

Journal for the Education of Gifted Young Scientists, 10(1), 11-22, March 2022 e-ISSN: 2149-360X

jegys.org





Research Article

Exploring the constraints of space in enhancing giftedness of academics and administrative staff in higher education

Vimbi Petrus Mahlangu 1

Department of Educational Leadership and Management,, University of South Africa, South Africa

Article Info

Received: 9 November 2021 Revised: 23 December 2021 Accepted: 20 January 2022 Available online: 30 March 2022

Keywords: Conceived spaces Constraints Higher education institution Lived spaces Policy South Africa

2149-360X/ © 2022 by JEGYS Published by Young Wise Pub. Ltd. This is an open access article under the CC BY-NC-ND license



Abstract

This paper reports on a study that was conducted in Higher Education Institution (HEI) of Gauteng Province, South Africa. It forms part of a larger research project, which is "The dynamics of higher education space and place in Sub-Saharan Africa". The participants were randomly selected, and they were readily available. The aim of the study was to explore the perceptions and experiences of 17 academics, 4 administrative staff, and 1 chair of department, and 1 school director. This was a qualitative study that used interviews. In this paper the perceptions discussed are those of the academics and administrative staff only. The shortage of space in South African higher education institutions is a cause for concern; daily reports appear in the written and electronic media about the shortage of lived and conceived spaces. The findings suggest that space as a constraint in utilisation of higher education spaces is of serious concern in enhancing giftedness of academics and administrative staff in higher education spaces. And this is one of the internal factors that exacerbate poor performance of academics and administrative staff at the university. The study recommends that there is need to utilise space and policies effectively. A well-ordered HEI is also a less constraining environment. HEIs that experience problems of shortage of lived and conceived spaces need active academics, administrative staff, chairs of department, directors and policies that monitors space; recommends, redress enabling measures; and oversees policy implementation.

To cite this article:

Mahlangu, V.P. (2022). Exploring the constraints of space in enhancing giftedness of academics and administrative staff in higher education. Journal for the Education of Gifted Young Scientists, 10(1), 11-22. DOI: http://dx.doi.org/10.17478/jegys.1021197

Introduction

This paper reports on a study that was conducted in Higher Education Institution (HEI) of Gauteng Province, South Africa. It explored the constraints of space in enhancing giftedness of academics and administrative staff in higher education spaces. Van Alteren (2021) discovered that exceptional academics and administrative employees are capable of critical and creative thinking. They process information in a distinct way, and they can distinguish between irrelevant and important information, as well as transfer new information to previously acquired knowledge. Issue recognition, plan formulation, and self-monitoring are improved in gifted academics and administrative employees, making them good problem solvers. Space can also limit their ability to organize and work in a systematic manner. Despite a lack of clear evidence showing a connection with giftedness of academics and administrative staff in higher education spaces, many researchers have concluded that space should be available because of its potential to support. academics and administrative giftedness. Mtonga et al. (2021) believe that education and training play a key role as the human capital function. This is especially true for tertiary education. However, infrastructure and equipment limitations are some factors that limits levels of students' enrollment in universities. This is more so the case in the investigated university where much of the allocated space for offices seems to be limited and this is a constant problem that needs sophisticated approaches to deal with.

¹ Prof.Dr., Department of Educational Leadership and Management, University of South Africa, South Africa. E-mail: mahlavp@unisa.ac.za ORCID: 0000-0002-8251-750X

Theoretical Framework

This study looked at the constraints of space in enhancing giftedness of academics and administrative staff in higher education spaces via the lens of contingency theory. Contingency theory posits that organizational efficiency can be reached by matching organizational features to contingencies that reflect the organization's condition, e.g. space (McAdam, Miller, and McSorley, 2019). They argue that common contingencies (also known as contingency variables) such as space and culture can be used to mitigate the constraints of space. From this standpoint, academic staff and administrative staff can enhance their giftedness by better fitting and aligning their defined set of contingency variables, to their defined set of contingency variables.

Literature Review

The functioning of universities is influenced by the constraints that act upon it and any changes in constraints may lead to changes in the organisation of the system. Constraints are the limiting aspects that influence institutions and can be classified into individual, environmental and task constraints (Renshaw & Chow, 2019, p. 108). Whitchurch (2019, p.680), found that academics and administrative staff can find ways of mitigating what many see as stringent special impediments. Whitchurch (2019, p.684) believes that increased need for additional space and time, such as for research, has become apparent. Academics, as a result, are vying for their own space and time. They apply for grants and sabbatical leaves in order to get away from the university's confined environment and, as a result, create space and time to pursue their research interests by taking academic leaves. However, one way to do so is to look outside the institution for what could be considered "free space," where people are less constrained by institutional norms and space. As a result, the intentionality associated with being an itinerant academic could be seen as a form of escape valve or channel, allowing one to move outside a structural cage and the power to adapt or oppose behaviors related to space limits.

Concerns about limited access to higher education spaces, particularly at selective public institutions, might be exacerbated when the majority no longer has the same real or perceived access to higher education as it did previously. The association between the proportion of racial/ethnic minorities in a geographic area and compensatory responses by White inhabitants, known as racial or power threat, has been studied by academics. When faced with rises in either economic or political power threats by racial/ethnic minorities, particularly Black individuals, researchers have discovered that White residents engage in retaliatory actions—for example, public policies, racial attitudes—in general (Baker, 2019, p. 8). Due to space limits, Baker (2019, p. 201) discovered that states with a smaller number of White college-age citizens are more likely to approve a state affirmative action prohibition when focused on racial threat variables.

