Enhancing the Organisation and the Management of Built Environment Higher Education Courses

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Abstract

Purpose – Persistent critical issues in Built Environment Higher Education (BEHE) curricula may need to be addressed by improving course organisation and management. In addition to the implications of the COVID pandemic, issues such as inadequate communication and lack of contemporary and innovative practices integrated with course delivery have resulted in a gap for Course organisation and management. The purpose of this study is to recommend a set of drivers that can assist academics and academic institutions in improving course development, organisation and management in the BEHE context. Thus, the study focused on three themes: course organisation and administration, timetabling, and course communication.

Methodology- A systematic approach was taken to obtain data, where a documental analysis and a close-ended questionnaire were adopted as data collection instruments. The documental analysis considered 334 Mid Module Reviews (MMRs) generating data from architecture, construction management, civil engineering, surveying and real estate students. Content analysis was used to identify critical themes within the MMRs and develop a closed-ended questionnaire. Twenty academics from each discipline completed the questionnaire. Eight drivers were developed from the data obtained from both MMRs and questionnaires. Content Analysis and Interpretive Structural Modelling (ISM) were applied to identify the relationship between the drivers. Finally, these drivers were categorised by their level of influence and reliance to highlight how they contributed to improving course organisation and management.

Findings – The study revealed eight drivers that can improve course organisation and management in the BEHE context. The study found that using Virtual Learning Environments (VLE) and communication are fundamental in course organisation and management.

Practical implications: This research paper suggests drivers to improve how academics and academic institutions organise and manage courses. The study recommends eight drivers that could be used as a guideline and a best practice as per the level partitioning diagram developed to enhance the course organisation and management in BEHE.

Originality/Value: The study proposes a set of drivers to improve course organisation and management in BEHE curricula. Furthermore, insight into how these drivers influence and rely on each driver and their relation with the NSS theme are novel contributions to the current body of knowledge. The paper further clarifies how they should be implemented for successful course organisation and management, thus, improving the quality of courses in HE curricula.

Keywords – *National Student Survey (NSS), Organisation and Management in Higher Education, Effective Communication in Higher Education, Virtual Learning Environment (VLE), Post-Pandemic-Pedagogy, United Kingdom, UK.*

Introduction

The organisation and management of Higher Educational (HE) courses are crucial in ensuring a positive student experience leading towards successful student progression (Ugur, 2020). It constitutes all the aspects of HE curricular development that include course and module development, intended learning aim and objectives, delivery methods, inclusive teaching practices used, support and resource availability, alignment to professional and statutory bodies, assessments and feedback information (Advance HE, 2011; Pereira & Wahi, 2017; Ugur, 2020). Course leaders reflect on Professional Statutory and Regulatory Bodies (PSRB) competencies in developing an intuitive pedagogical framework, potential learning opportunities, student support and precise means of student assessment (Felce, 2019). Thus, course organisation and management are extensive aspects of higher education curricula. However, a significant lack of guidelines addressing global issues in organising and managing HE courses is identified. This study aims to recognise how course management can be enhanced by developing a set of drivers, which could be used as a guideline within the HE.

Many issues and challenges are identified in course organisation in the current context of global HE that led to the study. Inefficiency in course organisation, course administration, timetabling issues and lack of effective communication are critical challenges in course management. In addition to the above, the current COVID pandemic influenced knowledge delivery in the international HE context through Virtual Learning Environments (VLE) and utilising digitised platforms (Zawacki-Richter, 2020; Mason and Rosenbloom, 2021). With the change in course delivery during the COVID pandemic, the key focus was accommodating changes and transferring information to students and other personnel involved in course delivery in a global context. A key focus is given to the Built Environment (BE) context, where Izumi et al. (2020) identified how students were not satisfied with how the pandemic was dealt with, and rising concerns were identified in how BE curricula would be facilitated in a digitised environment. Additionally, a significant lack of publications was identified within course management in BEHE curricula. The lack of studies and research focus further highlights the need for a study to enhance course management in HE. Hence, opting for a best practice is crucial within the BEHE context to improve how the courses should be organised and managed effectively, addressing the key issues.

