

### Quality Assurance in Edu

# **Enhancing Academic Support for Students in Higher Education**

Journal:	Quality Assurance in Education
Manuscript ID	QAE-07-2023-0128.R3
Manuscript Type:	Research Article
Keywords:	Academic Support in Higher Education, Teaching in Built Environment, Interpretive Structural Modelling (ISM), Learning in Covid-19 Pandemic, National Student Survey (NSS), United Kingdom (UK) Pedagogy

SCHOLARONE™ Manuscripts

# **Enhancing Academic Support for Students in Higher Education.**



#### **Abstract**

**Purpose:** The need to enhance student support is evident in higher education (HE) curricula. In addition to the complications created by the COVID-19 pandemic, the current strategies used in academia are criticised for their lack of appropriate student support in HE. The study focused on the themes under section four of the National Student Survey (NSS): availability to contact tutors, receiving good advice and guidance, and availability of good advice. The study aimed to provide recommendations for enhancing academic support by developing drivers that need implementation during course delivery.

**Methodology:** A documental analysis and a qualitative survey were adopted for this study. A documental analysis of 334 mid-module reviews (MMRs) from levels three to six students in the Built Environment (BE) discipline. Critical themes identified from the MMRs were fed forward in developing a questionnaire for academics. A sample of 23 academics, including a Head of school, a Principal lecturer, Subject leads and lecturers, participated in the questionnaire survey. Content analysis is adopted through questionnaire data to develop drivers to enhance academic support in BE. These drivers are then modelled by Interpretive Structural Modelling (ISM) to identify their correlation to NSS section four themes. A level partition analysis establishes how influential they are in enhancing academic support.

**Findings:** The study identified nine drivers, two categorised as fundamental, two as significant, four as important, and one insignificant in enhancing academic support in HE. Module leaders'/tutors' improving awareness and detailing how academic support is provided were identified as fundamental. Differentiating roles in giving advice and the importance of one-to-one meetings were identified as significant. A level partitioning diagram was developed from the nine drivers to illustrate how these drivers need to be implemented to promote the best practices in academic support in HE.

**Practical implications:** The identified drivers and their categories can be used to set prioritised guidelines for academics and other educational institutions to improve students' overall satisfaction.

**Originality/Value:** Novelty from the study will be the developed drivers and the level partitioning diagram to assist academics and academic institutions in successfully integrating academic support into HE curricula.

**Keywords** – Academic Support in Higher Education, Teaching in Built Environment, Interpretive Structural Modelling (ISM), Learning in Covid-19 Pandemic, National Student Survey (NSS), United Kingdom (UK) Pedagogy.

#### 1.0 Introduction

Higher Education (HE) institutions are ever more focused on the quality of the academic experience provided to students. The changes from traditional to virtual pedagogic delivery due to the issues of the COVID-19 pandemic further highlight the need for effective academic support in student progression (Cavanaugh et al., 2022; Raaper and Brown, 2020). Academic support has been misinterpreted and misaligned with current issues such as student well-being, digital/different learning contexts, staff resources management, and students' academic improvement, which are seldom overlooked (Gomis, 2023a; Zancajo et al., 2022; Neuwirth, 2021). Limited accessibility to support services, whether for personalised support, mental well-being, academic advising, financial advice, or diversified and specialised learning, is a key concern within the student body. In addition, inconsistent technological underpinning, peer support programmes and preparation for real-life contexts could be identified as underlying issues cutting across HE curricula (Wei et al., 2023; Wingate, 2007). However, the key concern is not the aspects of academic support available but the limited guidance on implementing academic support. A best practice within the identifiable body of knowledge is needed to guide academic and academic-related institutions in providing effective academic support in HE (Gomis et al., 2022; Raaper & Brown, 2020). The provision of academic support in curricula is not limited by the various teaching approaches implemented, such as face-toface, online or distance-learning within curricula (Hermita et al., 2023). Academic support is considered critical in quality assurance in higher education, with direct influence over student satisfaction and intended learning outcomes and creating effective support services committed to the continuous academic improvement of students (Basbeth et al., 2021). The UK government initiated the NSS to achieve a competent overview of the quality of pedagogical practice within the HE sector (Mantzios et al., 2019; Dean et al., 2020). NSS focuses on six critical areas that serve as a potential yardstick in evaluating academic success in addressing educational expertise, and one of them is academic support provided to students.

This study identifies a knowledge gap in addressing how academic support is needed to enhance the student experience in academia (Hermita et al., 2023). NSS confirm the need for improving academic support, as student satisfaction has significantly reduced in the past few years (Office for Students, 2022). NSS data emphasises a critical need to enhance the academic support provided in HE as student satisfaction ranged from 81.6%, 73.5%, 73.9% and 83.5% from 2020 to 2023, respectively. Although the satisfaction index has improved within the last year, academics and related institutions identify a need for further improvement within HE as it directly influences student learning and achievements. The diversified pathways within the HE curricula and impediments of the nature and the teaching complicate the provision of academic support, as it requires additional learning environments, support material, tools and equipment, exposure, and additional infrastructure to support learning. However, this is not readily available in pedagogical implementation in HE. Thus, HE institutions tend to reflect on the practices put forth by frameworks such as the NSS to improve the quality of pedagogical implementation. Section Four of the NSS questions, "Academic Support", emphasises three themes within NSS section four: availability to contact tutors (Q12), receiving sufficient advice and guidance (Q13), and availability of good advice (Q14).