The distinction between elite, mass and universal systems of higher education. Eliteness is frequently depicted as a privilege enjoyed by some groups at the expense of others. The elite group receives social standing as a result of their power and prestige (Preece, 2019, p. 405). Tight (2019, p. 94) distinguished between elite, mass, and universal higher education systems. 'Elite' higher education systems enrolled fewer than 15% of the population; 'mass' higher education systems enrolled 15% to 50% of the population; and 'universal' higher education systems enrolled more than 50% of the population.

Despite the fact that diversity in admissions is an objective for all top tier institutions, wealthy families continue to have considerably more access to highly selective universities than less affluent families. While affluent families continue to dominate such institutions, selective postsecondary education has become a more competitive and, as a result, anxiety-inducing environment for present and aspiring elites. Each year, the most prestigious universities receive 30,000 to 40,000 applications, with schools like Harvard and Stanford accepting only approximately 5% of those who apply (Binder & Abel, 2019, p. 42). In some instances, affluent parents realized that they would have to put in more strategies to prepare their children to compete successfully for higher education admittance and, later, in the larger social system. "Maximally maintained inequality," in which parents encourage their children to pursue higher-level degrees (such as master's degrees on top of bachelor's degrees) in order to stay ahead of lower-income groups catching up in the educational credentials race, is one strategy used by wealthier segments. A second type of educational monopolization happens when privileged social groups engage in "successfully sustained inequality" by gravitating toward "more advantageous, selective, or prestigious portions" of the growing horizontally stratified higher education system (Ibid, 2019, p. 43). Academics and administrative staffs regularly experience inner and exterior limitations that drive their decisions, according to Weiss and Kivetz (2019, p. 519) in their real lives and in university spaces. The essay, on the other hand, focuses on choices imposed by internal restrictions, notably choices surrounding the utilization of space and location in universities.

Every process must include the road toward gifted performance, according to the developmental approach, which emphasizes the dynamic character of emerging skills. It should include domain-specific skill training and treatments, as well as self-regulated thinking, to reach high levels of expertise and exceptional performance independent of facility limits. From a developmental standpoint, both academics and administrative staff must consider cognitive and conative elements, as well as access to university facilities, to obtain exceptional results. Blumen (2021) revealed that despite their high levels of stress, young scholars from ethnically diverse backgrounds who were studying at a culture-sensitive university were engaged with their studies and maintained their academic achievement. Academics and administrative employees appear to be supported by the university. As a result, it appears that space/facilities and motivational processes are important determinants in the university's good performance of both academics and administrative employees.

Academics and administrative employees with high abilities can benefit or harm their psychological well-being by participating in university-based relationships and activities. When university space-based interactions are positive, academics and administrative employees, particularly those with exceptional ability, can maximize their potential. When universities create a safe environment for academics and administrative staff to develop proactive coping methods that allow them to enjoy life satisfaction, they have a better chance of achieving psychological well-being and academic success. Academics and administrative staff must be able to cope with stressors (such as space constraints) associated with university facilities to be motivated to work productively within the university spatial context. They must also have expectations of their ability to realize their potential regardless of the facilities available (Burkett-McKee, Knight, & Vanderburg, 2021).

People who have worked in the field of the talented have recognized that aptitude alone is not enough for success, and that other elements such as motivation, lack of issues, intellectual preoccupations, and suitable planning of educational institutions, such as facilities, are also important. Academics and administrative employees have a hurdle in this scenario because of the facilities. Poor information, insufficient time, a lack of physical space, and a lack of necessary abilities were all factors that influenced their poor performance on assignments. An option for enhancing engagement is to strengthen a sense of solidarity and social belonging among students, as well as for university administrators to provide cultural and social environments. According to the problems and issues raised by the talented students, things like forming expert groups of the talented for informing and counseling students about the development of research projects, scientific productions, or solving other educational and welfare problems by managers and university officials should be prioritized (Rahiminia, Yazdani, & Rahiminia, 2021). Factors like cheerfulness, resilience, self-efficacy, a good self-concept, excellent past academic accomplishment, and a supportive university atmosphere can improve the association between university facilities and giftedness. Social adjustment is essential in this piece to mitigate the limits created by university infrastructure (Schuur et al. 2021). define social adjustment as the ability to form satisfying relationships with others within the university, and emotional adjustment as the acceptance of one's personal spatial circumstances, which may include adapting one's attitudes and emotions in response to facility constraints. As a result, socially and emotionally well-adjusted accelerated academics and administrative staff in higher education should display adequate social and psychological responses to the university's space constraints.

Problem of Research

To determine the influence of space as a constraint in enhancing giftedness of academics and administrative staff in higher education spaces. The shortage of space in South African higher education institutions is a cause for concern; daily reports appear in the written and electronic media about the shortage of lived and conceived spaces. The question this paper explores is "To what extent do we know the constraints of space in enhancing giftedness of academics and administrative staff in higher education spaces?

Method

Research Design

This was a qualitative study that used interviews and documents. The participants were randomly selected, and they were readily available to the researcher. The aims of the study were to explore the perceptions and experiences of 17 academics, 4 administrative staff, and 1 chair of department, 1 school director and the analysis of policies. The qualitative data from both the interviews and documents (policies) was re-analysed, more specifically to understand ways in which constraints of space were being translated in practice, and ways in which the dynamics characterising a diversifying workforce might be explained. The aim was to show how individuals were negotiating the more fluid constraints of environments in which they found themselves and negotiating the spaces in which they worked.

