

Teacher's pedagogical competencies on the utilisation of instructional materials for teaching history subject in public secondary schools in Zanzibar: A case of the Pemba North Region

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Abstract. This study examined teachers' pedagogical competencies and the factors influencing the use of instructional materials (IMs) in teaching history in secondary schools in Zanzibar. A census sampling technique was employed, involving 81 history teachers from 35 public secondary schools in the Pemba North Region, Zanzibar. Data were collected using a closed-ended 5-point Likert scale questionnaire and classroom observation. Descriptive and inferential statistics with IBM SPSS Statistics version 26 and thematic analysis were employed to analyse quantitative and qualitative data. The findings revealed that teachers' pedagogical competencies in using instructional materials were low (mean = 1.93). Moreover, the study found a significant link between pedagogical competence and both in-service training ($p = 0.012$) and the teachers' subject specialisation ($p = 0.006$). The study concludes that most history teachers in Zanzibar's public secondary schools face considerable challenges in effectively utilising IMs. Addressing the challenges will require strengthening teachers' pedagogical and professional knowledge. The study recommends capacity-building initiatives, including continuous in-service training, workshops, seminars and the recruitment of fully qualified teachers to improve the teaching of history in public secondary schools in Zanzibar.

Keywords: teacher's pedagogical competencies, factors affecting, instructional materials and history teaching

1. Introduction

Competent teachers are pivotal in achieving national educational goals in view of the fact that they influence the learning process and student achievement [52]. Without competent teachers, the teaching and learning process remains unrealised since competent teachers always have positive influences on students' learning and simultaneously improve the quality of education. For an effective teaching and learning process, a teacher must design and utilise appropriate instructional materials and strategies so as to achieve instructional objectives. Therefore, it is imperative to enhance teachers' pedagogical competencies in the utilisation of instructional materials for them to deliver effective classroom instruction and thus ensure quality education for diverse students [20, 67]. However, teachers' pedagogical competencies in the effective use of instructional materials in teaching and learning history are largely influenced by various factors such as teachers' specialisation, training, educational level, working experiences and attitudes toward using those materials.

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1.1. An overview of teacher's pedagogical competencies toward using instructional materials in teaching and learning

Instructional materials refer to various materials used by teachers in delivering classroom instruction and transmission of prescribed educational content, consequently facilitating the achievement of learning objectives [45]. These materials, which make classroom learning really practical and bring novelty and freshness to the learner in the learning process, include a variety of aids such as maps, pictures, textbooks, charts, graphs, tape recorders, videos and others being used by teachers in facilitating the teaching and learning of history in secondary schools [34]. The utilisation of instructional materials has been viewed as vital for effective teaching and learning processes [60]. Worldwide, educational policy and curriculum emphasise the use of instructional materials to impart quality education by teachers [45, 67].

In the US, studies reveal that the utilisation of instructional materials is considered the primary driving force for teachers in delivering effective classroom instruction [28]. At the same time, in the UK, it was evident that the uses of instructional materials make lessons more interactive and helpful in improving students' motivation and learning experiences [48]. In the same vein, in German, Wilson and Bruni-Bossio [71] revealed that the use of instructional resources seems to be crucial for improving the quality of learning and increasing students' thinking capacity, interest, retention of knowledge and helping teachers in presenting historical events. Likewise, in Greece and Australia, the uses of instructional materials in teaching and learning help teachers in presenting lessons and enhance students' ability to comprehend learning outcomes [37, 57].

In Asia, Pakistan in particular, using instructional materials in teaching and learning is helpful for students in developing their observation and interpretation skills, increasing students' engagement and understanding of complex concepts, improving retention as well as boosting motivation, subsequently enhancing examination performance [53, 65]. Teachers' use of instructional materials has been significant for capturing student's attention and motivating them toward learning [36]. In that regard, teachers' pedagogical competencies toward utilising instructional materials are pivotal for attaining educational objectives and improving the quality of the teaching and learning process, history subject in particular [26, 63].

In Africa, Ghana being the best example, the uses of instructional materials have been proven significantly to enhance teaching effectiveness and student learning [25]. Similarly, in Rwanda, Mugisha, Uworwabayeho and Urwibutso [47] revealed that the uses of instructional materials make teaching and learning simpler, more enjoyable, more engaging and more closely to real-world application. Besides, in Tanzania, the history curriculum emphasises the use of instructional materials by teachers so as to improve the quality of teaching, thus enhancing student's understanding and performance [44, 45]. This indicates that instructional materials are vital for supporting both teachers and students during the teaching and learning process, and there is a need to investigate their effective use in teaching and learning history subject at Pemba North Region in Zanzibar's public secondary schools.

The concept of pedagogical competency is defined as the minimum professional standards required for an individual to undertake specific educational roles [10]. On the other hand, it also refers to the combination of skills and knowledge that enable a teacher to be successful in implementing the educational objectives [56]. Asuru and Ikpa [7] argued that teachers' pedagogical competencies focus mainly on a broad and good understanding of teachers within their subject areas, knowledge of student's learning, subject-based teaching and learning issues. According to Fauziyah, Yusuf and Andayani [18], any professional teacher should possess four components of competencies which are essential for facilitating quality instruction. These components

include pedagogical competency, personal competency, professional competency and social competency. Shulman [61] identified seven categories of knowledge in their teaching process, namely: (i) knowledge of the content to be taught; (ii) general pedagogical knowledge; (iii) knowledge of the curriculum that is specific subjects topics and teaching material; (iv) pedagogical knowledge of the content; (v) knowledge of learners and their characteristics; (vi) knowledge of the educational context; and (vii) knowledge of the aims, purposes and value of education and its historical as well as philosophical foundation. In that regard, examining teachers' pedagogical competencies in the instructional process is indispensable.