When identifying critical themes to enhance organisation and management, HE institutions (HEIs) use the National Student (NSS) data to reflect on the critical questions/themes needed to improve their institutional standing. Consequently, the NSS becomes the central referral point to develop pedagogy and its' respective features in HE curricula. The study focuses on Section five of NSS - Organisation and Management, including three questions/themes highlighting key focus areas. The three focus areas are 'the course is well organised and running smoothly' (Q15), 'the timetable works efficiently for me' (Q16) and 'any changes in the course or teaching have been communicated effectively' (Q17). This study will adhere to the NSS themes, promoting a robust research framework and the guideline for widespread HEIs. Thus, the structure of this study, from the literature review to the discussion, will be based on the critical themes identified from the above-mentioned NSS themes.

1.0 Literature Review

1.1 Organisation and administration of the course

The UK Professional Standard Framework (UKPSF) identifies the development of effective knowledge content, organisation and administration of the course are crucial aspects within the HE practice (Advance HE, 2011). The course's organisation and administration directly reflect the quality of the course provided, thus becoming a benchmark in student satisfaction appraisal (Horrod, 2019). However, studies indicate a significant need for course organisation and administration improvement within the current HE curricula (Al-Kurdi et al., 2020; Camilleri, 2021). It further denotes that the courses' organisation and administration reflect on academic infrastructure, i.e. effective media to transfer knowledge and provide student support (Potter and Devecchi, 2020). Significant challenges and limited literature were identified within course organising and management with limited alignment to respective industrial practices to provide relevant and current knowledge. Further issues have been raised which affect the development, organisation and administration of courses in HE with the transition to VLE platforms in course delivery methods with the recent COVID pandemic (Mason and Rosenbloom, 2021). Critical issues such as lack of student engagement and participation in the course management process and technological incompetence by staff in course development were documented (Lacka et al., 2021; Bond et al., 2020). Furthermore, Izumi et al. (2020) and Nandy et al. (2020) identify that HE institutes have a limited strategy for resilience in course organisation and management.

Limited literature around course leadership is directly responsible for course organisation and administration, particularly within the HE context. Weinstein et al. (2020) recognise a course leader as being responsible for developing course content, teaching, consultations and troubleshooting that has become integrated with course management in liaison with student satisfaction and progression. UKPSF highlights that course leaders should organise courses that acknowledge the broader context and implications for professional practices as required by the PSRBs (Advance HE, 2011). However, course development in BE has been challenging due to the nature of the subject matter and the complexity of disciplines associated with professional practice. PSRB guidance provided for BE course organisation and management has been beneficial in merging professional practice with academia. Nevertheless, Dawson and Osborne (2019) further identify room for further improvement in aligning professional practice within the industry to the current academic curricula.

A critical issue within the COVID pandemic transformed HE pedagogical contexts leading to changes in course development's organisational and structural features (Walker et al., 2017). The flexible learning environments, Course leader involvement in student support and VLE facilities' orientation will significantly contribute toward a digital pedagogical implementation. The current HE context presents the perfect scenario for optimising VLE, eliminating time and space restrictions, and identifying the best practice to encourage student performance (Ożadowicz, 2020). However, studies identified VLE implications within course delivery failed in the global HE context (Youssef & Dahmani, 2008). The lack of organisational effort was the main reason for inadequate VLE implementation (Walker et al., 2017). The lack of VLE implementation negatively impacts their organisation and administration, timetabling and effective communication to students (Kaur and Saini, 2020; Dawson and Osborne, 2019). Tamim et al. (2011) recognise further frustrations from students with the lack of course administration due to miscommunication. This further affected student satisfaction levels and their overall experiences. Conclusively, the literature suggests that academics and students need to understand the context of module organisation and administration in reflecting the learning outcomes and how it influences student progression.

1.2 Efficiency of the timetable on the course

The timetables enable students to understand how the modules are run throughout the semester/academic year and integrate curricula into the academic routine, ensuring smooth module operation and delivery (Page et al., 2019). They are developed to focus on an institutional level so that all the students have access to module delivery and improve the transparency of academic operations. However, the literature identifies many issues with timetabling in higher education structures, creating issues in managing the course. Kaur and Saini (2020) highlight that the prominent issues in timetable management are inadequate classroom facilities/management, and poor communication between academic institutions and students. Albalooshi and Shatnawi (2021) further highlight that digitisation and the integration of VLE platforms addresses these issues. Integrating VLE enables timetables to digitise/automate and improve convenience and flexibility that help manage the course effectively. However, many HEIs report conflicts and constraints, among other critical challenges in managing timetables. Dawson and Osborne (2019) signify the importance of triangulating the available facilities with an institution-wide system to maintain students' specific needs and academics in module delivery.