Thus, this study aims to develop a set of drivers as guidelines for enhancing academic support and promoting best practices in HE. The research questions align with the NSS Section 4 and focus on 1.) how tutor availability will improve academic support, 2.) how the students receive sufficient advice and guidance, and 3.) how the students obtain good advice. The following paper will be structured according to the above research questions and NSS section 4 themes to provide further ease and clarity for the reader.

#### 2.0 Literature Review

#### 2.1 Tutor Availability for Support

The success of a module depends on the strategies utilised in implementing pedagogy within the learning environment (Rapanta et al., 2021; Rennar-Potacco et al., 2016). Whereas fundamental factors contribute to pedagogy, the core element of influencing fundamental factors remains in the tutor's hand. Aristovnik et al. (2020) considered the 'role of a tutor' a primary challenge during the COVID-19 pandemic, where most teaching and support is delivered through VLE (Virtual Learning Environment). Thus, the 'role of a tutor' has been deemed the initial focus in knowledge delivery and providing academic support to students through VLE. Aristovnik et al. (2020) further highlight that students have a limited view of the educational culture and the support available in HE. It was also identified that most students struggle to grasp the concepts of self-learning and research, which is fundamental in HE.

The current HE practices engage in a far broader context of academic support, such as open days, availability of personal and module tutors, and availability of student representatives. Wong and Chapman (2023) and Baik et al. (2019) identified that the current practice looks further than assessment performance, aiming at student well-being and ensuring proper student guidance. Even though many concepts and platforms facilitate academic support, such as additional tutoring, mentoring, placements, etc., the first point of contact will still be the tutor (Gomis et al., 2021; Prada et al., 2020). In addition to academic advising, tutors seldom provide personalised and pastoral support such as mental health and wellbeing (Hilliam and Williams, 2019; Baik et al., 2019). Yale (2017) identifies how a positive relationship can develop student performances in both academic development and social integration.

Current HE contexts determine three classifications a tutor needs for academic support (Wong and Chapman, 2023; Rotar, 2022). 1.) the basic academic fundamentals in providing pedagogical and other intellectual support; 2.) the managerial aspect that involves administrative, organisational, social, and pastoral care; 3.) the technical proficiency aspired to provide secondary support to academic development, such as digitisation in teaching. This provides the elementary and fundamental overview of academic support from tutors' perspectives. However, Prada et al. (2020) and Yale (2019) identify a significant need for improvement in tutors' engagement in providing academic support, such as comprehensive training programs in compliance with HE curricula to enhance the quality of academic support provided.

Previous studies highlight best practices and factors to enhance academic support by promoting and facilitating the role of tutors (Hilliam and Williams, 2019; Yale, 2019). The recent pedagogical development in the post-COVID pedagogic era emphasises digitisation of learning and teaching, E.g. MS Teams, Zoom, Blackboard, Moodle, and Canvas (Hermita, 2023; Tilak and Kumar, 2022). Hybrid learning systems of student-tutor communication platforms, focusing on hybrid approaches of both face-to-face and virtual, need to be more predominant within HE (Hermita, 2023). Studies highlight the inclusiveness of personal, pastoral and academic support within these communications platforms and support sessions (Hilliam and Williams, 2019). However, further training and specialising are needed to facilitate these for further enhancements. Conversely, there has been a significant decrease in students contacting tutors to obtain the above support (Raaper and Brown, 2020). This was evident during all traditional, hybrid and digital platforms where limited engagement was identified within the student body. This signifies the need for robust guidance to accommodate the best practices and improve issues within tutor availability and HE curricula.

#### 2.2 Receiving sufficient advice and guidance

One of the significant aspects of student performance is receiving advice and guidance for continuous improvement within academia. There are infinite resources for receiving advice; however, Dean et al. (2020) and Mantzios et al. (2019) reveal that the content available can be overwhelming or chaotic, leading to confusion. It was stressed that advice should be orientated to provide clarity to students for better decision-making. Dean et al. (2020), among many others, highlight that students rely on information obtained through academic staff rather than other media such as webpages. However, it varies from academic support to different aspects, such as financial support, mental health and well-being, and career counselling.

The student body varies in several aspects, such as knowledge competency, learning techniques, physical and mental well-being, socioeconomic background and other demographic factors (Kahn and Agnew, 2016). A key theme identified in previous studies was the importance of reflecting on each variable in providing advice and guidance in general and assessment contexts (Gomis et al., 2023c). It should be noted that meeting these diverse variables alone is challenging and limited by the curriculum framework, increasing student numbers and demanding academic time frame. Another critical aspect that influences the provision of advice is the approach to module delivery. The approaches taken in module delivery and academic support may vary across HE institutions (Wei et al., 2023; Yale, 2017). E.g., in the context of the Built Environment (BE), industry orientation, drawing details, etc. (Gomis, 2023b; Rotar, 2022; Dawson & Osborne, 2019). Some HE institutes provide personal and pastoral support, such as mental well-being, inclusivity, technological underpinning, industry orientation, specialised support, and knowledge-specific support.

Previous studies reflect the best practices and factors to enhance academic support for providing sufficient advice and guidance (Rotar, 2022; Picton and Kahu, 2022). Academic support is claimed to be at optimum when different academic staff, such as lecturers, tutors, and academic and skills coaches, are differentiated to obtain critical and different perspectives on providing specific advice and guidance. However, advice and guidance must discourse hidden knowledge to understand the knowledge content holistically (Wei, 2023; Nakata et al., 2018). Reflection on an inclusive tutoring practice, career progression advice, the opportunity for collaboration and academic resource management, and continuous professional development are deemed essential. The importance of advice being impartial, accessible, holistic, and understandable was a critical takeaway from the pre and post-COVID HE context (Tilak and Kumar, 2022; Rapanta et al., 2021). In conclusion, advice and guidance must enhance students' ability to successfully complete the academic programme, secure employment and overall progression.

