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Instructional Strategies in Developing Critical Thinking Skills in Non-Formal Secondary Education in Tanzania

Abstract

This study examined the contribution of instructional strategies in developing critical thinking skillsin non-formal secondary education in Tanzania. The study was carried out in Kinondoni Municipal council in Tanzania. Qualitative approach with phenomenology design was employed in this study. The study sample comprised 36 learners and 8 teachers that make total of 44 participants. The study used purposeful sampling to all participants. Methods used to collect data in this study were interviews, focused group discussions and observations. This study employed thematic analysis to analyze the data. The study findings indicated that there was limited use of instructional strategies had showed to have little contribution of developing critical thinking skills among learners. These strategies include lecture, questions and answers, oral presentation, group discussion and problem-solving that had low contribution in developing critical thinking among learners in non-formal secondary education. The study further revealed that most of the people who were teaching were not qualified to be teachers; this lead also to very low contribution of developing critical thinking among learners. The study recommends that teachers should use adequate interactive instructional strategies that may have great contributions in developing critical thinking among learners such as questions and answers strategy, group discussion, oral presentation, problem solving, research activities, field work, exposing learners to libraries, provisional of triggering questions, puzzling questions and promoting self-independent learning.

Keywords: critical thinking, instructional strategies, non-formal secondary education.

Introduction

Critical thinking is one of the higher order thinking skills that are highly needed in the 21st century (Baker, 2015; Barnett & Francis, 2012; Gini-Newman & Case, 2018; Gray, 2016; Saputri et al., 2019; Susilawati et al., 2020). A learner with critical thinking skills is always reasonable and rational (Baker, 2015; Facione, 2015; Kong, 2015).Critical thinking involves different attributes such as problem-solving, analysis, rational reasoning, evaluation, investigations, and judicious decision, interpretation, inference, explanation, interpretation, self--regulation (Facione, 2015; Ghazivakili et al., 2014). Literature (Chalkiadaki, 2018; Joynes, Rossignoli, & Amonoo-Kuofi, 2019) suggests that critical thinking is an important aspect because it facilitates learners to become effective and efficient in the labour market economy. For this reason, enhancing teachers' abilities to inculcate critical thinking skills in their learners is an inevitable endeavor.

Evidence indicates that critical thinking can be promoted in diverse ways. One of the strategies used by many Western countries to enhance critical thinking is through highly involving learners in taking their own responsibilities, particularly during teaching and learning processes (Joynes et al., 2019; Raymond & Choon, 2017). Some authors (Zhao, Pandian, & Singh, 2016; Ademi, 2012) argue that teachers may help to develop critical thinking in their learners through asking questions, cooperative learning, as well as encouraging them to read novels and watching movies. Students from some Asian countries, however, seldom work collaboratively in class discussion due to their cultural influence (Raymond & Choon, 2017).

Critical thinking is also well featured in the Tanzanian secondary education curriculum (Giacommazzi, Fontana, & Trujillo, 2022). Developing self-confidence, curiosity, and an inquiring mind are also important among learners in non--formal secondary education as they enhance their abilities to effective exploit and utilize the available scarce (Tanzania Institute of Education, 2013). Fundamentally, non-formal secondary education in Tanzania aims to provide out--of-school with alternative or second-chance avenues of learning, as well as the option of mainstreaming back into general school system (Kanukisya, 2012; Shirima, 2020). The targeted group for this category of education are youths and adults who missed opportunity to join the formal secondary education systems due to poverty, early pregnancy, long distance from home to school, and orphanage (Mushi, 2010). This implies that non-formal secondary education in Tanzania serves all people regardless of their cultural background, ages, sex, marital status, disability and socio-economic status.

The role of critical thinking in shaping intellectual abilities of learners in various formal schooling is widely investigated (Ekici et al., 2017; Facione, 2015; Ghazivakili et al., 2014; Gurkaymaket et al., 2008; Joynes, Rossignoli,

& Amonoo-Kuofi, 2019; Juprijal & Simamora, 2017; Murawski, 2014; Nold, 2017; Oczan, 2020). Limited attention is, however, placed on understanding instructional strategies in developing critical thinking skills in non-formal secondary education. Therefore, this study was intended to address this knowledge gap. The study further is expected to add knowledge on both critical thinking literature and theory.