The current pedagogical implementation involves digitised timetables and timetable management systems, such as a modified frequent pattern system and total ranking score system (Albalooshi and Shatnawi, 2021). The integrated systems are intelligent and automated in developing efficient administration and management operations of the course. However, Caeiro et al. (2020) and Bond et al. (2020) claim that these applications are yet to be student-centred and developed further to be integrated with student support. However, the literature is limited on the role of a course leader in facilitating student-centred timetabling and supporting timetable management systems. However, Hamutoglu et al. (2019) identify a course leader's need to integrate timetabling management during course management. This is further reflected in the discussion made in section 1.1 on how VLE could assist in a more effective course organisation and administration.

1.3 Effective communication of any changes while teaching

HEIs and other course management personnel recognise the importance of communication in organising and managing HE curricula (Hamutoglu et al., 2019). Enakrire (2021) indicates that communication within the HE needs prominence in sharing course updates, module documentation, delivery changes, or any assignment-specific content updates with the students. The improvement in digitisation facilities and the increased use of VLE in the HE context mandates improved communication due to the use of digital media in course organisation and management (Cao, 2021; Marachi and Quill, 2020). The literature further identifies HEIs inclination to use centralised appointment systems, emails and other digitised methods in communicating within the course (Bond et al., 2020; Nandy et al., 2020). However, as per Lacka et al. (2021), there are significant challenges in the methods of communication used in HE curricula.

The COVID pandemic has changed the pedagogical delivery in the HE context and prompted academic institutes to use digital instruments to manage and organise courses (Mason and Rosenbloom, 2021; Gomis et al., 2021). However, analysis of the literature pre and post-pandemic context reveals similar issues in course organisation and management (Bond et al., 2020; Izumi et al., 2020; Nandy et al., 2020). The main challenge identified was how information is being managed by students, academics, and course development. As per Izumi et al. (2020), these issues have been amplified post-COVID context regarding HE course organisation and management. Smith (2007) highlights that professional development, training the students and providing technical support are eminent in improving effective communication. However, limitations in efficient course development are identified even after

the suggested factors are implemented within the curricula (Marachi and Quill, 2020). More importantly, these issues directly contribute towards student performance and affect student progression through the course.

Shelton, Hung and Lowenthal (2017) state that effective communication needs to enhance clarity and provide detailed knowledge content, identify means of learning and support available in both internal and external context and facilitate an effective learning environment by clarifying how the course progress. Current studies indicate that using VLE in effective communication, such as students expecting live updates and continuous communication from the course management teams, tends to perform better (Enakrire, 2021; Mpungose and Khoza, 2020). However, what stands out in recent studies is the lack of student voice and feedback available at the course management level (Jidesjö, 2021). This must be incorporated into facilitating effective communication as it addresses academic and student perspectives in course management. Mpungose and Khoza (2020) further emphasise that student feedback could be signposted, and more support could be provided at the module delivery level to facilitate student feedback for more effective communication in HE.

2.0 Methodology

This study aims to identify drivers that can help enhance course organisation and management in BEHE. This study uses a descriptive research design and an inductive approach to select critical themes in developing drivers to enhance course organisation and management. A mixed-method strategy was used, where documental analysis and a closed-ended questionnaire were used to collect data. Thematic content analysis is used to analyse the data obtained from both data and to develop drivers to enhance course organisation and management. ISM analysis will be used to recognise the level of reliance and influence of drivers developed.

2.1 Participants and Materials

Students from levels three to six within the BE disciplines were selected to provide feedback on how their course was going through a Mid-Module-Review (MMR) form. The students were not categorised in their programme as the study focuses on a general overview of the organisation and management of their course. Therefore, this study will not consider the particular context of each BE discipline, such as perceived content and learning resources oriented in each particular BE discipline. A sample size of 400 students was selected for the documental analysis with a confidence level of 95% and an error margin of 5%. The intended sample size of the documental analysis was 196, but 334 Mid- MMR forms were completed and deemed satisfactory for the study. The MMR data focussed on the student satisfaction rate and their comments on the issues of course organisation and management and how it should improve. A thematic content analysis was used manually to identify critical issues affecting the course organisation and management. Content analysis was done by categorising the critical issues into themes within NSS section 5. These themes were used to develop the closed-ended questionnaire targeting academic staff to determine how course organisation and management in HE could be enhanced.

