

## **Towards a Digital Life@Polys<sup>TM1</sup> Framework – Transformation of Digital & Media Literacy in the Polytechnic<sup>2</sup> Libraries in Singapore**

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### **Abstract**

The pace of disruptive technologies is accelerating and the Polytechnic students in Singapore are confronted with complexities of the digital world. To adapt and embrace digital opportunities in the sphere of their lives, it is timely for them to embrace life in the digital world by equipping themselves with competencies to stay ahead in their studies and prepare for the workplace. The Polytechnic Libraries in Singapore recognise this need and have come together under the Joint Polytechnic Libraries (JPL) Transformative Collaboration to harmonise their Learning Services under a one-stop framework of Digital Life@Polys<sup>TM</sup>. This paper touches on the processes as to how the team has worked together to create a one Poly Framework, the benefits of harmonising Polys' learning services together, and how the framework has helped the Poly Libraries to harmonise. The competencies are divided into five broad areas namely Staying Relevant, Cognitive Skills, Emerging Technologies, Safety & Wellness, and Enhancing Learning. The suite of offerings in this framework include E-learning packages, events, activities, learning journey, and curated guides which are collaborated with internal and external partners.

*Keywords: Digital Literacy, Transformation, Polytechnic Libraries, Singapore, Learning Services, Staying Relevant, Cognitive Skills, Emerging Technologies, Safety & Wellness, and Enhancing Learning.*

### **Introduction**

Fuelled by disruptive innovations and emerging technologies, today's business landscape is changing in rapid and unprecedented ways, but one thing remains clear: digital transformation is led by people. People with the right skillsets as well as competencies are the most important and powerful assets of an organisation for the future economy. What are the in-demand skills in this digital age? How can Polytechnic Libraries in Singapore adapt to help students embrace the opportunities in the digital world and prepare them for the workplace? In light of the current COVID-19 pandemic, the Polytechnic Libraries also face the challenge to support "Home-based Learning (HBL)" and "Working from Home (WFH)" more extensively through their remote learning services. How can the Polytechnic Libraries do more by broadening their offerings through collaborations? These are some of the burning issues that need to be addressed in Singapore's current education landscape. These questions made the Polytechnic Libraries relook at their current information literacy programmes, reposition themselves to transform in this digital world, and explore ways to transform through collaboration.

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<sup>1</sup> "Polys" is a shorter form of name which is commonly used in Singapore to represent the Polytechnics.

<sup>2</sup> Polytechnics in Singapore offer students with a three-year route towards a Diploma in a specialised discipline. Upon graduation, students can apply to the universities with their diplomas or apply for work. There are five Polytechnics in Singapore that offers full-time and part-time courses. Typically, students enter the Polytechnic in Singapore after the completion of their GCE "O" Level certificate or equivalent certificates.

This paper discusses the strategies adopted by Polytechnic Libraries in Singapore to reposition their libraries by supporting the [21<sup>st</sup> century critical competencies](#) and shifting the roles of librarians from traditional gatekeepers of the information world to 'educators' advocating digital literacy as a lifelong learning skill. The journey towards this transformation is done by forming a "one-stop Polytechnic Libraries' Learning Services framework" which drives the Polytechnic Libraries learning services delivery. The journey of transformation at the Polytechnic Libraries has been a continuous one. Over the last few years, four Polytechnic Libraries - Nanyang Polytechnic (NYP), Ngee Ann Polytechnic (NP), Temasek Polytechnic (TP), and Singapore Polytechnic (SP) have been collaborating under JPL to transform the delivery of their learning services.

### Literature Review

The findings in the literature show some similar trends towards the transformation for libraries in the international and Singapore landscapes on information literacy practices. The first trend is about the differences in the interpretation of information literacy, media literacy, and digital literacy. Libraries have implemented initiatives and programmes to correspond with these related literacies (Cordell, 2013; Wray & Mulvihill, 2018; Bryan, 2018; Schachter 2020). As the concepts of these literacies overlap, it will influence the direction of programme development and communication to the stakeholders. Traditionally, information literacy has always been associated with the field of librarianship. The Association of College and Research Library (ACRL) defines it as "the set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning" (ACRL, 2016). Media literacy, on the other hand, is "used to imply critical thinking in assessing information gained from the mass media" (Bawden, 2001). There is much similarity between media literacy and information literacy. With the evolving needs and demands in our digital age, the libraries would need to reframe their information and media literacies as well as reposition the importance of digital literacy.