Methods

This study employed a qualitative approach and phenomenology design was adopted. The approach and its design produce detailed description of participants' feelings, opinions, and experiences (Rahman, 2017; Creswell & Poth, 2018). The study was carried out in four non-formal secondary education centres in Kinondoni Municipal Council (MC) in Dar es Salaam Region, Tanzania because of high enrolment rates of students as compared to other regions. Students and teachers were purposively sampled from lowly and highly performing schools. According to Etikan, Musa and Alkassim (2015), purposive sampling is a deliberate choice of participants due to the qualities they possess. In this light, teachers were chosen due to the fact that they are implementers of the non--formal secondary education curriculum through utilization of instructional strategies during teaching and learning process. From each centre, two teachers were purposive sampled by virtue of their profession of teaching mathematics and history subjects. The researchers used expert sampling strategy to get teachers because of their knowledge, experience, expertise and position in teaching mathematics and history subject in non-formal secondary schools. Teachers from other subject areas of specialization were not involved because only two subjects that are mathematics and history were chosen for investigating the phenomena. These two subjects were chosen because elements of critical thinking skills are mostly found in mathematics and history subjects and learners are applying critical thinking in their day-to-day life. Specifically, the details of the sample size were as follows: Given that 36 non-formal secondary school learners were the main beneficiaries of the non-formal secondary education program, they were purposively chosen. Learners were purposeful chosen due to the fact that they are experiencing the practice of instructional strategies used by their teachers. Maximum variation sampling strategy were used to obtain the non-formal secondary school learners who study both history and mathematics subjects. Maximum variation is a purposive sampling technique in which the researcher selects informants who provide a cross diverse range of cases relevant to a particular topic of study (Etikan et al., 2016). The learners performing high, middle, and low studying both Mathematics and History subjects in stage two were chosen.

Data Collection

This study involved in-depth interviews because it is a valuable way of gaining a description of activities and events that took place in the past, or those which you cannot gain through observation method (Maxwell, 2005). Both teachers and their learners were interviewed whereby each individual interview took 45 minutes for every research participant to elaborate how the instructional strategies used by teachers develop critical thinking among learners. All eight teachers participated in this study were interviewed. In addition, two learners from each centre that made eight in total were interviewed. Two learners from each centre were interviewed that make total of eight. The study also used observation method where by participant observation type was used to collect data. The observation method was used due to the fact that this method provides a direct and powerful way of learning about people and the context in which this occur (Maxwell, 2005). The classroom observation took 40 minutes for every non-formal secondary education centre visited. Focused group discussion was also used as a method to collect data. Seven learners from each centre that make total of 28 participated in focused group discussion. The FGD created a good opportunity to collect data from the group of learners with diverse background who provide different ideas, opinions and feelings towards the phenomena.. The study had four focused group discussion in which each group had seven learners. Each focused group discussion took one hour.

Pseudonym were used for all teachers participated in this study and were named T1, T2, T3…T8. This is because teachers are experienced in teaching these two subjects and also were purposive sampled by virtue of their profession of teaching History and Mathematics subjects. The four non-formal secondary school education centers chosen for this study were named NFSEC1, NFSEC2, NFSEC3 and NFSEC4. From each non-formal secondary education centre 9 learners were chosen to participate in this study and were named LR1, LR2, LR3…LR36.

Data Analysis

The analysis of this study was based on qualitative analysis whereby thematic analysis was employed. In this study Creswell, (2014) steps were followed include ding organizing and preparing the data for analysis, reading all the data, developing categories or topics for analysis, using the coding process, advancing themes and interpreting the data.

Analysis of the Results

This part presents the results basing on the objective this study. Methods through which these data were obtained were in-depth interview, observation and focused group discussion. Thematic analysis was used to analyze the data. Six key themes were emerged from participants namely that are lecture strategy, questions and answers strategy, group discussion strategy, oral presentation strategy, problem solving strategy and teachers' qualification.