A sample size of 20 academic staff was selected for the questionnaire survey with a confidence level of 95% and an error margin of 5%. All 20 academic staff members, including course leaders and module leaders with a minimum of three years of experience in academia, participated in the study. The data saturation from the questionnaire survey further justifies the sample size. The study focussed on disciplines such as Architecture, Civil Engineering, Surveying, Construction Management and Real Estate, representing the BE. Four participants

were selected from each discipline, representing their roles in course organisation and management, such as course leaders and module leaders. The close-ended questionnaire aimed to understand the current practices, impending challenges and further areas of improvement in organising and managing a BEHE course. A thematic content analysis was used to analyse the questionnaire data to develop drivers that will enhance course organisation and management.

2.2 Research Procedure

Firstly, a literature review is conducted to obtain secondary data, which identifies the general implication of course organisation, timetabling and communication within course management in HE. A mixed-method strategy was implemented to obtain primary data, with data collection instruments such as documental analysis and closed-ended questionnaires. Data from the MMRs were analysed to develop the questionnaire, and the data obtained from the questionnaire were analysed to develop drivers to be implemented to enhance course organisation and management. The content analysis is evidenced in the Analysis section for further clarification on the developed drivers. The developed drivers recognised areas of improvement, but further analysis was needed in identifying the strategic implementations to enhance course organisation and management. Subsequently, Interpretive Structural Modelling (ISM), developed by Warfield (1982), determines each driver's relationship and influence in enhancing course organisation and management. ISM is seldom used as it is a systematic, well-established methodology providing inter-relationships that can be used for strategic decision-making (Agrawal et al., 2020; Attri et al., 2013). It is further beneficial to this study as it broadly improved interdisciplinary and interpersonal communication in looking at the BE discipline (Gomis et al., 2022). Three academics, such as a head of school, an associate head of school and a BE departmental head, were used in the ISM analysis to eliminate any unconscious bias in modelling the data identified. A reachability matrix is developed by carrying out a structural self-interaction matrix (SSIM) to identify each driver's level of influence and reliance. A MICMAC (Matrice d'Impacts Croises-Multiplication Appliqúe a Classement) graph was further developed from the binary coordinates acquired from the reachability matrix to categorise the level of influence and reliance of each driver. The drivers are categorised into four clusters: linkage, independent, dependent, and autonomous. The drivers listed under each cluster determine its influence and reliance on improving course organisation and management. Using such parameters in identifying the influence and reliance is novel, contributing to new knowledge in improving course organisation and management.

3.0Analysis

This study aims to develop a set of drivers that could be used as a guideline in enhancing organising and management in HE. The scope was to carry out a high-level analysis capturing the BE disciplines as a whole rather than a granular-level analysis. The following sections present the data obtained through the documental analysis, the closed-ended questionnaires, and the rationale for developing drivers to enhance organisation and management in HE.

3.1 Organisation and administration of the course

The data from both research instruments revealed that the students are satisfied with course delivery with due diligence, reflecting on PSRB guidelines. One of the most emphasised aspects of data collection instruments was how courses need to be strategically organised. Academics highlighted the importance of courses being “more prepared for change management” and “open-mindedness for innovative pedagogical pathways”. Students and academics highlighted that “communication is a fundamental” factor facilitating good organisation and management of courses. The availability of tutors providing feedback on the

course progression is deemed vital from both student and academic perspectives. The availability of information and how it should be easily accessible for students at the module level is considered important by students. Moreover, regular course/module lead updates on the status and changes must be emphasised and transferred effectively throughout course management. The students highlighted that academic staff always provide information; however, VLE could further streamline the process. Academic staff and students stressed using VLE platforms to accommodate the above practices into curricula. A comment highlighted in MMRs was allocating "academic staff exposed to teaching and research backgrounds". Research-oriented academics will allow better performance within course management and should be considered mandatory in HE staff recruitment. The key focus is not to recruit research prominent personnel but to emphasise the need for research in course management. Considering the above factors, the following drivers could be developed to improve course organisation and management.

D1: Create multiple opportunities for students to discuss what is going as planned and against module delivery.

D2: Critical focus on providing opportunities to ensure students discuss their academic challenges.

D3: VLE to be based as the foundation in course development, organisation and management.

D4: Having the input of research-active Academic staff in course development.

