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Sustaining a tutorship programme at a university of technology: a systems approach

Abstract

The role of tutorship programmes at universities is well documented. Given the continual challenges faced by universities such as low pass rates, low retention rates, low graduation rates, under-preparedness of first-year students, low throughput rates, and at-risk students, tutorship programmes have become an indispensable part of teaching and learning at universities. Tutorship programmes are one of the key interventions put in place by universities to ameliorate these challenges as part of student support and development mechanisms. It is said that a positive correlation exists between tutorship and improved student academic performance. Additionally, tutorship programmes are beneficial for tutors as well, as they develop critical skills throughout the programme. As such, it is befitting to reflect critically on the sustainability of the tutorship programme as a tool for student development (both the tutor and the student). This paper adopts a systems approach to reflect on the question of how to sustain a tutorship programme at a university of technology. A systems approach is a management technique used for examining all critical areas of an organisation. Within the context of higher education, it makes it possible to analyse teaching and learning enterprise and enable an appropriate analysis of the critical areas of the tutorship programme. A systems approach is adopted in this paper to demonstrate the holistic functioning of the tutorship programme, its tenets, as well as the factors that affect its sustainability. To understand the sustainability of tutorship, it is not enough to view it merely as a product of teaching and learning and the responsibility of academic departments and lecturers: rather, tutorship should be seen as an integral part of a university system, a more complex phenomenon than a mere sum of its constituent tenets, because the interrelationship between parts of the university plays a critical role for the sustainability of the tutorship programme.

Keywords: *tutorship, systems approach and tutorship, tutorship programme and sustainability, student development, sustainability in higher education.*

1. Introduction

The purpose of this paper is to interrogate how tutorship programmes could be used as a tool to sustain tutorship as student support and development using a systems approach. Empirical and non-empirical studies have

documented the importance of tutorship in higher education (McKay, 2016; Gazula *et al.*, 2017; Maphalala & Mpofo, 2020). In praxis and research, tutorship programmes continue to receive considerable attention due to South African universities prevailing and persistent student academic success challenges such as low undergraduate pass rates, low retention rates, low throughput rates, and low graduation rates (Bhorat, Mayet & Visser, 2010; McKay, 2016; Penprase, 2018). The under-preparedness of students transiting from basic education into the university system is often a significant contributor to mentioned challenges (McKay, 2016). In an attempt to ameliorate these persistent challenges, universities have devised tutorship programmes as one of the strategies to provide academic support for students.

The discourse on tutorship in higher education has hitherto mainly focused on the benefits of tutorship for students regarding improving academic performance (Bhorat *et al.*, 2010; Gazula *et al.*, 2017; Isohätälä, Järvenoja & Järvelä, 2017; Penprase, 2018; Arco-Tirado, Fernandez-Martín & Hervas-Torres, 2020; Kim, Jillapali & Boyd, 2021). Elsewhere, Martin (2015) and Miravet, Ciges and García (2014) have shown that tutoring at a university bridges the academic and experiential gap among first-year students. The focus on tutorship has conceived tutorship through the social realist paradigm and epistemological access (Layton & McKenna, 2016; Maphalala & Mpofo, 2020). Furthermore, Ntuli and Gumbo's (2019) study investigated tutors' views on the integrated tutor model for open distant learning. A similar study by Cupido and Norodien-Fataar (2018) support provision for academic staff is often overlooked when prioritising student success. In this article, we examine the need for academic support structures in relation to student success from the perspective of Bronfenbrenner's ecological theory. We argue the merits of a Teaching Assistant (TA) looked at developing a teaching assistant programme to support academic staff at a university. However, despite the consensus on the significance of tutorship in higher education, the question of sustaining tutorship programmes appears to be at the periphery of the discourse. This paper adopts a systems approach as a framework to analyse the critical facets of the tutoring programme at a university of technology in grappling with the question of sustainability. To the authors' best knowledge, this is the first work that applies a systems approach in tutorship programmes in higher education.