#### 2.3 Availability of good advice

The literature highlights the importance of academic support in developing student performances within curricula (Tilak and Kumar, 2022; Hilliam and Williams, 2019). The positive impact of the advice and guidance given in HE influencing personal and professional development is also emphasised in the literature (Nakata et al., 2018; McFarlane, 2016). The role of a tutor in providing academic support may not be one-dimensional, reflecting (but not limited to) knowledge competency and demography, relating ultimately to student performance (Wei et al., 2023; Gomis, 2023a; Kahn and Agnew, 2016). This evidence of good advice and guidance influences essential skills and competencies required in their career and personal and professional well-being. For example, creating awareness of the student's academic pathways, available support, university systems, etc., further encourages student retention and the overall success rate of HE institutes.

The current body of knowledge identifies challenges in making advice available to students. However, these challenges could be summarised into two critical aspects: lack of awareness of available support and deficiency within the chosen communication media (Rotar, 2022; Dean et al., 2020). This is evident from the student feedback identified during COVID-19 and is crucial within the post-COVID HE context (Kerres and Buchner, 2022). While many studies were prevailing on the academic support provided by the tutors' perspective, a limited number of publications highlighted the importance of fundamental attributes in academic support (Gomis et al., 2022; Dawson & Osborne, 2019). Academic staff training, innovative curriculum design, and strategic knowledge delivery are crucial to facilitating good advice and student support. However, current teaching concepts do not fully transcribe the academic support available to the students and require strategies to promote the best practices in enhancing academic support.

#### 2.0 Methodology

A systematic research approach underpinned by Saunders et al. (2009) theoretical framework was carried out to identify the drivers that enhance academic support and develop guidelines towards improving academic support in HE. A mixed-methods strategy was adopted to collect data as the study required multiple and holistic understandings of academic support provision in HE, ensuring the validity and reliability of the study. The strategy consisted of a) a literature review, b) document analysis, and c) a questionnaire survey, which was adopted for data collection and thematic analysis, and Interpretive Structural Modelling (ISM) was adopted for data analysis. A documental analysis and a questionnaire survey were used as pragmatic and time-sensitive, ensuring appropriate data was collected promptly to address the research question. Thematic and ISM analyses were especially adopted to capture the richness of the data and understand variables influencing academic support in HE. The level partitioning diagram, illustrating how the identified drivers should be implemented in the HE curriculum, will be the novel contribution of this study.

An inductive research approach was carried out, starting with an initial literature review to understand the current context. Secondly, the documental analysis was based on the 375 Mid-Module-Reviews (MMRs), where undergraduate students (from levels four to six) within the BE disciplines participated. From a 375 population with a confidence level of 95% and an error margin of 5%, the minimal sample size for the study needed to be more than 191. Overall, 230 students participated, making the sample size for the survey well above the required size and appropriate for the study (Gomis et al., 2023c; Bevan, 2019). The documental data were categorised into themes where students reflected on their experience with academic support and suggested areas for further improvement. A questionnaire survey was developed with the findings from the literature review and the MMRs using thematic analysis to refine the data further.

The questionnaire was circulated among 20 academic staff, including academics with at least three years of academic experience. From a 20 population with a confidence level of 90% and an error margin of 5%, the minimal sample size for the study needed 19 academics. All 20 academic staff members responded, achieving a success rate of 100%. The questionnaire aims to understand the current practice, potential challenges and areas of improvement in providing academic support. The research participants were selected systematically to represent the BE discipline and accommodate undergraduate HE student interaction levels. Departments of Architecture, Construction Management, Civil Engineering, Quantity Surveying, Property and Real Estate were selected to represent the BE discipline to obtain validated and reliable data. The sample represented academics titled professor/reader, senior lecturer, and lecturers from each department. Further to these participants, a Head of school, a

Principal lecturer, and a Subject lead were included, bringing the total academic sample size to 23. The latter participants ensured the elimination of unconscious bias, endorsed the validity, reliability, and transferability of the data obtained, and initiated the ISM analysis. The addition of the latter participants also enhanced the data collected from the questionnaire so that it could be generalised and better represented within the HE curricula. The sample size of both data collection instruments was validated as the data were saturated, detailing that the data was indepth and generalised within the HE context. The data were collectively analysed by content analysis to determine the drivers influencing academic support in HE.

The identified drivers were modelled by ISM to find the influence and reliance on enhancing academic support in HE. Firstly, the critical themes identified through the data were categorised into drivers fed into ISM to see their influence and reliance on academic support. Afterwards, a Structural Self-Interaction Matrix (SSIM) is developed based on identified drivers, laying the foundation for developing a reachability matrix by categorising the relationships using the binary form. Furthermore, to understand the impact of influence and reliance on each driver, a Matrice d'Impacts Croises-Multiplication Applique a Classement (MICMAC) is developed, in binary form, from the reachability matrix. The categorised data represented four clusters: linkage, independent, dependent, and autonomous. In conclusion, the position of these drivers with their specific cluster establishes their impact on the influence and reliance in providing academic support in HE. The level partitioning diagram takes the data from SSIM and MICMAC, which analyses the sensitivity and the transitivity of the developed drivers by modelling their influence. The diagram further illustrates the best practices for implementing the identified drivers in HE curricula.