Lecture Strategy

The study found out that lecture strategy was predominantly used by all teachers during teaching and learning process. Teachers and learners in the interview and focused group discussion revealed that lecture is the main method that is mostly used by all teachers during instructions. This was reflected from the responses of all participants in this study. During the interview and FGD with learners, they revealed that their teachers mostly they use lecture strategy during teaching and learning. For example, one learner in the interview from NFSEC3 had this to say:

> Though to a large extent our teacher uses lecture in teaching to teach us but sometimes he uses questions and answers, group discussion as well as oral presentations (LR34).

Likewise, teachers in the interview declared that they mostly use lecture method. The study findings established that lecture strategy had no contribution in developing critical thinking among learners. Teachers in the interview revealed that lecture strategy was mostly used by teachers to deliver the course content but not to develop critical thinking among learners. In addition, the study sought to find out the reasons for teachers preferring using lecture strategy than other instructional strategies. Teachers said that they mostly use lecture method due to the fact that they were running with shortage of time and their classes had large number of learners. For example, one interviewed teacher from NFSEC4 remarked:

> Lecture is the main strategy I use to teach my learners followed by question and answer shortly. I prefer using lecture method due to large class size I have that is 163 learners. It is very difficult for me to use the interactive methods mostly such as group discussion for a congested class like this. That is the reason I prefer lecture (T6).

This was further confirmed through observation method where all teachers observed to use lecture method mostly than other instructional strategies. It was observed that lecture method was the main strategy all teachers preferred used in the four visited centres. It was observed that teachers were standing in front of the classroom and lecturing learners. Learners were just

listening what their teachers were teaching and taking notes. For example T5 in NFCE3 when entered the class she started writing the title of the topic and sub-topic, later she wrote some hints or points only to the whole board. After finishing writing, she started giving a lecture by connecting the previous lesson to the current lesson while learners listening and taking the notes what was being said by this teacher.

The study findings imply that teachers in non-formal secondary education centres visited mostly used lecture method. Since lecture method is non--interactive strategy whereby learners are passive during instruction and a teacher observed to be the source of knowledge, it is difficult to develop critical thinking skill among learners. This is because when a teacher is lecturing there is no room for learners to participate and collaborate during teaching and learning. This make learners be passive, dormant and not active in learn that is a barrier for developing critical thinking among them.

Questions and Answers Strategy

The result of this study established that teachers were using questions and answers strategy during instruction. The study revealed that questions and answers had some contribution in developing critical thinking among learners. The study sought to explore the how questions and answers strategy enabled learners think critically on academic and general life issues. The findings established that questions and answers strategy have enabled most of the learners to think more on academic matters rather than life issues. For example, in the FGD with learners, learners said that teachers use questions and answers method enabled them mostly enabled me to think too much on academic issues rather than on life matters especially when they answer questions in the examinations. Contrary to these findings, few learners in the interview declared that questions and answers strategy has enabled them to think critically on both academic issues and life issues. For example, one learner fromNFSEC4 states:

> When a teacher asks questions in the class, I have to think first. This helps me to think even outside classroom when I encounter difficulties in my life (LR 27).

On top of that, in the interview with teachers, teachers said that they also use questions and answer method during instruction. Teachers revealed that questions and answers method enabled learners think critically on academic matters rather than on life issues. Additionally, teachers revealed that they use questions and answers strategy to make their learners memorize the concepts and finally be able to perform different classroom activities assigned and do school examinations and mock and national examinations for example, one interviewed teacher in NFSEC 4 elaborated:

> If we do not use questions and answers method in teaching students, they might end up getting zero scores in their final national examinations. This is because our main goal is our learners are to pass their final examinations so that our learners can get good credit while others get good certificates (T2).