A conceptual posture is adopted in this paper, which makes its unit of analysis a non-empirical phenomenon. As per Mouton (2005) and Babbie and Mouton (2006), non-empirical studies fall in the second order of reality. Gilson and Goldberg (2015: 127) posit that conceptual studies "do not have data, because their focus is on integration and proposing new relationships among constructs. Thus, the onus is on developing logical and complete arguments for associations rather than testing them empirically". Gilson and Goldberg's (2015) supposition applies to this study. This article does not deal with empirical data but concepts. Conceptual studies are not inferior to empirical studies (Jaakkola, 2020). According to Jaakkola (2020: 24), a conceptual paper "contributes to extent knowledge by delineating an entity: its goal is to detail, chart, describe, or depict an entity and its relationship to other entities". Yadav (2010) substantiates that in a conceptual study, the creative scope is unfettered by data-related limitations, allowing the researcher to explore and model emerging phenomena where little empirical data is available. As a conceptual paper, this article contributes by providing a roadmap for understanding the entity in question (tutorship programme) by delineating the focal concept, how it changes, the processes by which it operates, or the moderating conditions that may affect it (MacInnis, 2011).

Despite attempts to make the tutorship programme a success, such as augmented funding, the problem of its sustainability persists. So far, little is known about using the systems theory to address this problem. Therefore, this study sought to explain how a systems theory might assist both the policymakers and practitioners to combat the issue of the non-sustainability of tutorship programmes. The paper is structured as follows: Firstly, it delineates the concepts of tutorship and sustainability in higher education. Secondly, it is followed by a conceptual description of the systems approach. Thirdly, it shows how a systems approach applies in higher education. A systems approach is then used to analyse the critical components of the tutoring programme and the relevance of these components to ensure a sustainable tutorship programme.

2. Literature review

Given that this is a conceptual paper, the literature needed to examine pertinent issues that relate to its purpose closely. Therefore, the literature is limited to tutorship, e-tutoring and sustainability in higher education.

2.1 Tutorship

Studies show that South African universities, especially concerning academic enterprise, are grappling with a myriad of challenges, at the centre of which is high failure rates. The culprit for the high failure rates, particularly for first years, appears to be that students are often underprepared by the high school education system and thus find it challenging to transition into the academically demanding environment at universities (McKay, 2016; Spark, De Klerk, Maleswena & Jones, 2017; Penprase, 2018). Consequently, this has a ripple effect on success rates, throughput rates and graduation rates. For instance, McKay (2016) researched that first-year students are at greater risk; two in three first-year students fail at least one module during their first year of study at university. What follows are low graduation rates, low retention rates (McKay, 2016; Penprase, 2018), and high dropout rates (Spark *et al.*, 2017). Thus, Gazula *et al.* (2017) suggest that to ensure high graduation rates among such students, it is incumbent upon universities to supplement student instruction with tutoring to address the challenges mentioned above.

Chief among the strategies are the tutoring programmes aimed at providing academic support for students (Maphalala & Mpofu, 2020). According to Cupido and Norodien-Fataar (2018: 15) support provision for academic staff is often overlooked when prioritising student success. In this article, we examine the need for academic support structures in relation to student success from the perspective of Bronfenbrenner's ecological theory. We argue the merits of a Teaching Assistant (TA, "a crucial part of academic support structures is the development of tutorial programmes". Literature indicates conclusively that tutorial interventions have significant benefits for students as a supportive, idiosyncratic tool, collaborative and pedagogical enabler to support students (Isohätälä *et al.*, 2017; Maphalala & Mpofu, 2020). Scholars such as Martin (2015) and Miravet *et al.* (2014) aver that tutoring at university bridges the academic and experiential gap among first-year students. Globally, studies on university tutoring have tended to focus on experiences of implementing tutoring programmes (Miravet *et al.*, 2014; Gazula *et al.*, 2017), the evaluation of tutoring models (Narciss, 2017), the impact of tutoring on academic success (Cheng & Ku, 2009; Blanch *et al.*, 2012; Ng & Low, 2015) and the relationship between the tutor and tutee (Derrick, 2015). These studies have provided critical theoretical underpinnings for tutoring, highlighting the pedagogical and efficacy benefits.

Furthermore, Horn and Jansen (2009) and Karan (1996) underscore that tutorials have a positive impact on student academic performance as they encourage a collaborative approach to learning and assist students to become independent learners. Independent learning is a well-documented concept in education (Pather *et al.*, 2017), implying that utilising tutors to provide support and feedback can improve the performance of students who might be performing poorly academically (Bhorat *et al.*, 2010; Penprase, 2018). Literature concurs with the notion that there is a positive relationship between tutorial interventions and student academic support (Hof, 2014; Baleni, Malatji & Wadesango, 2016; McKay, 2016). Hof (2014) and McKay (2016) indicate that because of tutorial interventions for first-year students, the failure rate decreased considerably. The tutorials helped to bridge the gap when students did not understand the concepts in regular lectures and fell back on tutorials, suggesting that tutorial interventions provide a significant value proposition for both students and the institution battling low pass rates and at-risk students.

