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Obstacles to critical thinking: A qualitative study on secondary school learners in Masvingo, Zimbabwe

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The research reported on in this article was mainly undertaken to determine the obstacles to the enhancement of critical thinking in the learning of history at Form 3 level in secondary schools in the Masvingo urban area of Zimbabwe, in terms of the rationale of developing the learners' critical thinking. The promotion of critical thinking abilities is vital in education, since doing so helps to improve the learners' academic performance, as well as aiding in producing graduates with a multiplicity of skills that are required in the 21st century job market and in society as a whole. We used semi-structured interviews and lesson observations to reach conclusions on what recommendations to make in addressing the research problem. Several factors were identified as hindering the learners' acquisition of critical thinking, including the learners' and teachers' lack of self-efficacy, motivation and the poor learning environment. In addition to reflecting on the possibility of improving the learning and teaching of critical thinking, we recommend that the Ministry of Primary and Secondary Education, Zimbabwe's Schools Examination Council, teacher training colleges and teachers should all work together to develop the learners' critical thinking skills within the parameters of the Zimbabwean education system.

Keywords: critical thinking; education; history; learning; Masvingo; obstacles; secondary school; teaching; Zimbabwe

Introduction

In this study we identified the obstacles to the enhancement of critical thinking among Form 3 history learners in three selected secondary schools in the Masvingo urban area in Zimbabwe. The reason being that the Zimbabwean educational system appears to be unable to uphold the concept of critical thinking in its teaching (Ndhlovu & Mangwaya, 2013:329). History is unique and different from other subjects since historical thinking plays a fundamental role in history education (Seixas, 1997:23). The subject relies on historical sources necessitating a critical methodological study of past events (Chapman, 2011:175; Lévesque, 2009:6). Historical reasoning is an important task that enhances learners' understanding of historical events (Van Boxtel & Van Drie, 2018:149–176). As asserted by Lévesque (2009:11), historical thinking entails attainment of knowledge to comprehend the procedures used to examine historical aspects and its conflicting meanings. Critical thinking is a key ability that today's modern education systems aim to advance, since the capability of thinking critically is vital to everyday life. Its significance has been emphasised by several scholars, including Facione (2011:21–23), Massa (2014:387–392), Setyowati, Sari and Habibah (2018:240), Thompson (2011:1) and Vardi (2013:5).

As asserted by Cotton (1991, in Karakoç, 2016:81), the ability to think critically is seen as a characteristic of a learned individual, with critical thinking being essential for the development of responsible citizens that possess the necessary skills that equip them for a multiplicity of jobs. Facione (2011:23) states that critical thinking is a vital tool for the development of democracy in any country, since the deficiency thereof is likely to result in the collapse of the judicial system. This endeavour to expand the ambit of critical thinking has been inspired by the Zimbabwean education authorities' desire to equip learners for both living and work (Zimbabwe Ministry of Primary and Secondary Education, 2015:7). However, the teaching of critical thinking in schools has been difficult, despite the continuous calls for educators to foster such a spirit of inquiry (Radulović & Stančić, 2017:11; Slameto, 2014:161–166; Tapung, Maryani & Supriatna, 2018:173). Ndhlovu and Mangwaya (2013:329–334) assert that the Zimbabwean education system is being condemned by employers for its failure to produce graduates who are adequately prepared for work and life, with parents considering their children's ability as not being wholly developed by the current system. The Zimbabwe Ministry of Primary and Secondary Education (2015:6) also identifies the fact that the public, parents and the industry have become increasingly concerned about the relevance of Zimbabwean education. Consequently, we conclude that the Zimbabwean education system, as it currently stands, is unable to develop critical thinkers who are employable and in demand in Zimbabwe. In light of such a crisis, we sought to establish the obstacles that were hindering the enhancement of critical thinking among Form 3 secondary school history learners in the Masvingo urban area.

The lack of Zimbabwean learners' ability to think critically, something highlighted in the Zimbabwean curriculum review (2015:6–7), is also reflected by the low 2017 Ordinary Level pass rate (26.35%), which has deteriorated even further to 17.91% in 2019, according to the Zimbabwe Ministry of Primary and Secondary Education. Kibui (2012:33), Radulović and Stančić (2017:11) and Thompson (2011:1–7) were some of the first to note that a deficiency in critical thinking can result in learners achieving low grades. One of the researchers (a

secondary school teacher in Zimbabwe), also noted the findings by Kibui (2012:1) and Radulović and Stančić (2017:11); learners failed to do well in tests and examinations due to their inability to think critically. The Zimbabwean education system, across a broad front, seems to be failing to produce critical thinkers. In light of such a problem, we discuss how the obstacles to learners' critical thinking were detected, and how they could be seen to be affecting Form 3 history learners in the secondary schools in the Masvingo urban area.

