

Understanding Student-Teachers' Teaching Method Preferences and Rationales: Insights from Selected University Colleges in Tanzania

Innocent Buberwa Rugambuka

Department of Educational Psychology and Curriculum Studies, Faculty of Education, Dar es Salaam University College of Education, P. O. Box 2329 Dar es Salaam – Tanzania

Email: innocent.buberwa@duce.ac.tz; innoruga@gmail.com

Abstract

This study reports the teaching method preferences and rationales of student-teachers from Dar es Salaam and Mkwawa University Colleges of Education. A questionnaire with closed and open-ended items was administered to 335 participants and analysed through descriptive statistics and thematically. The findings indicated that transmission-based methods, particularly lectures, were slightly preferred most, while interactive ones, such as group discussions, were somewhat less preferred. The provided reasons for preferring transmission methods include content coverage, teaching time, frequency of use, class size, and improvement of listening and note-taking skills. The reasons for interactive methods were that they encourage participation, collaboration, confidence, knowledge sharing, and stimulation of critical thinking and creativity. The study concludes that the lecture method remains the dominant university teaching approach, partly because learners prefer it. However, the benefits of interactive learning cannot be ignored. Thus, the study recommends blending traditional lectures with interactive elements to enhance student engagement and participation.

Keywords: *classroom teaching, modes of teaching, student-teachers, teaching preferences, university students*

DOI: <https://dx.doi.org/10.56279/ped.v42.suppl.i.10>

Introduction

Despite using various teaching methods in universities to educate students, some methods remain prominent in many courses. Some methods used are transmission in nature and position students as recipients of the lecturers' talk. In contrast, others are interactive and integrate students' voices as almost equal classroom partners (Marmah, 2014). Research indicates that transmission methods dominate university classrooms and that the lecturers use about 80% of the talk time to instruct students and control what happens in the classroom (Phipps et al., 2001). Research also reveals that by the time university students complete their study period, they have

endured thousands of instructional hours in different methods that substantially influence their learning (Mermelstein, 2015). The methods used in teaching are, in most cases, lecturer-dependent, whether interactive or transmission models. Most lecturers agree that when it comes to choosing the better teaching methods, their actual reference point for choice is most likely themselves (Chien, 2014; Shengji et al., 2009). They choose the methods that make them feel comfortable when teaching, hoping students will learn directly from them, and in case, the learning does not occur as expected, students are at the centre of blame. Principally, the primary focus of the teaching and learning process, especially within a competence-based curriculum, should be on the students, who are central to the process, hence student-centred teaching methods (Mallillin et al., 2021; Mkonongwa, 2018). For that reason, the choice of methods ought to prioritise students as the targeted beneficiaries. More often than not, the choice of methods must envision the students' learning interests. According to Mermelstein (2012), when teaching methods align with students' learning interests, they acquire more knowledge and skills, leading to better performance. This study builds on that argument by examining the preferences and perspectives of Bachelor of Education student-teachers from selected university colleges in Tanzania.

Context of the Study

University teacher education in Tanzania began to be provided at the University of Dar es Salaam (UDSM) a few years after independence as an essential move toward obtaining graduate teachers to teach in teacher colleges and secondary schools. UDSM was the only Tanzanian university that provided higher education until the 1990s, when other public and private universities were established (Wangwe & Charle, 2005). Following the liberalisation of education provision in the 1980s, private universities were established, and teacher education began to be provided in private universities (Ministry of Education and Culture [MoEC], 1995). Meanwhile, there was more demand for teachers to meet the expanding enrolment of students in rapidly growing higher educational institutions. Since then, universities have provided undergraduate and postgraduate higher education degrees to meet teachers' demands at various academic institutions (Ministry of Education and Vocational Training [MoEVT], 2008).

In 2005, Tanzania transformed its two teacher colleges (Chang'ombe and Mkwawa) into University Colleges (Dar es Salaam and Mkwawa University Colleges) exclusively for preparing graduate teachers, researchers and experts in the education sector (Chambulila, 2013). The Colleges are the constituents of the University of Dar es Salaam. They provide several teacher education programmes, including Bachelor of Education in Arts (B.Ed. Arts) and Bachelor of Education in Science (B.Ed Sc.). The two programmes are meant to prepare tutors who could

serve in teacher colleges to train certificate and diploma teachers for teaching in primary and secondary schools. The programmes are constituted of educational courses, a teaching subject (arts or science), two general courses (communication skills and development studies), and a teaching practicum (University of Dar es Salaam [UDSM], 2021). They are run for three years, and each year, student-teachers undertake several courses based on the area they intend to specialise in. Based on the course syllabi, the suggested mode of delivery of the courses includes face-to-face lectures and seminars.

However, research indicates that, in recent decades, university classroom teaching in the UDSM has been changing to integrate computer-assisted educational technologies (Mtebe & Raphael, 2017; Twaakyondo & Munaku, 2012). The technologies have improved classroom teaching by including interactive methods such as group discussion forums, pair work, and inquiry methods (Twaakyondo & Munaku, 2012). Despite the improvement, transmission methods such as lectures and demonstrations still dominate classroom teaching “based on the information transmission fallacy that students learn just by being told” (Schmidt et al. 2015, p.13) . While conventional teaching methods dominate the classrooms, efforts have been made by the government of Tanzania since 2005 to review educational curricula to integrate competency-based elements (Tilya & Mafumiko, 2018). The review placed a particular emphasis on interactive teaching and learning methods to align with competency-based education (Kafyulilo et al., 2013).

On the contrary, research indicates mixed feelings about using transmission and interactive teaching methods at the university level (Makunja, 2015; Nzima, 2016). Teaching in university classes is said to be partly conducted through interactive methods, while a large part of it is carried through conventional transmission methods, particularly lectures. This scenario has prompted research on the preference for teaching methods among student-teachers in the university because they are the primary beneficiaries of the teaching processes. The teaching methods preferred by student-teachers to be professional teachers in their training will likely influence their future teaching practices. Regarding this view, Aynalem et al. (2015, p. 1) note that “preferences on the teaching methods are vital to creating conducive emotional environment thereby bringing effective teaching and learning process.” As Tanzania substantially emphasises improving the teaching and learning standards at various levels, understanding university student-teacher teaching method preferences is imperative. It is crucial to note that more recently, in 2023, the government is underway to review the educational curriculum at all levels, aiming at ensuring that competency-based education is provided to students. It is envisioned that by 2027, a new curriculum will have been implemented in schools and higher learning institutions.