The synthesis between the effectiveness of tutorials (Karan, 1996; Horn & Jansen, 2009) and the challenges of higher education (Bhorat *et al.*, 2010; Pather *et al.*, 2017; Penprase, 2018) show that the institution needed to have tutorial interventions as part of student support strategies to improve student academic performance. The objective of the tutorship programme at the selected university of technology is to provide students with academic support through tutorials. Academic support promotes active and independent learning and creates a conducive environment for engaged learning (*Tutor Manual*, 2020). The end goal is that students should ultimately improve their academic performance, based on the assumption that when students work with tutors, they perform well academically (Karan, 1996; Horn & Jansen, 2009). Ultimately, as Maphalala and Mpofu (2020) underscore, graduation-based funding systems have resulted in higher education institutions using tutoring as a self-serving strategy to augment learning and improve completion rates to ensure funding.

Tutorials are also beneficial for student development (Maphalala & Mpofu, 2020) for both the tutee and the tutors. The institution's *Tutor Manual* (2020) states that there are benefits associated with tutorials for both students and tutors. Tutors can reflect on their attitudes towards a particular module and adjust to assist students. The interactive nature of tutorials also helps students to prepare for tests, exams and assignments (*Tutor Manual*, 2020). For tutors, Kraft and Falken (2021) aver that tutoring likely also has reciprocal benefits. Leung's (2019) study found evidence of substantial academic gains for tutors. Additionally, tutors develop higher-order thinking, improve subject matter knowledge and general knowledge, improve their ability to manage their learning and study strategies, and are motivated to learn more. Tutorials also provide an opportunity to supplement what was covered in the lecture, gain more understanding of various topics, improve their academic performance, and improve their independent learning (Kraft & Falken, 2021).

2.2 e-Tutoring

With the surreptitious advent of Covid-19, subsequent lockdowns that closed universities (Mashau & Nyawo, 2021) and the introduction of educational technologies, it would be a travesty to discuss the future of tutorship without the 'electronic' and 'online' aspects because these are critical features of modern teaching and learning at universities. Motaung and Makombe (2021) attest that higher education institutions gravitated towards online learning. Covid-19 accelerated and forced the move to online learning, even for traditional universities (Dube, 2020). Consequently, it made sense for tutorials, as a critical supporting role in teaching

and learning, to also be administered online. Mashau and Nyawo (2021: 124) observe that “the modern trends in education technology have led many universities to utilise online learning (e-learning)”, which suggests that e-electronic tutorials (e-tutorials) are an integral part of modern higher education and the future thereof.

E-tutoring can be defined as teaching, support, management, and assessment of students on programmes of study that involve significant use of online technologies (Motaung & Makombe, 2021). Kopp, Germ and Mandl (2010) explain that e-tutoring comprises all the activities of a teacher that support a learner in constructively and actively dealing with the learning environment. The concept of e-tutoring is thus used in this paper to refer to all forms of tutoring through online platforms – Learning Management Systems (LMSs) – such as Blackboard, Moodle, Microsoft Teams and WhatsApp broadcast. E-tutoring takes place online and virtually, unlike traditional tutoring, which is through contact sessions. The principles of tutoring do not necessarily change, but the mode of delivery is different as it is mainly online and requires access to the internet.

Interaction between students and e-tutors can occur synchronously or asynchronously. According to Ntuli (2016), synchronous interaction involves exchanging information where the session is conducted in real-time. The learning instruction and collaboration is in “real-time”, “live” via online platforms such as Blackboard Collaborate, MS Teams, Zoom, e-chat and WhatsApp broadcast. On the other hand, asynchronous learning is when learning does not occur in real-time. Instead, students use information-sharing facilities such as thread discussions on BB, e-mail, etc., to leave questions or communicate their ideas. The benefits of e-tutoring include that students can interact with tutors and engage with their peers on the subject content from anywhere (Ntuli, 2016), as long as they have access to the necessary tools and the internet. Thus, when planning a tutorship programme, it is vital to consider a university’s LMS, student profile, including students with disabilities (Ntuli, 2016), and appropriate and relevant training for e-tutors (Mashau & Nyawo, 2021). Given the prominence of e-learning, e-tutoring appears to be an essential aspect of tutorship concerning sustainability.