Accordingly, the article is presented in six sections. The discussion starts with a presentation of the literature review and research methods used in the study. The research findings are then elaborated on and discussed in detail. This is followed by recommendations, concluding remarks, and acknowledgements.

Aim and Objectives

Aim

The aim was to discover factors affecting the effective execution of critical thinking in the curriculum of secondary school learners.

Objectives

- a) To ascertain teachers' perceptions towards the role of critical thinking of Form 3 learners in secondary schools.
- b) To determine how Form 3 learners perceive the role of critical thinking in their learning of history.
- c) To establish how critical thinking can be effectively implemented in the curriculum of Form 3 history classes at the chosen secondary schools.

Research Questions

The main research question was:

What is the role of critical thinking in teaching in secondary schools in Zimbabwe in the Masvingo province?

The major research question was supported by sub-questions which were as follows:

- 1) What are teachers' perceptions of the place of critical thinking in their teaching of history to Form 3 learners?
- 2) How do Form 3 learners perceive the role of critical thinking in terms of their conception of critical thinking, motivation and belief systems?
- 3) How can critical thinking be effectively implemented in the curriculum for Form 3 history classes at secondary schools in Zimbabwe's Masvingo province?

Literature Review

The concept "critical thinking" is key to this article, necessitating its definition. A variety of definitions of critical thinking have been advanced by important researchers as Ennis (2011), Facione (2013), Glaser (1941, in Wisdom & Leavitt, 2015), Lai (2011), and Scriven and Paul (1987, in Wisdom & Leavitt, 2015). Ennis (1985, in

Muhlisin, Susilo, Amin & Rohman, 2015:5), identifies critical thinking as a way of thinking concerning decision-making about how to act, or about what to accept as true. Elder (2011, in Wisdom & Leavitt, 2015:99) considers critical thinking as consisting of closely self-controlled thinking that is aimed at striving to reason in line with the highest order.

In trying to find a common definition of critical thinking in 1990, a team of 46 principal experts, known for their knowledge of critical thinking, reached consensus on the major components of the phenomenon (Facione, 1990, in Vardi, 2013:1). The panel of experts, who were chosen from the fields of philosophy, psychology, the social and physical sciences and education, collectively reached consensus on the definition of critical thinking. They found that it entails purposeful, self-regulatory judgement that results in analysis, interpretation, explanation, evaluation and inference (Facione, 2013:10). Such critical thinking skills are labelled as "cognitive skills." The panel of experts also asserted that critical thinking involves cognitive habits or critical thinking dispositions, namely, eagerness (Vardi, 2013:4). Dewey (1933, in Lai, 2011:1) clarifies critical thinking dispositions as habits or attitudes of the mind. Critical thinking dispositions, as expressed by the panel of experts, make one eager to apply critical thinking skills in all facets of life (Leen, Hong, Kwan & Ying, 2014:8), with one having to possess both critical thinking *skills* and critical thinking *dispositions* to be a critical thinker (Vardi, 2013:4). The core critical thinking dispositions acknowledged by Facione (1990, in Vardi, 2013:5) are open-mindedness, flexibility, fair-mindedness, truth-seeking, inquisitiveness and analyticity. Edward Glaser (1941, in Wisdom & Leavitt, 2015:99) defines critical thinking as a combination of the willingness to think about how to solve problems within the context of experience with knowledge of the methods of rational inquiry and the skill to utilise the methods concerned.

In this article we follow the definition of critical thinking propounded by Edward Glaser (1941, in Wisdom & Leavitt, 2015:99) since it agrees with the above-mentioned panel in defining critical thinking as the willingness to think selflessly (in terms of disposition), along with the possession of knowledge of the appropriate methods of inquiry and with the skill to apply the methods (i.e. the critical thinking skills) fittingly. In this article a critical thinker is regarded as one who possesses the inner motivation (i.e. the disposition) along with the necessary critical thinking skills, including the ability to explain, analyse, interpret, infer, evaluate and think in a self-directive manner.