Participants

The participants were randomly selected, and they were readily available. The aim of the study was to explore the perceptions and experiences of 17 academics, and 4 administrative staff about the constraints of space in enhancing the giftedness of academics and administrative staff in higher education spaces.

Table 1.Demographic Structures of Participants

		frequency	%
Gender			
	Male	11	52
	Female	10	48
Age			
	25-35 Ages	3	14
	35-45Ages	1	5
	46-55 Ages	5	24
	56-65 Ages	12	57
	66 + Ages	0	0
Administrative Position			
	Academics-Non-administrative position	17	81
	Administrative	4	19
Total		21	100

There were 11 males and 10 ladies among the participants. Academic posts were held by 17 people, while administrative ones were held by four people. The majority of the participants (12) were between the ages of 56 and 65. Five were between the ages of 46 and 55, one was 35 and 45, and three were between the ages of 25 and 35. Males took part in the study in greater numbers than females.

Research Instruments

Semi-structured Interview Form

The broad aim of the project was to look at the "The dynamics of higher education space and place in Sub-Saharan Africa". The objective of this paper was to look at the constraints of space in enhancing giftedness of academics and administrative staff in higher education. The research instrument was developed jointly by academics from the University of South Africa, University of Zululand, University of Zambia, Walter Sisulu University, Makerere University, University of Fort Hare, and the Vaal University of Technology. Seven experts investigated for content validity in the project.

The interview schedule consisted of 15 interview questions and the paper reports on questions 1 to 8. The selected questions are the following: (see Appendix 1)

- What are your experiences of the physical spaces within the institution?
- What are your experiences of technology within the institution?
- Who controls the utilization (and maintenance) of the physical and technological spaces?
- What is your role in ensuring that the physical spaces are enabling?
- Who do you think contributes to the constraints of the physical and technological spaces?
- What should be done to attend to the constraining factors about the physical and technological spaces? Who should do this?
 - What should be done to enhance the enabling spaces? Who should do this?
 - In your view, how do the physical and technological spaces relate to where the university is located?

Data Analysis

The statement of the participants was recorded using a tape recorder and their statements were transcribed verbatim. Thereafter, the statements were interpreted using interpretive paradigm to get meaning about the perceptions of the participants. Themes emerged from the statements and are explained under discussion.

Procedure

The research began in 2018 and it is continuing. The paper was compiled at the University of South Africa. This is an empirical paper that was compiled from a bigger study called "The dynamics of higher education space and place in Sub-Saharan Africa". The participant universities are University of South Africa, University of Zululand, University

of Zambia, Walter Sisulu University, Makerere University, University of Fort Hare, and the Vaal University of Technology. The paper used a qualitative technique, interviews and an interpretive paradigm.

Results and Discussion

This section presents the results that emerged from the interviews transcripts and the document analysis of the policies. The findings suggest that space as a constraint in utilisation of higher education spaces is of serious concern in a South African higher education institution and is one of the internal factors that exacerbate poor performance of academics and administrative staffs. At the researched institution some staff members are sharing offices and they don't have privacy. As for parking, this is a serious problem if staff members come late to work and they must park far from their offices and at times find their cars windscreens pasted with orange stickers if they have parked in those spaces that are not parking spaces. In one building the elevator, in most cases it was found that only one out of three elevators were working. It was found that the deanery management along with Chairs of Department are aware what the staff members are going through in terms of space, but they don't want to voice their opinions. The university has a large open space which can be used for building of new office space and parking area.

Theme 1. University Staff Experiences of the Physical Spaces

Competencies are domain-specific and heavily dependent on circumstance, according to Elatia and Ippercial (2015). To put it another way, the context and environment will determine which ones should be used and how they should be adopted and applied. Choosing appropriate talents is heavily influenced by what is valued most highly by university stakeholders. The stakeholders involved in this process determine how competencies are used, implemented, and interpreted. Stakeholders are the driving force behind the deployment of skills from a pragmatic standpoint. They are, without a doubt, at the heart of the entire operation. University administrators, potential employers, students at various levels, professors at various ranks and with various duties, financing organizations, and government offices are all possible stakeholders. The participants are of the view that their experiences are terrible, because they are sharing offices and they don't have privacy, as for parking is a serious problem if they come late they park far from their offices and at times find the windscreen of their cars pasted with orange sticker. The parking space is also a serious issue that need to be probably addressed if they are not parking far, they find a sticker on their cars' windscreens and for them it is difficult to remove. At times their working conditions are tight, because there is not enough room for all their belongings and things. They find it unsafe as their cabinets have no keys to lock their stuff as some of them work with sensitive files (master's & doctoral students' files), and in other department some people are three in the office and its very crowded. Office space is a serious problem in the institution because staff are sharing and as they are sharing they are assigned to different tasks, as for some staff are sharing work with exam and assignment scripts and they work with master's and doctoral files, when it is time for assignments and examination periods about 20 000 scripts comes to their offices then they find their office space very small and the can't move around.

The major experience is that it is much of an inconvenience for them. Some other times you will find that the person that they have to share with is off a fixed term contract, in the next two or three months the person will be gone and then they have to adjust to another person coming in. That is why for some it is an inconvenience in terms of the physical part and also the emotional part. Physical spaces, because when they were appointed, some didn't have an office. Some remember when they had to report to the administrator's office up until they were sent to the library to go and report there, because they wanted to access the internet and at some stage they finally got some offices in a distant campus which is in another campus and during all that time, that physical space wasn't working well for some because they couldn't do anything with regards to their academic work.