#### 4.0 Analysis

#### **4.1Tutor Availability for Support**

MMR data suggests 83% of students agree they can contact the staff when needed. Thus, the data reveals that most students are satisfied and that the existing practice is successful. However, there is a need to improve catering to the 17% who had neutral/negative comments.

The academic staff reflected on the opportunities provided to students to contact staff who needed advice and guidance. The staff agreed that having multiple opportunities for students to contact the staff is essential for academic support. However, most staff agreed that "even if there are opportunities, the issue is the lack of awareness of the potential opportunities provided in contacting staff members". The staff highlighted that the student does not embrace the innovative technologies initiated in providing academic support, which is signposted in MMR data as well. "Most students preferred to contact staff in-class or by email, even during the Covid-19 pandemic". It is recognised that students rarely use the digitised appointment system, whereas more than 90% of students use in-class time or email to contact academic staff. Even though the staff could be reached via different means of communication (e.g. in-class, e-mail or digitised), the academic staff preferred a digitised appointment system as the most effective. This is because advice/guidance can be limited when it has to be provided in an email to the in-class environment.

Academics highlighted the use of appointments to capture hours of support provided to students in reflecting student progression. Most recommended including academic support in the course guide and the module guide to create awareness among students. It is proposed that module leaders and personal tutors explain the process of meeting with tutors and making appointments at the beginning of the semester and use external examiners and other relevant experts to reinforce the best practice of providing academic support. Digitalised platforms were considered successful during the Covid-19 pandemic and promoted VLE learning. Close

monitoring of how academic support was provided suggests that the Course leader interacts with the students at least once a semester in the classroom, reflecting on the academic support provided. From the above, four drivers could be identified in improving the availability of contacting tutors such as;

- **D1:** Module leaders and personal tutors to explain how to meet with your tutor and the systems used in making appointments at the beginning of the semester.
- **D2:** The course leader must interact with the students at least once a semester in the classroom.
- **D3:** Lecturers should use external examiners and experts to reinforce the academic support provided.
- **D4:** Add a section on academic support in the Module and Course Guide detailing the contact details of the academic staff.

#### 4.2 Receiving sufficient advice and guidance

The data illustrates that 70% of the students have received good advice and guidance about the course. Whereas 20% of the students neither agreed nor disagreed, and 10% not applicable.

The staff agreed on the data obtained through MMRs, where providing sufficient advice and guidance concerning student courses was considered prominent in the academic role. However, the emphasis was given to the students who stated the advice received was unsatisfactory. Despite the lack of evidence presented by most academic staff, some recognise that the sources (such as course-specific templates) used in receiving advice may be a reason behind such data. "Most of the guidance is provided through module specifications and other course-related documents. Students may not be familiar with obtaining guidance from a piece of paper". The findings suggest that course and module leaders are the prime sources of information for advice and guidance concerning the course.

Considerations should be made in identifying what advice was needed and the appropriate medium for receiving advice- e.g. obtaining contextualised advice from course/module leaders and tutors. Also, the advice provided by the course leader, the module leader, and the personal tutor may differ even if the advice pertains to certain coherencies. However, a key understanding is that both academics and students preferred digitised and VLE approaches, such as announcements and contents from digital module delivery, to promote academic support. Most academic staff agreed to differentiate and highlight Course Leader, Module Leader and academic/personal Tutor roles and what advice and guidance they could provide. Therefore, three drivers from the data obtained are identified in providing sufficient advice and guidance such as;

- **D5:** Differentiate Course Leader, Module Leader and Personal Tutor roles, highlighting the context of each role in providing academic support.
- **D6:** Using the VLE approach, such as announcements, discussion and digital module delivery, to promote the academic support available.
- **D7:** Using one-on-one meetings with students to provide further advice and guidance.

#### 4.3 Availability of good advice

The data highlights that 64% of students agreed that good advice is available when making study choices on their course. Furthermore, 25% of the students neither agreed nor disagreed, 5% mostly disagreed, and 6% not applicable.

The academic staff agreed with the data presented by the MMR and reflected on the support provided to students by offering good advice when they needed to make study choices for their course. Most of the academic staff responded that they had "students coming in between lectures, emailing requesting advice or making appointments to discuss the advice available for their decision making". Most academic staff highlighted that they are the "front-line in guiding student decision making"; students had also acknowledged this in MMR comments. Data shows that more than 90% of students prefer contacting lecturers or other academic tutors for academic support.

The academic staff highlighted that even though it is a good attempt by the students to meet with their academic tutor or a personal tutor, they should not be limited only by the two options. Academics recognised opportunities and highlighted the lack of other means available to obtain academic support. These are student services, student support and well-being centres, learning resource centre staff, and student unions in obtaining advice and guidance. Data identifies a preference for using digital tools to create awareness of student support available to students and academics. The data further shows the need to create awareness of opportunities that are available and provided by HE institutes. The academic staff further recommends including a section on 'Academic Support' in the Module & Course spaces, in which students are reminded where they can find support. These should include lecturers, personal tutors, and facilities such as student services, student well-being officers, student unions, and library support. Therefore, the data obtained could identify two drivers in providing good advice. These are;

**D8:** Include a section on 'Academic Support' in the Module & Course Guides, signposting students where they can find academic support.

**D9:** Use Digital learning to display information about Academic Support.

#### 4.4 Findings from data modelled using the Interpretive structural modelling

A pair-wise relationship could be mapped to the SSIM using a binary matrix based on the data gathered through the closed-ended questionnaire survey from the teaching staff. The binary matrix created the MICMAC graph (Figure 1) to recognise the drivers' correlation that enhances HE academic support.