Teachers' and learners' perceptions of the role of critical thinking

Critical thinking involves the ability to apply skills such as the ability to analyse, interpret, infer and evaluate and also the eagerness to apply such skills. Teachers' and learners' perceptions of critical thinking are influential to its practice in schools and they can either enhance or hinder learners' critical thinking. Beliefs held by teachers are regarded as important since they affect their understanding of concepts, their decision-making, and their choice of practices (Massa, 2014:387). Teachers' beliefs make it difficult for teachers to adopt a new teaching strategy or believe that there could be fresh efficient means of instruction of the syllabus (Sazant, 2014:16). Massa (2014:388) propounds that the beliefs held by teachers about intelligence can affect how they relate to learners, their instructional approaches, and their dissimilar application of critical thinking in their class activities.

Teachers' and learners' beliefs influence their conceptions of critical thinking and its role in education. The way in which learners and teachers understand critical thinking affects the way in which critical thinking is taught and learnt (Barnaby, 2016:40). Orszag (2015:2) concludes that learners have a constricted view of critical thinking skills and critical thinking dispositions that comprise it. Teachers lack knowledge of critical thinking (Sekoubaou, 2017:749). Vygotsky's "more knowledgeable others" are the adults, teachers and peers with experience or more additional knowledge than the learner (Shabani, 2016:6).

Self-efficacy is delineated as the person's beliefs about his or her capabilities in producing outcomes (Gangloff & Mazilescu, 2017:1). Teachers' and learners' beliefs are a result of their experience and culture (Williams & Burden, 1997, in Xu, 2012:1397). Williams and Burden (1997, in Xu, 2012:1397) argues that there is a tendency that learners' and teachers' self-efficacy can influence their motivation and critical thinking. According to Sulaiman, Kuppusamy, Ayub and Rahim (2017:3), there is a link between critical thinking disposition and instruction efficacy, and that a teacher with a high self-efficacy diversifies instructional methods. Teachers can have low self-efficacy or high self-efficacy. Xu (2012:1400) states that teachers with high self-efficacy have high expectations of learners. We sought to establish Zimbabwean secondary school history teachers' and Form 3 history learners' self-efficacy and how their self-efficacy impacted on their learning of critical thinking.

The role of teachers and classroom practices

Teachers' teaching methods can be influential in the improvement of critical thinking (Murphy,

2015:19). Historical thinking affects learners' advance through the history syllabus and that progression influences instructional practices (Seixas, 1997:23). A variety of teaching strategies can be used by teachers and such strategies can be directed instruction, indirect instruction, interactive instruction and independent instruction. Direct instruction involves the lecture method. Indirect instruction focuses on concept formation. Interactive instruction involves debates and discussions. Independent instruction is inquiry based involving learners in doing researches and assigned questions. According to Davies and Barnett (2015:84) information should nowadays not be merely conveyed using a lecture method since the content is memorised. The opinion put forward by Clark and Biddle (1993, in Olatunji, 2017:214) is that there should be active learning in the classroom for critical thinking to be promoted. Bean (2011, in Nelson & Crow, 2014:78) observes that active learning lessons are strategies that can be used in making learners powerful critical thinkers. Classroom debate supports the growth of critical thinking; as the learners engage in debate they can scrutinise hypotheses, assess assumptions and pose questions (Murphy, 2015:50). The teacher's role in classroom dialogue is to initiate the debate procedure, giving learners the same chances of participation (Murphy, 2015:50). Debates can develop learners' critical thinking.

Discussion can also be used by teachers in instruction. Discussion gives learners a chance to express their views on the topic under discussion (Murphy, 2015:65) The role of the teacher would be to direct learning and guide the learners to achieve their learning goals. The group discussions in classroom can lead to critical thinking since the teacher can support learners' critical thinking abilities. Paul and Elder (2007, in Apsari, 2016:51–72) proposes various teaching methods that teachers can use to develop learners' critical thinking. These include the use of suitable questions, teachers talking less in class, and activities that encourage learners to think. Less teacher talk in class gives learners more time to think. The appropriate questions assist in probing a variety of dimensions of learners' critical thinking. As Omidvar and Ravindranath (2017:346) state, class size can also result in unproductive teaching. Schoper and Wagner (2013, in Wisdom & Leavitt, 2015:204) propose a flexible physical environment with desks and chairs that can be moved easily and where enough learners are accommodated. It is vital to provide teacher training on how to use teaching techniques that effectively promote critical thinking in the classroom (Radulović & Stančić, 2017:12).

Curriculum and examination-oriented education system

Examination-oriented teaching focuses on tests and the need for learners to gain entry to high school or university. Sazant (2014:16) expresses the view that numerous teachers face the problem of inadequate time when they try to cover every part of the essential curriculum content. Kirkpatrick and Zang (2011:39) argue that this would result in teachers teaching without considering learners' ability to think critically. In addition, the examination-oriented system encourages teachers to apply conventional teacher-centred teaching methods, drills and revising past question papers (Che Musa, Koo & Azman, 2012, in Dwee, Anthony, Salleha, Kamarulzaman & Kadir, 2016:632). Chopra (2015, in Omidvar & Ravindranath, 2017:345) notes that examination-centred teaching enables learners to memorise for tests, but after the test they would not remember much of what they had learnt.