Research questions

This study was guided by two research questions as follows:

- i) What type of classroom teaching methods do university student-teachers prefer in the teaching and learning process?
- ii) What are the rationales for student-teachers' preference of classroom teaching methods at the university level?

Literature Review

Conceptual framework

Various teaching models are suggested in the teaching profession. The models comprise a set of theoretical specifications, rules, and regulations for how the teaching will occur. They determine the quality of student learning when they are appropriately used (Capar & Tarim, 2015; Pech et al., 2021). King (1993) identifies three teaching models: transmission, dialogue, and transformative. The transmission teaching model is considered the oldest in the teaching profession. It is a teacher-directed model because teachers mainly determine the teaching and learning configuration and, therefore, the centre of the teaching and learning process (Abdulbaki et al., 2018). The overarching role of the teacher in this model is being the sole dispenser of knowledge, arbitrator of accuracy, and the ultimate evaluator of learning. Students in this model are placed as regurgitation instruments of teachers' instructions to be reproduced during examinations (Freeman et al., 2014; Heasty et al., 2012; Kaur, 2011). The substantive and representative methods include lecture, demonstration, and drill teaching methods. Birgili (2016) notes that in the transmission model, students regard teachers as unique authorities, and in some extreme instances, what they teach is regarded as entirely correct and unquestionable. The model rarely attracts students' active involvement, which makes it closed-ended. On the other hand, Kaur (2011) notes that if the model's methods are crafted well by welcoming a degree of interactivity rather than sheer telling, they become the best teaching methods. The justification given is their persistence in the teaching profession apart from a multitude of newly coming teaching methods.

Another prominent teaching model, according to King (1993), is interactive. It is based on constructivist theories, which assume that teaching is the construction of knowledge through dialogues between teachers and students. It is based on the stance that students interact with the materials and construct knowledge. The model attracts open-ended inquiry whereby students and teachers probe to develop a deeper understanding of topics. The role of a teacher in the interactive model is to facilitate the learning process by creating learner-disposed teaching and learning

contexts (Puig et al., 2016; Strobel & van Barneveld, 2009). Nimje & Dubey (2013, p. 118) note that “the teacher plays more than a teacher’s role, such as being a friend, guide, facilitator, guardian, and role model.” The best methods in this category include all methods that integrate an interactional element, such as question and answer, group tasks, discussions, and think-pair-share, to mention a few. Although the methods in this model promote deep learning, the incompetence of teachers, big class sizes, and students’ reluctance to participate in teaching processes become challenging (Wegner et al., 2013).

According to King (1993), the transformative model is another teaching model. This perspective of teaching originates from social cognitive and transformative theories of learning. Based on this model, teaching is considered a condition created for transforming the learner holistically in knowledge, skills, attitudes, and emotions (Azemikhah, 2006; Slavich & Zimbardo, 2012). Transformational teaching invites students and teachers to discover their full potential as learners, members of society, and human beings (Açıkgöz & Babadoğan, 2021; Azemikhah, 2006). The role of the teachers is to facilitate problem-solving skills for students by making them learn experientially through solving problems. In so doing, the students are most likely to learn the content and the thinking strategies about the process and outcome (Hmelo-Silver, 2004). The primary goals of the model are “helping students develop flexible knowledge, effective problem-solving skills, self-directed learning skills, effective collaboration skills, and intrinsic motivation” (Hmelo-Silver, 2004, p. 235). The teaching methods under this model include role modelling, project-based, intellectual stimulation, inquiry-based, experiential learning, and personalised learning, to mention a few. The three teaching models attract different preparations for teachers and students, ranging from simple to complex preparation for teachers and self-directed learning for students. The simplicity or complexity is considered in terms of time, effort, and resources.

Teaching methods preferences and rationales

Teachers’ preferred methods are imperative as they create part of a supportive teaching and learning atmosphere. The methods help to achieve the planned objectives, and for that matter, the choice and execution of various methods are indispensable agendas in teaching and learning (Aynalem et al., 2015; Gomez, 2014). The way teachers “choose, adapt and deliver classroom activities mostly reflects the methods they prefer in teaching” (Smperio, 2017, p. 58). The underlying logic behind this association is that many teachers prefer to teach as they were taught during their pre-service training (Gilakjani, 2012; Marmah, 2014; Pritchard & Woollard, 2010; Samperio, 2017). Research shows that many teachers believe that as long as the methods used for training them result in successful learning, there may be no doubt that they can be similarly applied to their students

and bring equivalent outcomes (Marmah, 2014). This belief partly justifies the constant availability of diverse teachers of different preferences. Some teachers prefer transmitting knowledge to students, while others prefer constructing knowledge with students (Dejene et al., 2018). Consequently, some teachers will tend to favour transmission-related teaching methods while others constructivist and transformative-related ones. The teachers' belief is somewhat delicate because education worldwide is constantly witnessing a rapid transformation of teaching and learning contexts because of improved technology in education, which demands updated teaching methods that fit the new context. For example, one would think of a new context where Artificial Intelligence (AI) has been infused into the education sector.

Similarly, research indicates that the preferred teaching methods make teachers confident before students during instructional time (Lehesvuori et al., 2018; Adib-Hajbaghery & Aghajani, 2011). The argument is that student-teachers consider teachers vested with instructional powers and have inimitable teaching authority. The teachers' powers have to be demonstrated without certainties. One of the mechanisms for proving the powers is teaching using the methods they are confident about that promote meaningful learning to students. Further, it is documented in the literature that teachers' preferred methods contain salient features that determine the instructional relationship between teachers and students for achieving the shared purpose as presented in the instructional plans (Capar & Tarim, 2015). The preferred method exposes the position of teachers and students in the teaching and learning context, particularly in the classroom. For example, Dejene et al. (2018) opined that teachers who prefer transmission models such as the lecture method tend to regard students as recipients and assimilators of their instruction with little or no alterations. Maphosa and Ndembele (2014) observe that students and teachers in transmission models context are automatically fixed in passive and active contexts regarding knowledge and skills acquisition.