3.2 Efficiency of the timetable on the course

The data obtained from documental analysis and close-ended questionnaires highlighted that the students had minimal issues with timetabling in the given context. Students highlighted that having specific days for academic work is beneficial and requested more academic-oriented sessions within their week. However, this would need to be based on each contract and allocation with their employers, particularly in part-time and apprenticeship studentships. Some students highlighted that three "lectures within a day challenge student well-being". This serious concern must be addressed in developing departmental timetabling, focusing on students' mental and physical well-being. Another comment that appeared through the documental analysis is the "integration of updates with a centralised timetabling" system. Students highlight that they have regular updates from course and module leaders, but the updates are not reflected or updated in the centralised timetable. The students feel that all the information could be centralised and better accessible through one specific system. Therefore, two drivers could be identified under timetabling as below.

D5: Use VLE approaches and real-time calendars to list important dates and highlight any changes in course delivery.

D6: Focus on student mental and physical well-being in timetable development.

3.3 Effective communication of any changes while teaching

The data identifies that the students are very satisfied with the communication in the course delivery in the BEHE context. This was further reinforced by the data obtained through the documental analysis. Most comments highlighted that course/module leaders were available when clarification was needed. Furthermore, students stated that other personnel, such as skills coaches and academic coaches, were accessible when the module/course leaders

were unavailable. It was highlighted that "academic staff keep the students well-informed" when they are available/unavailable, which was commented on as useful by students. Most students highlighted that "VLE platforms should be used more innovatively and be utilised as an effective communication" link. The academics agree that two stages are crucial in transferring knowledge to students: at the beginning of the course commencement and during any urgent update within the module. As students highlighted, the academic staff agrees that the most effective approach would be facilitating the VLE platform in providing information at the above stages in curricula. The following drivers could be developed to improve effective communication within course organisation and management from the current BEHE context in reflecting on the data obtained.

D7: Module leaders should use VLE platforms to update course information at the beginning of the course.

D8: Use Digitised or VLE approaches to announce urgent updates on course delivery.

3.4 Findings from data modelled using the Interpretive Structural Modelling

The MICMAC graph recognised the correlation between the drivers developed regarding their influence over each question under NSS Section 5. To further clarify their influence and reliance, the drivers are categorised into four definitive clusters: Linkage, Dependent, Independent, and Autonomous. Drivers in the linkage cluster denote a strong influence and reliance and are fundamental drivers. Drivers in the independent cluster denote a strong influence but a weak reliance; hence, are considered very important drivers. Drivers categorised under the dependent cluster strongly rely on other drivers but are weak in influence, which is important. Drivers under autonomous clusters neither have influence nor reliance, thus, are deemed insignificant drivers in the study.

Table 1 presents the drivers for improving course organisation and management in BEHE. The study revealed that drivers D3 and D8 fell under the linkage cluster, which deems they are fundamental in BEHE course organisation and management. D1), D2 and D6 drivers were categorised under the independent cluster, making them very important. D5 and D7 were recognised as dependent due to their position in the graph, making them important drivers. Interestingly, D4 fell under the autonomous cluster, which is considered insignificant.

The developed list of drivers would provide clear guidance on how the identified drivers must be implemented to improve course organisation and management.

Table 1: Drivers identified in improving course organisation and management in BEHE

NSS Themes	Drivers identified, and their influence and reliance under each NSS Question	MICMAC i,j Coordinates		Clusters
Q1- The course is well organised and running smoothly.	D1: Create multiple opportunities for students to discuss what is going as planned and against module delivery.	3	4	Very Important
	D2: Critical focus on providing opportunities to ensure students discuss their academic challenges.	3	5	Very Important

	D3: VLE to be based as the foundation in course development, organisation and management	6	5	Fundamental
	D4: Having the input of research-active academic staff in course development.	2	1	Insignificant
Q2-The timetable works efficiently for me.	D5: Use VLE approaches and real-time calendars to list important dates and highlight any changes in course delivery.	5	3	Important
	D6: Focus on student mental and physical well-being in timetable development.	2	7	Very Important
Q3- Any changes in the course or teaching have been communicated effectively.	D7: Module leaders should use VLE platforms to update course information at the beginning of the course.	6	3	Important
	D8: Use Digitised or VLE approaches to announce urgent updates on course delivery.	5	4	Fundamental

4.0 Discussion and Practical Implications

4.1 Organisation and administration of the course

The literature identifies the improvement made through academics and PSRBs in maintaining how the industry-led practices and contemporary practices with current orientation in research are integrated into the curriculum (Dawson and Osborne, 2019; Walker et al., 2017). This is further emphasised by the issues faced in the current pandemic and identifying strategies to improve course organisation and administration in the post-pandemic context (Izumi et al., 2020; Potter and Devecchi, 2020; Weinstein et al., 2020). Emphasis is given to course organisation to incorporate student support in course delivery and increase student engagement in course management (Mason and Rosenbloom, 2021; Walker et al., 2017). The emphasis is further stressed with the current use of VLE approaches in course delivery, where student support and engagement are essential and pending issues for all academic and academic institutions.