Research Design

We managed to determine existing obstacles to the development of critical thinking, and encourage critical thinking in secondary schools in Zimbabwe. The research was conducted in three schools selected from the Masvingo urban area. The research was guided by three theories – Bandurra's social-cognitive theory, John Dewey's constructivist learning theory and Vygotsky's socio-cultural theory. We were of the opinion that the combination of the three theories would be suitable in guiding the research. The theories are linked to the main factors involving the learning and teaching of critical thinking. The 15 participants (nine teachers and six learners) were purposively selected to engage in semi-structured interviews and lesson observations. The research was conducted in an actual life situation. According to Creswell (2012:79) a qualitative research method employs interviews and observations.

Semi-structured interviews were used to allow us to collect information with a direct bearing on the research objectives (Cohen, Manion & Morrison, 2011:411). Two teachers and two learners from each of the three selected schools were each interviewed once during the course of the research. Conducting several interviews with each individual could have produced superior results, but doing so was not viable due to the time and cost involved. Each interview lasted 50 minutes. Learners were interviewed in private, isolated rooms to enable the interviewees to be at ease, and, consequently, willing to disclose their different points of view. The use of interviews was found to be particularly appropriate for this research, because it permitted us to learn about the ideas, beliefs and viewpoints of the learners and

teachers regarding the obstacles to the development of critical thinking in secondary schools in Zimbabwe.

We also used lesson observations to overcome the shortcomings of interviews, since what human beings do sometimes differ from what they say they do (Cohen et al., 2011:411). Accordingly, we obtained first-hand data by means of lesson observations of the lessons of one teacher from each of the three selected schools. This implies that by using lesson observations we managed to observe behaviour that the learners and teachers might not have been willing to discuss during the interviews. We chose to engage in unstructured lesson observation, because doing so allowed us to accommodate personal subjectivity and to take into consideration the intentions and the attitudes of those observed (Cohen et al., 2011:463). We opted to be non-participant spectators and to observe the classroom situation from a distance (Creswell, 2012:85). By assuming the role of non-participant observers, we attempted to limit our influence on what we observed.

Research Methodology

We opted for a qualitative design in which a variety of research approaches such as ethnography, case study, phenomenology, grounded theory and critical study (McMillan & Schumacher, 2014:19) can be used. Phenomenology is a technique of the interpretive study paradigm. This renders a phenomenological research approach appropriate for this study as we examined teachers and learners' perceptions to critical thinking in schools. We focussed on the perspectives of nine teachers and six learners involved in history teaching and learning in secondary schools in the Masvingo urban area. A total of 15 participants were purposively selected. Nine teachers and six learners participated in semi-structured interviews and lesson observations.

Data Processing and Analysis

Being qualitative in nature the data collected in this study was in the form of texts from interview scripts, observation notes and audio recordings. The multifaceted qualitative research material collected from interviews or observations analysed in this study were broken down into controllable segments that were analysed unconnectedly. We read each transcript thoroughly in its totality, which enabled us to use the data to think through and observe whether any attention-grabbing patterns could be recognised (Hammersley & Atkinson, 1983, in Mohajan, 2018:16). The informal analysis which started during data gathering helped us to review whether sufficient research data (Yin, 2016:186) had been collected.

Ethical Consideration

Permission to conduct the study was granted by the University of South Africa's (UNISA) College of Education Ethics Review Committee and the Zimbabwe Ministry of Primary and Secondary Education.

Results

The findings reflect that several factors can influence the enhancement of critical thinking in the teaching of history to Form 3 learners in the secondary schools in the Masvingo urban area in Zimbabwe.

Presentations of Findings from the Semi-structured Interviews

The data presented are from the semi-structured interviews conducted with six teachers and six learners at the participating schools.

Conceptualisation of critical thinking

We attempted to determine whether or not the learners and teachers had a sound understanding of the nature of critical thinking. The responses of the majority of the research participants reflected a lack of clarity and full understanding of the meaning of the term "critical thinking", as some of them referred to only one aspect of critical thinking skills. For instance, one learner participant noted the following: "*After I started learning history, I was able to analyse, to think in depth about what the passage is [was] saying and am [was] able to answer it confidently.*"

The lack of clarity and deficiency in the understanding of the nature of critical thinking was not only shown by some of the learners, but by some of the teachers as well. One teacher said the following: "*Their thinking is affected maybe positively or negatively, in the sense that, whenever you teach a topic, there is a lesson to be learnt.*"

Critical thinking capability

The participants' responses revealed that they faced many challenges regarding the ability to think critically. These challenges are outlined below.