Research has also shown that teachers prefer to use methods that attract immediate achievement in paper-pencil assessment tasks because the tasks are confined to what and how students are taught (Maphosa & Kalenga, 2012; Qualters, 2012). A common assumption is that these methods make the best teachers in students' eyes and promote aspired performance. Confirming this assumption, Qualters (2012) observes that students are often inclined to the lecture teaching method and defy other teaching methods. Further, the lecturers who emphasise engaging students in lectures may not be students' favourites. This stance is evident, particularly in the education systems, which consider high-stakes testing a driving force. Therefore, teaching and learning focus on course content that will likely be tested (Muñoz & Álvarez, 2010).

Teaching methods are sometimes induced by contextual factors such as class size, course content, availability of resources, assessment system, administrative manda-

tes, and student characteristics, particularly age and cognitive level (Adib-Hajbaghery & Aghajani, 2011; Zheng & Borg, 2014). Large class sizes attract transmission teaching models regardless of the teacher's preference, while a small class size attracts interactive models (Dorgu, 2015; Ünal, 2017). In such circumstances, one can cautiously put it that teachers' preferences of teaching methods may be dwarfed in the real sense, thus forcing them to employ methods that are not of their preference. However, this does not hinder showing the primacy of teachers' preference of teaching methods as a precursor for good teaching, ultimately resulting in students' learning. Based on this importance coupled with the seemingly multifaceted factors for preference in other contexts, this study assesses student teachers' preferences of teaching methods in the Tanzanian context, bearing in mind that the country should implement competency-based education in its educational institutions. The underlying assumption is that student teachers likely prefer interactive teaching methods that match the Tanzanian education system's present tune.

Research Methodology

This study involved student-teachers from the Dar es Salaam and Mkwawa University colleges, which prepare teachers, among other professionals. They pursued a bachelor of education degree in the second and third years. Their precise number in the two years of study was not collected, but the total was estimated to be 367 based on the examination results. Valid responses were attained from 335 student-teachers [211 (63%) second-year and 124 (37%) third-years], making a response rate of 91.3% of the total participants, of which 167 were females (49.9), and 168 were males (50.1%). Chronologically, the student-teachers had experience in university studies conducted using transmission and interactive models (Mtebe & Raphael, 2017). Therefore, the participants had enough to offer the study about teaching methods preference.

Design

A descriptive survey design was used in this study because it was considered appropriate to collect data about one's preferences. Preferences are usually associated with one's feelings, and they can best be studied using descriptive data (Creswell, 2009). A questionnaire with closed and open-ended questions was used to collect the data. The closed-ended questions were used to obtain descriptive statistics to determine the extent of student-teacher preferences for teaching methods. Descriptive statistics (frequency, means, and standard deviation) determined the preference in this case. On the other hand, an open-ended question was used to determine why student-teachers preferred the teaching methods. The themes obtained from the content analysis of the responses from open-ended questions served the purpose.

Instruments

A validated questionnaire by Goh et al. (2014) on approaches to teaching inventory was adapted for data collection. The instrument was previously used in Malaysia to identify the teaching approaches by teachers in higher learning institutions. The questionnaire had 11 items measuring student teachers' preference for teaching methods. The items were of two scales: the transmission model (six items) and the interaction model (five items). The items had 0.74 and 0.75 alpha coefficients above the accepted coefficient of 0.70 (Pallant, 2005). The items were rated on a balanced 4-point scale (1- 4) ranging from strongly agree (1) to strongly disagree (4). A balanced Likert type was considered appropriate for its many advantages, including "reducing social desirability bias" (Leung, 2011, p.413) and the obfuscation effect (Kulas & Stachowski, 2009). The Likert scale items were piloted to 255 student-teachers pursuing a Bachelor of Arts with Education in the same university colleges. The results indicated a 0.76 alpha coefficient for the transmission model items and 0.79 for the interaction model items. The measurement was almost similar to the results from Goh et al. (2014). In addition to Likert items, one open-ended question was added to a questionnaire to obtain the reasons for student- teacher preference for teaching methods. The question required the respondent to select the preferred teaching method from the given list and explain the reasons for preference.

The questionnaire was administered to student-teachers during classroom sessions. The researchers consulted the lecturers to administer questionnaires during a portion of their teaching hours. Upon agreement, student-teachers were given a consent form, which they read, signed, and concurrently filled in the questionnaires during teaching hours. It took 10 minutes to complete and return the questionnaire to the researcher.

Data analysis

Preliminary analysis was done through SPSS software by inspecting the data in which the outliers and missing data were statistically managed. The outliers were identified by checking the extreme values table and were re-coded. Regarding the missing data, a preliminary multiple imputation analysis indicated that 11(68.75%) variables out of 13 had some missing values, 27(8.060%) cases were missing at least one value, and 35(0.653%) values were missing. The pattern of the missing values was random and thus incidental. Multiple imputations were run on an automatic model to fix the missing values. Afterwards, the descriptive statistics (frequency, mean, and standard deviation) were computed to establish student-teachers' preferences. In addition, content analysis was performed thematically for

the textual data to obtain the themes that indicated the reasons for student-teachers' preference for teaching methods. In this case, all participants' responses were analysed using MAXQDA software. The common themes were identified based on the meaning they made, and the responses were also quantified to obtain a clear understanding of the distribution of perspectives within the dataset.

Results and Discussion

Teaching methods preference

The first research question required assessing the types of teaching methods that university student-teachers preferred. The responses to questionnaire items indicate student-teachers' preferences (Table 1). The mean scores for individual items were somewhat above agree, except for items A4 and A6.