Insert Figure 1: MICMAC graph illustrating the correlation of drivers.

The identified drivers are categorised into four clusters per the data obtained from the MICMAC graph: Linkage, Dependent, Independent, and Autonomous. Drivers in the linkage cluster (classed as "fundamental") have a strong influence and strong reliance, whereas the independent cluster (classed as "significant") drivers have a strong influence but weak reliance. Drivers in the dependent clusters (classed as "important") have weak influence but strong reliance, whereas autonomous cluster (classed as "insignificant") drivers have weak influence and reliance. The drivers identified as fundamental are essential, and drivers listed as significant are critical (but not essential) for enhancing academic support. The drivers listed as important will facilitate the critical drivers mentioned, whereas the driver named as insignificant would have limited influence over the academic support provided.

The study revealed that drivers D1 and D2 fall in the linkage cluster, which has both strong influence and reliance, thus becoming fundamental in enhancing academic support. D5 and D7 in the independent cluster have a strong influence but weak reliance on other drivers, making them significant in enhancing academic support. The MICMAC further highlighted drivers D4, D6, D8, and D9 on the dependent cluster as having weak influence but strong reliance on other drivers, thus making them important. The study identified driver D3 on the

autonomous cluster, making it insignificant in enhancing academic support. Table 1 denotes the identified drivers within the categorised clusters.

Insert Table 1: Drivers identified in providing academic support in BE

#### 5.0 Discussion

#### 5.1 Tutor Availability for Support

The literature reveals a crucial need to enhance the current academic support provided by HE. Previous studies identify the necessity of developing academic support by refining student performances and improving teaching practices within curricula (Tilak and Kumar, 2022; Rennar-Potacco et al., 2016). Traditional concepts of academic support were orientated towards assessment support rather than integral academic support, amplifying student well-being and ensuring pertinent student guidance (Baik et al., 2019). Significant issues were identified within implementing and student satisfaction in enhancing academic support in HE.

Academic staff highlighted that the students do not comprehend the opportunities presented and the HE institutions' optimum level of academic support. Data suggested that students seem to contact the staff in a class or obtain advice via email. The staff highlighted the limitations of both media regarding holistic academic support. The lack of usage of the digitised appointment system in promoting students for academic support was emphasised. Data revealed that such systems were occasionally used, insisting that students were unaware of such systems.

The study highlighted two fundamental drivers critical in enhancing student support. First, the module leaders, tutors, and personal tutors need to specify how to meet with the students and explain that any system in the HE institution promoting academic support is critical (D1). Additionally, the course leaders interact with students frequently or at least once every semester to determine that the academic support provided to the student is critical (D2). The documentation and section on academic support in the Module and Course Guide detailing the contact details of the academic staff were deemed important but not critical to enhancing academic support (D3). Contradicting to Hilliam and Williams (2019), using external sources such as professionals, lecturers, and experts to support the modules learnt in presenting holistic understanding within leant modules was identified as insignificant (D4). This might be due to extensive support, facilitating the core concepts of academic support, and contacting other tutors from the other drivers.

#### 5.2 Receiving sufficient advice and guidance

Dean et al. (2020) and Mantzios et al. (2019) identify the main challenge in providing academic support not through excessive guidance material but by identifying the students' necessities and providing coherent advice. It was stressed that information should not be broad but orientated to provide clarity to students for better decision-making. However, providing coherent decisions is challenging, considering the diverse nature of students. The different approaches within HE institutions in delivering the module and providing academic support while remaining impartial, easily accessible, holistic, and understandable concerning the circumstances provided by the student (Kerres and Buchner, 2022; Zancajo et al., 2022).

The staff highlighted that the most popular reason for not obtaining academic support is the limitations provided by the source when providing academic support. Findings suggest that course and module leaders are the prime sources of information for advice and guidance about the course. The staff highlighted that students should opt more towards meeting (either one-on-one or digitally) academic personnel to obtain advice.

It is identified that differentiating Course Leader, Module Leader and Personal Tutor roles, highlighting the context of each role in providing academic support (D5) and using one-on-one meetings with students to provide further advice and guidance (D6) were significant drivers in enhancing academic support. The drivers exhibit critical importance in ensuring that students have received sufficient advice and guidance on their course. Using the VLE approach through content such as announcements, discussions, and quizzes during module delivery (D6) was identified as an important driver facilitating the other two drivers.

#### 5.3 Availability of good advice

Out of the many challenges present in providing academic support, lack of awareness of academic support provided needs to be critically addressed in developing student performance(Wei et al., 2023; Neuwirth, 2021; Bevan, 2019). Hence, critical focus is needed to promote and create awareness of what academic support is available to HE.

Academic staff highlighted the success by reflecting on how students were constantly prompted to require advice. However, further analysis showed that students approach academic staff and personal tutors more than the other available academic support. The staff highlighted that even though students meeting with their academic or personal tutors is appreciated, they miss out on different means of obtaining academic support for their study choices. The study highlighted the lack of emphasis on student services, student support and well-being centres, learning resource centre staff and student unions in obtaining advice and guidance.

The study highlighted two important drivers in facilitating other drivers under different themes of the NSS section in enhancing the academic support provided. The use of module guides and course guides by including a section on what academic support is available in the module/course guide format, where students are reminded where they can find support such as lecturers, personal tutors, library support, etc. (D8) and using digital learning to display the information about academic support (D9). Recommendations from both students and academics recognise the use of presenting contact details of lecturers, personal tutors and facilities such as student services, student well-being officers, student unions, and not limiting library support.