2.3 Sustainability in higher education

It is apparent that tutorship plays a critical role in higher education; as such, its sustainability is pertinent. The concept of sustainability in higher education appears to be fraught with a lack of consensus or commonality in the university systems (Weisser, 2015). According to Weisser (2015), understanding the etymology of sustainability is crucial to understanding its current usage in higher education. In broad terms, the notion of sustainability is related to the environment concerning the society and the economy, advocating that the environment should be utilised sustainably in the pursuit of economics. The central discussion on sustainability in higher education emphasises the broader spectrum of sustainability. For instance, Wu and Shen (2016: 3) consider that universities can be agents for the promotion and promulgation of sustainable development principles in societies.

Although Wu and Shen’s (2016) assertion is stated within the broader societal context, the role of universities and higher education institutions in general with regard to sustainability is further accentuated by Filho *et al.* (2018) and Padayachee, Matimolane and Ganas (2018) especially in light of universities’ expected contribution to economic and socio-political transformation. In particular, curriculum transformation has proved challenging, as evidenced in actions and calls by students in recent years for decolonisation of the curriculum. This study, which formed part of an institutional response to the challenge of curriculum transformation

and decolonisation, initially sought to examine perceptions of the term "decolonisation" amongst a group of early career lecturers at a leading university in South Africa. Highlighted in the outcomes of the study was the centrality of personal and contextual relevance in notions of decolonised curricula, the impact of curriculum conversations on lecturers' well-being, and the broader implications of responsive and relevant curricula for institutional and societal well-being. In this respect, the findings of the study illustrated the similarities of curriculum decolonisation approaches and the concept of education for sustainable development which is underpinned by the goal of global well-being and the common good. Also highlighted was the need for greater balance between Mode 1 (theoretical. According to Alturki and Aldraiweesh (2021), the integration of sustainability in education is a global trend, which places emphasis on the development of a wide variety of skills or qualities that contribute to academic achievement by both academics and students. In the context of tutorship, sustainability pertains to the long-term management and implementation of the tutoring programme to ensure that its benefits are not once-off or short-term. Instead, sustainability is about ensuring that future cohorts of students also benefit beyond the immediacy of the current cohort of students. A sustainable tutorship programme would contribute to long-term benefits to students in terms of academic support. Universities are heavily influenced by continuous attempts to improve and optimise the services provided to both students and staff and are constantly involved in means to enhance the delivery of its programmes (Filho *et al.*, 2018). Given the obstinate challenges universities face as articulated earlier, the sustainability of tutorship is imperative, and tutorship should be viewed through a long-term perspective.

3. The context of the paper

The tutorship programme emerged from the Teaching and Learning Development Centre (TLDC) at the Mangosuthu University of Technology (MUT). The core mandate of the TLDC is to provide academic support to both staff and students. At the centre of the student support is the coordination of the tutorship programme and tutorial training to all appointed tutors. In 2019, an internal baseline study was conducted by the TLDC regarding the implementation of the tutorship programme across the institution, which identified three main concerns: 1) the implementation of the tutorship programme was not uniform across departments, mainly because there was no policy on tutorship; 2) the institution reduced funding for the programme annually, thus increasingly relying on external funding; and 3) the training and support for tutors were found to be inadequate. Without a uniform approach to implementation, the tutorship programme is fragmented, which poses a threat to long-term sustainability. The gradual decrease in internal funding and increasing reliance on external funding place the tutorship programme at the caprices of external environments. Tutors are the main agents for any tutorship programme, and as such need adequate and relevant training supplemented by support throughout the semester.

The key recommendations of the report were: 1) a tutor policy should be developed and implemented to improve standardisation and commonality for the implementation of the tutorship programme; 2) the tutor funding model needed to be reviewed; and 3) the training content needed to be reviewed, and departments needed to provide additional continuous discipline-specific training to capacitate tutors. As a result, the TLDC developed an equitable funding model to ensure that the distribution of the University Capacity Development Grant (UCDG) funding for the tutorship programme considers the key contextual factors at MUT in general, such as students per department, number of programmes offered in a department,

high-risk modules and pass rates. The tutor training manual was also reviewed and incorporated feedback from previous tutors who attended the training.

