

TEACHING AND LEARNING CASE STUDY	
Name of Institution/ Organisation	Mary Immaculate College
Who led the initiative?	Amy Mitchell from the Learning Enhancement and Academic Development Centre (LEAD)
Date and timeframe of the initiative	2021-present (ongoing).
What was the reach of the initiative?	To date the LEAD Knowledge Base supports around 5,000 students, 360 academic staff members and 230 professional services members at MIC. However, these Open Educational Resources (OER) are hosted on the Lead Knowledge Base to facilitate access for all HEIs.
Initiative Title	LEAD Knowledge Base: Supporting on-demand, 'just-in-time' support and guidance for digital learning platforms and tools
Aims/ Objectives	<ol style="list-style-type: none"> 1) To create a 24hr, on-demand, 'just-in-time' support for the use of digital tools and technology. 2) To address the requirements of users across a wide range of experience and technical knowledge by focusing on clear, low-jargon support and information. 3) To provide multimodal digital supports that align with UD principles. 4) To foster inclusive practice, as staff are upskilled to use more accessible resources and create more accessible content. 5) To facilitate self-directed professional learning and development through open, accessible and self-guided learning resources that cover a range of topics. 6) To promote discovery, inquiry and development of new approaches to teaching, learning, assessment and feedback that can be enabled through digital tools. 7) To create a tool that, driven by both technical and lay key search terms, is more interactive and responsive to staff and students' specific queries. 8) To produce an easily navigable and cross-linked knowledge base, centred on an integrated and highly optimised search function. 9) To create a system that will perform gap analysis, enabling LEAD to identify in-demand and future areas for training based on the evaluation of successful and failed searches.
Rationale and Identified Needs	<p>Prior to the development of the Lead Knowledge Base (KB), LEAD maintained a bank of professional development resources on a Moodle page called the TEL Staff Support page. Engagement with these resources had been poor for a variety of reasons, including the lack of a search facility, the need to access resources in a signed-in environment, and the limited capabilities for tagging and categorising content.</p> <p>When LEAD's KB was first conceived of, it aimed to introduce a more accessible resource to support staff to enhance their teaching and assessment approaches</p>