Regarding the issue of space in an institution of higher learning to some staff members find that space in an institution where they are working, it is a big problem, because people are sharing offices, because it is an Open Distance e-Learning institution, where they need to have space but unfortunately because of the number of learners that have increased, people are staying in an office where they are double packing and they think the issue there is when they are double packing. It is not easy for them to bring out the quality of work that will enhance their giftedness because if someone is doing their work within the crowded office space, then, they disturb one another and currently the issue of the resources, they found that a whole crew of people they are using one resource. They would give an example, a machine, a photocopy machine was used by a lot of people and at the end of the day it would be costly because if each and every one was using that particular machine, it would be broken every time. So, the issue of space is a problem because it is not balancing the population of the building itself. In support of the findings in this paper, Sturtevant, Huebner and Waite (2021) confirmed the problem of space in their study titled: An Evaluation of On-Campus Lactation Spaces for Student-Parents". In support of the constraints of space, they identified two primary

challenges with space arrangement. First, the lactation rooms could become overcrowded. Many students had lunches and breaks around the same time, so rooms were in high demand during these periods. Second, while allowing multiple students to use the space simultaneously increased availability, this arrangement reduced privacy.

Theme 2. Experiences of Technology within the University

In the present technological environment, Vershitskaya et al. (2020) determined that e-learning is an important instrument that may be utilized to mitigate the problem of location. A hybrid combination of learner-centered elearning, personalized courses, and audio/video online communications can alleviate the problem of student-teacher separation. E-learning has a significant impact on academic performance, particularly when it combines a variety of activities, such as aided learning, blended learning, and e-learning. As a result, in the education sector, learning management systems (LMS) are regarded as one of the tools for this type of learning. Similarly, Aras and Huber (2009) discovered that mobile access to the "Social Web" must take into account various contextual aspects and provide an understandable interaction paradigm in order to deal with large amounts of user-generated data in social networking applications. In support of Aras and Huber (2009), Absah, Karina, and Harahap (2021) discovered that educational facilities are tools and equipment that are directly used to support the educational process, especially the teaching and learning process, such as buildings, classrooms, tables, chairs, and learning tools and media, whereas educational infrastructure is a learning facility that indirectly supports the course of the educational or teaching process, such as campus location and transportation. Laptop and network were not a problem, the only problem they face is the elevator, because in most cases they would find that only one out of three elevators were working. Elevators are not working regularly as expected. Elevators are problems they do jam sometimes they have to take stairs from ground floor to the 7th floor and some of them have health issues they can't climb those stairs so the university should fix the elevators. Their ICT is bad, because their support staff with technology is not good, especially if they are called, the ICT people will always be in a phone for half an hour without any answer, they think in this category the university needs a lot of improvement. Parking is a disaster because sometimes they do find it sometimes they don't. They think each building must have a backup generator in case of cable theft.

With regards to network and computer they are happy. The technological spaces they would specifically be talking about the technology. How the system is programmed in terms of support, especially their section as academics. If they could be evaluating from one ten in that order, they would give it less than a 5. The reason, specifically for that was that every time when they would be having something to do with the technology, but one has to be working at or with, most of the times they would have the problems of access. So more than anything else it is a serious problem.

The experience also they wouldn't really say it is very good simply because been given a laptop that they can't use effectively sometimes, especially for their subjects was not really helping them to maximise their work. Nonetheless they are happy then because they have laptops allocated to them, there is technology that they can access. However, they would want to think that people would need to be trained around the campus. Some of their experiences was based on the technological space within the institution, some of the technological equipment, they can't reach them because if they need to print one copy, it takes some time to move from one office to another and it is very expensive, because if they move from here to the next level to go and do everything, it takes a lot of time and they lose whereas they would be doing something.

Theme 3. Control and Utilization of Physical and Technological Spaces

Waheed and Gilani (2021) conducted a phenomenological study to better understand PhD students' spatial experiences in universities, and one participant stated, "This office provides me with the energy to live and work... This office, in a sense, protects me, and I feel secured while being with my colleagues. I own this office and it owns me." in the same study a question was posed to another participant "What is it like for you being and working in this place"? He was sitting in his laboratory and remarked that: "I am sitting in this small corner of my office, which is not ideal for work. I feel like an isolated person here. I don't think there is something that can stimulate me. Nevertheless, this is a worthwhile place for me because I would not be so active and fall asleep if I worked at home. Although, I am not in contact with most of the colleagues working here". At universities, space management is extremely crucial. It was shown that lecturers' capacity to encourage active engagement from students is required for students to retain lecture materials more effectively (Absah, Karina & Harahap, 2021). Mtonga et al. (2021) discovered that the survival of universities is heavily reliant on the income generated, and that tuition fees are a consistent and reliable source of income for the institutions; therefore, available infrastructure must be put to the best possible use to maximize income generation. For the control of technological spaces, they think ICT was responsible and physical space the University Estate is responsible and there is a problem.

At the moment they cannot just be specific for giving names, but they know that for technology they talk of ICT that would be a senior, an acronym that they usually use and for physical space they wouldn't even know.

In some departments, those who control space are the Heads of department and the senior administrators, and it was up to them to decide, because there are people who are appointed they have applied but knowing that they are coming, but when they come, they will find that there are not laptops to be given to them. So that kind of space controlling is with their office or vicinity.