4. Theoretical framework

Against the backdrop of tutorship in higher education and its sustainability and how it takes place at MUT, the complexity of a university as a system is apparent; hence, this study adopted a systems theory model to interrogate the question of how to sustain the tutorship programme at MUT. A systems theory can be traced to the classical works of Ludwig von Bertalanffy in the 1950s and 1960s, notably, his seminal work *General system theory* (Von Bertalanffy, 1956; Von Bertalanffy, 1968). Also referred to as open systems theory, it is applied in various organisational contexts. Roiszowki (1981: 23) defines a system as “a set of elements or components or objects which are interrelated and work towards an overall objective”. For Groenewegen (1996: 15), “a system is comprised a complex of factors interacting according to an overall plan for a common purpose”. Achieving a common strategic goal or objective appears to be central to the definition of a system. Gupta and Gupta (2013) postulate that a systems approach is a management mechanism that enables the examination of all aspects of the organisation, including the interrelationships and how resources used can be optimised. According to Gupta and Gupta (2013: 53), in higher education, a systems approach makes it possible to analyse teaching and learning enterprise.

Although the systems approach has been used in higher education (Gupta & Gupta, 2013), the theory appears to be scantily used within the context of tutorial systems. Literature indicates that theories applied in the tutorship programme mainly focus on educational practices theories such as cognitive development theories, personal and professional development, talent development, and cooperative learning theories (Krajewska & Kowalczyk-Walędziak, 2014). Scholars such as Maphalala and Mpofu (2020) and Layton and McKenna (2016) embed their studies in a social realist paradigm and epistemological access. The main theories applied in tutorship appear to be concentrated in the realm of teaching and learning, and not necessarily the tutorship programme itself as part of the university system. The application of systems theory is thus apt in this paper, given the significance of tutorship and given the complexity of higher education institutions. A university is a complex system operating in a complex environment, influenced by internal and external factors. Thus, the systems approach could provide a framework through which the sustainability of the tutorship programme can be analysed.

Within the context of this paper, Figure 1 depicts a basic systems model that is viewed as a unit of a whole incorporating all its aspects and parts. In a basic systems model, also called the transformation model, the inputs comprise the elements that need to be transformed into outputs. Inputs are the ingredients of the system – what is required to be transformed into an output. Transformation is concerned with the conversion of inputs into outputs. Outputs result from the systems process; that is, it is the product of what has been transformed.



Figure 1: Basic Systems Model

As shown in Figure 1 below, a basic systems approach has three tenets – input, transformation and outputs. In this regard, the inputs for the tutorship programme are the key resources, key role-players and beneficiaries of the tutorship programme. Transformation involves the management of key resources and coordination of activities by key role-players in the implementation of the tutorship programme, the output of which is a sustainable tutorship programme. The application of the systems approach as depicted in Figure 1 is further illustrated in detail in Figure 2 in the next section.

5. Discussion

5.1 Tutorship programme

As a subsystem, the tutorship programme is depicted to show in detail the interrelations between system components and how their coordination offers potential sustainability. The tutorship programme provides academic support to all undergraduate students. To this effect, key components underpinning the tutorship programme are elucidated using Figure 2 below, which illustrates a holistic picture of the tutorship programme as a subsystem. Inputs comprise all the key resources – key resources (funding, tutorial venues, timetabling), key role-players (TLDC, Human Resources and Development [HR&D], finance), beneficiaries (tutors, students) and internal structure (policies). Transformation is concerned with implementing the tutorship programme, the crux of which is the availability and deployment of key resources in the management and implementation of tutorship. Within the context of this paper, the central output is a sustainable programme that delivers intended outcomes.

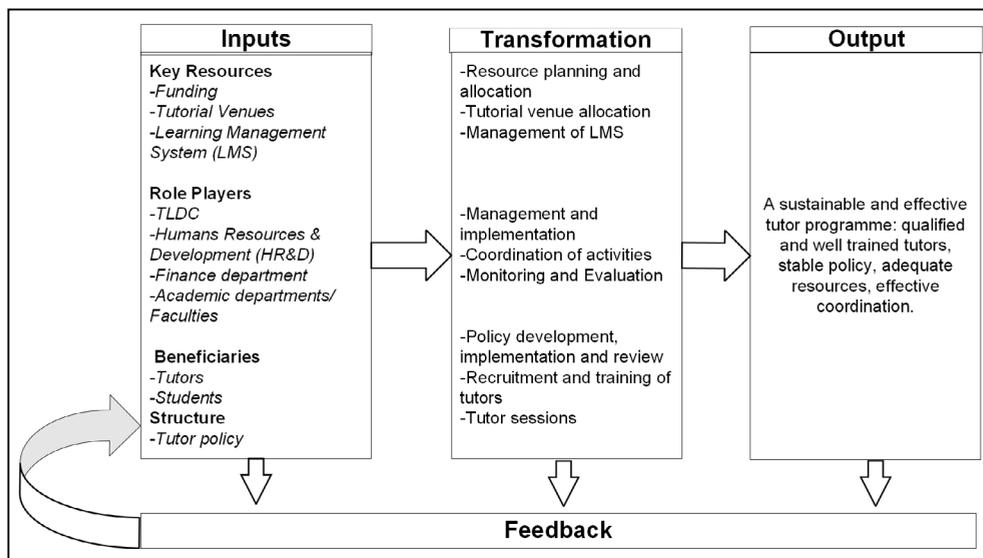


Figure 2: Implementation of tutorship (Source: Authors' own creation)