Table 1

Descriptive Statistics for Individual Items

Items addressing teaching method preference		N	M	SD
*A3	I prefer teaching methods that integrate the practical application of knowledge and skills	335	3.13	1.040
A4	I prefer teaching methods that enable student-teachers to discuss key concepts and ideas	335	2.71	1.169
A5	I prefer teaching methods that give chances for students to exchange ideas	335	3.17	.920
A6	I prefer teaching methods that embrace interaction, collaboration, and multiple experiences	335	2.76	1.062
A1	I prefer teaching methods that encourage rethinking the existing knowledge	335	3.40	.919
**B1	I prefer teaching methods that supply students with content in a teacher-predetermined order	335	3.16	.910
B2	I prefer teaching methods that demand students to listen to the teacher talk	335	3.14	.978
B3	I prefer teaching methods that focus on content coverage to save students time	335	3.36	.950
B4	I prefer teaching methods that focus on teacher presentation for students to note	335	3.00	1.032

B5	I prefer teaching methods that focus on what the teacher provides to students	335	3.03	.983
B6	I prefer teaching methods that give teachers the authority to decide what to be taught and learnt	335	3.34	.943

*Note: *'A' represents items for interactive-related methods; **'B' represents items for transmission-related methods*

Further, the analysis was done to merge the items into their respective scales (interactive and transmission models), as indicated in Table 2.

Table 2

Descriptive Statistics for Scales of Preference

	N	M	SD
Transmission	335	3.28	0.669
Interactive	335	3.00	0.673

The analysis revealed consistent results, indicating that the mean preference for both scales was 'agree' and slightly above agree in favour of the transmission model. Moreover, both scales showed relatively similar standard deviations, suggesting similar variability in preferences within each group. The findings varied from the study conducted by Neetha et al. (2023), where, out of 146 medical college students, the majority (73%) expressed a preference for interactive-based methods, while a minority favoured transmission-based, particularly deductive lectures. The variation could be attributed to the distinct contexts of the student groups studied. Previous studies suggest that students in various fields tend to favour distinct teaching methods due to the contextual variations in learning outcomes associated with different approaches (Adib- Hajbaghery & Aghajani, 2011; Neetha et al., 2019). In this study, the emphasis was on teacher education students, in contrast to the previous research that focused on medical students.

The findings of this study show that student-teachers favour transmission and transaction-related methods almost equally but do not conform to the competency-based teaching and learning processes that demand more interaction than transmission. Globally, there is an increasing emphasis on teaching methods that place the learner at the centre of the educational process (Merritt et al., 2017; Nzima, 2016; Zheng & Borg, 2014). The methods are said to enshrine learning primacy as almost the only overarching goal for teaching. The basis for emphasis is that the methods guarantee meaningful learning by advancing the competencies that work (Nzima, 2016). Finding a slightly higher preference for transmission-related methods may be informed that the

efforts aiming at reinforcing interactive-related methods are progressing slowly. This contradicts the seemingly generally supported belief that there should be a greater focus on interactive-based approaches (Merritt et al., 2017), but in this case, more student-teachers slightly prefer the lecture method, which places a learner almost on the recipient and inactive side (King, 1993; Freeman et al., 2014; Birgili, 2016). The source of preference appears to be student-teachers' experience in their lecture rooms, as they are taught through transmission models, particularly the lecture method. Such preference reiterates the argument that one's teacher training experience influences one's teaching method preference (Samperio, 2017).

The findings also support Marmah (2014, p. 601), who asserts that "although new approaches to teaching and learning have been promulgated in higher learning institutions, the lecture remains a prominent feature of many courses." Likewise, Lehesvuori et al. (2018, p. 285) "indicate that lectures are popular among university academics for that they are economical in terms of planning, flexible as they can be applied to most content areas and also simple to implement in class." However, transmission model related methods have been reprovved for their weaknesses of not being able to aptly promote critical competencies due to "theoretical underpinnings of instructor-focused (teaching by telling) approach" (Freeman et al. 2014, p. 8410). For example, transmission models can hardly grant most 21st-century skills, such as critical thinking, creativity/innovation, communication, and collaboration (Azemikhah, 2015). Regardless of the criticism, the findings highlight a crucial point that university student-teachers, mainly in the context of this study, learn better when the lecture method is used. The finding supports Kaur (2011, p. 12), who noted that through the transmission model, "greater attention could be secured and maintained by learners, as interest leads to attention." Nonetheless, learning in the context of the transmission model may not be similar to learning advocated in other teaching models.

On the other hand, the study findings indicated a slightly lower preference for interactive -related methods compared to transmission-related methods. Such preference indicates that despite nearly two decades of advocacy, some student-teachers remain unconvinced about transitioning to interactive methods. This scenario is detrimental to the competency -based education advocated in the Tanzania Education system (Kafyulilo et al., 2013; Komba & Mwandanji, 2015). Competence-based education, among other things, is promoted through interactive and transformative teaching methods (King, 1993; Puig et al., 2016). It calls for learners to actively participate in almost all teaching and learning processes and demonstrate most of the learning aspects into practice (Azemikhah, 2015). This scenario could be reflected in B. Ed student-teachers by recording slightly higher preferences for transmission methods. The preference also suggests that the intera-

ctive teaching-based methods in the university teaching for teacher preparation are likely minimal, such that student-teachers are not attracted to the model.

Reasons for preference

The second research question sought to obtain the reasons for teaching method preferences. In this case, respondents were given a list of teaching methods: lecture and demonstration methods represented the transmission model, and group discussion, inquiry, and pair-work methods represented the interactive model (See *Table 3*). They were supposed to select the most preferred method and explain the reasons for their preference. The results indicate that the transmission-based methods, particularly the lecture method, were highly preferred over the interactive-based methods.

Table 3

Teaching Methods Responses

Teaching Model	Teaching Method	Frequency	Per cent	Cumulative Per cent
Transmission	Lecture	188	56.1	56.1
	Demonstration	44	13.1	69.2
Interactive	Group Discussion	90	26.9	96.1
	Inquiry	4	1.2	97.3
	Pair work	9	2.7	100.0
	Total	335	100.0	

Regarding the reasons for preferences, respondents reported various interrelated reasons for each particular method that formed a specific model in the context of this study. The reasons for each method have been merged into themes based on the close meaning they formed. The analysis indicated that 136(95.1%) of 143 respondents who preferred the lecture method provided the reasons, while the remaining 7(4.9%) did not. The reasons for preferring the lecture method were categorised into four themes: (1) content coverage, (2) frequency of use, (3) improvement of listening and note-taking, and (4) class size.