	<p>through digital tools and systems. Currently, LEAD’s KB supports around 5,000 students, 360 academic staff members and 230 professional services members at MIC.</p> <p>Developed during Covid-19, when a clear need for 24hr, on-demand, accessible, ‘just-in-time’ support for the use of digital tools and technology was recognised, this support helped staff to upskill on new and existing MIC digital platforms and tools. These standardised guides, informed by UD principles, created a unified and coherent approach for staff and students looking to expand their use of educational digital tools. Though the Covid crisis resolved, as staff began to make more use of technology, the need for LEAD’s KB supports grew. Since 2021 LEAD’s KB has received over 99,403 consultations. Within this last calendar year, the number of consultations of LEAD’s KB grew by 134%.</p> <p>Our student support pages give staff professional, timely and detailed resources to help students who are using educational technology to support their learning. This saves staff from duplicating content, and it gives students a more consistent experience across the College. In providing these resources, staff are given the space to focus on the development and delivery of their subject specific content, while students are given easy guides to follow so that they are not struggling with technology when they should be focusing their attention on module content. The value of these supports is evidenced through academic requests and student use. For example, last year LEAD were asked to produce support articles for a module containing 900 students. In the month in which this support was given, we saw a spike of 11,070 consultations of LEAD’S KB. This demonstrates that the resources are both needed and being used.</p> <p>As staff use LEAD’s KB they implicitly and explicitly shape its development, either through the search terms they use or the specific requests for resources they ask for. Their influence on LEAD’S KB has resulted in its increased use value, as evidenced by the table below, which details the growing use of the tool.</p> <table border="1"> <thead> <tr> <th></th> <th>S2</th> <th>S2</th> <th>S2</th> <th>S2</th> <th>S2</th> <th>S2</th> <th>S2</th> <th>S1</th> <th>S1</th> <th>S1</th> <th>S1</th> <th>S1</th> <th>S1</th> </tr> <tr> <th></th> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> <th>Annual</th> </tr> </thead> <tbody> <tr> <td>2021</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>391</td> <td>1,285</td> <td>1,528</td> <td>1,560</td> <td>4,764</td> </tr> <tr> <td>2022</td> <td>2,297</td> <td>1,847</td> <td>2,050</td> <td>3,996</td> <td>1,884</td> <td>297</td> <td>359</td> <td>267</td> <td>538</td> <td>763</td> <td>834</td> <td>735</td> <td>15,867</td> </tr> <tr> <td>2023</td> <td>1,027</td> <td>1,530</td> <td>1,809</td> <td>1,143</td> <td>1,224</td> <td>1,025</td> <td>2,020</td> <td>1,524</td> <td>3,559</td> <td>2,600</td> <td>3,457</td> <td>2,456</td> <td>23,374</td> </tr> <tr> <td>2024</td> <td>4,064</td> <td>2,387</td> <td>3,394</td> <td>11,070</td> <td>6,346</td> <td>6,948</td> <td>4,392</td> <td>3,778</td> <td>5,711</td> <td>7,308</td> <td></td> <td></td> <td>55,398</td> </tr> </tbody> </table> <p>Figure 1: Monthly Consultations of LEAD’s KB *Please note, the roll out for LEAD’s KB occurred in September 2021.</p>		S2	S2	S2	S2	S2	S2	S2	S1	S1	S1	S1	S1	S1		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	2021	-	-	-	-	-	-	-	-	391	1,285	1,528	1,560	4,764	2022	2,297	1,847	2,050	3,996	1,884	297	359	267	538	763	834	735	15,867	2023	1,027	1,530	1,809	1,143	1,224	1,025	2,020	1,524	3,559	2,600	3,457	2,456	23,374	2024	4,064	2,387	3,394	11,070	6,346	6,948	4,392	3,778	5,711	7,308			55,398
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<p>Frameworks, Policies, or Strategies Aligned (internal, local or national)</p>	<p>The Lead Knowledge Base (LEAD KB) speaks to the SATLE goal to transform higher education through the advancement of digital skills in staff and in higher education. Its objectives further align with the goals of the <i>Next Steps for Teaching and Learning: Moving Forward Together (Next Steps)</i> report, <i>The National Professional Development Framework for all Staff who Teach in Higher Education (National PD Framework)</i>, and the <i>National Strategy for Higher Education to 2030 (National Strategy)</i>, which call for the enhancement of teaching and learning through the digital upskilling of staff and students.</p>																																																																																				

	<p>the LEAD KB’s support of educational digital technologies mirrors the <i>Next Steps</i> ambition to “reimagine our campuses and learning environments” (12), and it serves to enhance staff’s digital capabilities. In line with the <i>National PD Framework</i>, staff are empowered to “use [...] digital tools to create and develop new learning materials, embedding a range of media and interactive resources” (10) in their teaching practice. This sees LEAD’s KB align with the <i>National Strategy</i> as it helps to facilitate “technology-supported learning” and promotes “[t]he adoption of new forms of pedagogy for greater student engagement” (52). Finally, as the use of digital technologies becomes embedded in teaching practices, and as digital support resources are made available to students, students are supported in their “development of transversal skills and digital capabilities” (14) as advised in the <i>Next Steps</i> report.</p> <p>Beyond the national, LEAD’s KB aligns with, and is strongly guided by, the values and principles established in the various domains of the <i>DigCompEdu Framework</i>. As the LEAD KB provides guides on a variety of digital tools and systems supported at MIC, it enables staff to “identify, assess and select digital resources for teaching and learning [, as well as t]o consider the specific learning objective, context, pedagogical approach, and learner group, when selecting digital resources and planning their use” (<i>DigCompEdu</i>, 2.2). Echoing the ambitions of the <i>DigCompEdu</i> (4.1), the LEAD KB supports innovation and inclusivity in assessment design, as the LEAD KB upskills staff on digital technology with advanced accessibility features. Further as the LEAD KB’s digital resources are multimodal and built on UD principles, the LEAD KB serves to model best practice for the use of digital supports.</p> <p>LEAD’s KB’s alignment with SATLE objectives, national frameworks and strategies, and European ambitions places it as an exemplar of best practice for the sector and as a transformative tool for academic staff and students within and beyond MIC.</p>
<p>Summary (Max 400 Words)</p>	<p>The LEAD Knowledge Base is a continuously evolving resource that supports staff to upskill on new and existing MIC systems and technologies as these systems and technologies advance. Although the LEAD KB was designed with the MIC community in mind, as many of the technologies MIC supports are also used within other HE institutions, it is a useful resource for HE and other users. To facilitate external use of the LEAD KB, service is built on an open access public platform. LEAD’s KB employs advanced search engine optimisation practices, ensuring it consistently appears as a top result on Google. The public searchability of the site and its Open Educational Resources (OER) enables the LEAD KB to take on an outward looking support role within the Irish HE sector.</p> <p>LEAD’s KB was designed around best practice principles, including the UD and DigCompEdu frameworks among others. This has enabled LEAD to create a knowledge base that is easy to use, and which caters to different users’ needs. It serves to model best practice to staff, supporting them to think progressively about their adoption of digital tools.</p> <p>LEAD’s KB contains a wide body of resources. As such, usability and easy navigations are central to the design of the LEAD KB, with the ability for time-poor staff to easily</p>

