Medici TV
DKIT	28	BibliU <i>-Bloomsbury Education and Childhood Studies</i> <i>-Bloomsbury Popular Music</i> <i>-Drama Online</i> <i>-Screen Studies</i> Cambridge Core 4CourseEra free online courses EBSCO ebook EDP Sciences EDX free courses

		<p>Emerald Covid-19 Research IEEE: E-learning courses Internet Archive Emergency Library IHS Markit Coronavirus Research Centre JSTOR Ebooks, journals, primary source collections JoVE: Science Education: 11 Education Collections <i>Basic Biology</i> <i>Advanced Biology</i> <i>Chemistry</i> <i>Physics</i> <i>Engineering</i> <i>Environmental Sciences</i> <i>Psychology</i> <i>Clinical Skills</i> <i>Lab Manual: BIO</i> <i>Core: BIO</i> LinkedIn Free Training Courses Next Gen U public health courses Ovid: 5 Minute Clinical Consult <i>Acland Anatomy</i> <i>Bates Visual Guide (Bates Online)</i> <i>Health Library</i> Ohio university press-free ebooks Open University free courses Oxford university press- Epegium courses for online teaching Pearson Education free resources Practical Action Publishing: Development Bookshelf Project MUSE Recovery College Courses Sage: Sage Video <i>Sage Research Methods Video</i> <i>Sage Knowledge</i> Science Direct Textbooks Springer Nature Ebooks University of Michigan- free ebooks Vital Source Textbook Aggregator</p>
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IADT	10	Bloomsbury Applied Visual Arts Bloomsbury Design Library Bloomsbury Fashion Central (Berg Fashion Library) Bloomsbury Fashion Central (Fairchild Books Library) Bloomsbury – Screen Studies JoVE Science Education JSTOR Expanded Access Digital Theatre Plus Humanities Search Ultimate Academic Search Ultimate
GMIT	16	Bloomsbury Applied Visual arts Bloomsbury Collections Bloomsbury Cultural History Bloomsbury Food Library Harvard Business Review Press Collection Human Kinetics Library InCites Journal Impact Factor Skills4studycampus Statista & Global Consumer Survey Academic Search Ultimate Cambridge Core Textbooks JoVE MIT Press Direct SAGE Knowledge SAGE Research Methods SAGE Video
IT Tralee	6	ProQuest Resources Online Harvard Business Collection JoVE Science Education Video Collection Cambridge Core Science Direct e-Textbooks IEEE (e-Learning courses)
WIT	5	Artfilms streaming EBSCO eBooks Kortext ProQuest unlimited licenses (access was widened) JSTOR eBooks (access widened)

12. Appendix 2.

CPD

Institute	Total no. of CPD
AIT	224 hours
IT Carlow	49 hours
CIT	244.5 hours
DKIT	50 hours
IADT	52.5 hours
GMIT	243.5 hours
IT Tralee	24 hours
WIT	40 hours