The section below describes the tutorship programme's key inputs, transformation, and output as depicted in Figure 2.

5.2 Inputs

As indicated in Figure 2, the inputs of the tutorship programme comprise key resources (funding, tutorial venues, LMS), role-players (TLDC, HR&D, finance, academic departments), beneficiaries (tutors) and internal structure (policy).

5.2.1 Key resources: Funding

In Figure 2, funding is one critical resource for a typical tutorship programme. As part of a university-wide grant application availed by the Department of Higher Education and Training (DHET) and applied for by universities, the university received a UCDG for the cycle ending in 2020. Funding was awarded for several projects, one of which focused on student support. The student support project comprises a tutorship programme, first-year experience, and mentorship. Regarding funding, the tutorship programme is funded by the university and augmented through UCDG. In the previous UCDG cycle, 450 tutors were appointed, and over 5 000 undergraduate students benefited from the programme. An internal review of the tutorship programme indicates a 30% to 40% funding shortfall annually based on what departments need and the available funding, meaning that departments cannot appoint enough tutors.

5.2.2 Key resources: Tutorial venues and timetabling

Tutors need venues to conduct tutorial sessions. As highlighted earlier, the unavailability of venues was identified as one of the challenges hampering the programme's implementation. The typical tutorial is characterised by students meeting regularly in a classroom with their tutor. However, due to the increasingly large numbers of first-year students entering the institution, who are perceived to need academic support, this exerts a great deal of pressure on the university's resources in terms of venues and available tutors.

5.2.3 Key resources: LMSs

From the discussion on e-tutorship, it is apparent that LMSs are vital resources for the tutorship programme (Motaung & Makombe, 2021). Currently, the UoT, under the scope of this article uses Blackboard as the primary LMS, which offers tutors functionalities for both synchronous and asynchronous e-tutoring. However, as noted by Machika and Dolley (2018), the adoption of an LMS is often marred by challenges such as infrastructure, support and access.

5.2.4 Role-players

The key role-players are TLDC, HR&D, and the academic and finance department. The primary role of the TLDC is to coordinate the tutoring programme at the university, which involves issuing calls to academic departments for tutor submissions, coordinating tutor appointments, providing training for tutors, Blackboard training for both staff and students, and managing the UCDG project funding. Academic departments recruit and select tutors, deploy them in specific modules, allocate tasks, and supervise tutors. The HR&D processes appointments per normal institutional recruitment processes and policies.

5.2.5 Beneficiaries

As per Figure 2, tutors and students are the main beneficiaries of the tutorship programme. Critically, the quality and calibre of tutors are vital to ensure that tutorship contributes positively to student academic success.

5.2.6 Internal structures: Tutor policy

Regarding policy, Nguyen, Nguyen and Dao (2021) indicate that institutional policies are essential for the success of projects, as policies create a regulatory framework and serve as guidelines for implementing projects. As a crucial input, the tutor policy plays a vital role in regulating the tutorship programme, including regulation of interactions of the components of the systems, such as the deployment of funds and other critical activities such as recruitment and training of tutors. Previously, the institution had no tutor policy, which created challenges regarding the management and implementation of the tutorship programme. Owing to these challenges, the TLDC developed a tutor policy in 2020 to create a regulatory framework within which the tutorship programme is coordinated, managed and implemented.

5.3 Transformation

Transformation is concerned with putting all pieces of the puzzle (the inputs) together in implementing the tutorship programme. The main elements of transformation include resource planning and allocation, recruitment of tutors, training and support for tutors, coordination of activities, and monitoring and evaluation. In this regard, resource planning and management are crucial for tutorship programme success and require careful planning and cooperation by the role-players.