	<p>find appropriate supports marked as a high priority for this project. LEAD’s KB enables users to view all support articles related to a topic. On displaying a topic, the LEAD KB presents its users with extended links to related materials. While these features help to improve the usability of the LEAD KB, it also supports staff to explore how digital tools can be used and managed in a variety of ways.</p> <p>The LEAD KB tracks the use of search terms, which enables LEAD to identify areas of demand for upskilling and new areas for content development. As a result, the LEAD KB resources directly evolve based on evidenced demand in the College and in the sector more widely.</p>
<p>Did you collaborate with internal and/or external stakeholders to deliver?</p>	<p>Yes, we collaborated with:</p> <ol style="list-style-type: none"> 1) External Systems Providers. 2) Munster Technical University – by providing insights into how they implemented their own KB. 3) Information and Communications Technologies Services - in the security, development, procurement and provision of the Knowledge Base including the procurement of a suitable sub-domain. 4) Information Compliance Office - for the review and completion of Data Processing Impact Assessments and the establishment of protocols to assure the security of data.
<p>Organisation and Planning</p>	<p>When the decision was taken to create a user-friendly Knowledge Base, LEAD began by researching the available options. LEAD consulted with ICT, who recommended using SharePoint. However, to have a clearer sense of the options available to us, an additional 11 products for domain management were reviewed. The suitability of the products were assessed under 26 different criteria, centred around usability, interface, accessibility, reporting, media compatibility, integration and site management. Of these criteria, usability (in particular, the ability to search for content) and accessibility were of top priority.</p> <p>While SharePoint would have enabled the Lead Knowledge Base to stay in house, after conducting our own review of the product, the capabilities were deemed to be too limited. The project lead sought to meet with companies whose products were identified as compatible with the needs of the envisioned LEAD KB. In the end LEAD decided that the domain manager Teamwork would be the best product for the development of the Lead Knowledge Base. Teamwork offered customisable features and was very easy to use. This product also offered advanced analytics, that would allow us to track search terms, failed searches and identify resources that received high traffic.</p> <p>Though more functional, the use of Teamwork as our domain manager meant that LEAD’s KB was positioned outside of MIC’s domain. As such, the team consulted with information compliance to ensure that our use of LEAD’s KB was in line with GDPR and MIC policies and guidance.</p>