Furthermore, it was also confirmed through classroom observation where it was revealed that teachers were also using questions and answers method during teaching and learning. For example, a Mathematics teacher (T8) in NFSEC2 was asking learners questions by asking them to repeat what he had said especially when saying something important. Similarly, T3 in NFSEC4 when was teaching History subject was asking learners the oral questions and demand learners to answer the questions in a chorus form. For example, this teacher asked this question: 'When the Second World War did occur?' Learners replied in a chorus form '1945'. In addition, T5 in NFSEC2 asked one question in the topic of Africa in International Affairs and sub-topic of African Regional co-operation as follows: 'Mention any four regional cooperation entities'. Students answered this question individually and the answers mentioned by students are 'East Africa Community, COMESA, SADC and ECOWAS'.

These findings imply that teachers were using questions and answers strategy for the examinations purposes not developing critical thinking among learners. This shows that teachers were relying on cognitive domain of Bloom's taxonomy rather than affective and psychomotor domains.

Group Discussion Strategy

The study findings established that teachers were using group discussion strategy during instruction. The study also established that group discussion method had large contribution in developing critical thinking among learners in all spheres of life. This was evidenced from the interview and FGD with learners that group discussion strategy mostly enabled learners to thinking critically on both academic issues and life matters. For example, one learner in the FGD from NFSEC2 states:

> A group discussion is the best strategy which enabled me to think critically on life issues rather than on academic matters compared to other strategies such as lecture and questions and answers (LR 12).

On top of that, teachers in the interview revealed that they use group discussion rarely. It was also revealed in the interview with teachers that group discussion method had enabled learners to think critically on both academic and life issues in general. It is only one teacher who said that group discussion enabled learners to think critically much on academic matters rather than on life issues. For example, one interviewed teacher from NFSEC1 portrayed:

> I think group discussion somehow has enabled my learners to think critically on both academic matters and life issues in general. This is because group discussion can enable learners to keep long memory when learning though it consumes too much time in practising it (T3).

This is evidenced from classroom observation that teachers were using group discussion method occasionally. It was found that most of the group discussions were being conducted after class hours whereby learners were discussing questions mostly from past papers of mock examinations, national examinations and few questions given by teachers to discuss. It was further observed that teachers were not visiting the groups to provide assistance.

The findings imply that group discussion is a good method that enabled learners have critical thinking though it was used rarely by all teachers in the visited centres. This is because it was evidenced when all participants declared that group discussion method enabled learners think critically on both on academic issues and life matters.

Oral Presentation Strategy

The study findings established that teachers were using oral presentation during teaching and learning. It was further established that oral presentation strategy had some contribution in developing critical thinking among learners and confidence. Learners in the interview and FGD revealed that oral presentation somehow has developed critical thinking among them as well as on how to present the given question. For example, in the FGD with learners, one learner from NFSEC1 explained:

> Oral presentation strategy has helped me to be confident when I am presenting. This method also has added a value to me on how to think critically before I talk in front of the class (LR8).

On top of that through interview with teachers they said that they seldom use oral presentation method. In the interview, teachers declared that oral presentation method has some contribution in developing critical thinking among learners. This was evidenced from one teacher in the NFSEC1 heard:

> I think oral presentation may be a good method that enable learners to think critically and gives learners' way of solving problems they encounter every day (T3).

On top of that, it was confirmed through observation method that few teachers were using oral presentation strategy. It was observed that teachers provided a question to discuss in groups and later on learners went in front of the class and present the answer of the question given. It was further observed teachers were asking some questions a group that was presenting and some members of the group answered the questions basing on what they have presented.

The study findings revealed that oral presentation method had some contribution in developing critical thinking among learners rather than prepare learners develop the confidence. This entails that teachers were using oral presentations to prepare learners gain confidence, self-expression and master course content.

Problem Solving Strategy

The study established that teachers who teach Mathematics subject were using problem solving strategy. It was revealed in the interview and FGD with learners and teachers who teach Mathematics subject that problem solving strategy had great contribution in developing critical thinking among learners than other strategies. For example, one interviewed teacher form NFSEC3 states:

> Mathematics is a problem in nature… Any teacher who teaches this subject cannot avoid using problem solving strategy. This is because we use mathematics in our daily life such as measuring water, cooking oil, sugar, salt, rice and all types of food and other materials This force me to teach learners on how to solve problem, in which critical thinking may be developing (T4).