The university itself is the one that is controlling space and also it makes it a point that at the end of the day university needs to maintain that but remember that what the participants said before is that space was used by a lot of people, one equipment for a lot of people. Then it would affect the institution directly or indirectly.

Theme 4. Enablers of Physical Spaces

Systems are the formal and informal aspects that enable the delivery of an online (OL) strategy, and their structure must incorporate technology (Internet connectivity and learning device availability) as well as support for online platforms. While students had access to free Wi-Fi through university hotspots throughout their time on campus, other students may not have Internet connectivity at home. Students suffer technical issues at home when navigating through OL platforms, in contrast to traditional teaching where students gathered in a setting and had access to instant support from educators (Roslan & Halim, 2021). Administrative employees are required to perform well, be capable, dependable, and willing to carry out their responsibilities by following good and efficient procedures and methods and completing work regularly and precisely. Administrative employees must demonstrate speed, responsiveness, polite and learned behaviors and appearances, a display of trust and conviction, and true attention to every element that demands their assistance in their task (Absah, Karina & Harahap, 2021). There is nothing the participants as administrators could do, because they think if the university cannot appoint people responsible to deal with the matter of physical spaces. There are professors who are working from home who don't have offices on campus. They do sometime accommodate them in their offices and clear their desk for them to work for those few hours. They don't play any role as administrators, but they think people who should is University management and University estate to ensure that all staff fit in and there is no space problem. The role that some administrative staff are playing is to make sure that the information is escalated to the people who are in charge. Now recently in 2019 some staff members were complaining as colleagues in their departments to say that the ICT system was failing them, and they then wrote a memo with the advice of their Head of Department to the ICT to say that academics are experiencing specific problems that relates to ICT and the role that they have played so far, is to escalate their concerns to ICT department. The participants were of the view that the absence of proper training at different levels can help them. The staff members think that their role is to make sure that they deliver what they are supposed to deliver as per requirement of their contracts, and in actual fact, what they need is to have the space that they will be able to utilise. Now they don't have that particular space. The increased emphasis on auditing academic teaching space, the rapid expansion of the student population, and the introduction of new technologies; a wide range of teacher education educators' and to mainstream physical, discursive, and relational conditions the university provides have all influenced academics' practices, according to Santos and Soler (2021).

Theme 5. Causes of Constraints of the Physical and Technological Spaces

According to Sorathia and Joshi (2009), social networking websites allow individuals and groups to engage with one another through chat rooms and share personal information, ideas about a topic, and get to know new people. This means that, while being a student at a university, you can make friends from other universities, learn about other cultures, learn new languages, and so on. They also recommend that a number of websites and mobile applications be devoted to establishing friends, professional contacts, mobile chat, picture-video sharing, instant messages, photo blogging, mobile gaming, and communicating with students and coworkers, among other things. Mobile devices are pervasively connected to the global network as well as to people as a result of technical advancements in recent years. Social networks have migrated to the mobile platform as a result of the development of location-based services and the increased adoption of mobile devices such as cell phones, gaming machines, and handheld computers by a wide range of users. The participants believe that the deanery management along with Chairs of Department know what they are going through, but they don't want to voice their opinions. The number of staffs are increasing, and the availability of resources is limited and all of them cannot work effectively on one system because it would start freezing and this cause delay in production. Everyone within the university contributes to the constraints of both physical and technological spaces, the staff of the university are so many but with few offices. All of them relied on one system and when the system is down they all go home, and another day is wasted. They would not specifically point to a particular person, but every time when they go to, for an example to ICT people, more than anything else, there is that element of people in terms of their appointment contracts, so more than anything else they feel that they cannot do more than what they can do in terms of what is available to them.

They wouldn't say who must do what, but they would say all of them need to really do something, like for example if they know there are people that are coming to join the university, definitely there should be space for them to occupy, physically and have a space and the technology should also be enhanced to such that it is user friendly to people. The newly appointed people have to be trained on the use of myUnisa and many other ICT tools that are available. The newly appointed people should be trained in using Podcasts and all the things related to ICT, because UNISA is an ODL university. The participants think that the physical planners in the institution never planned it ahead, because if they had planned ahead, the issue of space won't be a problem, but they failed to plan it ahead. If the university increases the numbers of learners in an institution it means that they need to increase the resources itself. Learning spaces, according to Pawlicka-Deger (2021), are "places of engagement where often disjointed thoughts and ideas, that have been inchoate, begin to cohere as a result of the formation of some kind of suspension from regular life." Staff typically perceive that their notions of learning, teaching, knowledge, and identity are being questioned in such places, and they realize that they must decide how they will respond.'

Theme 6. Constraining Factors about the Physical and Technological Spaces

Poor infrastructure has a negative impact on teaching, research, learning, and students' health and safety, according to a study by Oghiagbephan (2017). The quality and quantity of human and material resources put in place in institutions of higher learning determine the quality and quantity of higher education. The quality of education in universities will be harmed by a lack of infrastructure such as office space, student hostels, libraries, and electricity. The institution has large open space they think it should be used for building of new offices space and parking lot. The university should look at other options, maybe for those who are not sharing must start sharing, but they must make it limited like two people per office and as far as technology their system need to be upgraded on a constant basis, as technology keeps changing and the system must also keep up with those changes because they are trapped on this old windows and they find that there was already latest models of soft wares that was outdated but they still trapped in this old version.so system need to be modified on a regular basis and they are talking about the speed of the internet. For example, some for instance at the banks they use fingerprints and the data comes up, stuff like that the university needs to look into it. They know that it's expensive, but it can help a lot. Firstly, of all the university must provide those staff members who are sharing with the big offices and build new office space on the campus as they do have enough open space which was not used. Those who work with the exam scripts must be given their own offices since the number of modules in the departments has increased. There must be a committee that works with the problem of office space and the allocation of offices to staff members. Elevators must be updated and serviced on a regular basis or even replaced if possible.

