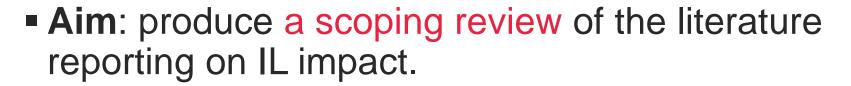


# Background and context







- Developed in association with MILA and informed by UK Government's Online Media Literacy Strategy.
- It was completed in April-July 2022.







- The impact of IL interventions across noneducational settings is not well understood.
- This is in part because there is no agreed definition of IL intervention impact and there are no set parameters to guide impact assessments.
- This project therefore explores the meanings of IL impact and the success factors associated with IL impact in practice.

# Research questions



1. How is impact defined in IL interventions?

IL impact 2. What are the success factors behind impactful IL interventions?

# Methodology



Development of keywords

#### N=170

Drawing up a longlist of impact-focussed IL research

From 3861 papers to 26 items for rigorous review

N=6177

Database searches: LISTA & Web of Science

Recency filtering: focus on results from 2005 onwards

N=3707

Filtering of results that do not contain 'IL' in title or abstract

N=3816

## Methodology: some considerations

- Working definition of IL impact: the outcome of an IL intervention.
- Flexibility in interpretation: across several contexts, outcomes may not always be seen as 'impact'; phenomena may not be described as 'interventions'.
- Classification: by geography, context and method of study
- Scoring: by significance, quality and rigor (SQR) scores, to generate the longlist.





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Geography	Long- list	Final sample	Context	Long- list	Final sample	Method of study	Long- list	Final sample
Europe	38	12	Education	91	15	Quantitative	64	11
Americas	56	7	Library	22	3	Mixed	18	8
Africa	14	2	Workplace	11	3	Qualitative	20	4
Asia	18	4	Everyday	5	2	Literature review	9	0
Oceania	11	1	Health	10	2	NA/none	59	3
Global	4	0	Citizenship	3	1			
NA/not stated	29	0	Conceptual	1	0			
			NA/not stated	27	0			
Totals	170	26	Totals	170	26	Totals	170	26

## Impact assessment themes



- Formal and purposeful impact assessment is rarely performed.
- Long-term impact is rarely measured.
- Impact assessment that is reported is most often found in institutions (in education and to a lesser extent in the library).



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 Only a few contributions discussed the impact assessment: Crawford (2013), Markless and Streatfield (2017).

# Findings: defining successful impact in IL interventions



In the literature, impact has been defined not in terms of **outcomes** but by considering **outputs**:



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- Doney (2006) evaluated increases in numbers of IL-education sessions, literature searches and book-issues, rather than showing that healthcare outcomes had improved.
- Impact is not defined as beneficial societal impact but merely as the result (planned or not) of an intervention.
- Papers do not report how impacts are generated and evaluated.

# Findings: defining successful impact in IL interventions



#### **Success factors**

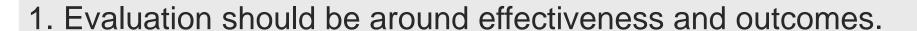




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- 2. Choice of clear frameworks and structures to measure impact.
- 3. Ensuring integration and relevance of the intervention.
- 4. Collaboration between stakeholders.
- 5. Design of content and delivery methods.
- 6. Repetition and follow-up.
- 7. Management buy-in and budget.

# 1. Evaluation should be around effectiveness and outcomes



• Markless and Streatfield (2017, p. 113) strongly suggest that people running IL interventions should not simply collect 'busyness statistics' (i.e. outputs).



- It is necessary to understand the nature and extent of interventions' impacts.
- Where possible outcomes should be measured using substantiated tools (Crawford, 2013).

# 2. Choice of clear frameworks and structures to measure impact



• Frameworks and structures to bolster the assessment of IL impact.



Linked to clear, evaluable objectives focussed on participants.

For instance: scales have been used by e.g. Seifi et al (2020) who based their intervention on SCONUL (2011) and Kulthau (2003).

# 3. Ensuring integration and relevance of the intervention



IL is context-dependent so IL interventions must be integrated into their contexts.