Again, one interviewed learner from NFSEC2 proclaimed that:

> Problem solving strategy is a good method because when a teacher a question to solve, for sure I have to stretch my brain. I start writing the question and then I write a formula. Basing on the formula I solve a question step after step until I reach conclusion or answer (LR10).

On top of that, through classroom observation, it was observed that problem solving method was used by teachers who teach Mathematics subject while teachers teaching History subject were not using this method.

These findings imply that problem-solving strategy features all elements of developing critical thinking. This is because learners think critically on how to solve a problem stage by stage until the answer or solution is obtained. However, problem-solving strategy was done occasionally by mathematics teachers, learners somehow were equipped critical thinking.

Teachers' Qualifications

The study found that most of people who were teaching in the non-formal secondary education visited were hat having qualification to be teachers. This was revealed in the interview with teachers when the study sought to find out the teachers' education background and their experience of teaching. Through interview with teachers it was revealed that three teachers out of eight were qualified to be teachers. These teachers had a Bachelor of education in arts and

science. One teacher had 12 experiences in teaching, another teacher had 6 years in teaching and one teacher had 3 years in teaching. The five unqualified teachers four of them were the Form Six leavers (Advanced secondary level of education). For example, two of them in their advanced level studied the combination of History, Geography and Kiswahili (HGL). Two teachers studied the combination of Physics, Chemistry and Mathematics (PCM) and one teacher had a Bachelor of Public Administration (BPA).

These findings entails that most of teachers in the non-formal secondary education centres were not qualified to teach basing the fact that they did not pass any teachers training college or university provide courses for teachers. The implication of these findings might be that the heads of non-formal secondary education centres are not basing on the teachers qualification. The lack of teaching qualification may lead teachers fail to develop the critical thinking among learners.

Discussion of the Findings

The study findings revealed that teachers who teach Mathematics subject used problem solving method rarely while teachers who teach History subject did not use this method. The study further revealed that problem solving was a good strategy for developing critical thinking among learners though it was done rarely. The findings are in alignment with an experimental study by Mardiana et al. (2018) in Indonesia who found that there are differences of critical thinking and science process skills among learners who learn to use problem solving method with learners who learn by using conventional learning method in experiment class. Similarly, in a quasi-experimental study by Budhi and Suwarni (2019) indicated that there is an influence of learning problem-based learning model on the ability of critical thinking on science. This entails that problem-solving method is a good strategy for developing critical thinking skills among learners though in the non-formal secondary education centres visited was limited used in Mathematics classes while in History was not. This limitation might cause the low contributions of development of critical thinking among learners in non-formal secondary education centres visited. In addition, in the study by Peppen et al. (2021) found that learners learned to avoid biased reasoning and learners reasoning task performance were improved from pretest to immediate posttest. Contrary, the study by Juprijal and Simamora (2017) in Indonesia, found that the learning devices based on Realistic Mathematics Education (RME) increased students' critical thinking. Tanzania differ with Indonesia in technological and economic advancement in which the RME device in Tanzania is not yet being used during teaching and learning to develop the critical thinking among learners.

The study findings established that all teachers were using questions and answers strategy during instructions. The study found that questions and answers strategy had some contribution in developing critical thinking skills among learners. The findings concur with what have been found by Santoso, Yuanita, and Erman (2018) in Indonesia that the level of questions plays an important role in critical thinking skills in the question levels of predictive, analysis, evaluation and inference. According to Santoso et al. questioning means thinking and thinking is manifested in the form of questions in which a series of questions usually encourage learners to think critically. However, not every questions promote the critical thinking among learners but it depend on the way the questions are structured and having dispositions of critical thinking such as the questions demanding learners to have high reasoning capacity, analytical, good decision, comprehend, create and innovate and solve problems, infer and reach to the conclusion. The findings further are in agreement with a qualitative study by Rashid and Qaisar (2016) in Pakistan who found that questioning is a productive teaching approach in promoting critical thinking among students. Contrary, Yuliawati, Mahmud, and Muliati (2016) in their qualitative study on the teacher's questioning techniques and to analyze the roles of teacher's questioning on student's critical thinking, they found that the role of teachers questioning only in the lower order thinking of the students which could not facilitate the student's critical thinking but it can lead the students to think critically. Questioning technique is one of the elements of five step model that suggested by Yusuf and Adeoye (2012) that can develop critical thinking among learners.