The participants think more than anybody as they want to believe it is cyclical wherein they have different components and from the components they would have systems that are put in place, but what they know is that all the system to function properly, every other component has to be in play, then they would be talking about quality for the institution. They believe that the spaces to be enabling they should be maintained. To be sustained and then they would want to feel that every individual in his or her own spaces are responsible for that. They suggest that there is a need to make sure that the ratio of the learners, go hand in hand with what the staff provisioning have. So, the management of the university should make sure that at the end of the day things are balanced in the institution in terms of space. They believe that there is a lot of imbalances. Peimani and Kamalipour (2021) found that space for developing core professional qualities among students, such as communication, interpersonal, and practical skills, and maintaining student retention rates, as well as training and support to effectively use online technologies and address technical issues and cyber security risks, are seen as major challenges for online education.

Theme 7. To Enhance the Enabling Spaces

Mtonga, Twahirwa, Kumaran, and Jayavel (2021) discovered that the problem in higher education may be divided into three subproblems in the education domain: space allocation, new student allocation, and students' projects allocation. The challenge of space allocation entails allocating resources to specific space locations, such as office space, in order to meet varied demands and limits. The goal here is to guarantee that no space is wasted or overused. The placement of students into classes to match the capacity in the relevant classes is a new student allocation problem. The capacity of each class and assigning students with the same rankings to the same classes are two examples of hard limitations to meet in this problem. Student project allocation refers to how to allocate a student to a case while keeping both the student's and lecturer's capacity limits in mind. According to Denney (2021), higher education employees are increasingly switching between professional and academic jobs in order to progress their careers in academia, as well as taking on new and emergent quasi-academic roles in response to rising student numbers. Rather than being bound by the traditional academic structure, individuals in the industry are increasingly likely to develop their own portfolio

career based on their own choices. Furthermore, employees of all ages and types are becoming increasingly desirous of flexibility, which aligns well with the institutions' need to cover more services over longer periods of time. Each college must assign one or two people and create committees that deals only with the spaces. The university needs to get people to come and enhance the staff members' offices, come and check what needs to be done in the offices, how they can fit everyone in. The university is advised to appoint people to enhance spaces in and out of office, committees for spaces must be created and matters should be resolved. They think they have management at different levels, so they would say each unit in terms of responsibilities of management should be able to take care of what it is supposed to be doing. Some of the participants are not sure what to do to enhance space at the university because as an Open Distance e-Learning institution, many a times the staff members are dealing with people that they can't even see. So, in their view some participants suggest that policies and rules for both academics and students should be in place and adhere to. The participants advise that the university needs to make sure that everything that is here for now, to make sure that they enhance them, and these things should be done by each and everybody in the university. Not a certain people who do 1, 2, 3, 4, but the issue here is to make sure that at the end of the day, everybody is having resources and the space where they can work in.

Theme 8. Physical and Technological Spaces Relate to Where the University is Located

According to Absah, Karina, and Harahap (2021), online learning allows students to maintain their learning processes while having more flexibility in their schedules. Some students, however, believe that online learning is more difficult than traditional learning because of issues such as internet data quotas, network stability, laptop availability, better understanding of learning materials compared to face-to-face meetings, university readiness to provide online learning facilities and infrastructure, and partial readiness of lecturers and students in operating online learning systems quickly, such as preparing digital lecture materials. The participants believe that where the university is located is fine, because there is a lot of space for new development and enough space for building offices. The university is located at the right place is just that there is a need to place out staff correctly. It was found that there are people who are not sharing offices and it is suggested that those people can also share like others they think it won't be a problem and other problems comes with the contract people (staff). It was found that some of the contracts are not renewed and those people leave, and the space was made available. So, the university will never have a fixed number as to how many people belong to an office, but if the people are permanent then it will be known how many people are placed in the university offices. And the university statistics won't change because the university will know that people are placed permanently and there is space then they can work around who is based where permanently. To the participants, the physical and the technological space, refer to the institutional place. To them the university where is located is fine, but the context that the university needs is to make sure their programs are of good quality to the students, because the university has a challenge of space. Kim and Kutscher (2021) believe that the location of the university is very essential. Although higher education institutions frequently regard students with disabilities as a group, students with different disability kinds have varied requirements and so face different hurdles to postsecondary achievement and growth. Students with visible disabilities (e.g., sensory disabilities, physical disabilities) and students with less visible disabilities (e.g., learning difficulties) may experience different obstacles in higher education spaces.

Conclusion

This paper investigated 'To what extent do we know the constraints of space in enhancing giftedness of academics and administrative staff in higher education spaces?' From this main research question, an overall conclusion on the study was that the university will never have a fixed number of staffs in offices, but if the people are permanent then it will be known how many people are placed in the university offices. And the university statistics won't change because the university will know that people are placed permanently and there is space where they can work. Regarding the issue of space some staff members found that space at the university is a big problem, because people are sharing offices. Findings in this study highlighted that space as constraints in utilisation of higher education spaces is of serious concern in a South African university and is one of the internal factors that exacerbate poor performance in academics and administrative staff. Because of contracted staff instead of being permanently employed, the university will not have a fixed number of staffs in offices. But if the people are permanently employed, then it will be known how many people are placed in the university offices.