	<p>With the domain management product selected, LEAD then considered how to optimise the searchability of Lead’s Knowledge Base. It was decided that a custom domain name that was linked to a Teamwork subdomain was needed. This would enable staff within and beyond MIC to more easily locate LEAD’s KB. ICT supported the team in the setup of this domain name.</p> <p>Once the appropriate product for domain management was procured, the team began to plan for how LEAD’s existing support content could be modified to fit the structure and functionality of LEAD’s new KB. The team sought to move away from large toolkits to bite sized support documents. The project lead went through existing guides. She outlined how these resources could be subdivided and classified the priority level for their redevelopment (high/medium/low).</p> <p>The project lead created a planner for this work. Within the planner, members of the team could nominate themselves to undertake the revision of a subdivided resource, with content labelled as high priority addressed first. Once the bite sized support resource was prepared, another member of the team could nominate themselves to review and approve the publication of the new resource. This ensured that resources produced were of high quality and that no sensitive data was included in any of the publicly facing resources.</p> <p>Over time, failed searchers in LEAD’s Knowledge Base, in-person requests for supports, the introduction of new systems and tools, and LEAD’s research began to shape the content that was developed for the LEAD KB. When it became apparent that a support resource was needed for a particular topic or digital tool, the work would be put into the planner, research would be conducted, and a new support article or video would be produced. This process saw LEAD’s KB develop organically with the needs of the College.</p>
<p>What resources did you need?</p>	<ol style="list-style-type: none"> 1) LEAD staffing, 2) Domain Manager, 3) Project Planner, 4) SATLE funding to support the development of many of the OER available on the LEAD KB.
<p>Has it been evaluated? How successful has it been?</p>	<p>the LEAD KB is a hugely successful resource which has had a measurably positive impact on supporting digital transformation in MIC. The popularity of LEAD’s KB’s 260 topic-specific support articles has grown year on year, as has its content. LEAD’s KB received 55, 398 consultations to date in 2024. This is an increase of 137% from 2023. These figures highlight both the growing demand for the LEAD KB, and points to the increasing digitisation of the College. Further, as staff have become aware of the benefits of LEAD’s KB to both themselves and their students, staff have begun to request new resources to support the novel approaches to teaching and learning they are implementing. When these new resources are produced, LEAD are seeing a spike in the consultation numbers.</p> <p>We have also received oral testimony from staff who have highlighted the value of the resource to them. Considering the accessible nature of the LEAD KB’s system</p>

	<p>and content, one academic said, “I could evaluate the options available to me and figure out how best to get the job done in a pretty straight forward manner”, while another labelled the LEAD KB as “absolutely invaluable.”</p> <p>From the data highlighting the high usage of LEAD’s KB and academic’s testimonies, it is clear that the LEAD KB is both a needed and valued resource within the MIC community.</p>
<p>Any future plans, including the sustainability of the initiative?</p>	<p>With the rise of Generative AI, we have begun to explore how LEAD’s KB can be harnessed by AI technologies to create a stronger, more human-like support for staff. We intend to further expand LEAD’s KB by incorporating additional digital resources, as well as content on Generative AI, UDL, authentic assessment, programme design and academic integrity. As LEAD’s KB expands its content, it will serve as data points that can be used within a Generative AI builder. The more data points created within the LEAD KB, the more advanced our Generative AI support will be. Working in partnership with the University of Liverpool, we intend to transform this national resource into one that will be relevant to Irish and UK higher education by jointly producing the needed data points for both sectors and by jointly promoting its use.</p>
<p>Key Learning Points</p>	<ol style="list-style-type: none"> 1) Easily accessible content and navigations are important when developing a resource that can speak to the needs of academics. 2) Being able to learn from how staff use LEAD’s KB is central to both the evolution of an effective KB as well as to its continued use value. 3) Having clear and consistent guidance for both staff and students enables staff to effectively use and learn about new technologies. 4) 24hr, asynchronous ‘just-in-time’ support gives space for staff to upskill in their own time and gives them a foundation to build their understanding on.

Teaching and Learning Focus Areas (please tick all that apply)

Categories	Elements	Topics	Target Groups
Commit <input type="checkbox"/>	Leadership, Strategy & Governance <input type="checkbox"/>	Digital Transformation <input checked="" type="checkbox"/>	Students <input checked="" type="checkbox"/>
Coordinate <input type="checkbox"/>	Curriculum and Assessment <input type="checkbox"/>	Education for Sustainable Development <input checked="" type="checkbox"/>	Staff <input checked="" type="checkbox"/>
Consult <input checked="" type="checkbox"/>	Innovation in Teaching <input checked="" type="checkbox"/>	Academic Integrity <input checked="" type="checkbox"/>	Wider community <input checked="" type="checkbox"/>

Create <input checked="" type="checkbox"/>	Professional Development <input checked="" type="checkbox"/>	Inclusive and Equitable Teaching Practices <input checked="" type="checkbox"/>	Other <input type="checkbox"/>
Celebrate & Continue <input checked="" type="checkbox"/>	Research and Evaluation <input type="checkbox"/>	Innovations in Assessment and Feedback <input type="checkbox"/>	
		Student Engagement and Partnership <input type="checkbox"/>	
		Collaborative and Interdisciplinary Approaches <input type="checkbox"/>	
		Artificial Intelligence <input type="checkbox"/>	
		Other <input type="checkbox"/>	

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