The study identified four drivers to improve course organisation and administration in the HE context. Student feedback on how the course is delivered (Barnacle and Dall'Alba, 2017), thus emphasising D1 & D2 drivers. The study identified that having multiple opportunities for student feedback and engaging students to provide feedback is very important. The analysis deemed that D1 & D2 drivers were categorised in the independent cluster, highlighting that these drivers are influential and are very important in improving course organisation and management. Both literature and data collection identified the

emphasis of VLE in the current HE context and its' influence (Mason and Rosenbloom, 2021). Academics and academic institutions should further facilitate VLE learning and digitisation in learning and use it as a foundation in course development. The literature and the data analysis highlighted the significance of VLE being the foundation in course development, organisation and management (D3). It was categorised under a linkage cluster, thus, making it fundamental to improve course organisation and management. Even though the input of research-active academic staff in course development (D4) was insignificant, the reachability and antecedent matrix identified a weak link with D3 in improving course organisation. However, in level partitioning, all the drivers are valuable, at each capacity, in course organisation and management, as illustrated in figure 1.

4.2 Efficiency of the timetable on the course

The timetable is developed to ensure the smooth operation of faculty-wide course delivery and is intended to improve students' understanding of how the course delivery will be carried out (Page et al., 2019). Consequently, it focuses more on a holistic institutional-wide operation level, directed more toward academic operations and facilities management rather than using it as a tool for academic support (Albalooshi and Shatnawi, 2021). Previous studies and current literature identify ongoing issues in timetabling, such as limited resource/facilities management, poor communication between academics and students, and disparate and contradictory information (Hamutoglu et al., 2019; Youssef & Dahmani, 2008). The literature (Kaur and Saini, 2020) and data collected identified that most of these issues are not due to the system used in developing a timetable but the malpractices within information management.

All the data obtained was directed towards the significance of using a digitised/VLE platform for teaching and learning. Data identifies that VLE needs to integrate a real-time information management system to support students' engagement and attendance. A centralised information system needs further integration where all students can apprehend that course delivery is recognised (Albalooshi and Shatnawi, 2021). Consequently, driver D5- Use VLE approaches and real-time calendars to list important dates and highlight course delivery changes were developed. Therefore, ISM analysis categorised the driver in the dependent cluster, where it does not have much influence but highly relies on other drivers. Hence, it is significant in facilitating other drivers to improve course organisation and management. Additionally, data from the study identified the importance of students' mental and physical well-being. The unrealistic lecture times and poor timetable management affect students' mental and physical well-being (Hart et al., 2021). Additionally, timetables could further inform tutors and other academic staff about where critical support is needed for students. The ISM analysis identified that D6 in the independent cluster strongly influences other drivers in enhancing course organisation and management.