The justification of the main conclusion is based on one insight which highlighted that recently in 2019 some staff members were complaining that the ICT system was failing them. The results are similar to Renshaw and Chow (2019) findings that constraints are the boundaries that shape self-organisation and can be separated into categories, such as, individual, environmental and task constraints. The university is located at the right place is just that there is a need to

place out staff correctly. It was found that there are people who are not sharing offices and it is suggested that those people can also share like others. The university needs to get people to come and enhance the staff members' offices, come and check what needs to be done in the offices, how they can fit everyone in. The university is advised to appoint people to enhance spaces in and out of office, committees for spaces must be created and matters should be resolved. Those who work with the exam scripts must be given their own offices since the number of modules in the departments has increased. There must be a committee that works with the problem of office space and the allocation of offices to staff members. Elevators must be updated and serviced on a regular basis or even replaced if possible. Everyone within the university contributes to the constraints of both physical and technological spaces, the staff of the university are so many but with few offices. All of them relied on one system and when the system is down they all go home, and another day is wasted.

Limitations of the Study

The study represents a snapshot of constraints of utilisation of space, and although it is not possible to make broad generalisations from the numbers involved, it is likely that they are indicative of trends in South African Higher Education Institutions. The report is about an investigation in one institution of higher learning.

Recommendations

The study recommends that there is need to utilise space and policies effectively. A well-ordered HEI is also a less constraining environment. HEIs that experience problems of shortage of lived and conceived spaces need active academics, administrative staff, chairs of department, directors and policies that monitors space; recommends and redress enabling measures; and oversees policy implementation. Enabling environment should be created for staff through improved conditions of service, provision of basic infrastructures, and information communication technologies and internet connectivity.

Acknowledgment

This paper emanates from a larger project called: The dynamics of higher education space and place in Sub-Saharan Africa'. The participant universities are University of South Africa, University of Zululand, University of Zambia, Walter Sisulu University, Makerere University, University of Fort Hare, and the Vaal University of Technology.

Biodata of the Author



Prof. Dr. Vimbi Petrus Mahlangu [BA. ED; BED; M. ED; PHD] is a Full Professor at the University of South Africa, Department of Educational Leadership and Management. He had extensive writing, supervision, and publication experience in education. He had published books, book chapters, articles and supervised M and D students to completion. He presented papers at national and international conferences. **Affiliation:** University of South Africa **E-mail:** mahlavp@unisa.ac.za **Orcid:** 0000-0002-8251-750X **Phone:** (+27)124298550

References

Aras, H., & Huber, D. (2009). Mobile Interaction with Geo-Notes: A Gesture-Driven User Interface for Browsing User-Generated Content in Mobile Web Applications. In: D. Tavangarian, Kirste, T., Timmermann, D., Lucke, U., & Versick, D. (Eds).Intelligent Interactive Assistance and Mobile Multimedia Computing. *International Conference, IMC 2009 Rostock-Warnemünde*, Germany, November 9-11, 2009 Proceedings IMC 2009, CCIS 53, pp. 25–36.

Absah, Y., Karina, B., & Harahap, R.H. (2021). Strategies to Improve Student Satisfaction Through the Quality of Online Learning Facilities and Infrastructure, Characteristics of Academic Staff, Lecturers Competence, and Good University Governance in Medan. Systematic Reviews in Pharmacy, 12(3), 671-675.

Baker, D. J. (2019). Pathways to Racial Equity in Higher Education: Modeling the Antecedents of State Affirmative Action Bans. *American Educational Research Journal*, 56(5), 1861–1895. DOI: 10.3102/0002831219833918

Binder & Abel, (2019). Symbolically Maintained Inequality: How Harvard and Stanford Students Construct Boundaries among Elite Universities. *Sociology of Education*, 92(1), 41–58.

Blumen, S. (2021). *Talent Development, Cultural Diversity, and Equity: The Challenge of the Andean Countries* (pp. 21-35). In: Sternberg, R.J., & Ambrose, D. (Editors): Conceptions of Giftedness and Talent. Springer Nature: Switzerland.

Burkett-McKee, S., Knight, B. A., & Vanderburg, M.A. (2021). Psychological Well-Being of Students With High Abilities and Their School's Ecology: Is There a Relationship? Roeper Review, 43(3), 197-211. doi.org/10.1080/02783193.2021.1923593

Denney, F. (2021). A glass classroom? The Experiences and Identities of Third Space Women Leading Educational Change in Research Intensive Universities in the UK. Educational Management Administration & Leadership, 1–21.

Elatia, S., & Ipperciel, D. (2015). Towards a 21st Century Competency-Based Model of Higher Education: The Pragmatics of Accountability. - *International E-Journal of Advances in Education*, 1(1), 5-12.