#### 5.4 Influence and Reliance of the drivers developed for academic support

Figure 2 is developed from the discussion by recognising the relationships and correlations between each driver. The level partitioning was carried out, taking all nine drivers holistically and assessing the level of influence and correlation within each other individually to enhance academic support in HE. Critical focus is given to their influence and reliance in developing the sequential order, which provides insight into the level of emphasis and the relationship between each driver under NSS section 4. The level partitioning diagram developed can be considered the first-ever prioritised guideline for promoting academic support in HE.

Insert Figure 2: Level Partition of Drivers Enhancing Academic Support in BEHE

#### 6.0 Conclusions & Recommendations

This study aimed to enhance the academic support provided to students in HE and predominantly focussed on section four of the NSS to identify the research framework. The research framework was categorised under core themes as "availability to contact tutors", "receiving sufficient advice and guidance", and "availability of good advice". The main findings from the literature and data analysis establish the lack of awareness in providing academic support to students. Hence, a critical focus was given to the study on promoting and improving awareness of academic support for successful student academic progression.

Addressing issues of academic support within the Covid period and how they will feedforward in developing the best practice of providing academic support in forthcoming pedagogical practice is also considered. Although providing feedback is crucial in academic support, the study will not include them within the research parameter since it is categorised under a different theme in the NSS.

The drivers developed aim to improve academic support, provide helpful insight into module development and improve the NSS score in HE. The literature and primary data from the study emphasise that academic support during and after COVID-19 brings more challenges in providing academic support. However, the drivers are developed to be implemented across different learning approaches such as face-to-face, online and hybrid. The drivers addressed this challenge and promoted a best practice that can be implemented by both traditional and digitised approaches when providing academic support. This study may be the first to conduct an analysis technique such as ISM to develop drivers for enhancing academic support in Higher education.

The main findings from the study identified two fundamental (D1 & D2), two significant (D5 & D7), four important (D4, D6, D8 & D9) and one insignificant (D3) set of drivers to help promote academic support in HE, as detailed in the discussion section. The level partitioning analysis (Figure 2) further illustrates how each driver should be implemented to enhance academic support in HE curricula by considering their influence and reliance. The developed level portioning diagram will act as strategic guidelines in developing a course that integrates the best practice of academic support in HE curricula. Even though the data represents BE curricula, the findings could be replicated in the general HE context. The level partitioning diagram could be used in a generalised context within the HE curricula. This is because the drivers are holistically developed to enhance curriculum management and academic support in HE. Academics and HE institutions should reflect on the drivers developed and integrate them as recommended to maintain and enhance academic support. However, the support provided for mental well-being, financial support, etc., needs to be catered to in another study, as this study predominantly focused on pedagogic-related academic support.

Furthermore, appropriately implementing the level partition diagram and the developed drivers could improve student satisfaction and NSS scores. MICMAC analysis revealed that meeting module leaders and tutors to understand how academic support is provided and course leaders' duty to enhance academic support with students was fundamental to enhancing tutor availability and support (Q12). The use of external examiners in enhancing academic support was classified as insignificant, although further analysis revealed that it directly influences other important drivers. Differentiating tutor roles and using one-to-one meetings (whether online or otherwise) was considered most important when providing advice and guidance (Q13). Creating further awareness through VLE and having a dedicated section within modules and course guides were considered very important in enhancing the availability of academic support (Q14). Thus, the study will be imperative for academic institutions to obtain higher NSS scores.

The developed drivers address critical issues and challenges identified within COVID-19 pandemic and provide an overview of the recovery plan in supporting students in HE curricula. Thus, these drivers and the developed level partitioning diagram could be a potential framework for creating the best academic support in a post-pandemic HE context. This study offers valuable insight to academics, academic institutions, researchers, policymakers and pedagogical statutory bodies to be used to set prioritised guidelines to promote the best practice of academic support in Higher Education. Moreover, the developed drivers alone would assist academics and HEIs in enhancing pedagogy within the HE context, which is essential in

improving the NSS score. One of the main limitations of this study is the limited sample size; however, the data was obtained with a cross-sectional design, and future research could capture a broadened sample from different pedagogical contexts. The methodology of this study could be further replicated on an international level to iterate drivers and create international guidance on improving academic support in HE.