The American Library Association (ALA) defines digital literacy as "the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills" (ALA, 2013). Drawing on the reports by JISC, digital literacy is defined as the "capabilities which fit an individual for living, learning, and working in a digital society" (JISC, 2014). Policy documents and literature have revealed that the concept of digital literacy is complex and wide-ranging, where different perspectives co-exist, covering "technical 'know-how' via cognitive skills to social practices and proactive engagement with digital content" (Spante et.al., 2018). Terms such as 'digital fluency', 'digital competency', or 'digital capabilities' are at times used interchangeably with 'digital literacy'. More importantly, studies have shown that it is imperative for education institutions to entrench the development of digital literacy skills within the curriculum to build capacity and capability (Press et al., 2019).

The second trend is the growing demand for workers across industries to upskill for the digital economy. There are national movements in various countries to promote 21<sup>st</sup> century competencies in their schools and tertiary institutions to prepare students for the workforce

(Gekara et al., 2019; Bergson-Shilcock, 2020). Increasingly, libraries have repositioned their literacy initiatives and programmes, where librarians play a more substantial role in teaching and supporting digital literacy efforts, drawing on their information literacy background (Alexander et al., 2016; Latham et al., 2013; Monge & Friscaro-Pawlowski, 2014). In Singapore, there are various sets of common, transferable competencies rolled out by the Government Bodies to the Polytechnics for implementation. For example, SkillsFuture Singapore (SSG), a statutory board<sup>3</sup> under Singapore's Ministry of Education (MOE) which drives the national SkillsFuture movement to promote lifelong learning has introduced 16 Critical Core Skills (CCS) competencies, grouped into three clusters of skills – 'Thinking Critically', 'Interacting with Others', and 'Staying Relevant', that are deemed essential for the future workforce (SSG, 2019). The 'Thinking Critically' cluster covers the cognitive skills (e.g. sense-making, transdisciplinary thinking) needed for broad and creative thinking. The 'Interacting with Others' cluster anchors on people relations (e.g. collaboration, communication), while the 'Staying Relevant' cluster is all about effective self-management (e.g. digital fluency, adaptability) and staying on top of trends.

Recognising the importance to equip students in order to thrive in a digital society and take on the jobs of the future, Singapore's Ministry of Education (MOE, 2020) has launched the National Digital Literacy Programme. This programme aims to help students acquire digital skills across the four components in the "Find, Think, Apply, Create"<sup>4</sup> framework throughout the different stages of their education journey. At the higher education level, educational institutions such as Polytechnics will enhance their baseline digital competencies for example, computational thinking and data competencies, alongside their efforts to strengthen cyber wellness.

Various workgroups were set up in the Polytechnics to drive competencies rolled out by Singapore's Ministry of Education (MOE). One of the working groups that the Polytechnic Libraries have been working closely with is the Joint-Polytechnic Committee to Enhance Teaching and Learning (JP-CETL). The committee drives six domain competencies on Cyber Wellness & Security, Information and Media Literacy, Digital Content Creation, Digital Learning, Data & IT for Problem-solving & Decision-making, and Virtual Collaboration in the Polytechnics. The other working groups in the Polytechnic to drive various digital and lifeskills competencies are the AI-related Baseline Competencies Workgroup, WSH (Higher Education and Research) Working Group and MOE Lifeskills Workgroup. The schools<sup>5</sup> within each Polytechnic are expected to infuse these competencies in their curriculum through various delivery modes. With added competencies streaming down into the curriculum, it provides an opportunity for the Polytechnic Libraries to leverage by supporting the teaching of the baseline competencies through self-directed E-learning packages. This support would be appreciated by the Schools that may face challenges juggling their time teaching the core subjects and these competencies in their curriculum.