- Kim, M.M., & Kutser, E.L. (2021). College Students with Disabilities: Factors Influencing Growth in Academic Ability and Confidence. Research in Higher Education, 62, 309–331.
- McAdam, R., Miller, K., & McSorley, C. (2019). Towards a Contingency Theory Perspective of Quality Management in Enabling Strategic Alignment. *International Journal of Production Economics*, 209, 195–219.
- Mtonga, K., Twahirwa, E., Kumaran, S., & Jayavel, K. (2021). Modelling Classroom Space Allocation at University of Rwanda-A Linear Programming Approach, Applications and Applied Mathematics: *An International Journal* (AAM), 16(1), 724 738.
- Oghiagbephan, A.D. (2017). Re-Focusing Higher Education Challenges in Nigeria in the Present Dispensation: A Tool for Counselling. *Journal of Qualitative Education*, 13(1), 1-8.
- Pawlicka-Deger, U. (2021). Place matters: Thinking about spaces for humanities practices. *Arts and Humanities in Higher Education*, 20(3), 320–338.
- Peimani, N., &Kamalipour, H. (2021). Online Education and the COVID-19 Outbreak: A Case Study of Online Teaching during Lockdown. Educational sciences, 11(72), 1-16.
- Preece, S. (2019). Elite bilingual identities in higher education in the Anglophone world: the stratification of linguistic diversity and reproduction of socio-economic inequalities in the multilingual student population. *Journal of Multilingual and Multicultural Development*, 40(5), 404-420. DOI: 10.1080/01434632.2018.1543692
- Rahiminia, E., Yazdani, S., & Rahiminia, H. (2021). Investigating and analyzing the situation of the talented students of shahid beheshti university of medical sciences: a qualitative study. *Journal for the Education of Gifted Young Scientists*, 9(3), 269-276. DOI: http://dx.doi.org/10.17478/jegys.946606
- Renshaw, I., & Chow, J-Y. (2019). A constraint-led approach to sport and physical education pedagogy. Physical Education and Sport Pedagogy, 24(2), 103-116. DOI: 10.1080/17408989.2018.1552676
- Roslan, N.S.; Halim, A.S. (2021). Enablers and Barriers to Online Learning among Medical Students during COVID-19 Pandemic: An Explanatory Mixed-Method Study. *Sustainability*, 13(6086), 1-15. https://doi.org/10.3390/su13116086
- Santos, D., & Soler, S. (2021). Pedagogical practice as 'feeling-thinking' praxis in higher education: a case study in Colombia. Teaching in Higher Education, DOI:10.1080/13562517.2021.1885021
- Schuur, J., Van Weerdenburg, M., Hoogeveen, L., & Kroesbergen, E.H. (2021). Social–Emotional Characteristics and Adjustment of Accelerated University Students: A Systematic Review. *Gifted Child Quarterly*, 65(1) 29–51.
- Sorathia, K., & Joshi, A. (2009). My World Social Networking through Mobile Computing and Context Aware Application. In: In: D. Tavangarian, Kirste, T., Timmermann, D., Lucke, U., & Versick, D. (Eds.): Intelligent Interactive Assistance and Mobile Multimedia Computing. International Conference, IMC 2009 Rostock-Warnemünde, Germany, November 9-11, 2009 Proceedings
 - IMC 2009, CCIS 53, pp. 179-188, 2009.
- Sturtevant, C., Huebner, C., & Waite, W. (2021). An Evaluation of On-Campus Lactation Spaces for Student-Parents. *Journal of Human Lactation*, 37(1), 174-183.
- Tight (2019). Mass Higher Education and Massification. Higher Education Policy, 32 (1), 93-108.
- Van Alteren, I. (2021). Effect of specificity of guidance on gifted children's learning process, learning outcomes, mood and flow during inquiry-based learning in science education. Faculty: Behavioural, Management, and Social Sciences Master: Educational Science and Technology University of Twente, Enschede.
- Vershitskaya, E.R., Mikhaylova, A.V., Gilmanshina, S.I., Dorozhkin, E.M., & Epaneshnikov, V.V. (2020). Present-day Management of Universities in Russia: Prospects and Challenges of E-learning. *Education and Information Technologies*, 25, 611–621.
- Waheed, S.A., & Gilani, N. (2021). A Phenomenological Study on Understanding Doctoral Students Spatial Experiences in the Universities. *Orient Research Journal of Social Sciences*, 6(1), 95-105.
- Whitchurch, C. (2019). From a diversifying workforce to the rise of the itinerant academic. *Higher Education*, 77, 679–694. https://doi.org/10.1007/s10734-018-0294-6
- Weiss, L., & Kivetz, R. (2019). Opportunity Cost Overestimation. Journal of Marketing Research, 56(3), 518-533.

Appendix 1.

Semi-structured Interview Questions

Semi-structured Interview Questions

- Q1. What are your experiences of the physical spaces within the institution?
- Q2. What are your experiences of technology within the institution?
- Q3. Who controls the utilization (and maintenance) of the physical and technological spaces?
- Q4. What is your role in ensuring that the physical spaces are enabling?
- Q5. Who do you think contributes to the constraints of the physical and technological spaces?
- Q6. What should be done to attend to the constraining factors about the physical and technological spaces? Who should do this?
- Q7. What should be done to enhance the enabling spaces? Who should do this?
- Q8. In your view, how do the physical and technological spaces relate to where the university is located?
- Q9. What are you passionate about as an administrator?
- Q10. How do the social relations at the institution enable the growth of this passion? Or your development as an administrator?
- Q11. How do social relations in the institution constrain your development as an administrator?
- Q12. What would you attribute to the cause of these enabling (and/or constraining) social factors?
- Q13. How might the enabling factors be enhanced or consolidated for sustainability?
- Q14. How do XXXX policies and rules enable your development?
- Q15. How do they constrain your development? Possibilities of learning