For instance: Hopkins and Julian (2009) report on an intervention that was administered to undergraduates. It was found that IL intervention should take into account what students already know.

#### 4. Collaboration between stakeholders



Collaboration between IL intervention workers and others can be undertaken to integrate IL interventions into workplaces and teaching.



 Crawford (2013) recommends collaboration around national policies.

 Middleton's (2005) project included collaboration between lecturers and library staff.

# 5. Design of content and delivery methods



Few of the papers describing interventions gave clear detail of their content and delivery to enable others to reproduce them.



Some had given details of the frameworks that informed their approach: one thoroughly detailed the intervention in an annex.

# 6. Repetition and follow-up such support.



 Several papers advocate repeating or reinforcing IL interventions, because IL learning soon fades without



 Delayed post-testing is beneficial, as is testing before and immediately after an intervention.

 Ahmad et al. (2020) state that workplace IL training programmes should be conducted at least twice yearly.

#### 7. Management buy-in and budget





Freepik

Impact assessment requires support from management, including budget.

Ahmad et al. (2020) showed that developing an innovation mindset needs investment in information-processing capabilities.



#### **Next steps**

'Information Literacy & Society' project

- Identify core research into the role that IL plays for different user groups in society
- Identify core research into the barriers/enablers to shaping an information literate population
- 3. Map research methodologies used in the literature and which appear to be most effective at delivering societal change.

Some preliminary results on <a href="blogs.napier.ac.uk/social-informatics">blogs.napier.ac.uk/social-informatics</a>



Literacy Alliance





### References



- Ahmad, F., Widén, G., & Huvila, I. (2020). The impact of workplace information literacy on organizational innovation: An empirical study. International Journal of Information Management, 51. (2020). https://doi.org/10.1016/j.ijinfomgt.2019.102041
- Crawford, J. (2013). Value and impact. In J. Crawford & C. Irving (Eds.), Information literacy and lifelong learning: policy issues, the workplace, health and public libraries (pp. 211–245). Chandos (2013).
- Daugherty, A. L., & Russo, M. F. (2011). An Assessment of the Lasting Effects of a Stand-Alone Information Literacy Course: The Students' Perspective. *Journal of Academic Librarianship*, 37(4), 319–326 (2011). https://doi.org/10.1016/j.acalib.2011.04.006
- Doney, L. (2006). Evaluating the impact of a project promoting library and information services to primary care in Nottingham, UK.
  Health Information and Libraries Journal, 23(1), 64–68 (2006). https://doi.org/10.1111/j.1471-1842.2006.00627.x
- Hopkins, E., & Julian, S. (2009). An Evaluation of an Upper-Division, General Education Information Literacy Program.
  Communications in Information Literacy, 2(2), 67 (2009). <a href="https://doi.org/10.15760/comminfolit.2009.2.2.59">https://doi.org/10.15760/comminfolit.2009.2.2.59</a>
- Kuhlthau, C. C. (2003). Seeking Meaning: A Process Approach to Library and Information Services (2nd ed.). Libraries Unlimited (2003).
- Markless, S., & Streatfield, D. (2017). How can you tell if it's working? Recent developments in impact evaluation and their implications for information literacy practice. *Journal of Information Literacy*, 11(1), 106–119 (2017).
  https://doi.org/10.11645/11.1.2201
- Middleton, A. (2005). Northumbria University: impact on improving students' confidence and competence in information and IT skills.
  Library and Information Research, 29(91) (2005). https://lirgjournal.org.uk/index.php/lir/article/view/185/230
- Seifi, L., Habibi, M., & Ayati, M. (2020). The effect of information literacy instruction on lifelong learning readiness. *IFLA Journal*, 46(3), 259–270 (2020). <a href="https://doi.org/10.1177/0340035220931879">https://doi.org/10.1177/0340035220931879</a>
- SCONUL. (2011). The SCONUL Seven Pillars of Information Literacy: Core Model (2011).
  <a href="http://www.sconul.ac.uk/groups/information\_literacy/seven\_pillars.html">http://www.sconul.ac.uk/groups/information\_literacy/seven\_pillars.html</a>, last accessed 2023/05/11