Content coverage over time: 73 of 136 respondents (53.68%) reported that the lecture method was preferred because it covered a large amount of content within a short time compared to other teaching methods. They thought that the content within their course outlines required a long time to cover, and fortunately, the lecture method ensured the content was covered within a short time. Regarding this reason, some typical responses were such as: “*Lecture is the favourite method because it makes learning many contents from lecturers in few weeks which would*

have been impossible, for example by using discussions that consume much time” (StudentTeacher211, B.Ed. Science); “... I prefer lecture because lecturers use slides to organise what they teach us in a fast speed and this saves time ...I like lecture because sometimes they cover all modules and spare time for us to revise”. These quotations from different respondents additionally imply that student teachers are interested in content coverage based on the teaching and learning context.

Frequency of use: 31 of 136 respondents (22.79%) reported that their lecturers used the lecture method frequently, which attracted them to regard it as a better method than others. Some of the responses in this category of reasons are: “It is a good one because instructors always use it when teaching and through it, one is ensured good performance in tests and exams” (StudentTeacher72, B.Ed. Arts); “It is the most efficient method in teaching as students perform well in their exams through it and that is why lecturers use it most ... putting it first as a primary preference is a must” (StudentTeacher114, B. Ed. Science). These responses may inform beyond the frequency of use to include test and examination performance as their primary learning indicator.

Listening and note-taking skills improvement: 20 of 136 respondents (14.71%) preferred the lecture method because it requires them to listen carefully to learn. The typical responses for this category of reason include: “learning by listening from the lecturer, writing notes then working on what the lecturer has said about the content are achieved best through lecture method” (StudentTeacher52, B.Ed. Arts); “It is more convenient because when one listens carefully, then the teacher imparts knowledge effectively and lecture slides help in copying notes” (StudentTeacher127, B.Ed. Arts). Skills in the context of the given reasons include copying notes from lecturers’ slides, jotting down the points from lecturers’ clarifications, and answering questions posed by lecturers.

Class size: A fourth emerging category of reasons was that the lecture method is appropriate for large class sizes. 12 of 136 respondents (8.82%) provided this reason for the lecture method. Some of the typical responses from various respondents include: “It is fast and efficient for the large class size” (StudentTeacher305, B.Ed. Science); “because lectures capture many of us, so, I prefer it because we are too many in the classroom (StudentTeacher44, B.Ed. Arts) ...it is easy to conduct because it is from the lecturer to us and it is not necessary to ask or to be asked questions” (StudentTeacher218, B.Ed. Science). The centre of preference in this category was the class size and easiness of conducting the lecture.

The findings regarding the reasons for preference for the lecture method are consistent with Jerez et al.’s (2021) study. They recommend this method for its ability to support the effectiveness of large-group learning activities across various

dimensions. These include student-teacher interaction, the implementation of active learning strategies, classroom management, student motivation, and commitment, as well as the utilisation of online teaching resources. Similarly, Nordmann et al. (2022) support the argument by challenging the criticisms of the lecture method that often stem from the wrong premise. In their perspective, technological teaching resources provide lecturers with numerous opportunities to improve active learning strategies and foster interaction, even within the context of large class sizes that are commonly associated with lectures. Such arguments may imply that the lecture method provides pragmatic solutions to teaching and learning, particularly for large classes when the lecturers innovatively use the method as opposed to making it a telling method. Nevertheless, it remains enigmatic, especially in under-resourced education systems where technological tools are not integrated into lecturing. This absence of integration often leads to the lecture method consistently fostering passivity among students as opposed to promoting activeness.

In addition to the lecture method, some participants expressed a preference for a discussion teaching method, ranking it as the second most favoured (26.9%) among the array of teaching methods. Out of the 135 respondents who ranked the discussion teaching method as their first preference, 132 (97.78%) provided reasons for their choice, while three respondents (2.22%) did not. The reasons for preferring the discussion teaching method were identified in two categories: (1) promotion of participation, collaboration, confidence, and knowledge sharing, and (2) stimulation of critical thinking and creativity.

Promotion of participation, collaboration, confidence, and knowledge sharing: This category constituted 68.94% of all reasons. It was indicated that group discussion could be put into the perspective of meaningful learning regardless of the teaching context a teacher may face. For example, StudentTeacher234 (B.Ed. Science) reported that the discussion method supported deep learning by sharing ideas with colleagues about the topics the lecturer had told them to brainstorm during the lesson. Supporting this idea, another participant reported the possibility of learning better in group discussion, even in large class sizes: *“I am fond of group discussion because sometimes our lecturers advise us to sit in groups then discuss and speak out the agreed answers and through that, we learn though we are too many in class”* (StudentTeacher55, B.Ed. Arts). This argument implies that architecting the group discussion matters most when using it as a teaching method for effective learning.

Stimulation of critical thinking and creativity: This reason constituted 31.06% of the reasons for the group discussion preference. Various reasons in this category indicate that the method had the power to keep student-teachers active during teaching by answering and asking questions to teachers and colleagues, thus provi-

ding them a chance to achieve shared learning. The overarching message from these reasons is that meaningful learning for some students is a product of multiple combined and directional efforts by main classroom stakeholders. This argument makes the group discussion method indispensable in teaching and learning because it enables student-teachers and teachers to collaborate in knowledge construction. Some of the typical responses in this category include the following:

It gives us a chance to engage in a lesson ...provides a high level of knowledge inquiry...gives us the required competencies than memorisation from lecture notes projected on slides by most of our lecturers ...provides a chance for us to be active during teaching and learning sessions because we ask each other questions and each one strives for answers (StudentTeacher190, B.Ed. Arts).