Various studies have revealed that teachers' pedagogical competencies positively influence teachers in conducting classroom instruction, subsequently facilitating the teaching and learning process. For example, in Germany and Wales, studies show that teachers' pedagogical competencies in using instructional materials have a positive effect on their self-confidence and classroom communication as well as students' learning progress [32, 70]. In Norway and the USA, studies revealed that teachers' pedagogical competencies positively influence the quality of instruction and students' learning outcomes [11, 74]. Likewise, in Russia, it was noted that teachers' pedagogical competencies in using digital materials increase teachers' efficiencies in teaching foreign languages and student's personal development [27]. Similarly, in Malaysia, pedagogical competencies help teachers to teach history subject effectively and motivate students toward learning the subject [6, 21]. In India, teachers' mastery of content knowledge, instructional resources, and innovative methods of teaching and learning increases student's interest in studying history [26, 63].

In Sub-Saharan Africa, Nigeria being the best example, teachers' pedagogical competencies in classroom management and instruction influence quality teaching and student performance [24] of which it indicates that teachers' pedagogical competence in using instructional materials in the teaching and learning process is vital for supporting teachers in providing quality instruction to their students. In Tanzania, the educational policy emphasises teachers' competencies so as to improve teachers' classroom practices and student outcomes [44, 45]. Besides, it is argued that teachers' pedagogical competencies are pivotal for implementing a competency-based curriculum, improving the quality of education and student achievement in history subject [38, 50].

However, teachers' pedagogical competencies on the utilisation of instructional materials to deliver effective classroom instruction bring about challenges for many history teachers [62], which indicates that there is a relationship between teachers' pedagogical competencies in using instructional materials and effective classroom practices. Therefore, this paper assessed the effects of teachers' pedagogical competencies in using instructional materials when teaching history subject in public secondary schools, particularly in the Pemba North Region, Zanzibar.

Various studies from different parts of the world have reported that teachers' pedagogical competencies in using instructional materials in the teaching and learning process are affected by various factors. For example, in Malaysia, Kazakhstan and Ghana, shortage of in-service training, professional seniority, teacher's attitudes, school environment as well as student diversity are amongst the factors that hinder teacher's pedagogical competencies in using instructional materials [13, 14, 54].

In Tanzania, mainland, lack of adequate pedagogical preparation and professional development opportunity and teacher's negative attitudes were reported as the main factors that hinder teachers from using instructional materials in facilitating quality classroom instruction [38, 39, 50]. In Zanzibar, absences of in-service training, lack of professional maturity and specialisation among teachers, teacher attitude and low teacher experiences were revealed as the main challenges faced by teachers in using

instructional materials to facilitate the teaching and learning process in the classroom [1, 22]. As a result, secondary school teachers find it difficult to use instructional materials to facilitate effective history classroom instruction [1, 40], which implies that there is a need to investigate teacher's pedagogical competencies in the teaching process.

Various global initiatives have been undertaken to improve teachers' competencies in the teaching and learning process. In Europe, European Union member states have created a continuum of teacher education to ensure teachers' competencies in the teaching and learning process encompassing initial teacher education and in-service teacher education [17]. In Finland, teachers' professional development emphasises supporting teachers' professional and pedagogical competencies through induction and in-services training courses [51]. In USA and Turkey, teacher competence frameworks are designed so as to shape teacher's competence initiatives and development [16]. In the same vein, in China, teachers' competencies framework has set guiding principles for teachers' continuing professional development so as to broaden their competencies in the teaching process [75]. In South Africa, teachers are engaged in diverse professional development initiatives in order to enhance their competencies in classroom practices [4]. In Kenya, the Basic Education Curriculum Framework emphasises regular teachers' training so as to enhance teacher's competencies in the provision of quality teaching [30].

The National Curriculum Framework for Basic and Teacher Education (NCFBTE) in Tanzania insists on the teacher's professional development programmes through continuous and regular training in improving teachers' competencies for successful implementation of the instructional process [44]. Besides, curricula emphasise teachers' competencies in using instructional materials in order to facilitate effective classroom practices [45]. However, the shortage of regular in-service training and the teacher's limited skills in integrating instructional materials into classroom teaching are the major challenges that affect the implementation of the initiatives [50]. The Educational and Training Policy (ETP) and Continuous Professional Development (CPD) framework emphasise enhancing teacher's competencies through in-service training to meet the EFA goal, enriching teachers' practices to deliver child-centred pedagogy for the improvement of standard and quality education [43, 72].

Furthermore, in recent years, the Revolutionary government of Zanzibar implemented the Zanzibar Improving Students' Prospects (ZISP) project and Enhancing Quality of Secondary Schools Education in Zanzibar (EQSSEZ) projects to improve teachers' competencies in the teaching process. These projects trained unspecialised mathematics, science, and English teachers on content and pedagogical knowledge to enhance student performance. The projects also focussed on improving teachers' competencies in using instructional materials and ICT in implementing a competency-based curriculum and student-centred approach for quality instruction [35, 73]. However, these projects did not focus on the issue under study, thus compelling the researcher to investigate the history teacher's pedagogical competencies in the teaching and learning process and factors that affect history teachers in utilising instructional materials when teaching and learning history subject in public secondary schools at Pemba North Region in Zanzibar and subsequently fill the gap.