# **Shortlisted papers**



- Ahmad, F., Widén, G., & Huvila, I. (2020). The impact of workplace information literacy on organizational innovation: An empirical study. *International Journal of Information Management*, 51. <a href="https://doi.org/10.1016/j.ijinfomgt.2019.102041">https://doi.org/10.1016/j.ijinfomgt.2019.102041</a>.
- Auberry, K. (2018). Increasing students' ability to identify fake news through information literacy education and content management systems. Reference Librarian, 59(4), 179–187. <a href="https://doi.org/10.1080/02763877.2018.1489935">https://doi.org/10.1080/02763877.2018.1489935</a>.
- Chen, L. C., Huang, T. W., & Chen, Y. H. (2017). The effects of inquiry-based information literacy instruction on memory and comprehension: A longitudinal study. Library and Information Science Research, 39(4), 256–266. <a href="https://doi.org/10.1016/j.lisr.2017.11.003">https://doi.org/10.1016/j.lisr.2017.11.003</a>.
- Chen, L. C., Yan, R. de, & Huang, T. W. (2014). The effects of inquiry-based integrated information literacy instruction: Four-year trends. *Journal of Educational Media and Library Sciences*, 51(4), 561–595. <a href="https://doi.org/10.6120/JoEMLS.2014.514/0629.RS.CM">https://doi.org/10.6120/JoEMLS.2014.514/0629.RS.CM</a>.
- Chen, Y. H. (2015). Testing the impact of an information literacy course: Undergraduates' perceptions and use of the university libraries' web portal. *Library and Information Science Research*, 37(3), 263–274. <a href="https://doi.org/10.1016/j.lisr.2015.04.002">https://doi.org/10.1016/j.lisr.2015.04.002</a>.
- Cheuk, B. (2008). Delivering business value through information literacy in the workplace. *Libri*, 58(3), 137–143. https://doi.org/10.1515/libr.2008.015.
- Craig, A., & Corrall, S. (2007). Making a difference? Measuring the impact of an information literacy programme for pre-registration nursing students in the UK. Health Libraries Group. Health Information and Libraries Journal, 24, 118–127. <a href="https://doi.org/10.1111/j.1471-1842.2007.00688.x">https://doi.org/10.1111/j.1471-1842.2007.00688.x</a>.
- Crawford, J. (2013). Value and impact. In J. Crawford & C. Irving (Eds.), Information literacy and lifelong learning: policy issues, the workplace, health and public libraries (pp. 211–245). Chandos.
- Cullen, R., Clark, M., & Esson, R. (2011). Evidence-based information-seeking skills of junior doctors entering the workforce: An evaluation of the impact of information literacy training during pre-clinical years. Health Information and Libraries Journal, 28(2), 119–129. <a href="https://doi.org/10.1111/j.1471-1842.2011.00933.x">https://doi.org/10.1111/j.1471-1842.2011.00933.x</a>.
- Daugherty, A. L., & Russo, M. F. (2011). An Assessment of the Lasting Effects of a Stand-Alone Information Literacy Course: The Students' Perspective. The Journal of Academic Librarianship, 37(4), 319–326. <a href="https://doi.org/10.1016/j.acalib.2011.04.006">https://doi.org/10.1016/j.acalib.2011.04.006</a>.
- Doney, L. (2006). Evaluating the impact of a project promoting library and information services to primary care in Nottingham, UK. Health Information and Libraries Journal, 23, 60–68.
- Forster, M. (2013). Information literacy as a facilitator of ethical practice in the professions. *Journal of Information Literacy*, 7(1), 18–29. <a href="https://doi.org/10.11645/7.1.1783">https://doi.org/10.11645/7.1.1783</a>.
- Hirvonen, N., Ek, S., Niemelä, R., Pyky, R., Ahola, R., Korpelainen, R., & Huotari, M. L. (2016). Everyday health information literacy in relation to health behavior and physical fitness: A population-based study among young men. *Library and Information Science Research*, 38(4), 308–318. <a href="https://doi.org/10.1016/j.lisr.2016.11.013">https://doi.org/10.1016/j.lisr.2016.11.013</a>.