The study findings indicated that teachers who teach History subject were using oral presentation strategy while those teaches Mathematics were not. The study further indicated that oral presentation strategy had some contribution in developing critical thinking skills among learners though it was done occasionally. The study findings are in consistent with that of quantitative study by Rathakrishnan et al. (2020) in Malaysia found that oral presentation method allows students to process new information and think critically and confident in conveying their oral speaking. In addition, the study findings concur with what have been found from a mixed research by Robillos (2022) in Thailand that oral presentation method has significance relationship in enhancing critical thinking disposition. Despite the fact that there is an economic and technological advancement gap between Malaysia, Thailand and Tanzania, the findings had some similarities though the disparities were few such as focus, methodology and sample. Literature shows that oral presentation method allows learners to encourage different skills including critical thinking skills (Zamira & Khurziya, 2020). The oral presentation may also enable learners in their future career simply because this method apart from developing critical thinking skills it develops also communication skills, self-expression skills and confidence.

The study findings revealed that all teachers were using group discussion strategy during teaching and learning though seldom it was used. The findings also revealed that group discussion strategy contributed learners' critical thinking in both academic matters and life issues. These findings has some similarities with a qualitative study by Asrita & Nurhilza (2018) in Finland who found that the ability of students to think critically was developed after getting experiences in learning by using group discussion method. Similarly, the current study findings concur with quasi- experimental study that of Maryani, Wahyudin and Sopiansah (2018) in Indonesia in their quasi- experimental study found that the whole group discussion has an emphasis in the development of critical thinking among learners. This imply that the whole or not whole group discussion so long this method is interactive in nature it has much in contributing in developing critical thinking skills among learners. This is also support what Helterbran (2007) asserts that group discussion is a good method that can be designed to promote critical thinking among learners. Likewise, the findings are in agreement with that of Ying (2020) who found that a discussion based business pedagogy fastened students how to think on one's own two feet. Similarly, the study by Jones (2014) found that the relationship between discussion group effectiveness and critical thinking application are mediated by course interest and engagement. In addition, the current study findings are in agreement with the findings obtained in Iran in a participatory action research by (Hajhosseini, Zandir, Shabanan, & Madani, 2016) Hajhosseini et al. (2016) who found that the components of critical thinking dispositions and social interaction were mostly unveiled during group discussion.

The study findings established that all teachers predominantly used lecture strategy during teaching and learning. Data from all participants revealed that lecture strategy did not contribute critical thinking among learners. The current study findings mirror what have been found in Malaysia in an experimental study by Masek and Yamin (2012) who determined the effect of problem-based learning on students' critical thinking ability. In their study, they found that students' critical thinking ability in the problem based learning group had not been significantly different from their counterparts in the conventional approach group. Similarly, the current study findings connect with what have been said by Maphosa and Ndebele (2014) that lecture method has serious limitations in teaching students to be critical thinkers. Again, literature shows that the main problem lecturers usually face in the classroom is the students be passive in interactive activities and lack of asking questions that lead to lack of critical thinking (Santoso et al., 2018). Basing on these studies and the current study findings, it is undoubted that lecture strategy have no ability to develop the critical thinking skill and other today needed skills in the 21st century due to the fact that lecture is non-interactive method.