The third trend looks at how libraries are adapting their learning services to support the graduate outcomes of their institutions. Literature has shown that libraries have aligned their

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<sup>3</sup> The statutory board in Singapore usually reports to a Ministry and are autonomous government agencies.

<sup>4</sup> More details on the framework is on this website: <https://www.moe.gov.sg/microsites/cos2020/refreshing-our-curriculum/strengthen-digital-literacy.html>

<sup>5</sup> Schools are equated to faculties in a university.

strategic plans with the mission and goals of their parent institutions. This is to support the institutional needs, particularly in contributing to their students' success and retention. (Saunders, 2015; Gleason, 2018; Woolley & Core, 2018). Institutions such as Charles Sturt University and Deakin University have positioned digital literacy as a core graduate learning outcome (Press et al., 2019).

The fourth trend identified in the literature is on how libraries are developing unified overarching frameworks to chart the direction of building digital capabilities. Hallam (2019) pointed out that some Australian academic libraries, including The University of Queensland, La Trobe University, and the University of Adelaide have developed frameworks to guide practices in their institutions. For instance, a unified framework in La Trobe University provides the community there with a shared understanding of digital literacies. In addition, many new frameworks relating to digital literacy have also been conceptualised across the libraries in the academic institutions (De Paor & Heravi, 2020; Feerrar, 2019). Some examples include Edith Cowan University, University Libraries of Virginia Tech, and The Open University.

### **Challenges Faced by the Polytechnic Libraries**

Faced with the challenges to equip students with added [21<sup>st</sup> century competencies](#), there are four questions that the Polytechnic Libraries regard as important to address.

1. How to strategically reposition the Polytechnic Libraries to support the new competencies rolled out by the Government Bodies to the students?
2. How to enhance the support to students to align to their Polytechnic Graduate Competencies/Attributes/Profiles?
3. How to tap on the pool of talents and resources across the Polytechnic Libraries more effectively and offer broader and better learning services to their campus communities?
4. How could the Polytechnic Libraries position themselves more strategically to enhance user experience, optimise resources and achieve division of labour?

These questions set the tone for the Polytechnic Libraries to explore ways to transform themselves and reimagine their offerings beyond the traditional information and media literacy programmes. This can be done by engaging stakeholders with a one-stop framework on Polytechnic Libraries' Learning Services to complement the main curriculum and provide students with a holistic learning experience. Although the Polytechnic Libraries have already maintained a good relationship with their Schools to integrate their E-learning packages into the curriculum, they could enhance this support further by pooling their resources together to harmonise common E-learning packages. A unified event could be organised collaboratively to pool talents and resources together and achieve better user engagement. The trends identified through the literature review suggest that there is potential for the Polytechnic Libraries to do more in their branding, design an overarching framework that aligns their learning services with the competencies laid out by the Government bodies.

## Methodology

A qualitative approach through surveys and focus group meetings were used to gather information on the Polytechnic Libraries' information, media, and digital literacy practices. The findings helped the team ascertain the needs of the stakeholders and the current practices of the Polytechnic libraries. The findings had also identified the common and value-added best practices of the Polytechnic Libraries and their potential collaborative areas. Interviews with librarians who participated in the teaching of the literacy programmes were useful to gather insights on the approaches adopted by each Polytechnic Library.

The focus group sessions organised by the Polytechnic Libraries' Library of the Future (LoF) workgroup had identified the key stakeholders' visions on the role of the Polytechnic Libraries in the provision of learning services. These include a "Knowledge Hub, Learning Gym, and an oracle of knowledge related to academic and general information" and "Library as the first place to do research, look for information in experiential learning, civic engagement, and progressive future-oriented thinking". These visions gave the team some invaluable insights to help them conceptualise a forward-looking framework for the Polytechnic Libraries' Learning Services. The overall findings were analysed to review the feasibility of harmonising the Polytechnic Libraries' learning services together. The vision, objectives, and potential areas of collaboration were presented to the JPL Council for decision-making.

## Best Practices of the Polytechnic Libraries in Singapore

Polytechnic Libraries have adopted some common best practices to deliver their literacy programmes to their students on information literacy, digital literacy, media literacy, and library orientation sessions via various modes of delivery such as face-to-face delivery, E-learning package, learning journey, workshops, and curation of resources. Table 1 highlights the common and unique practices. The details on the best practices are highlighted in Appendix 1.