5.3.1 Recruitment, training, and support

Recruitment of tutors starts towards the end of an academic year with the submission of applications by senior students to academic departments. Ordinarily, departments identify modules that need tutors and initiate the recruitment process. Recruiting quality tutors is vital for achieving the intended objectives of tutorship, as Ntuli and Gumbo (2019) reiterate that tutors enhance student learning. Once appointed, tutors are provided with training and support by the TLDC. Staub and Hunt (1993) underscore the significance of tutor training. A study by Faraa (2017: 6) found that “tutors seem to exhibit a generally positive attitude toward training as well as recognise the need for training”. Continuous training and support for tutors are critical for the development of tutors and ultimately enhances their performance (Layton, 2013). The training is provided at the beginning of each semester and covers various topics such as teaching strategies, learning approaches, group dynamics, and professional development for tutors. Ntuli’s (2016) study recommends that for tutors to perform what the institution has employed them to do, they should be equipped appropriately with the relevant skills that will enable them to do so.

5.3.2 Coordination of the programme

Once all the resources are in place, the implementation of the tutorship programme, depicted as *transformation* in Figure 2, requires proper coordination of activities and management of funds to ensure a successful implementation of the tutorship programme. Coordination is a critical element of the implementation of activities in organisations. Lodge and Wegrich (2014) posit that coordination is concerned with the purposeful alignment of units, roles, tasks and efforts to achieve a predefined goal. In praxis, the coordination of the tutorship programme involves multiple key role-players – the TLDC, academic departments, faculties, HR&D, and academic departments. In this scene, the central coordination of the tutorship programme is vested in the TLDC, which, for instance, manages the UCDG project funding issues, the call for tutor submissions, coordinates appointments of tutors, and provides training for tutors. Academic departments are responsible for selecting high-quality tutors, deploying them in

specific modules, allocating tasks, and supervising tutors. The HR&D processes appointments per normal processes, whereas delays in appointment processing may have adverse effects as tutors cannot be deployed.

5.3.3 Tutorials

In terms of facilitation and learning instruction, the current approach adopted in tutorials is face-to-face. E-tutorials are primarily conducted via WhatsApp groups and have yet to fully embrace LMSs for tutorials. During the Covid-19 lockdown, the implementation of the tutorship programme was greatly affected as the institution was caught off-guard and not ready for online and remote learning. In some departments, some tutors used WhatsApp groups to support students. The lack of online presence by tutors posed serious interruptions for the needed academic support for students.

5.3.4 Monitoring and evaluation

Monitoring and evaluation are integral parts of project implementation (Persaud & Dagher, 2021) to ensure continuous improvement and sustainability (Biwott, Egesah & Ngeywo, 2017). Feedback, as a vital feature of the systems approach, offers an avenue for monitoring activities and evaluating the implementation process and requires a commitment to continuous improvement. As Filho *et al.* (2018) mention, universities grapple with constant attempts to improve processes and service students. The TLDC mainly elicits feedback on an annual basis from students, tutors, lecturers, and departments, to identify areas of concern and improve the implementation of the tutorship programme.

5.4 Output

Figure 2 depicts that the output should be a sustainable and effective tutorship programme, characterised by qualified and well-trained tutors, stable policy, adequate resources, effective coordination of the activities, and cooperation amongst key role-players. The implementation of the tutorship programme mirrors the complexity attested to by Roiszowki (1981). The tutorship programme components are interrelated and work towards an overall objective. As per Groenewegen (1993), the components interact according to an overall plan for a common purpose – successful and sustainable implementation of the tutorship programme.

6. Prospects for sustainability

In the previous section, we detailed the fundamental tenets of the tutorship programme and the management and coordination of critical activities. The critical components of the tutorship programme are intertwined and interdependent. Thus, the central idea espoused herein is that the tutorship programme, viewed as a complete subsystem, cannot be managed, conceptually and functionally, without proper coordination of all the interrelated aspects as a system. Four key pillars are essential in this regard, as shown in Figure 3 – funding, coordination, tutors and policy. Various integrated activities underline these four pillars. With regard to funding, relying on external funding poses a serious threat to the long-term sustenance of the tutorship programme, meaning that proper allocation of funding is needed internally. For tutor policy, the development and implementation of the tutor policy is the bedrock of implementing a tutorship programme, as it ensures standardisation and point of reference for coherence, without which the stability of the programme may be compromised. As per Nguyen *et al.* (2021), policies play a vital role at institutions for the success of projects. Policies are inherently not static, and the internal and external environments change, meaning that the tutor policy needs to be reviewed periodically.