#### 8.0 Reference List

- Aristovnik, A., Keržič, D., Ravšelj, D., Tomaževič, N. and Umek, L., (2020). Impacts of the COVID-19 Pandemic on Life of Higher Education Students: A Global Perspective. Sustainability, 12(20), 8438. https://doi.org/10.3390/su12208438
- Baik, C., Larcombe, W. and Brooker, A. (2019). How universities can enhance student mental well-being: the student perspective. Higher Education Research & Development, 38(4), 674-687. https://doi.org/10.1080/07294360.2019.1576596
- Basbeth, F., Ahmad Saufi, R., & Sudharmin, K. Bin. (2021). E-teaching satisfaction in a black swan moment: the effect of student engagement and institutional support. *Quality Assurance in Education*, 29(4), 445–462. https://doi.org/10.1108/QAE-03-2021-0039
- Bevan, W. (2019). How to Improve the Student Feedback Process: A Case Study within the Built Environment. International Journal of Construction Education and Research, 16(2), 117-131. https://doi.org/10.1080/15578771.2019.1663316
- Dawson, S. and Osborne, A. (2019). Re-shaping Built Environment Higher Education: The Impact of Degree Apprenticeships in England. International Journal of Construction Education and Research, 16(2), 102-116. https://doi.org/10.1080/15578771.2019.1668888
- Dean, A., Shubita, M. and Claxton, J. (2020). What type of learning journey do students value most? Understanding enduring factors from the NSS leading to responsible decision-making. Journal of Global Responsibility, 11 (4), 347-362. https://doi.org/10.1108/JGR-01-2020-0017
- Gomis, K. *et al.* (2023c) 'Enhancing the assessment and the feedback in higher education', *Quality Assurance in Education* [Preprint]. doi:10.1108/qae-01-2023-0004.
- Gomis, K., Saini, M., Pathirage, C., & Arif, M. (2021). Enhancing learning opportunities in higher education: best practices that reflect on the themes of the national student survey, UK. *Quality Assurance in Education*, 29(2–3), 277–292. https://doi.org/10.1108/QAE-01-2021-0004
- Gomis, K., Saini, M., Pathirage, C., & Arif, M. (2022). Enhancing quality of teaching in the built environment higher education, UK. *Quality Assurance in Education*, 30(4), 523–538. https://doi.org/10.1108/QAE-03-2022-0072
- Gomis, K., Saini, M., Pathirage, C., & Arif, M. (2023a). Enhancing the organisation and the management of built environment higher education courses. *Quality Assurance in Education*, 31(2), 331–345. https://doi.org/10.1108/QAE-01-2022-0020
- Gomis, M. K. S., Oladinrin, O. T., Saini, M., Pathirage, C., & Arif, M. (2023b). A scientometric analysis of global scientific literature on learning resources in higher education. *Heliyon*, *9*(4). <a href="https://doi.org/10.1016/j.heliyon.2023.e15438">https://doi.org/10.1016/j.heliyon.2023.e15438</a>
- Hermita, N., Erlisnawati, Alim, J. A., Putra, Z. H., Mahartika, I., & Sulistiyo, U. (2023). Hybrid learning, blended learning or face-to-face learning: which one is more effective in remediating misconception? *Quality Assurance in Education*. https://doi.org/10.1108/QAE-02-2023-0019
- Hilliam, R. and Williams, G. (2019). Academic and pastoral teams working in partnership to support distance learning students according to curriculum area. Higher Education Pedagogies, 4(1), 32-40. https://doi.org/10.1080/23752696.2019.1606674
- Kahn, H. and Agnew, M., (2016). Global Learning Through Difference. Journal of Studies in International Education, 21(1), 52-64. https://doi.org/10.1177/10283153156220

- Kerres, M., & Buchner, J. (2022). Education after the Pandemic: What We Have (Not) Learned about Learning. *Education Sciences*, *12*(5). https://doi.org/10.3390/educsci12050315
- Mantzios, M., Egan, H., Cook, A., Jutley-Neilson, J. and O'Hara, M. (2019). Well-being and the NSS: the potential of mindfulness and self-compassion for an enhanced student experience. Journal of Further and Higher Education, 44(3), 300-310. http://dx.doi.org/10.1080/0309877X.2018.1541970
- Nakata, M., Nakata, V., Day, A., Martin, G. and Peachey, M., (2018). Indigenous Undergraduates' Use of Supplementary Tutors: Developing Academic Capabilities for Success in Higher Education Studies. The Australian Journal of Indigenous Education, 48(2), 119-128. https://doi.org/10.1017/jie.2017.39
- Neuwirth, L. S., Jović, S., & Mukherji, B. R. (2021). Reimagining higher education during and post-COVID-19: Challenges and opportunities. *Journal of Adult and Continuing Education*, 27(2), 141–156. https://doi.org/10.1177/1477971420947738
- Office for Students, (2022). National Student Survey Results 2020. London, UK.
- Picton, C., & Kahu, E. R. (2022). 'I knew I had the support from them': understanding student support through a student engagement lens. *Higher Education Research and Development*, 41(6), 2034–2047. https://doi.org/10.1080/07294360.2021.1968353
- Prada, M.A. *et al.* (2020) "Educational data mining for tutoring support in Higher Education: A web-based tool case study in engineering degrees," *IEEE Access*, 8, 212818–212836. Available at: https://doi.org/10.1109/access.2020.3040858.
- Raaper, R., & Brown, C. (2020). The Covid-19 pandemic and the dissolution of the university campus: implications for student support practice. *Journal of Professional Capital and Community*, 5(3–4), 343–349. https://doi.org/10.1108/JPCC-06-2020-0032
- Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L., & Koole, M. (2021). Balancing Technology, Pedagogy and the New Normal: Post-pandemic Challenges for Higher Education. *Postdigital Science and Education*, 3(3), 715–742. https://doi.org/10.1007/s42438-021-00249-1
- Rennar-Potacco, D., Orellana, A., Chen, P. and Salazar, A., (2016). Rethinking Academic Support. Journal of College Student Retention: Research, Theory & Practice, 20(4), 455-474. http://dx.doi.org/10.1177/1521025116678854
- Rotar, O. (2022). Online student support: a framework for embedding support interventions into the online learning cycle. *Research and Practice in Technology Enhanced Learning*, 17(1). https://doi.org/10.1186/s41039-021-00178-4
- Saunders, M., Lewis, P. and Thornhill, A. (2009) *Research methods for business students*. Harlow, England, Financial Times Prentice Hall.
- Tilak, J. B. G., & Kumar, A. G. (2022). Policy Changes in Global Higher Education: What Lessons Do We Learn from the COVID-19 Pandemic? *Higher Education Policy*. https://doi.org/10.1057/s41307-022-00266-0
- Wei, X., Saab, N., & Admiraal, W. (2023). Do learners share the same perceived learning outcomes in MOOCs? Identifying the role of motivation, perceived learning support, learning engagement, and self-regulated learning strategies. *Internet and Higher Education*, 56. https://doi.org/10.1016/j.iheduc.2022.100880
- Wingate, U. (2007) 'A framework for transition: Supporting "learning to learn" in higher education', *Higher Education Quarterly*, 61(3), pp. 391–405. doi:10.1111/j.1468-2273.2007.00361.x.
- Wong, W. H., & Chapman, E. (2023). Student satisfaction and interaction in higher education. *Higher Education*, 85(5), 957–978. https://doi.org/10.1007/s10734-022-00874-0
- Yale, A. (2019). Quality matters: an in-depth exploration of the student–personal tutor relationship in higher education from the student perspective. Journal of Further and Higher Education, 44(6), 739-752. https://doi.org/10.1080/0309877X.2019.1596235