**Table 1: Best practices of the Polytechnic Libraries in Singapore**

Areas	NYP <sup>6</sup>	NP <sup>7</sup>	TP <sup>8</sup>	SP <sup>9</sup>
1. Get buy-in and build closer partnerships with academic schools to infuse information literacy into curriculum via the Polytechnic's Learning Management System (e.g. common Communication module for all first-year students)	✓	✓	✓	✓
2. Improve instructional design with the use of appropriate Ed1Tech tools (e.g. Panopto and Socrative) and new technology (e.g. conversational chatbot – Landbot)	✓	✓	✓	✓
3. Encourage experimentation and talent development to create opportunities for librarians	✓	✓	✓	✓

<sup>6</sup> NYP is the commonly used abbreviation used in Singapore to represent Nanyang Polytechnic

<sup>7</sup> NP is the commonly used abbreviation used in Singapore to represent Ngee Ann Polytechnic

<sup>8</sup> TP is the commonly used abbreviation used in Singapore to represent Temasek Polytechnic

<sup>9</sup> SP is the commonly used abbreviation used in Singapore to represent Singapore Polytechnic

Areas	NYP <sup>6</sup>	NP <sup>7</sup>	TP <sup>8</sup>	SP <sup>9</sup>
4. Enable peer learning through resource sharing (e.g. sharing of learning objects) and leveraging skills/expertise of librarians	✓	✓	✓	✓
5. Deliver specialised workshops to cater to specific needs of the campus community	✓	✓	✓	✓
6. Curate resources to support the Polytechnic Libraries' learning services	✓	✓	✓	✓
7. Tap on industry partners (e.g. Medial Literacy Council) as domain experts in content development		✓		
8. Develop system approach (e.g. formulate structure or framework) to drive the literacy programmes in the Polytechnic Libraries	✓	✓	✓	✓

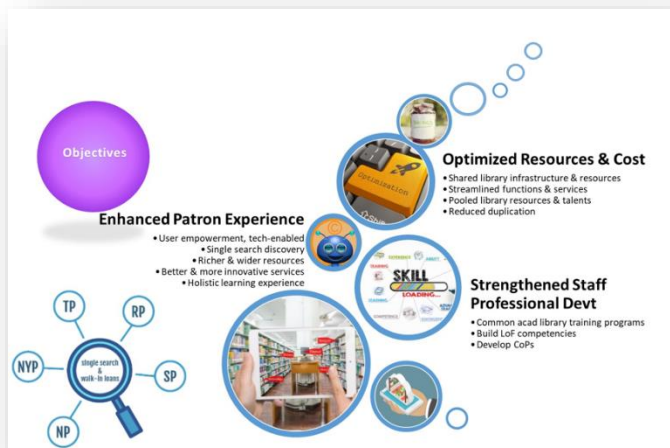
As there are commonalities in the programmes offered by the Polytechnic Libraries, there is a value for the Polytechnic Libraries to work collaboratively to tap on the best practices of each Polytechnic Library, pool their library resources and talents together, reduce duplication of the Polytechnic Libraries' effort and achieve division of labour. In addition, the Polytechnic Libraries would gain a more prominent voice when they forge collaboration with industry partners.

### **Background on Polytechnic Libraries' Collaboration in Information / Digital Literacy**

In Singapore, each Polytechnic has its own graduate competencies, attributes, or profiles to prepare students for the workplace. In the last few years, the Polytechnic Libraries have been collaborating with academic staff in their respective institutions to roll out information, digital, and media literacy programmes to their students. However, this could be enhanced further when the Polytechnic Libraries work collaboratively to harmonise their learning services and align their services more strategically to the graduate outcomes of their institutions.