The findings revealed that most of people who were teaching in non-formal secondary education centres were not qualified to be teachers. The findings contradicts with the Education and Training Policy [ETP] (2014) Tanzania that does not recognize people who did not pass a recognized college or university offering teachers training or courses. To develop learners' different essential skills including critical thinking, teachers' ability to utilize instructional strategies is a vital issue. For example, in Tanzania, teacher education is recognized and emphasized as an essential determinant of quality education. There are two teacher education programs in Tanzania, that are initial teacher education (pre--service education) and continuing professional development (in-service teacher education) (Namamba, 2017; Nzima., 2016; URT, 1995). Teachers colleges provide non-degree programs (certificates and diploma) while universities provide non-degree (Diploma), degree (Bachelor) and postgraduate diploma, and Masters in teacher education (URT, 1995). For example, diploma in secondary teacher education takes two years to offer professional courses, academic and teaching methods courses, and field experience (Nzima., 2016). From the pedagogical point of view, student teachers are prepared to acquire the competencies of guiding learners to be able to create, innovate and construct new knowledge through different learner-centered teaching methods (MoEVT, 2007; TIE, 2011).

Conclusion and Implications

In view of the findings emanated from this study, critical thinking skills are highly needed among learners in non-formal secondary education to enable them in employment, business, entrepreneurship, leadership and different issues needs judicious decision in this era of 21st century. In order for learners in non-formal secondary school learners develop the critical thinking skills and respond to the rapid global change of 21st century, teachers needs to use adequate interactive instructional such as questions and answers, group discussion, problem-solving, debate, oral presentation, peer tutoring, role-play, jig-saw, research, fieldwork, independent learning and expose learners to library. By so doing, learners may be in a better position of having critical thinking skills that may enable them having different abilities such of high reasoning capacity, making good decision, analyzing the wanted information from multiple source of information, create and innovate new things. In addition, policy makers needs to provide on-job training, workshops and seminars to teachers in non-formal secondary education so as to equip them knowledge on how to develop critical thinking skills among learners and various use of interactive instructional strategies needed during teaching and learning. Policy makers further needs to make sure that all people who teacher in non-formal secondary education centers have teaching qualification. If this done, may prevent several challenges which pose a danger of un employability, poor decision making, poor analytical of different source of

information, failure of solving problems, incompetent in working place, lack of confidence, lack of creativity and innovation among learners and graduates in non-formal secondary education in Tanzania. Last but not least, further researchers may conduct another study with similar knowledge by using mixed research with different location, sample, and scope.

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Strategie instruktażowe w rozwoju myślenia krytycznego w szkolnictwie średnim nieformalnym w Tanzanii

Streszczenie

W niniejszym opracowaniu zbadano wkład strategii instruktażowych w rozwój umiejętności krytycznego myślenia w nieformalnym szkolnictwie średnim w Tanzanii. Badanie zostało przeprowadzone w Kinondoni Municipal Council w Tanzanii. W badaniu zastosowano podejście jakościowe z projektem fenomenologicznym. Próba badawcza składała się z 36 uczniów i 8 nauczycieli, co daje w sumie 44 uczestników. Wykorzystano celowy dobór próby do wszystkich uczestników. Metody użyte do zebrania danych w tym badaniu to wywiady, zogniskowane dyskusje grupowe i obserwacje. W badaniu zastosowano także analizę tematyczną do analizy danych. Wyniki badania wskazują na ograniczone wykorzystanie strategii nauczania, które okazały się mieć niewielki wkład w rozwój umiejętności krytycznego myślenia wśród uczniów. Strategie te obejmują wykład, pytania i odpowiedzi, prezentację ustną, dyskusję grupową i rozwiązywanie problemów, które miały niski wkład w rozwój krytycznego myślenia wśród uczniów w nieformalnym szkolnictwie średnim. Badanie wykazało również, że większość osób uczących nie ma kwalifikacji nauczycielskich, co prowadzi do bardzo niskiego wkładu w rozwój krytycznego myślenia wśród uczniów. Badacze zalecają, aby nauczyciele stosowali odpowiednie interaktywne strategie instruktażowe, które mogą mieć duży wkład w rozwój krytycznego myślenia wśród uczniów, takie jak: strategia pytań i odpowiedzi, dyskusja grupowa, prezentacja ustna, rozwiązywanie problemów, działania badawcze, praca w terenie, wystawianie uczniów na działanie bibliotek, prowizoryczne pytania wyzwalające, zagadkowe pytania i promowanie samodzielnego uczenia się.

Słowa kluczowe: myślenie krytyczne, strategie instruktażowe, kształcenie średnie nieformalne.