4.3 Effective communication of any changes while teaching

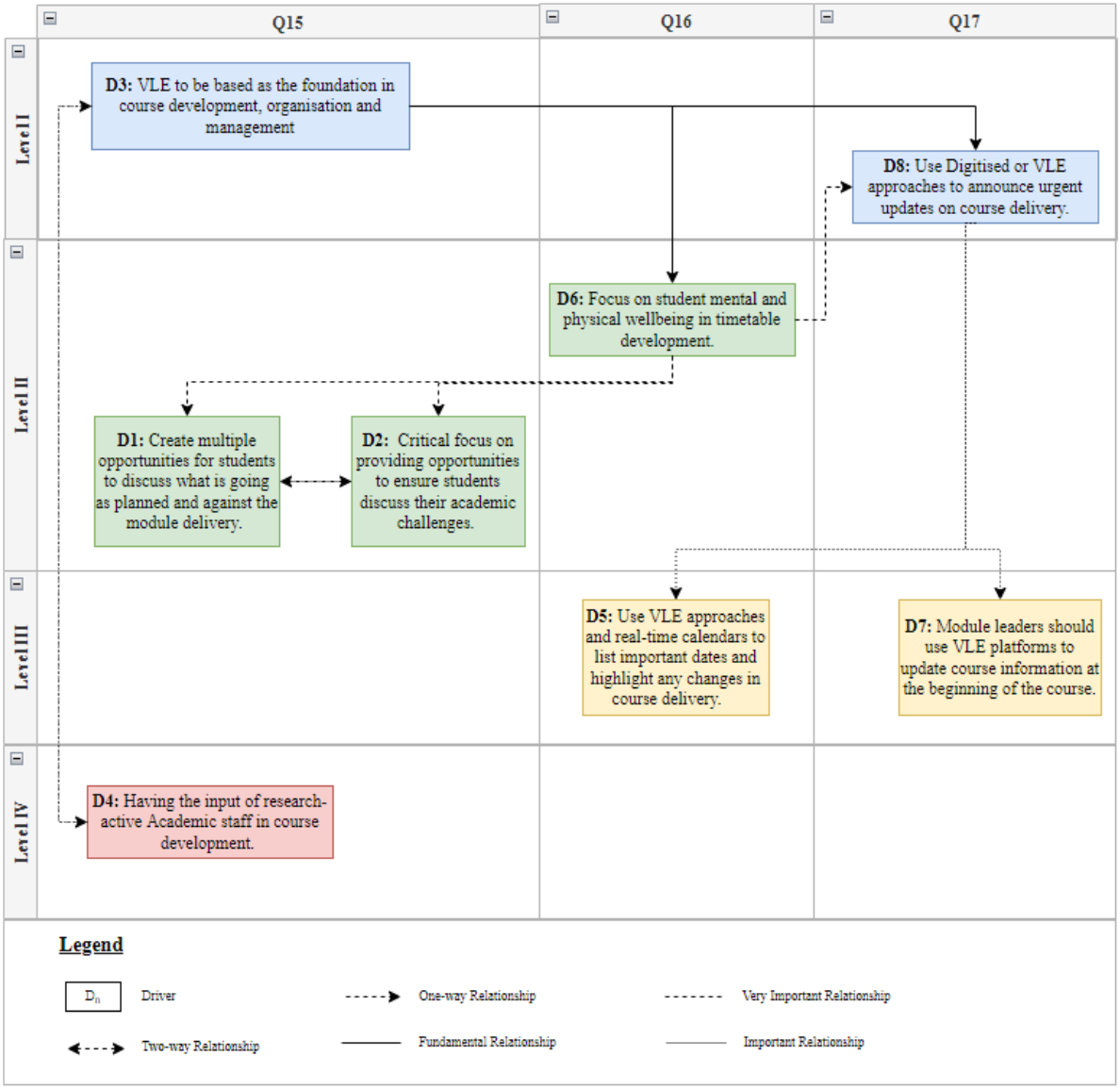
Reviewed literature and the data collected through documental analysis and close-ended questionnaires highlighted the importance of effective communication in course organisation and management. The literature identified that communication methods and means in advocating effective channels pave the strategy for effective communication within course delivery (Enakrire, 2021). The need for effective communication has been elevated since using VLE in HE and through ever-changing times such as the current pandemic context (Cao, 2021; Marachi and Quill, 2020). Mason and Rosenbloom (2021) and Garrison and Kanuka (2004) identify delay in information being reached to students, the lack of specific information during course development and the non-existence of students' voices in course organisation and management as pressing issues influencing effective communication in HE.

The data collected from academics identified the underpinning issue: the lack of information available during specific levels of course organisation. Several strategies were put forward, but academic participants highlighted two critical themes to improve course organisation and management. Using VLE platforms to update course information at the beginning of the course (D7) was considered important since the ISM analysis identified it under the dependent category. This could be facilitated through course leaders and induction settings during/throughout the academic years. Hence, the driver would be facilitating other drivers in improving course organisation. However, Digitised or VLE approaches to announce urgent updates on course delivery (D8) were considered fundamental since the ISM categorised it under the Linkage cluster. An application could be used, or tools such as announcements or an updates tab in VLE platforms could be used to facilitate such updates. Thus, the use of VLE in keeping students posted on current circumstances is considered fundamental to course organisation and management.

4.4 Level Partitioning of the drivers developed from the study

Figure 1 presents the level partitioning of the developed drivers obtained from the ISM analysis by identifying their sequential order and correlation, as highlighted in the above sections. The drivers are recognised for their correlation and sequential order of implementation through reachability and antecedent matrix. Conclusions and practical implications are based on the developed sequential correlation diagram and feed towards recommendations to improve course BEHE organisation and management.