It enables us to prepare before lecture sessions to contribute and critique points given by colleagues. ...also, group discussion allows the lecturers to be challenged if they misdescribe something. ...however, few lecturers use group discussion anyway! (StudentTeacher190, B.Ed. Science).

The findings regarding student-teachers' reasons for preferring the discussion method align with those of Birgili et al. (2016). They maintain that students like the discussion method because it enriches the teaching and learning process by making learning permanent. It can be smoothly integrated with other teaching methods to foster cognitive, emotional, and critical thinking in the teaching and learning process. In a similar vein, Capar and Tarim (2015) assert that teachers favour the discussion teaching method because it promotes student interaction in class, facilitating the learning process and simplifying the procedure. Although the discussion method is acknowledged as fundamental in teaching and learning, its complexity requires sophisticated preparation, which may act as a hindrance to its use. This complexity could potentially be a reason for the lower preference among students in the context of this study.

The final methods that received fewer responses were demonstration, inquiry, and pair work (*see Table 3*). The reported reasons for these methods were not specific to either transmission or interactive approaches. For example, one of the respondents reported that the demonstration method was preferred because it enabled lecturers to show student-teachers what to do and students to contribute ideas (StudentTeacher33, B.Ed. Science). Another typical response was, "*I like pair work because it grants me the freedom to do the tasks assigned by my lecturer*" (StudentTeacher169, B.E. Science). Another participant reported that "*it is a quick method in teaching ...It requires the student-teacher to be attentive when the teacher is making inquiries*" (StudentTeacher188, B.E. Science). These responses show that the teaching methods

were either infrequently used in their classroom sessions or not well understood by the respondents.

Conclusions and Pedagogical Implications

This study illuminates a predisposition of slightly more student-teachers to transmission teaching methods than interactive ones, with a specific preference for the lecture method. The preference advocates a persistence of traditional, teacher-centred approaches to teaching within teacher training programmes. Whereas the awareness and perceived usefulness of such techniques may influence their predominance among student-teachers, there is a need for careful reflection on the consequences of this preference for pedagogical practices in contemporary classrooms. On the other hand, the study also highlights the significance of continuous reflection and adjustments within the teacher education programmes. Policymakers and educators should use this insight as an opportunity to stimulate a more inclusive and diverse range of teaching methods so as to exploit the benefits of contemporary teaching methods in favour of learners. They should foster greater exposure to innovative and learner-centred approaches to create collaboration and communication, which is essential for promoting creativity and critical thinking. Learners' voices in teaching need to be primarily accommodated through changing lecturing into communication exchange instead of telling, and this provides promising indicators for the desired education. By doing so, teacher training programmes will prepare better educators to act on the diverse needs of contemporary learning and stimulate more engaging and active teaching practices in the classrooms.

References

- Abdulbaki, K., Suhaimi, M., Alsaqqaf, A., & Jawad, W. (2018). The impact of using the lecture method on teaching English at university. *European Journal of Education Studies*, 4(5), 285–202. <http://doi:0.5281/zenodo.1238871>.
- Açıköz, T., & Babadoğan, M. C. (2021). Competency-based education: Theory and practice. *Psycho-Educational Research Reviews*, 10(3), 67–95. https://www.doi.org/10.52963/PERR_Biruni_V10.N3.06.
- Adib-Hajbaghery, M., & Aghajani, M. (2011). *Traditional lectures, Socratic method and student lectures: which one do the students prefer?* <https://api.semanticscholar.org/CorpusID:45034323>.
- Aynalem, S., Abebe, F., Guadie, Z., & Bires, Z. (2015). Students' Preference for the Various Teaching Methods in Tourism Courses: A Case of Tourism Management Department, Madawalabu University. *J Tourism Hospit*, 4(4), 1-5. <http://dx.doi.org/10.4172/2167-0269.1000175>
- Azemikhah, H. (2006). The 21st century, the competency era and competency theory. *Open Learning Institute of TAFE*. 11(2). <http://consultiumresearchprogram.Net>.
- Birgili, B., Kiziltepe, Z., & Seggie, F. N. (2016). Teaching method preferences of teachers: The cooperative teaching method. *World Studies in Education*, 17(2), 37–52. <http://dx.doi.org/10.7459/wse/17.2.04>.
- Capar, G., & Tarim K. (2015). Efficacy of the cooperative learning method on mathematics achievement and attitude: A meta-analysis research. *Educational Sciences: Theory and Practice*. 15(2), 553-559. <http://doi:10.12738/estp.2015.2.2098>.
- Chambulila, C. (2013). Quality enhancement in teacher education: Tanzanian teacher educators' conceptions and experiences (Master Dissertation, Åbo Akademi University). Åbo Akademi University. oai:www.doria.fi:10024/93785.
- Chien, C. N. (2014). Analysis of EFL teaching methods for Taiwan University students. *Journal of Language Teaching and Research*, 5(5), 985–993. doi:10.4304/jltr.5.5.985-993.
- Creswell, J. W. (2009). *Research Design Qualitative, Quantitative, and Mixed Methods Approaches* (3rd Ed.). SAGE Publications, Inc. <http://www.ceil-conicet.gov.ar/wp-content/uploads/2015/10/Creswell-Cap-10.pdf>.