1.2. State of history teaching in Tanzania

In Tanzania and Zanzibar in particular, history is a core discipline which is fully integrated into the ordinary-level and the advanced-level curricula, with its independent syllabus [46]. The development of history teaching in Tanzania has gone through a transformation from pre-colonial, colonial and post-colonial periods [45, 46]. The content of history subject in secondary school varies from social-cultural, political and

economic history in our country and extends to the history of African and European civilisation [45, 46]. However, it was noted that the history being taught up to the 1990s lacked the touch of local experiences and remained synonymous with colonial activities and less focused on the Tanzanian context [50]

The literature reveals that teaching and learning history subject in Tanzania was previously regarded as a narration of the past and dominated by teacher-centred pedagogy [50]. In 2005, nevertheless, Tanzania embarked on a notable curriculum change from a content-based to a competency-based curriculum in order to improve the quality and access to education for all. This change revolutionised history teaching and learning by changing teacher duties from the centre of knowledge to becoming the facilitator, and students' roles were changed from being passive to active participants in the learning process [49]. Therefore, the history teacher should be trained with pedagogical knowledge so as to enhance their competencies in facilitating competency-based pedagogy while teaching in the class.

Recently, in Tanzania, history teaching has been perceived as having the potential to promote values, unity, and identity and revive patriotism, morals, and national heritage; thus, serious efforts have been made to improve the teaching of history in Tanzania. This includes revising the history curriculum and introducing a new subject known as History of Tanzania and Ethics, which incorporates themes and content from the Tanzanian context [45]. For that reason, history teachers should be well prepared and equipped with good pedagogical and professional knowledge so that they can deliver intended learning competencies and outcomes to students.

1.3. Research questions

Two research questions, namely guide this paper:

1. What are teachers' pedagogical competencies in using instructional materials for teaching history subject in public secondary schools at the Pemba North Region in Zanzibar?
2. What are the effects of teachers' specialisation, in-service training, working experiences and educational level on teachers' pedagogical competencies in using instructional materials for history teaching at the Pemba North Region in Zanzibar?

2. Theoretical framework

This study adopted the Technological Pedagogical Content Knowledge (TPACK) model (figure 1) proposed by Koehler et al. [31] as an improvement of Shulman [61] ideas of Pedagogical Content Knowledge (PCK).

The TPACK model is helpful in this study for the reasons that, first, it helps to assess the extent of teachers' competencies in preparing and utilising instructional materials for history teaching and learning, thereby facilitating effective instruction of subject matter since to develop historical knowledge, students should be engaged in the inquiry classroom and critical analysis of historical sources. Second, the model emphasises that teachers must possess the requisite competence to integrate instructional materials with instructional content and subject matter. Third, this model fosters students' readiness by employing effective strategies to engage learners in the learning process, thereby facilitating meaningful teaching and learning experiences in the history subject.

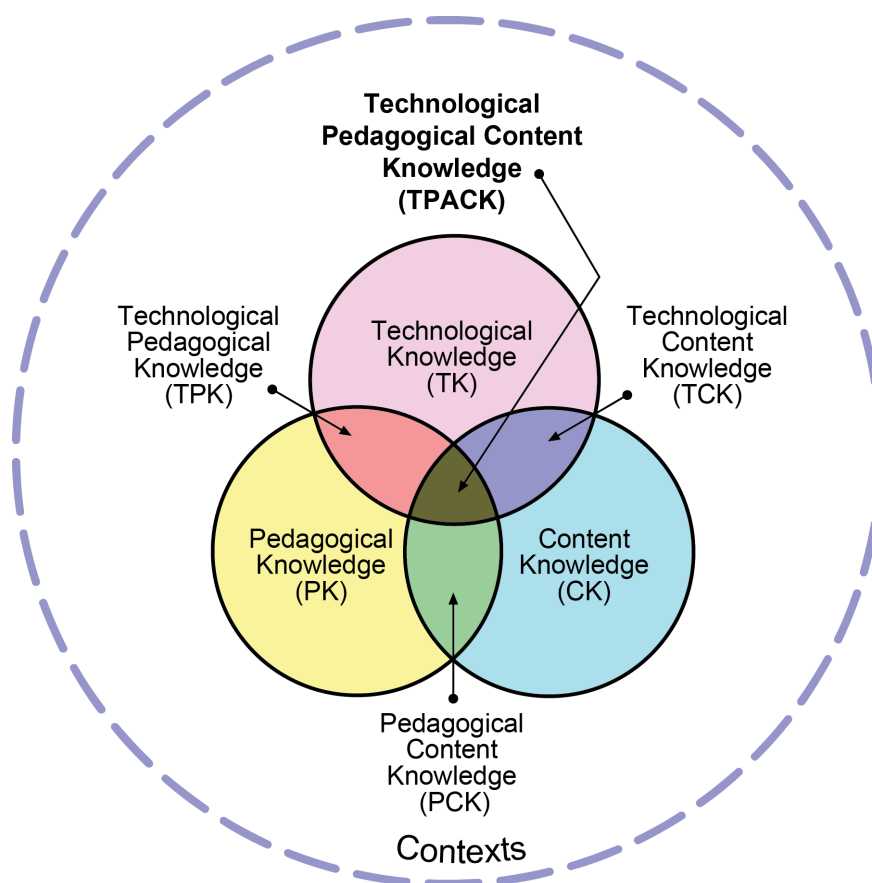


Figure 1: The components of the TPACK framework adopted from Koehler et al. [31].