### **List of Figures**

Figure 1: MICMAC graph illustrating the correlation of drivers

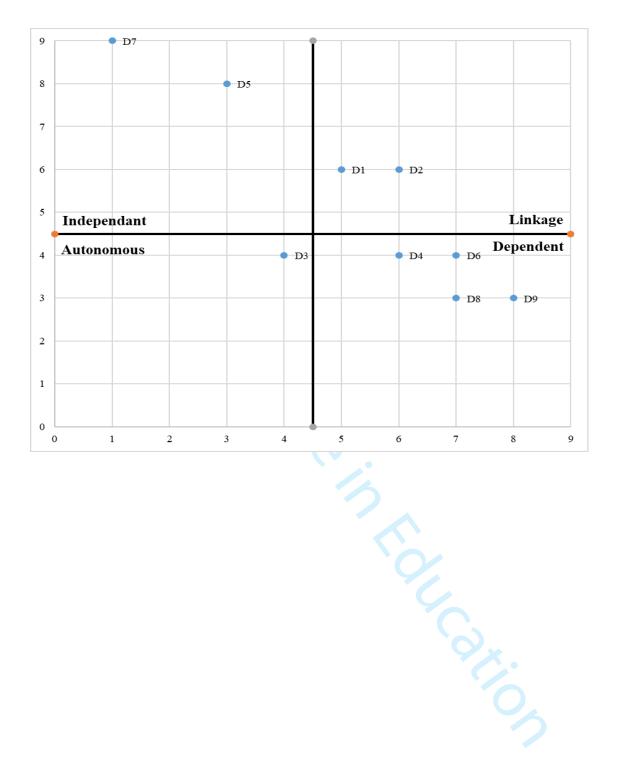
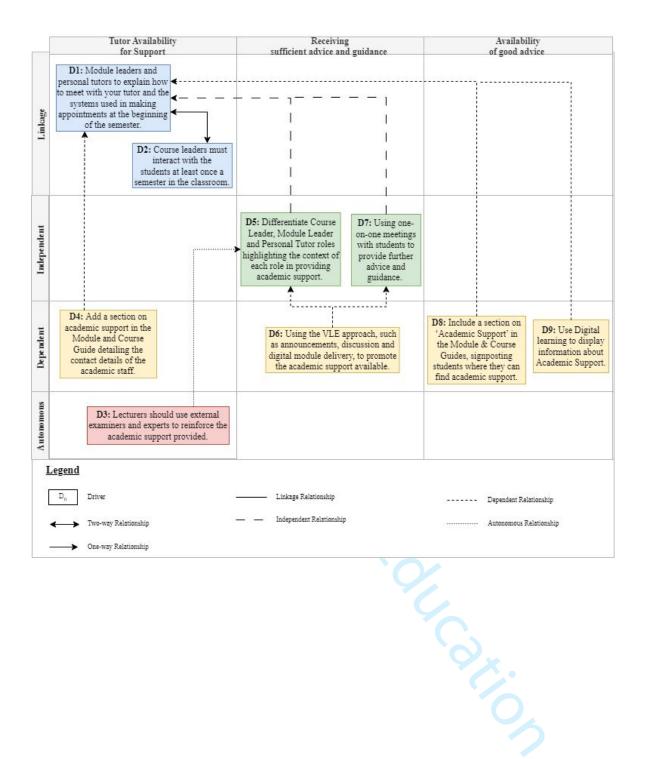


Figure 2: Level Partition of Drivers Enhancing Academic Support in BEHE



## **List of Tables**

Table 1: Drivers identified in providing academic support in BE

Questions from NSS		Strategies identified through the study		
Section 4: Academic Support				
1.	have been able to contact staff when they needed to	D1 - Module leaders and personal tutors to explain how to meet with your tutor and the systems used in making appointments at the beginning of the semester.	Fundamental	
		D2 - Course leaders must interact with the students at least once a semester in the classroom.	Fundamental	
		D3 - Lecturers should use external examiners and experts to reinforce the academic support provided.	Insignificant	
		D4 - Add a section on academic support in the Module and Course Guide detailing the contact details of the academic staff.	Important	
2.	have received sufficient advice and guidance	D5 - Differentiate Course Leader, Module Leader and Personal Tutor roles highlighting the context of each role in providing academic support.	Significant	
		D6 - Using the VLE approach, such as announcements, discussion and digital module delivery, to promote the academic support available.	Important	
	in relation to their course.	D7 - Using one-on-one meetings with students to provide further advice and guidance.	Significant	
3.	available when students needed to	D8 - Include a section on 'Academic Support' in the Module & Course Guides, signposting students where they can find academic support.	Important	
		D9 - Use Digital learning to display information about Academic Support.	Important	