

Hilliger, I., Miranda, C., Celis, S. and Pérez-Sanagustín, M., (2023). Curriculum analytics adoption in higher education: A multiple case study engaging stakeholders in different phases of design. British Journal of Educational Technology. 00,1–17

how stakeholders can contribute effectively to the design process and adoption strategies

analytics tools to support continuous curriculum improvement

mechanisms for engaging stakeholders at various CA tool development stages

success factors for CA adoption

McEneaney, J., & Morsink, P. (2022). Curriculum Modelling and Learner Simulation as a Tool in Curriculum (Re) Design. Journal of Learning Analytics, 9(2), 161-178

simulation method to explore the possible causal effects of curriculum design before implementation

Coloured Petri Nets simulations based on curriculum and learners characteristics

simulation method to support curriculum designer

Hilliger, I., Aguirre, C., Miranda, C., Celis, S., & Pérez-Sanagustín, M. (2022). Lessons learned from designing a curriculum analytics tool for improving student learning and program quality. Journal of computing in higher education, 34(3), 633-657

how CA tools can support stakeholders' reflection within a continuous curriculum improvement processes

continuous curriculum improvement (CCI)

unclear how such collected evidence can be turned into insights

need to improve institutional capacity

importance of involving key stakeholders in development

CA can bring together a great and wider variety of documentary evidence

CA definition

Greer, J. E., Thompson, C., Banow, R., & Frost, S. (2016). Data-Driven Programmatic Change at Universities: What Works and How. In proceedings of PCLA @ LAK, 32-35

Ribbon Tool ( based on Sankey diagrams) to provide an interactive visualisation of student flows through academic programs

to visualise student flows through academic programs, progressing over time to either successful completion (graduation) or attrition

Molinaro, M., Steinwachs, M., Li, Q., & Guzman-Alvarez, A. (2016). Promoting Instructor and Department Action via Simple, Actionable Tools and Analyses. In PCLA@ LAK, pp. 36-40

dashboards to provide useful, actionable, and timely information at multiple instructional levels to promote positive change

curriculum leaders often lack sufficient and timely data, tailored to relevant questions with potential impact on student outcomes

Wong, W. Y., & Lavrencic, M. (2016). Using a Risk Management Approach in Analytics for Curriculum and Program Quality Improvement. In PCLA@ LAK, 10-14

risk management framework for quality appraisal of curriculum

pressure on HEIs to demonstrate their teaching quality

Ochoa, X. (2016, April). Simple metrics for curricular analytics. In Proceedings of the 1st learning analytics for curriculum and program quality improvement workshop, CEUR Workshop Proceedings (Vol. 1590, pp. 20-26).

simple curriculum metrics can be extracted from academic records, which allow an objective analysis of curriculum

metrics to analyse curriculum at programme level

to foster a culture of inquiry and scholarship about continuous program improvements

opportunity to investigate the assessment undertaken and the learning outcomes achieved by an individual student on their degree pathway

The establishment of a curriculum network provides the potential to map, analyse and visualise individual student learning pathways as they progress through a program.

social network analysis

student performance should ultimately be related to its curriculum context to effect impactful change: CA can help to do this

Dawson, S., & Hubball, H. (2014). Curriculum analytics: Application of social network analysis for improving strategic curriculum decision-making in a research-intensive university. Teaching and Learning Inquiry, 2(2), 59-74.

Jørnø, R. L., & Gynther, K. (2018). What constitutes an 'actionable insight' in learning analytics?. Journal of Learning Analytics, 5(3), 198-221

the importance of the feedback loop between data, action capabilities, and end goals in relation to actionable insights

to develop an understanding of what is meant by "actionable insight"

Dennehy, D., Conboy, K., & Babu, J. (2023). Adopting learning analytics to inform postgraduate curriculum design: Recommendations and research agenda. Information Systems Frontiers, 25(4), 1315-1331

use of 'sentiment analytics' to inform curriculum design and improve students' learning experience

capturing student sentiments on their learning can help understand the quality of their experience and inform teacher inquiry

student sentiments could be used to inform curriculum improvement

lack of skills may prevent teacher from making senses of the data

encouraging students to be active participants and knowledge creators

Salazar-Fernandez, J. P., Sepúlveda, M., Munoz-Gama, J., & Nussbaum, M. (2021). Curricular analytics to characterize educational trajectories in high-failure rate courses that lead to late dropout. Applied Sciences, 11(4), 1436

process mining to study students' educational trajectories to understand which lead to late dropout

to develop a CA approach to analyse late dropouts