Resource planning and coordination of activities undergird the tutorship programme. Implementation is thus guided by the regulatory framework and guidelines enshrined in the tutor policy. At the heart of coordination is a cooperation between the multiple key role-players in the implementation process – the TLDC, HR&D and academic departments. Such coordination would, for example, ensure that resources are available, tutors are recruited and trained on time before the start of the semester, and the appointment forms are processed timeously. Tutors and e-tutoring are integral parts of the tutorship programme, largely dependent on LMSs. In this sense, the appointment of qualified tutors who fit the purpose is critical. Beyond recruitment, training, followed by continuous support, is vital to ensure that tutors are upskilled and aided in the tutoring journey. E-tutoring requires appropriate LMSs, access to the internet or the availability of mobile data for e-tutors to ensure that they are adequately resourced.

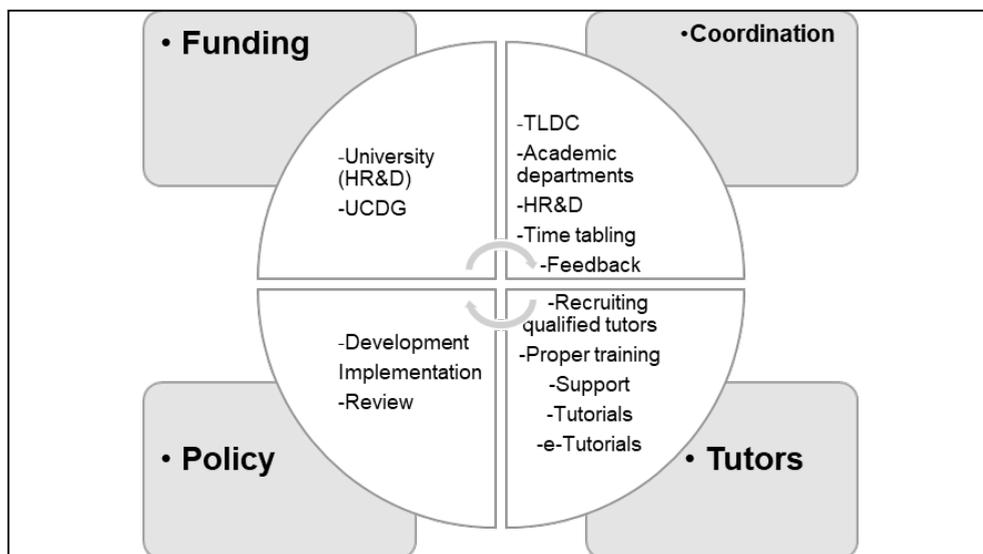


Figure 3: Key pillars for sustaining tutorship programme (Source: Authors' own creation)

Tutorship programmes have become an indispensable part of teaching and learning at universities. We argue that in pursuing a sustainable tutorship programme, instead of approaching tutoring as an ancillary intervention for remediating student learning in the short-term, tutorship should be viewed as an integral part of the university system, with adequate allocation of resources and efficient coordination of the tutorship programme activities. Long-term sustainability is pertinent, considering that tutorship programmes are critical interventions put in place by universities supported by the DHET to ameliorate the challenges alluded to earlier, and are part of student support and development mechanisms. The success and suitability of a support programme such as tutorship are further underscored by Godfrey (2008) and Johnson (2000), who even propose that support programmes need support at a strategic level.

7. Conclusion

In this paper, we discussed the implementation of the tutorship programme aided by a systems approach in a quest for sustainability. The article provides insights on sustaining a tutorship programme at a university of technology, using a systems approach, thus providing holistic functioning of the tutorship programme, its tenets, and the factors that affect its sustainability. It has become apparent that the tutorship programme, as a subsystem, is a complex phenomenon than the mere sum of its constituent tenets. The interrelationship between parts of the university plays a critical role in the sustainability of the tutorship programme. The central idea espoused in this paper is that the tutorship programme cannot be sustainably managed without proper coordination of all the interrelated aspects of the tutorship programme as a system. To this effect, the four key pillars were identified as critical for sustaining the tutorship programme – funding, coordination, tutors, and policy. The argument advanced in this paper is that tutorship should not be viewed as an ancillary intervention for remediating student learning in the short term. Instead, tutorship should be considered an integral part of the university system with adequate allocation of resources and efficient coordination of the tutorship programme activities. Long-term sustainability is pertinent, considering that tutorship programmes are one of the key interventions put in place by universities to ameliorate poor student success challenges and are part of student support and development mechanisms.

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