Figure 1 - Level Partitioning of the drivers developed from the study



The study identifies that using VLE has become the foundation in course development, organisation and management (D3) and is the most significant driver positioning at Level I, directly influencing NSS Q15. It is seen that this driver influences almost all the other drivers identified in the study and is fundamental in improving course organisation and management. Moreover, D3 relies on having the input of research-active academics in course development (D4), although it was considered insignificant in ISM analysis. It further signifies the use of research-active academics in course development in having relevant and contemporary knowledge and optimising the course organisation and management (Leal Filho et al., 2018). Lack of digitisation is a serious issue associated with the mismanagement of course information and ineffective course delivery (lbalooshi and Shatnawi, 2021; Enakrire, 2021). Therefore, digitised approaches to announce urgent updates on course delivery (D8) were positioned in Level I and considered fundamental in improving NSS Q17. D3 and D8 were considered priority Level I drivers in improving course organisation and management in the BEHE context.

Student mental and physical well-being is given high priority in HE. The literature identified that timetabling issues affect students' mental and physical well-being (D6), impacting student performance (Hart et al., 2021). Also, the VLE approach (D3) could help improve student well-being if the timetabling is carried out effectively. Hence, D3 will be facilitating D6 for enhancing both student performance and course organisation and management. The literature identifies the lack of opportunities for student feedback, and their input on course organisation and management is crucial (Potter and Devecchi, 2020). Accordingly, two drivers, D1 and D2, were identified from the study to integrate student voice throughout course delivery. Creating multiple opportunities for students to discuss module delivery (D1) and ensuring students discuss their academic challenges (D2) were identified as important course organisation and management. The study further identified that focussing on student well-being could facilitate D1 and D2, catering to effective student support. Given the influence and dependency, D1, D2 and D6 are positioned under Level II. However, the analysis identifies that D1 and D2 correlate and facilitate each other, whereas D6 has a very important relationship with D8.

Using VLE implementation approaches and real-time calendars to list important dates and highlight any changes in course delivery (D5) and how module leaders should use VLE platforms to update course information at the beginning of the course (D7) were recognised as prominent drivers. As these two drivers affect both NSS Q16 and Q17, the study recognised the drivers' importance in enhancing course organisation and management. However, both drivers are facilitated by D8 and should be facilitated when implementing D8 in course management. As D4 and D5 are only dependent on D8 and have no reliance on other drivers, they are positioned at Level III but should be considered essential when implementing D8.

5.0 Conclusion and Recommendations

This study aimed to establish drivers to enhance course organisation and management in HE. The main findings from the data analysis confirmed the need for effective communication within course management and the significance of using VLE as the most appropriate medium to share information. The study's novelty is developing a level partitioning diagram for enhancing course organisations and management.

The study identified that using VLE as the foundation in course organisation and management is crucial in improving course organisation and management in the current context of HE. The strategic use of digitisation in course organisation and the online/blended course delivery methods underpins effective course management. Furthermore, it is identified that students demand real-time information regarding the course. Thus, digitised or VLE approaches to announce urgent updates are necessary for course delivery and are considered fundamental in course organisation and management.

Data identified that mental well-being had been a key focus during the COVID pandemic. Having appropriate breaks between lecture slots and convenient and appropriate lecture times would positively influence students' mental well-being. The use of multiple opportunities for students to discuss what is going well/wrong and feedback from the tutor was considered very important in course development. Two important drivers were identified, with high reliance but a low influence on other drivers. These drivers were related to timetabling and the availability of information at the beginning of the course. Drivers such as using VLE approaches and real-time calendars to list important dates and highlight any changes in course delivery and how module leaders should use VLE platforms to update course information at the beginning of the course were considered facilitating drivers.

This study identifies how course organisation and management need to be improved within HE. This is achieved through implementing the developed set of drivers as recommended through the level partitioning diagram in the study. Emphasis on VLE, focusing on student well-being, having multiple opportunities for student feedback, and maintaining effective and efficient communication are prominent attributes in enhancing course organisation and management. Lessons learnt from the COVID pandemic and further reflected in the developed level partitions as the best practice in course organisation and management. The study would provide a decisive guideline for improving course organisations, improving NSS score, and enhancing student satisfaction in HE delivery.

Although the study was focused on BE disciplines, the findings of this study can be implied across the HE context. It could further benefit by focussing on each discipline to have a more contextualised overview of course organisation and management. Also, further research could be done to identify how the organisation and management could have been aligned to learning opportunities and student support at a granular level (contextualising each discipline) within HE.

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