3. Methodology

3.1. Research approach and research design

This study employed a mixed research approach, which combines both quantitative and qualitative data in a study [12]. The quantitative and qualitative data collection methods were characterised by closed-ended and open-ended data, respectively, during data collection. The mixed-methods approach was appropriate for this study since it helped the researcher to address the weakness of both qualitative and quantitative approaches and thus collect detailed information on history teachers' pedagogical competencies in using instructional materials for history teaching in secondary schools in Pemba North Region, Zanzibar. Besides, the study employed a concurrent mixed research design, whereby both quantitative and qualitative data were collected concurrently, combined and used to comprehend the research problems. Notably, the use of a concurrent mixed design helped the researcher capture important information on teachers' pedagogical competencies in utilising instructional materials when teaching history and the challenges associated with their pedagogical competencies.

3.2. Study area, sample size and sampling techniques

This study was conducted in the Pemba North Region, Zanzibar – Tanzania, which is one of the five regions that make up the Zanzibar islands. The reason for selecting this study area was for the reason that the public secondary schools in the region experienced poor students' academic performance in history subject in form four national examinations for three consecutive years 2021, 2022 and 2023: 18.48% (2021), 17.09% (2022) and 19.49% (2023) [64].

The census and simple random techniques were used for the study sample selection;

the census technique was used to obtain a total of eighty-one (81) secondary school history teachers from thirty-five (35) public secondary schools in the study area who filled out the questionnaires. Out of them, 63 were male and 18 were female. The researcher used the census method since the study population was less than 100 respondents; thus, surveying the whole population was suitable for the quantitative study, specifically when the study population is less than 100. Besides, the simple random sampling technique was used to obtain 31 teachers who were involved in the classroom observation method of data collection, which provided an equal chance for every teacher to be involved in the study sample while minimising bias during the sample selection.

3.3. Data collection instruments and analyses procedures

The questionnaire and classroom observation rubric were used to collect data from the respondents. The 5-Likert scale questionnaire with fourteen (14) questions measuring teacher's competencies in utilising instructional materials in teaching history subject were administered to history teachers in public secondary schools in Pemba North Region, Zanzibar. The scale ranged from the lowest to the highest scale: (1 – strongly disagree, 2 – disagree, 3 – neutral, 4 – agree, and 5 – strongly agree). IBM SPSS Statistics Version 26 was used to analyse descriptive statistics such as means and standard deviation and chi-square tests to establish associations between variables. The mean value from the 14 questions was computed and categorised into high competencies level and low competencies level. The respondents who scored below average (3) mean value were termed as having low competencies level, while those with an average of (3) mean value and above were referred to as having high competencies level. The overall mean values for all questions were computed and finally termed as high competency level or low competency level. Then, a chi-squared test was used to establish an association between teachers' pedagogical competency levels in using instructional materials and other independent variables, which were demographic characteristics of the respondents such as subject of specialisation, in-service training, educational qualification and teaching experiences.

This study also employed the observation technique to collect data from teacher classroom practices, of which a simple random technique was used to select the 31 teachers who were involved in the classroom observation. During classroom observation, the observer was guided by the observation checklist with a list of guiding questions. The observation checklist guided the researcher to examine teachers' competencies on using instructional materials and how teachers employ effective strategies in using instructional materials in a classroom setting. Both quantitative and qualitative data were generated. Qualitative data were thematically analysed.

3.4. Validity and reliability of the study

Experts from the field of curriculum and instructions, statistics, and professional language editors from the University of Dodoma were consulted to validate the validity of the questionnaire. The questionnaires were evaluated in terms of language, quality, clarity, and coverage to check for any duplication or contradiction. The experts' suggestions were implemented to improve the validity before going into the field. Furthermore, questionnaires were (tested) piloted before actual data collection. To maintain reliability, Cronbach's alpha test was performed to test internal consistency, and the result was 0.72, which implies that the questionnaire was reliable.

3.5. Ethical considerations

The research team observed research ethics, which include securing the research clearance letter from the responsible authorities, namely the University of Dodoma and the Ministry of Education and Vocational Training of Zanzibar. Every respondent

was informed about the purpose of research and were required to fill and voluntarily sign the consent forms to accept to decline their participation in the study. In addition, respondents were informed earlier about the tools for data collection. The agreed-upon respondents willingly signed the consent form. Lastly, the pseudonyms were used instead of the actual names of participants to ensure confidentiality.

4. Research findings and discussion

4.1. Teacher's pedagogical competencies level on using instructional materials in teaching history subject in public secondary schools in Pemba North Region in Zanzibar

Data with regard to the first study question were collected through questionnaires and classroom observation, which were analysed based on mean score value and categorised into the lowest and highest pedagogical competencies as depicted in table 1.

Table 1

Teacher's responses with regard to the pedagogical competencies on using instructional materials in teaching history subject in secondary schools.

Variables	Mean	Standard deviation
I always choose appropriate instructional materials (IMs) when teaching	2.30	0.94
I always use IMs to facilitate learning in different contexts	1.81	0.78
I always use IMs appropriately to facilitate collaborative learning	2.16	0.83
I always modify IMs in relation to the instructional objectives	2.33	0.85
I always use IMs to facilitate classroom interaction	1.44	0.74
I always use IMs to promote learner-centred learning	1.84	0.81
I always integrate various IMs to promote activities-based learning	1.25	0.43
I always manage the classroom while using IMs in teaching	2.31	1.29
I always engage students with problem-solving tasks while using IMs	1.88	1.12
I always use IMs to accommodate learner's differences	1.70	0.98
I always use IMs confidently to promote inquiry-based learning	2.01	1.29
I have enough experience with IMs to teach history	2.09	1.16
I can use IMs to organise history lessons	2.47	1.22
I always relate IMs to the real-life situation during the lesson	1.54	0.76
<i>Overall competencies</i>	<i>1.93</i>	<i>0.77</i>