- Dejene, W., Bishaw, A., & Dagnew, A. (2018). Preservice teachers' approaches to learning and their teaching approach preferences: Secondary teacher education program in focus. *Cogent Education*, 5(1), 1-15. <https://doi.org/10.1080/2331186X.2018.1502396>.
- Dorgu, T. E. (2015). Different teaching methods: A panacea for effective curriculum implementation in the classroom. *International Journal of Secondary Education*, 3(6), 77-87. <http://doi:10.11648/j.ijsedu.s.2015030601.13>.
- Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning boosts performance in STEM courses. *Proceedings of the National Academy of Sciences*, 111(23), 8410-8415; <http://doi:10.1073/pnas.1319030111>.
- Gilakjani, A. P. (2012). A match or mismatch between the learning styles of the learners and the teaching styles of the teachers. *International Journal of Modern Education and Computer Science*, 11, 51-60. <http://doi:10.5815/ijmecs.2012.11.05>.
- Goh, P., Wong, K., & Hamzah, M. (2014). The approaches to teaching inventory: A validation of the Malaysian translation. *Australian Journal of Teacher Education*, 39(1) 16-26. <https://doi.org/10.14221/ajte.2014v39n1.6>.
- Gomez, M. A. (2014). Lecture vs. self-regulated learning: A comparison of two methods in teaching Biological Science. *IAMURE Multidisciplinary Research*, 9, 89-101. <http://dx.doi.org/10.7718/iamure.ije.v9i1.756>.
- Heasty, M., McLaughlin, T. F., Williams, R. L., & Keenan, B. (2012). The effects of using direct instruction mathematics formats to teach basic math skills to a third-grade student with a learning disability. *Academic Research International*, 2(3), 382-387. [http://www.savap.org.pk/journals/ARInt./Vol.2\(3\)/2012\(2.3-47\).pdf](http://www.savap.org.pk/journals/ARInt./Vol.2(3)/2012(2.3-47).pdf).
- Hmelo-Silver, C. E. (2004). Problem-based learning: what and how do students learn? *Educational Psychology Review*, 16(3), 235-266. <https://doi.org/10.1023/B:EDPR.0000034022.16470.f3>.
- Jerez, O., Orsini, C., Ortiz, C., & Hasbun, B. (2021). Which conditions facilitate the effectiveness of large-group learning activities? A systematic review of research in higher education. *Learning: Research and Practice*, 7(2), 147-164. <https://doi.org/10.1080/23735082.2020.1871062>.

- Kafyulilo, A. C., Rugambuka, I. B., & Mosses I. (2013). Implementation of competence-based teaching in Morogoro teachers' training college, Tanzania. *Makerere Journal of Higher Education*, 4(2), 311-326. doi: <http://dx.doi.org/10.4314/majohe.v4i2.13>.
- Kaur, G. (2011). Study and analysis of lecture model of teaching. *International Journal of Educational Planning & Administration*, 1(1), 9–13. <http://www.ripublication.com/ijepa.htm>.
- King, A. (1993). From sage on the stage to guide on the side, *College Teaching*, 41(1), 30–35, <https://doi.org/10.1080/87567555.1993.9926781>.
- Komba, S. C., & Mwandangi, M. (2015). Reflections on the implementation of the competence-based curriculum in Tanzanian secondary schools. *Journal of Education and Learning*, 4(2), 73-80. <http://doi:10.5539/jel.v4n2p73>.
- Kulas, T. J. & Stachowski, A. A. (2009). Middle category endorsement in odd-numbered Likert response scales: Associated item characteristics, cognitive demands, and preferred meanings. *Journal of Research in Personality*, 43, 489–493. <https://doi.org/10.1016/j.jrp.2008.12.005>.
- Lehesvuori, S., Ramnarain, U. & Viiri, J. (2018). Challenging transmission modes of teaching in science classrooms: enhancing learner-centredness through dialogicity. *Res Sci Educ*, 48, 1049-1069. <https://doi.org/10.1007/s11165-016-9598-7>
- Leung, S. (2011). A comparison of psychometric properties and normality in 4-, 5-, 6-, and 11-point Likert scales. *Journal of Social Service Research*, 37, 412–42. <http://doi: 10.1080/01488376.2011.580697>
- Makunja, G. (2015). Adopting competence-based curriculum to improve quality of secondary education in Tanzania: “Is it a dream or reality”? *International Journal of Education and Research*, 3(11), 175–188. <http://www.suaire.sua.ac.tz/handle/123456789/2360>.
- Mallillin, L. D., Laurel, R. D., Mallillin, J. B., Carag, E. A., & Guingab-Carag, C. (2021). Competency-based learning and quality education in the new normal modality of teaching. *East African Scholars Journal of Education, Humanities and Literature*, 4(4), 156-166. <http://doi:10.36349/easjehl.2021.v04i04.002>.

- Maphosa, C. & Ndebele, C. (2014). Interrogating the skill of introducing a lecture: Towards an interactive lecture method of instruction. *Anthropologist*, 17(2), 543–550. <https://doi.org/10.1080/09720073.2014.11891463>.
- Maphosa, C., & Kalenga, R. C. (2012). Displacing or depressing the lecture system: Towards a transformative model of instruction for the 21st-century university. *The Anthropologist*, 14(6), 555–563. <https://doi.org/10.1080/09720073.2012.11891281>
- Marmah, A. A. (2014). Students' perception about the lecture as a method of teaching in tertiary institutions, views of students from College of Technology Education, Kumasi (Coltek). *International Journal of Education and Research*, 2(6), 601–612. <https://www.ijern.com/June-2014.php>
- Mermelstein, A. D. (2015). Asian EFL university students' preference toward teaching approaches. *The CATESOL Journal*, 27(2), 259–279. <https://eric.ed.gov/?id=EJ1111668>
- Mermelstein, A. D. (2012). A comparison of teaching styles and their implications for student success. In *The Proceedings of the 2011 International Conference and Workshop on TEFL & Applied Linguistics* (pp. 197-207). Taipei, Taiwan: Crane.
- Merritt, J., Lee, M., Rillero, P., & Kinach, B. M. (2017). Problem-based learning in k-8 mathematics and science education: A literature review. *Interdisciplinary Journal of Problem-Based Learning*, 11(2). Accessed from <https://doi.org/10.7771/1541-5015.1674>.
- Ministry of Education and Culture (1995). Education and Training Policy. Dar es Salaam http://wbfiles.worldbank.org/documents/hdn/ed/saber/supporting_doc/AFR/Tanzania/EPS/Education_and_Training_Policy-Tanzania_1995.pdf.
- MoEVT (2008). Education sector development programme: Teacher development and management strategy 2008-2013. Dar es Salaam: Ministry of Education and Vocational Training.
- Mkonongwa L. M. (2018). Competency-based teaching and learning approach towards quality education. *Dar es Salaam University College of Education*, 21(7), 1–12.