## **Shortlisted papers**



- Hopkins, E., & Julian, S. (2009). An Evaluation of an Upper-Division, General Education Information Literacy Program. Comminfolit, 2(2), 67–83. <a href="https://doi.org/10.15760/comminfolit.2009.2.2.59">https://doi.org/10.15760/comminfolit.2009.2.2.59</a>.
- Howard, H., & Gill, M. (2005). University of Leeds: impact of information literacy initiatives. Library & Information Research, 29(91). https://doi.org/10.29173/lirg182.
- Kennedy, H. R., & Gruber, A. M. H. (2020). Critical thinking in a service-learning course: Impacts of information literacy instruction. Communications in Information Literacy, 14(2), 205–226. <a href="https://doi.org/10.15760/comminfolit.2020.14.2.3">https://doi.org/10.15760/comminfolit.2020.14.2.3</a>.
- Lee, T., Lee, B. K., & Lee-Geiller, S. (2020). The effects of information literacy on trust in government websites: Evidence from an online experiment. *International Journal of Information Management*, 52. <a href="https://doi.org/10.1016/j.ijinfomgt.2020.102098">https://doi.org/10.1016/j.ijinfomgt.2020.102098</a>.
- Maranda, S., Harding, B., & Kinderman, L. (2016). Evaluation of the Long-Term Impact of a Curriculum-Integrated Medical Information Literacy Program. Journal of the Canadian Health Libraries Association / Journal de l'Association Des Bibliothèques de La Santé Du Canada, 37(3). https://doi.org/10.5596/c16-026.
- Markless, S., & Streatfield, D. (2017). How can you tell if it's working? Recent developments in impact evaluation and their implications for information literacy practice. *Journal of Information Literacy*, 11(1), 106–119. <a href="https://doi.org/10.11645/11.1.2201">https://doi.org/10.11645/11.1.2201</a>.
- Middleton, A. (2005). Northumbria University: impact on improving students' confidence and competence in information and IT skills. Library & Information Research, 29(91). <a href="https://lirgjournal.org.uk/index.php/lir/article/view/185/230">https://lirgjournal.org.uk/index.php/lir/article/view/185/230</a>.
- Olaopa, S. O. (2017). Information Literacy Skills, Alternative Format Availability and Information Sources Utilization by Visually Impaired Secondary School Students in South-West.
  <a href="http://digitalcommons.unl.edu/
- Petrak, J., Markulin, H., & Matiç, T. (2008). Information literacy in continuing professional development of medical practitioners: A Croatian example. Health Information and Libraries Journal, 25(1), 46–49. <a href="https://doi.org/10.1111/j.1471-1842.2007.00730.x">https://doi.org/10.1111/j.1471-1842.2007.00730.x</a>.
- Seifi, L., Habibi, M., & Ayati, M. (2020). The effect of information literacy instruction on lifelong learning readiness. *IFLA Journal*, 46(3), 259–270. <a href="https://doi.org/10.1177/0340035220931879">https://doi.org/10.1177/0340035220931879</a>.
- Squibb, S. D., & Mikkelsen, S. (2016). Assessing the value of course-embedded information literacy on student learning and achievement. In *College and Research Libraries* (Vol. 77, Issue 2, pp. 164–183). Association of College and Research Libraries. <a href="https://doi.org/10.5860/crl.77.2.164">https://doi.org/10.5860/crl.77.2.164</a>.
- Streatfield, D., & Markless, S. (2008). Evaluating the impact of information literacy in higher education: Progress and prospects. Libri, 58(2), 102–109. <a href="https://doi.org/10.1515/libr.2008.012">https://doi.org/10.1515/libr.2008.012</a>.
- Uzuegbu, C. P. (2019). Impact of tailor-made information literacy provision on rural dwellers' participation in sustainable development targets in Nigeria: Implications for public library services to oral societies. IFLA Journal, 45(2), 81–103. <a href="https://doi.org/10.1177/0340035219845519">https://doi.org/10.1177/0340035219845519</a>.