ASCILITE 2025

Future-Focused:

Educating in an Era of Continuous Change

Visualising learning: A curriculum mapping dashboard for ophthalmology training

Kshitiz Gyawali, Santosh Khanal, Shalini Purohit, Jorge Reyna

Ranzco

This proof-of-concept study explores the feasibility and usability of an interactive curriculum mapping dashboard designed to support informed decision-making around ophthalmology trainee rotations. Developed using data from the Royal Australian and New Zealand College of Ophthalmologists' eDiary (surgical logbook) and Curriculum Component Survey, the dashboard allows stakeholders including trainees, supervisors, training networks, and the college to visualise curriculum coverage and identify potential gaps in clinical learning across training sites. Two key datasets informed the project: (1) 2023–2024 eDiary data, selected due to improved completeness following the introduction of required minimum procedures, and (2) 2023 Curriculum Component Survey data, which captured the type (Observe, Assist, Perform) and frequency (Frequent, Moderate, Occasional) of curriculum exposure reported by training sites. Data were integrated and visualised using Microsoft Power BI, with dashboard prototypes tested by college staff, Fellows, and committee members. The results highlighted substantial variation in clinical exposure across training posts and demonstrated how dashboard filters could assist in aligning individual trainee needs with available learning opportunities. User feedback confirmed the dashboard's value in supporting planning and transparency, while also emphasising the importance of data accuracy and quality to ensure trust and usability. Overall, this study demonstrates the potential of a curriculum mapping dashboard to enhance data-informed training decisions in specialty medical education.

Keywords: Curriculum Mapping, Clinical Training, Learning Analytics, Dashboard Visualisation

References

Haluška, J., et al. (2020). Technical infrastructure for curriculum mapping in medical education: a narrative review**.** *Bio-Algorithms and Med-Systems*, 16(1). DOI: 10.1515/bams-2020-0026 researchgate.net+9degruyterbrill.com+9degruyterbrill.com+9

Harden, R. M. (2018). Curriculum mapping as a tool to facilitate curriculum development: a new School of Medicine experience. *BMC Medical Education*, 18, 185. DOI: 10.1186/s12909-018-1289-9 teaching.helsinki.fi+15bmcmededuc.biomedcentral.com+15conceptmap.ai+15

Hauer, K. E., et al. (2018). Fostering medical students' lifelong learning skills with a dashboard, coaching and learning planning. *Perspectives on Medical Education*, 7(5), 311–317. DOI: 10.1007/s40037-018-0449-2

Klerkx, J., Verbert, K., & Duval, E. (2017). Learning analytics dashboards. In *Handbook of Learning Analytics* (First ed., Chap. 12). DOI: 10.18608/hla17.012 solaresearch.org

Riquelme, J. C., et al. (2015). Curriculum Mapping with Academic Analytics in Medical and Healthcare Education**.** *PLOS ONE*, 10(7): e0143748. DOI: 10.1371/journal.pone.0143748 journals.plos.org+1academia.edu+1

Gyawali, K., Khanal, S., Purohit, S. & Reyna, J. (2025, Nov 30 – Dec 3). Visualising learning: A curriculum mapping dashboard for ophthalmology training.[Poster Presentation]. Australasian Society for Computers in Learning in Tertiary Education Conference, Adelaide, Australia. https://doi.org/10.65106/apubs.2025.2711