The Polytechnic Libraries had started working together on joint projects in information literacy as early as 2017 when the Polytechnic Information Literacy Interest Group was set up for the four Polytechnic Libraries (Nanyang Polytechnic, Ngee Ann Polytechnic, Singapore Polytechnic, and Temasek Polytechnic). This model of collaboration through interest groups has achieved some considerable success through the exchange of knowledge and skills. For example, the group had jointly curated resources on Digital Literacy@Polys<sup>TM</sup> and SkillsFuture Singapore as well as developed a common E-learning package on Copyright Education for students. Although there were attempts to curate and create some learning services together, the collaboration was still within the borders of the library community. With only limited staff represented in the interest group, the Polytechnic Libraries could only look at small areas of collaboration. The libraries' initiatives could be highlighted more prominently if there is a formalised governing structure for the Polytechnic Libraries' collaboration where initiatives are tabled to the Polytechnics' senior management. Since then, the Polytechnic Libraries have explored various models to collaborate more cohesively. In August 2020, the Joint-Poly Libraries (JPL) Transformative Collaboration was set up with a network of five Polytechnic Libraries (Nanyang Polytechnic, Ngee Ann Polytechnic, Singapore Polytechnic, Temasek Polytechnic, and Republic Polytechnic) to collectively take the Polytechnic Libraries towards the Library of the Future (LoF). The Polytechnic Libraries remain autonomous and manage their

own polytechnic specific needs. It is a tightly coupled collaboration in areas governed by the Joint-Poly Libraries Council (JPLC) chaired by a Deputy Principal of an appointed polytechnic.



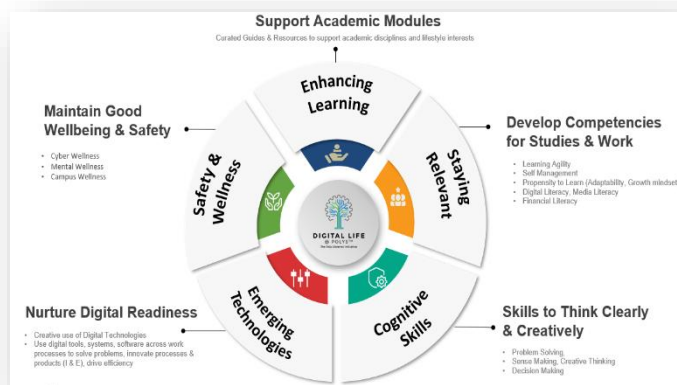
JPL sets its direction with a “3410” vision which encompasses three objectives, four key collaborative areas, and 10 initiatives. The key objectives are to enhance user experience, optimise resources and cost, as well as strengthen the professional development of library staff. The four key areas include JPLA1<sup>10</sup> on Library Systems and Resource Procurement, JPLA2 on Digitalisation and Unified Services, JPLA3 on Curation and Resource Development, and JPLA4 on Learning Services, User Engagement, and Staff Development.

In 2021, Ngee Ann Polytechnic (NP) and Nanyang Polytechnic (NYP) were appointed as lead and co-lead respectively to helm the leadership of driving the Polytechnic Libraries’ initiatives under JPLA4. The goals of JPLA4 are to foster Digital Literacy & Lifelong learning, synergise patron engagement & promotion, achieve unified patron experience, forge closer collaboration with the Schools & industry partners and foster specialised library staff development opportunities. Two initiatives were launched during the pilot phase from April to May 2021 under the areas of “One Learning Services Framework” and “Harmonised Patrons Engagement”.

### Coming Together under “One Learning Services Framework”

The Polytechnic Libraries’ learning services are embraced under an overarching one-stop framework with the brand name, Digital Life@Polys<sup>TM</sup>. The objective of having a unified branding is to communicate to the Polytechnics’ stakeholders on a common identity to guide the efforts done by the Polytechnic Libraries in their learning services. It brings together the initiatives by the Polytechnic Libraries on information, digital, and media literacies which are delivered via various modes of delivery such as E-learning packages, workshops, learning journeys, and curation of resources.

<sup>10</sup> JPLA1 to A4 represents the Joint-Polytechnic Libraries (JPL) Transformative Collaboration in Areas 1, 2, 3 and 4 accordingly.