The results in table 1 show that teachers had low pedagogical competencies level in using instructional materials when teaching history subject, with an overall mean value of 1.93 (mean = 1.93), which is slightly below the average (3). Besides, it was revealed that the teacher's skills of using IMs to organise history lessons were the highly rated item with a mean score of 2.47 (mean = 2.47), followed by the teacher's skills to modify IMs in relation to the instructional objectives with a mean score of 2.33 (mean = 2.33). On the other side, the teacher's ability to integrate various IMs into the teaching process, with a mean score of 1.25 (mean = 1.25), was the least rated item. Furthermore, it was noted that, despite the variation of respondents in rating pedagogical indicators, all responses were below the average values, indicating low pedagogical competencies level of teachers in utilising instructional materials. These findings necessitated measures to be taken so as to improve teachers' pedagogical competencies in the utilisation of instructional materials for the effective teaching of history subject in public secondary schools at Pemba North Region in Zanzibar.

It is widely acknowledged that pedagogical competencies are necessary for teachers to teach and influence students' learning outcomes effectively. The findings from the

current study revealed low pedagogical competencies among teachers when using instructional materials in teaching history subject. The findings imply that teachers must be given pedagogical support so as to enhance their competencies and confidence and integrate instructional materials into their daily teaching practices. The study findings align with the study conducted by Ordu [53] in the UK, Ahmad et al. [3] in Malaysia and Purwaningsih, Madhakomala and Rita [58] in Indonesia, who observed that teachers had low pedagogical competencies and proficiency in the application of history materials for efficacious teaching and learning process which eventually affected their performances in the classroom. This is due to the fact that low pedagogical competencies commonly affect teachers' ability and confidence in using instructional materials to realise classroom practices. Likewise, Abdul Razak et al. [2] found that teachers have low pedagogical knowledge for carrying out classroom-based assessments, which implies that teachers should be engaged in professional training in order to improve their pedagogical competencies for effective teaching and learning history subject. Similarly, in Norway and the USA, studies found that teachers with high pedagogical competencies were likely to influence the quality of instruction and students' learning outcomes [11, 74]. Therefore, teachers should be trained through seminars, conferences and workshops to enhance their pedagogical competencies.

In contrast, the findings of this study differ from those generated by Marte and Quines [41] in the Philippines, which revealed high competencies of teachers in selecting, organising and implementing instructional materials to address learning goals as a result of the in-service training which indicates that, teachers with high competencies were more likely to influence students' learning than those with low competencies. Besides, these findings are in line with the Educational and Training Policy of Zanzibar and the Continuous Professional Development (CPD) framework, which emphasises in-service training so as to develop teacher competencies in using instructional materials, which in turn meet the EFA goals for the improvement of the teaching standards thus upgrading the quality education in Zanzibar [43, 72]. On a different note, the study conducted by Geletu [19] in Ethiopia found that teachers have high competencies in using instructional materials which facilitate cooperative learning practices as a result of regular professional and pedagogical training, which implies that teacher's professional and pedagogical training is vital for the development of teacher's pedagogical competencies. This study found that, despite the initiatives done to enhance teachers' pedagogical competence in using instructional materials in the teaching process, majority of secondary school teachers at Pemba North Region have low pedagogical competence with regard to the usage of instructional materials in teaching history subject. The study concludes that the effective utilisation of instructional materials in the teaching and learning process depends upon teachers' competencies through regular in-service training. In that regard, the Ministry of Education and other educational stakeholders should arrange workshops and seminars for public secondary school history teachers to upgrade their skills for effective classroom instruction.

The study also involved classroom observation to evaluate the pedagogical competencies of teachers in using instructional materials when teaching history subject. The findings from the classroom observation revealed teachers' low competency in selecting and utilising appropriate quality instructional materials for history teaching. The finding implies that in-service training is needed for teachers so as to improve their competencies in using instructional materials for effective history teaching. The findings from classroom observation are presented below.

4.1.1. The quality of instructional materials

The findings from the classroom observation revealed that most teachers have low competencies in selecting appropriate and quality instructional materials. It was evidenced that most of the instructional materials used by teachers were too small, unprofessionally constructed and in poor condition, missing important information, poorly coloured, containing unnecessary information, and some of them were non-functional. It was observed that a large proportion of 23 out of 31 teachers were able to use instructional materials having good quality in terms of visualisation, audibility and readability to the learner, whereas 22 out of 31 were observed to use materials with poor condition and poor colouring. For example, one teacher at School Y was observed using a sketch map drawn on Manila paper while teaching the topic of the East African slave trade route. However, there were challenges in preparing the sketch: the illustrations and font size were too small, the colours were poorly chosen (red marker on a red Manila sheet), and the map was overloaded with unnecessary information. As a result, students struggled to comprehend the intended lesson. It was also found that 18 out of 31 teachers were using irrelevant and non-flexible instructional materials when the research was carried out. Furthermore, 19 out of 31 teachers were observed using incomplete and non-functional instructional materials. For instance, one teacher at School X was observed relying solely on written text while teaching the topic of human evolution instead of using a wall map or illustrations. In contrast, another teacher at School Z used a chart to teach various historical sites in Tanzania rather than employing a sketch map to show their distribution. The use of these materials failed to accurately depict reality for the students, making it difficult for them to understand the lesson. These findings indicated that the majority of teachers had low competencies in selecting apt instructional materials for teaching history subject and that employing such instructional materials could create problems for a learner, hence failing to achieve the intended learning outcome. Figure 2 shows the summary of the quality of the instructional materials used by the history teachers in the study area.

