

Reference	Research problem/question	Research methods/approach	Known facts/assumptions/ definitions/gaps at start	Key findings/contribution made	Notes in relation to own research
<b>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</b>	to understand how stakeholders can contribute effectively to the design process and adoption strategies of learning analytical tools	Cross-analysis of quantitative and qualitative evidence from three case studies in the context of multiple Latin American universities. The case studies focussed on the development of analytics tools to support continuous curriculum improvement (both student learning and programme quality)	<p>data researchers/tech developers generally lack awareness of how learning analytics tools can provide meaningful and actionable information for everyday use</p> <p>stakeholder engagement could ensure the successful development and adoption of learning analytics</p> <p>current studies indicate that stakeholders are often only engaged at start, while participatory human-centred design could provide stakeholders with the opportunity to influence the whole of development and increase acceptance and adoption post-deployment</p> <p>barriers to adoption stem from tools not addressing stakeholders' needs or requiring unwelcome changes to processes/tasks</p>	<p>some mechanisms for engaging stakeholders at various CA tool development stages, from requirements to design to deployment</p> <p>some success factors for CA adoption</p>	The findings are very generic and a bit weak in the sense that they could have been inferred from the literature on software development in general: there is very little (if anything) which is specific to curriculum analytics. However, the empirical evidence provided contextualises such knowledge from SE to this particular educational context.
<b>McEneaney, J., &amp; Morsink, P. (2022). Curriculum Modelling and Learner Simulation as a Tool in Curriculum (Re) Design. Journal of Learning Analytics, 9(2), 161-178</b>	to develop a simulation method to explore the possible causal effects of curriculum design before implementation	Construction and evaluation of Coloured Petri Nets simulations based on curriculum and learners characteristics, in relation to learning outcomes, curriculum sequencing and learning progression	<p>a key risk in curriculum re-design is that effects on learning cannot be empirically tested until after deployment, when significant resources have already been used</p> <p>it is desirable for stakeholders to be able to explore the possible causal effects of curriculum design before implementation</p> <p>existing learning analytics focus primarily on historical data and probabilistic prediction, so have limited applicability to the above problem</p> <p>simulations could be used to investigate envisaged interventions, but no research to date achieves this at a programme level</p>	<p>proof-of-concept simulation method to be used alongside other practices intended to support curriculum designer, from scholarship around learning and curriculum design, to applying learning analytics to historic data</p> <p>identified benefits:</p> <ul style="list-style-type: none"> <li>- high stakeholder engagement in a collaborative programme improvement</li> <li>- stakeholders able to see the (potential) effects of curriculum sequencing and timing on student learning</li> <li>- can support iterative testing of different design choices</li> <li>- is transparent in its rule and algorithmic base, hence open to inspection and adjustments</li> </ul> <p>identified limitations:</p> <ul style="list-style-type: none"> <li>- based on simplified assumptions of human learning</li> <li>- early stages in its development</li> </ul>	An interesting alternative to more traditional curriculum analytics approaches. A clear demonstration of how certain curriculum and learning data could be put to use to inform curriculum design/re-design. Quite technically focussed: it would be interesting to know how easy would be to reproduce it for different programmes