The framework encompasses the critical competencies required of students to excel in the Digital World beyond their disciplinary curricula and is closely aligned to the competencies laid out by the Ministry of Education (MOE), Polytechnics Graduate Outcomes, and SkillsFuture. It covers five broad areas under “Staying Relevant”, “Cognitive Skills”, “Emerging Technologies”, “Safety & Wellness”, and “Enhancing Learning”.

The intent is to provide stackable modular courses for the students throughout their three years in the Polytechnic. Students will be able to take the modules progressively at a comfortable pace and be awarded digital badges upon the completion of each module. At the start of every new semester in April, the Polytechnic Libraries also plan to implement a flagship event entitled “Power Up!” to promote Digital and Media Literacy. This event will help students kickstart their learning journey of Digital Life@Polys™ and replace the Polytechnics’ existing orientation programmes.



The first initiative was the implementation of a harmonised E-learning package on Digital and Media Literacy for the Polytechnic Libraries. The harmonisation includes consolidating the content and questions from the Polytechnic Libraries’ existing E-learning packages into one single E-learning package under the acronymised brand name, D.R.E.A.M.S.<sup>11</sup> The E-learning package containing multiple quiz questions was developed on Articulate Rise 360 and Articulate Storyline 360. Tapping on the feature of Articulate Storyline 360, students who completed the quiz will be prompted with a digital badge to validate their acquired competencies which they could integrate into their digital portfolio. Since April 2021, Ngee Ann Polytechnic and Temasek Polytechnic have made this skill compulsory to Year 1 students while Nanyang Polytechnic and Singapore Polytechnic have

infused it within existing curriculum. Generally, the Polytechnic Libraries collaborated with the Schools closely to infuse this E-learning package into the curriculum via Brightspace either by integrating into core modules identified by the Schools (e.g. Ngee Ann Polytechnic) or into

<sup>11</sup> D.R.E.A.M.S stands for D- Determine the extent of information need, R – Retrieve relevant information, E- Evaluate online information, A – Acknowledge use of information, M- Manage online information, S – Share online information.



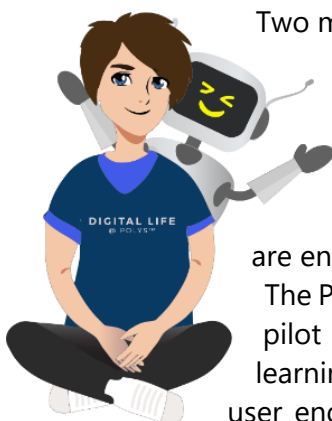
the Polys' Communication modules (e.g. Nanyang Polytechnic, Temasek Polytechnic, and Singapore Polytechnic).



The second initiative was a pilot launch of the inaugural flagship event – “PowerUp!” from April to May 2021. Highlights of the event included virtual library tours, One-Poly Libraries [microsite](#) as well as industry cum library talks and activities to promote Digital & Media Literacy under the Digital Life@Polys™ framework.

For the first time, the Polytechnic Libraries have forged their efforts to organise virtual talks via the Zoom platform delivered by 11 external industry partners, namely Singapore Press Holdings (SPH), Media Literacy Council (MLC), Ministry of Social and Family Development (MSF), Institute for Financial Literacy (IFL), and E-database vendors (Elsevier, ProQuest, LinkedIn Learning, EBSCOHost, WGSN, 123RF), and subject domain experts from the Polytechnics.

Besides that, the Polytechnic Libraries have also positioned themselves under one unified branding logo on Digital Life@Polys™ which symbolises the digital life and growth for the five Polytechnic Libraries (NP, NYP, RP, SP, TP) to work together and reach out to their Polytechnics' communities.



Two mascots, Mike (a student) and his learning buddy, AI (A futuristic robot) were developed as the Polytechnic ambassadors of Digital Life@Polys™. The mascots are represented in the marketing platforms of the Polytechnic Libraries to boost the students' spirit that future technologies (which is symbolised by a robot) will become an integral part of a student's life. The efforts and initiatives by JPLA4 are encapsulated in a [video](#).

The Polytechnic Libraries have achieved some significant outcomes after the pilot launch of these initiatives that include an increase in the patrons' learning engagement, pooling of resources and talents, harmonisation of user engagement, strengthening of staff professional development through new skills acquisition and manpower savings.