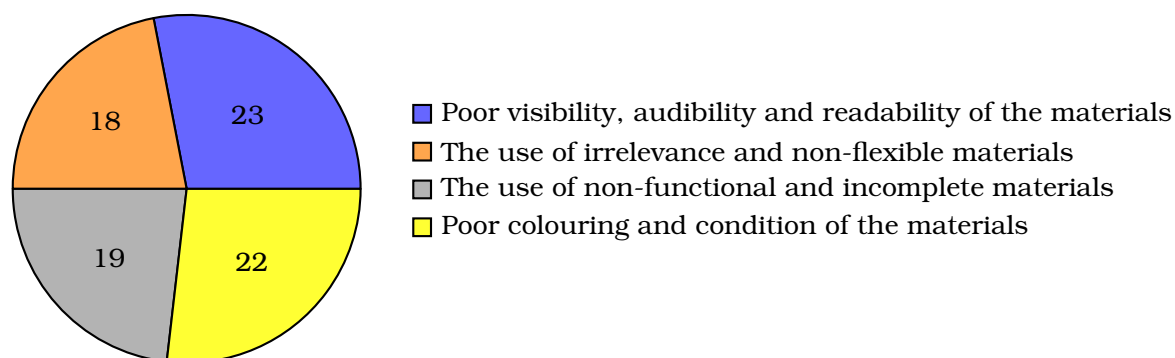


Figure 2: Quality of instructional materials used by history teachers.

The study findings imply that teachers have low competencies in the selection of appropriate instructional materials that can help students develop critical thinking and comprehend learning of the subject matter; thus, improving teachers' competence in the utilisation of the IMs is compulsory for effective teaching and learning of history subject. The findings concur with the study by Makwinya [39], who found that, teachers' ability of selecting IMs is low as most of materials used by teachers were observed to have structural and technical problems. In the same vein, Višnić et al. [68] and Kija and Msangya [29] support that employing IMs with small size and poor conditions hindered students from understanding the subject matter. Consequently,

teachers should be enrolled in professional development courses so as to enhance their competencies in using IMs for effective teaching and learning history subject.

4.1.2. Teachers' weaknesses on the utilisation of instructional materials in the teaching and learning process

During classroom observation, various issues were identified regarding the teachers' low competencies in utilising instructional materials when teaching in the classes. Figure 3 presents the summary of teachers' weaknesses in using instructional materials when teaching.

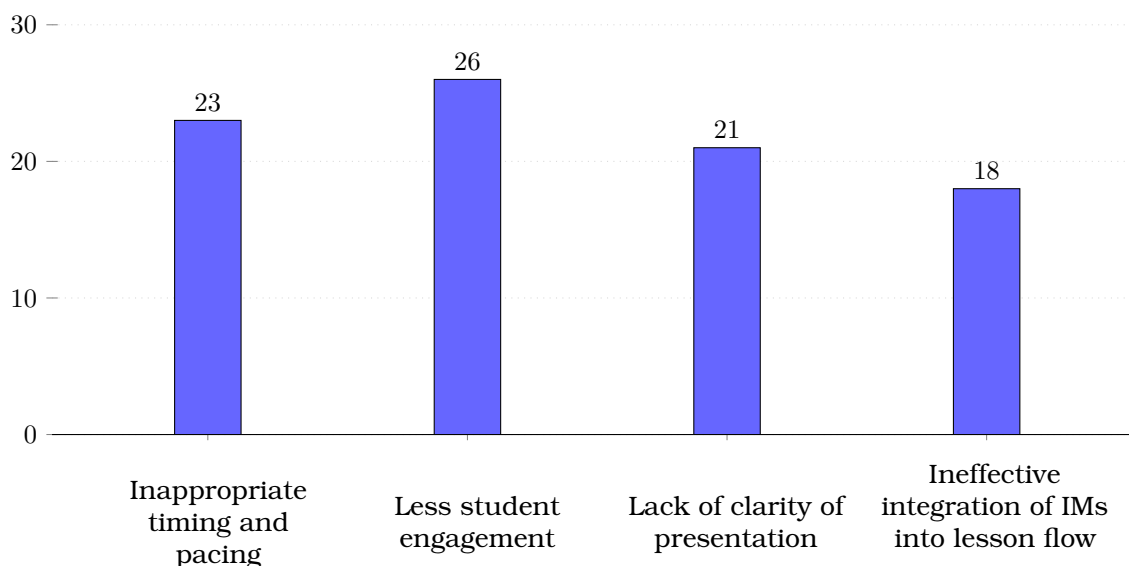


Figure 3: Teachers' weaknesses in utilising IMs when presenting history lessons.

One of the weaknesses observed from teachers' use of IMs during classroom observation is the ample and suitable time and pace for presenting the IMs. It was found from the classroom observation that the majority of teachers, 23 out of 31, utilise instructional materials improperly and untimely. For example, the findings from classroom observation depict that most teachers hang the IMs on the wall before starting to present the lesson. This issue was observed 21 times, thus being widely acknowledged from the literature that presenting instructional materials at the beginning of the lesson divides learners' concentration as partly concentrated while others do not. Some teachers were observed using instructional materials, such as sketch maps and atlases, only at the end of the lesson, while others were found to use textbooks inappropriately by distributing them to students from the beginning to the end of the lesson without specifying the appropriate timing and pace for their use. Therefore, presenting instructional materials in a timely manner and at an appropriate pace is crucial for enhancing students' understanding. For that reason, it is recommended that teachers present the IMs in a timely and provide sufficient descriptions of the subject matter appropriately. This finding is similar to the study by Ehirim, Iwuchukwu and Okenyi [15], who informed the relationship between time for presenting IMs and effective classroom instructions. Likewise, Makwinya [39] and Castro-Alonso et al. [9] supported that learners benefit more when IMs are used by teachers at the appropriate time. So, it was recommended that teachers should attend conferences and workshops on IM preparation and utilisation for effective teaching and learning process [66].