- Mtebe, J. S., & Raphael, C. (2017). A decade of technology-enhanced learning at the University of Dar es Salaam, Tanzania: Challenges, achievements, and opportunities. *International Journal of Education and Development Using Information and Communication Technology (IJEDICT)*, 13(2), 103–115. <http://repository.udsm.ac.tz:8080/xmlui/handle/20.500.11810/4571>.
- Muñoz, A. P., & Álvarez, M. E. (2010). Washback of an oral assessment system in the EFL classroom. *Language Testing*, 27(1), 33-49. <https://doi.org/10.1177/0265532209347148>.
- Nimje, A. A., & Dubey, K. T. (2013). The Socratic lecture model: An effective teaching pedagogy in changing educational scenario. *IOSR Journal of Humanities and Social Sciences*, 14(6), 117–121.
- Neetha, C. S., Nandini, T., & Padmanabha, T. S. (2019). Students' preferences of teaching methods and aids in a medical college: A cross-sectional study. *National Journal of Physiology, Pharmacy and Pharmacology*, 9(8), 763–766. <https://doi:10.5455/njppp.2019.9.0518623052019>.
- Nordmann, E., Hutchison, J., & MacKay, J. R. (2022). Lecture rapture: The place and case for lectures in the new normal. *Teaching in Higher Education*, 27(5), 709–716. <https://doi.org/10.1080/13562517.2021.2015755>
- Nzima, I. (2016). *Competence-based Curriculum (CBC) in Tanzania: Tutors' Understanding and Their Instructional Practices* (Doctoral dissertation, Linnaeus University Press).
- Pallant, J. (2005). *SPSS survival manual: A step-by-step guide to data analysis using SPS for Windows* (2nd ed.). Crows Nest NSW, Australia: Allen & Unwin.
- Pech, M., Rehor, P., & Slabová, M. (2021). Students' preferences in teaching methods of entrepreneurship education. *Journal on Efficiency and Responsibility in Education and Science*, 14(2), 66-78. <http://dx.doi.org/10.7160/eriesj.2021.140201>.
- Phipps, M., Phipps, C., Kask, S. & Higgins, S. (2001). University students' perceptions of cooperative: Implications for administrators and instructors. *The Journal of Experiential Education*, 24, 14-21. <https://doi.org/10.1177/105382590102400105>.
- Pritchard, A., & Woollard, J. (2010). *Psychology for the classroom: Constructivism and social learning*. London: Routledge.

- Puig, A., Pérez, C., Vera, J., Fernández, F., Vilas, L., Merino, B., (...) Valverde, J.V. (2016, July 4-6). *An example of problem-based learning (PBL) from a collaborative and multidisciplinary approach*. Proceedings of EDULEARN16 Conference, Barcelona, Spain. <https://www.researchgate.net/publication/>.
- Qualters, D. (2012). Do students want to be active learners? *Journal of the Scholarship of Teaching and Learning*, 2(1), 51–60. <https://scholarworks.iu.edu/journals/index.php/josotl/article/view/1588>.
- Samperio, N. (2017). Discovering students' preference for classroom activities and teachers' activity use. *Colomb. Applied Linguist. J.*, 19(1), 51–66. doi: <http://dx.doi.org/10.14483/calj.v19n1.9292>.
- Schmidt, H. G., Wagener, S. L., Smeets, G. A., Keemink, L. M., & van Der Molen, H. T. (2015). On the use and misuse of lectures in higher education. *Health Professions Education*, 1(1), 12-18. <https://doi.org/10.1016/j.hpe.2015.11.010>.
- Shengji, J., Hongmei, Y., & Yimin, S., (2009). On the importance of teaching methods and teachers' devotion to education. *International Forum on Information Technology and Applications*, 764-765. <http://doi:10.1109/IFITA.2009.372>.
- Slavich, G., M. (2005, October). Transformational teaching. Excellence in Teaching, Volume 5. <http://www.teachpsych.org/ebooks/eit2005/eit05-11.html>.
- Slavich, G. M. & Zimbardo, P. G. (2012). Transformational teaching: theoretical underpinnings, basic principles, and core methods. *Educational Psychology Review* 24, 569-608. <http://doi:10.1007/s10648-012-9199-6>
- Strobel, J., & van Barneveld, A. (2009). When is PBL more effective? a meta-synthesis of meta-analyses comparing PBL to conventional classrooms. *Interdisciplinary Journal of Problem-Based Learning*, 3(1), 44-58. <https://doi.org/10.7771/1541-5015.1046>.
- Twaakyondo, H. M., & Munaku, M. (2012). A steady progress towards e-learning in Tanzania: The case of CVL-UDSM. In *IST-Africa 2012 Conference* (pp. 1-7). http://www.ist-africa.org/home/outbox/ISTAfrica_Paper_ref_69_4798.pdf.
- Tilya, F., & Mafumiko, F. (2018). The compatibility between teaching methods and competence-based curriculum in Tanzania. *Papers in Education and Development*, (29).

- UDSM. (2021). *Undergraduate programmes and admission procedures*. https://www.udsm.ac.tz/upload/20210723_115740_UDSM%20-%20Admission%20Handbook%202021-2022.pdf.
- Ünal, M. (2017). Preferences of teaching methods and techniques in mathematics with reasons. *Universal Journal of Educational Research*, 5(2), 194 –202. <http://doi: 10.13189/ujer. 2017.050204>
- Wangwe, S. & Charle, P. (2005). Macro-economic Policy choices for Growth and Poverty Reduction: The Case of Tanzania. Dar es Salaam: *Economic and Social Research Foundation*. <https://www.sciepub.com/reference/248964>.
- Wegner, C., Minnaert, L., & Strehlke, F. (2013). The importance of learning strategies and how the project 'Kolumbus-Kids' promotes them successfully. *European Journal of Science and Mathematics Education*, 1(3), 137-143. <https://files.eric.ed.gov/fulltext/EJ1108220.pdf>
- Zheng, X., & Borg, S. (2014). Task-based learning and teaching in China: Secondary school teachers' beliefs and practices. *Language Teaching Research*, 18(2), 205–22. <https:// doi.org/10.1177/1362168813505941>.