

Curriculum Enhancement: Reflections on the Use of Evidence, Holistic Student Support and Disciplinary Skills Development on a Decade-Long Transformative Journey

Introduction:

The dynamic nature of the Higher Education (HE) environment requires academics to innovatively navigate learning and teaching in a complex setting to ultimately improve student success. Persistently poor student success could be indicative of the ongoing challenges both students and academics are facing. A more integrative approach to curriculum enhancement, using 1) data, 2) holistic student support and 3) focused disciplinary skills development could possibly support improved HE outcomes. Whilst such an integrative approach might also lead to the transformation of role-players to better navigate the ever-changing, HE environment.

Aim:

This study provides key reflections on the integration of 1) data, 2) holistic student support and 3) focused disciplinary skills development in curriculum enhancement and the resultant transformation of role-players during this journey.

Methods:

A participatory action learning and action-research (PALAR) approach is utilised to inform student-focused curriculum enhancement initiatives. Data was collected from all undergraduate students in EMS on a 3-year cycle for all modules presented in the faculty. Academic staff involved in teaching these modules were also included in the

data collection. Various quantitative and qualitative data collection tools were utilised, such as questionnaires, focus groups, interviews, artefact analyses, and others.

Results and Discussion

1) Data

Firstly, a faculty-specific data analytics framework was developed, based on existing data analytics framework utilised in the HE sector (Long & Semens, 2011; Campbell, DeBlois & Oblinger, 2007; Norris & Baer, 2013) and implemented in the Faculty of Economic and Management Sciences (EMS) at the University of the Free State (UFS) in 2014. Drawing on multiple institutional, and modular data sources (including academic analytics, learning analytics, & teacher analytics) – the EMS data analytics framework served as a basis for engagement with academics on evidence-based practice and scholarly teaching. Academics were assisted to make evidence-based curriculum enhancement changes in their modules to support student success. Through various modular level curriculum adaptations, the faculty managed to obtain an increase in the average module success rate. This also led to a transformational change amongst academics' regarding student-focused curriculum enhancement, built on data, and a community of practice for the scholarship of teaching and learning were formed.

2) Holistic student support

A subsequent focus emerging from the data was the need to promote graduate attributes and employability skills of students, additionally to the discipline-specific curriculum enhancement (as described above). A programme-specific student support initiative, including expanded tutoring, peer mentoring, industry interactions, and holistic student support sessions, was developed and implemented from 2018 to supplement the modular-level approach to teaching and learning on a faculty-level.

Positive

feedback from students on the programme-specific holistic student support efforts, indicated the value of an integrative support system moving beyond modular level. The programme-level support was built on Vygotsky's learning theory, Social constructivism as well as Wlodowski's motivational conditions.

3) Development of quantitative skills for business

Student support, with both a curricular (module level) and co-curricular (programme level) focus was now established and the need to move to faculty level and start to focus on graduation of students (as one of the ultimate indicators of student success) was evident. This 3rd level integration of student support action was informed by the significant influence of high school maths on the performance in entry-level economics, and its proven correlation with graduation from academic programmes in the EMS. The internationally acclaimed Pathway maths programme was implemented in 2021. This student-focused programme incorporates peer learning using authentic examples and is facilitated through uncommon teaching methods. Iterative contextualisation and student feedback remained central to continuous curriculum enhancement and transformation.

Through this integrative system on modular, programme and faculty levels, student success becomes the single driving force of curriculum enhancement and led to the transformation of both student and academics.

Conclusion

Curriculum enhancement is a complex, reflective process including various role-players on different levels. The continuous transformation of curricula, teaching and learning experiences and perspectives, and role-players maintains important momentum to navigate the ever-changing HE environment, towards student success.

Keywords:

Curriculum enhancement; Student success; Student-focused support; Data analytics; Quantitative skills development

Questions to stimulate discussion:

- 1) Is modular level curriculum enhancement enough to move the needle on student success & throughput (i.e., graduation)?
- 2) How can an integrated data analytics framework be operationalised to assist with focused, modular level curriculum enhancement?
- 3) What is the role of holistic (both curricular and co-curricular) student support on students' academic success and learning experiences?
- 4) What are the key levers of creating an integrated holistic student support system?
- 5) How could faculty level student success (i.e., graduation rates) be analysed to identify broader interventions that could move the needle on student success & throughput?
- 6) What benefits could the focus on the development of the quantitative skills for business hold for students enrolled in business, accounting, and related study fields?