

## Leveraging Learning Analytics to Inform Learning Design in Higher Education

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**Abstract :** This literature review aims to offer an overview of existing research on learning analytics and learning design, the alignment between the two, and how learning analytics has been leveraged to inform learning design in higher education. Current research suggests a need to create more alignment and integration between learning analytics and learning design in order to not only ground learning analytics on learning sciences but also enable data-driven decisions in learning design to improve learning outcomes. In addition, multiple conceptual frameworks have been proposed to enhance the synergy and alignment between learning analytics and learning design. Future research should explore this synergy further in the unique context of higher education, identifying learning analytics metrics in higher education that can offer insight into learning processes, evaluating the effect of learning analytics outcomes on learning design decision-making in higher education, and designing learning environments in higher education that make the capturing and deployment of learning analytics outcomes more efficient.

**Keywords :** learning analytics, learning design, big data in higher education, online learning environments

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