Another issue observed in the classroom was a lack of clarity and ineffective integration of IMs into lesson flow. The study findings show that teachers had insufficient

skills in utilising IMs for effective teaching of history subject. It was revealed that a significant proportion of teachers that is 21 out of 31, used little time to both describe and provide sufficient descriptions of the IMs to students, though it is clear that the role of IMs is to explain complex concepts being taught abstractly. It was also observed that the majority of teachers, 23 out of 31, presented the IMs while standing in front of the classroom instead of walking around and describing at different angles in the classroom or distributing IMs in different groups. Such demonstration of the IMs by teachers benefited only a few students staying in the front seats while the majority of them lacked the opportunity to interact with the IMs, thus creating the challenge for students to achieve the intended learning objective. Likewise, in some schools, teachers failed to integrate instructional materials into the lesson and instead presented them to the classroom without proper context. This issue was observed 18 times. The study findings indicated that the use of IMs is still a big challenge for the majority of history teachers in the Pemba North Region. In that regard, to address this issue, history teachers need professional training on the appropriate strategies to be employed in utilising IMs, including preparing many IMs and distributing them to different groups of students in the class or standing at different angles in the class, displaying and describing the IMs to students. The study finding aligned with the study by Michael, Ndiyuje and Ephraim [42], Ndomondo, Mbise and Katabaro [50], who reported that poor utilisation of IMs and strategies among history teachers probably was caused by teachers' insufficient knowledge and skills in teaching history subject. Similarly, Bukoye [8] revealed that poor utilisation of the IMs among teachers had a direct influence on the student's failure to achieve the learning outcome. Thus, the finding implies that it is high time to enhance teachers' pedagogical competencies to improve instructional practices in public secondary schools at Pemba North Region in Zanzibar.

Another issue observed during classroom observations was students' engagement with instructional materials. The findings revealed that nearly every teacher used a teacher-centred approach when presenting instructional materials during lessons, while students had few opportunities to use the materials actively. This passive approach limited students' chances to interact with and practice the classroom activities. As a result, it became difficult for students to develop critical thinking skills and fully comprehend the learning objectives. These findings imply that the majority of teachers lack the skills to use a student-centred approach to engage the students with materials actively during the instructional process. Therefore, the study recommends that in-service training for history teachers be taken into account so as to improve their competencies in the utilisation of IMs for the teaching and learning process to be effective. The findings of this study are similar to the study by Ali, Ahmad and Seman [6], who found that teachers still focus on the traditional methods of the teacher-centred approach in the contemporary world. Based on the premise of Vygotsky's SCLT, effective classroom practices should focus on learner-centred pedagogy where learners are active participants in the learning process [69]. In the same vein, Mamoura and Nako [40], Edin, Awang and Ahmad [14] supported that teachers had to create inquiry classrooms by engaging students in meaningful discussion. This finding implies that student involvement in utilising IMs is essential in fostering their understanding and critical thinking; thus, teachers should be encouraged to use a student-centred approach when conducting instructional practices.

4.2. The effect of teachers' specialisation, in-service training, working experiences and educational level on teachers' pedagogical competencies in using IMs for history teaching

The second question was to find out the effects of teachers' educational level, specialisation, working experiences and in-service training in the application of teachers' pedagogical competencies in using instructional materials when teaching history subject. A chi-squared test was performed to measure variables affecting teachers' pedagogical competencies in using instructional materials for history teaching. Table 2 presents the chi-squared test on the factors associated with teachers' competencies in using instructional materials when teaching effectively.

Table 2

Chi-squared test on the factors associated with teacher's competencies in using instructional materials.

Variables	Competency level		chi-value	p-value
	Low, N (%)	High, N (%)		
Education level			3.321	0.1899
Masters	2 (66.66)	1 (33.33)		
Bachelor	56 (81.16)	13 (18.84)		
Diploma	5 (55.56)	4 (44.44)		
Experience			0.988	0.6107
<5	31 (83.78)	6 (16.22)		
6-10	16 (72.73)	6 (27.27)		
>11	17 (77.27)	5 (22.73)		
In-service training			6.291	0.012*
Not trained	47 (87.00)	7 (13.00)		
Trained	17 (63.00)	10 (37.00)		
Specialization			7.547	0.006*
Specialized in history subject	43 (70.49)	18 (29.51)		
Not specialized in history subject	18 (90.00)	2 (10.00)		

* $p < 0.05$ indicates statistical significance

Based on the findings in table 2, it was observed that teachers' pedagogical competencies were significantly associated with in-service training ($p = 0.012$) and specialisation of the respondents ($p = 0.006$). With regard to the in-service training, it was observed that a large proportion of teachers with low competencies were observed among those who did not attend in-service training, equivalent to 87.00% compared to those who attended in-service training, equivalent to 63.00%. In respect of the specialisation, teachers who did not specialise in teaching history subject were significantly more likely to have low competencies scores, equivalent to 90.62%, compared to those who specialised in teaching history subject who were equivalent to 65.3%. The study findings imply that both in-service training and specialisation are crucial factors for enhancing teachers' pedagogical competencies in the utilisation of instructional materials for the effective teaching and learning process. For that reason, educational stakeholders in Zanzibar should initiate measures with respect to the study findings to improve teachers' pedagogical competencies in the teaching and learning process, particularly in history subject.