### Moving Forward for the Polytechnic Libraries

After the pilot implementation of the event “PowerUp!”, the team came together to brainstorm more strategies to drive wider participation from the campus communities, but they were also mindful of the challenges that they needed to overcome. One of which was how to retain

students' engagement in a virtual environment as the circumstances under the COVID-19 pandemic restricted social gatherings for a physical event. In addition, with many activities happening at the start of a new term, the Polytechnic Libraries have to compete with other Schools for their students' time to secure their participation in the Libraries' activities. The team will also continue to review and improve the E-learning package on digital and media literacy after the first batch of students had completed the package by end of October 2021. It is expected that more time will be invested for the initial harmonisation of the Polytechnic Libraries' E-learning packages as the content need to be reviewed, adapted, and re-packaged under a new harmonised wireframe.

Despite these challenges, the team has broken new ground in the delivery of the learning services. For example, this can be seen in the sharing of resources and pooling of talents to deliver better outcomes for the E-learning package and event. The Polytechnic Libraries have plans to launch more E-learning packages on other competencies under the Digital Life@Polys™ framework such as Computational Thinking, Cyber Wellness, Artificial Intelligence, Financial Literacy etc. and forge tighter partnerships with industry partners.

### **Conclusion**

The Polytechnic Libraries' experience to harmonise their learning services under the Joint-Polytechnic Libraries (JPL) Transformative Collaboration is an applaudable effort recognised by the Ministry of Education of Singapore (MOE). This transformative journey of the Polytechnic Libraries towards the Library of the Future (LoF) may face challenges in its initial stage, but the Polytechnic Libraries are confident that it will reap many benefits in the long run. The initiatives under the Polytechnic Libraries' one-stop framework of Digital Life@Polys™ has helped to reposition the Polytechnic libraries by enhancing their stakeholders' user experience and optimising their resources and productivity. The framework is forward-looking as it houses all the baseline competencies rolled out by the Government Bodies in Singapore and has a strategic alignment with the 21<sup>st</sup> century competencies (21CCs) by Singapore's Ministry of Education, SkillsFuture, Singapore's Critical Core Skills (CCS), and Polytechnics' Graduate Competencies. It also compliments the core curriculum of the Polytechnics and is flexible enough to add more competencies to support the Schools.

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## Appendix 1

With the push for self-directed learning in the polytechnic community, the Polytechnic Libraries have responded to this with a strategic shift towards their online instruction, specifically by integrating information/media/digital literacy into the curriculum through their Learning Management System. The motivation to move to online instruction is stemmed from the challenges associated with face-to-face instruction, such as inefficient use of librarians' time through repeated workshops, accommodating, and managing large numbers of students and scheduling conflicts (Tomaszewski, 2021).

To complement the online instruction, the librarians had also reviewed the delivery of traditional face-to-face librarian-led workshops, as well as explored pedagogies such as the flipped classroom and blended learning to implement innovative programmes to address the specific needs of the polytechnic communities.

Furthermore, the COVID-19 pandemic has indirectly changed the teaching and learning landscape with the increasing need for online training to support "Home-based Learning (HBL)" and "Working from Home (WFH)". The libraries will continue to harness the opportunity by adapting and enhancing their literacies programmes.

More details of the Polytechnic Libraries' best practices were published in the *2018/19 Vol. 47 Special Issue* on [Information Literacy Research and Practice in Singapore](#). The papers are as follows:

1. Lim, B. A., & Dumauual, H. (2018). E-learning journey in Ngee Ann Polytechnic Library—our experience: a review on its effectiveness and future directions. *Singapore Journal of Library & Information Management*, 47.
2. Kheak, H. H., & Liew, A. (2018). Transforming information literacy programmes—a design thinking approach. *Singapore Journal of Library & Information Management*, 47.
3. Seng, R., & Glass, G. (2018). Delivering research skills to all first-year students: the Temasek Polytechnic example. *Singapore Journal of Library & Information Management*, 47.
4. Lim, X. R. (2018). Flipping library instruction: Singapore Polytechnic Library's experience. *Singapore Journal of Library & Information Management*, 47.