The findings from the second question show that history teachers' low pedagogical competencies in using IMs were attributed to the absence of regular in-service training and lack of specialisation among them in public secondary schools in Pemba North Region in Zanzibar. It was found from the published literature that pre-service and in-service training toward the utilisation of IMs influenced teachers' competencies in their instructional process. The findings imply that the absence of regular in-service

training among the majority of teachers affected their pedagogical competencies and readiness to utilise IMs during history teaching lessons. Hence, teachers should acquire appropriate skills and knowledge on the effective utilisation of IMs in teaching practices.

The study's findings concur with the study in Tanzania by Maisiba and Azaliwa [38] and Makwinya [39], which revealed that the lack of adequate pedagogical preparation and professional development opportunities mainly attributed to low pedagogical competencies amongst teachers in using IMs in classroom presentation. Moreover, Oteng et al. [54] in Ghana suggested the necessity of teacher's training in subject matter and pedagogical knowledge to raise their pedagogical competencies and proficiency in the implementation of the curriculum. For this reason, teachers with high pedagogic competencies in using IMs were more likely to influence the teaching and learning process [33]. Teachers should engage in professional development programmes so as to improve their competencies toward utilisation of IMs for effective teaching and learning process [57]. Nevertheless, in Malaysia, Edin, Awang and Ahmad [14] and Ali, Ahmad and Seman [6] revealed a shortage of in-service training, low professional seniority and teacher attitudes as the main factors that hindered teachers' competencies in teaching history subject. In Zanzibar, the CPD framework identified the necessity of in-service training for improving the professional standard of teachers in the provision of quality education [72]. Similar to the current finding, Hamad, Ndibalema and Matalu [22] and Abdalla [1] in Zanzibar revealed the association between the absence of regular in-service training among teachers and their low pedagogical competencies in using IMs in secondary schools. The findings imply that the Ministry of Education and Vocational Training and other educational stakeholders should prioritise regular training and recruitment of trained history teachers so as to improve the quality of teaching and learning history subject at the Pemba North Region in Zanzibar.

This study also found that teachers who specialise in teaching history subject have higher pedagogical competencies in using IMs when teaching compared to those who are not specialised; thus, this finding highlights the need to recruit teachers who specialise in teaching history subject. Similar to other studies, the present study revealed that unspecialised history teachers have low competencies in using IMs to effectively influence the teaching and learning process of the subject matter. Ali [5] revealed that some pre-primary school teachers have low competencies in teaching pre-primary education since they are not specialised in teaching pre-primary schools. Thus, specialised teachers have high competencies in using IMs in the teaching process. Besides, the findings imply that specialised knowledge is essential in improving teachers' competencies in the teaching process. Therefore, non-specialised history teachers should enrolled on professional programmes to acquire pedagogical skills in using IMs for the effective teaching of history subject. Nevertheless, it was found that professional training has a positive impact on the pre-service teachers on the integration of digital technology into the teaching processes [55]. Moreover, Quilapio and Callo [59] revealed that in-service training programs improve teacher competencies in content knowledge, teaching methods and better utilisation of teaching and learning resources. These findings imply that the educational stakeholders in regulating professional training should re-train non-specialised teachers with pedagogical practices for the effective utilisation of IMs. Therefore, teachers' training should be a continuous process and organised at a school-based level for developing non-specialised subject teacher skills of using IMs in the teaching process [23].

5. Conclusion and recommendation

This study examined teachers' pedagogical competencies in utilising IMs for teaching history subject in public secondary schools in Zanzibar. The findings revealed low pedagogical competencies among teachers in using instructional materials for teaching history subject in public secondary schools in the Pemba North Region in Zanzibar. It is therefore argued from the literature that teachers with high competencies are likely to influence effective teaching and student learning outcomes and thus should be recruited in public secondary schools at the Pemba North Region in Zanzibar. The low competencies in using instructional materials demonstrated by teachers indicated that there is a big problem in teaching and learning history subject in public secondary schools in the Pemba North Region in Zanzibar and Tanzania in general, which implies that there is a need to enhance teacher's pedagogical competencies to upgrade their ability in using instructional materials so as to improve the quality of teaching and learning history subject.

Furthermore, it was found that a shortage of regular in-service training and limited specialisation among history teachers is a significant factor associated with the low pedagogical competencies of the teachers in using IMs for teaching history subject. The study findings imply that in-service training and specialisation are pivotal for improving teachers' pedagogical competencies in the teaching and learning process. Based on these findings, the current study suggests continuous in-service and re-training programmes for history teachers through seminars, workshops, short courses and conferences. This can be effectively implemented through school-based in-service training, as it is a cost-effective approach that allows teachers to continuously share knowledge, skills, and experiences, helping them to upgrade their pedagogical practices of utilising IMs for effective teaching of history subject. Besides, curriculum developers and policymakers should work together to design comprehensive guides for the effective utilisation of instructional materials, which can be used as a model for teachers to utilise instructional materials in their daily classroom teaching effectively.

Finally, the study acknowledged limitations related to the study design that may limit generalization of the findings across populations. Since this study was conducted in secondary schools in Pemba North Region, future research may expand the study location and sample schools in other regions in Zanzibar and Tanzania mainland. Future studies may benefit from sample size that is representative of the broader population of history teachers in Zanzibar, Tanzania mainland or other countries. Furthermore, studies that employ in-depth interviews and documentary and integrate insights from students and school quality assurance officers are recommended. This may provide a more understanding of teachers' pedagogical competencies in using IMs. In addition, it would be beneficial for future studies to focus on the impact of teachers' competencies in using instructional materials on the development of students' critical thinking skills.

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