One learner participant, in acknowledging that the capability to think critically is influenced by attitude, stated: "*The attitude of the person can affect how they learn history.*" The importance of the attitude adopted towards critical thinking is supported by Dewey (Lai, 2011:10), who defines critical thinking dispositions as habits or attitudes of the mind.

Another challenge faced regarding the learning of critical thinking in the teaching of history was found to be the lack of resources, as one teacher participant noted the challenge of a lack of resources such as textbooks, "*We have*

challenges; we do not have textbooks and other resources to use to get ideas to be used for one to be a critical thinker."

Other challenges to the teachers' ability to teach critical thinking were articulated by some of the participants in relation to the lack of sufficient time in which to give instruction in critical thinking and the lack of teacher training on how to teach critical thinking. A teacher participant claimed that the training college that he had attended neither equipped him, personally, to be a critical thinker, nor to teach critical thinking. The teacher participant said, "*When I left college, I cannot say I left college with the necessary skills on how to teach my students to be analytical thinkers.*"

Belief systems

In the semi-structured interviews most participant teachers reflected that their belief systems influenced the development of the ability to think critically in terms of the teaching of Form 3 history learners.

Cultural beliefs

The majority of the participants expressed that cultural beliefs affected the learning of critical thinking. One teacher participant stated:

Obviously, my beliefs are very important in their learning, because whatever I say usually comes from the way [in which] I do things. This is a Christian school; we are encouraged to actually tell them [learners] to do things in a Christian way.

Classroom activities

From the classroom activities we noted that the lecture method and dictation of notes were the most dominant teaching methods used in the teaching of Form 3 history.

Teaching methods employed

One learner described the situation in the following way: "*The teacher dictates notes, and if you do not get a statement, he is free to repeat a statement. I think referring to a textbook is a complex way [of learning].*"

Big class sizes

One of the greatest challenges in the teaching of history outlined by the participants was the big class sizes. Big class sizes and the ineffectiveness of group work were raised by the interviewees. One teacher stated: "*Group work is difficult, because of our numbers in class. There are 60 students in each class.*"

Questioning techniques used

Data collected from the semi-structured interviews showed that the learning of critical thinking in secondary schools was influenced by the questioning techniques concerned. One learner

noted: *“The questions are easy to answer. Usually, you are asked what you already know.”*

Teacher-learner roles

The participants pointed out that the learners were passive in class. One learner observed: *“The teacher gives us notes. In class, I enjoy sitting passively listening, without participating. Students are lazy people, and they will not say anything.”*

The curriculum and national public examinations

Many of the participants articulated that a number of factors related to the curriculum and to the public examinations negatively affected the learning of critical thinking in secondary schools.

Nature of the syllabus

In the semi-structured interviews a number of the participants stated that teaching and learning in accordance with the national curriculum and the syllabus impeded the development of critical thinking in learners. Form 3 learners are Ordinary Level learners who are taught following the history syllabus set by such examination boards as the Zimbabwe School Examinations Council (ZIMSEC) or that of the International General Certificate of Secondary Education (IGCSE). The participants generally agreed that the nature of the history syllabus adversely affected the learning of critical thinking skills in relation to the teaching of Form 3 history.

One teacher participant noted:

The syllabus actually affects the way we teach. Sometimes they [learners] may not fully understand certain topics that are listed, because the teachers intend to cover a lot of topics that are enshrined in the syllabus and it affects them.

Impact of the public examinations

The majority of the participants revealed that the writing of public examinations influenced learners' acquisition of critical thinking skills. One teacher participant reflected:

There is no way you can run away from emphasising the importance of examinations, because, at the end of the course, it is the barometer that measures their performance, so we teach for [the] examinations. Students fear to fail [the] examination and sometime[s] they do some cramming.

Presentation of Findings from the Lesson Observations

The main purpose of conducting the lesson observations in this research was to triangulate the data found. In this section we discuss whether what we observed in the lessons confirmed or contradicted what was said by the participants during the interviews. The lesson observation findings are, accordingly, explored in terms of classroom appearance and lesson delivery.

Classroom appearance

Classroom appearance was found to influence the teaching and learning of critical thinking in the Form 3 history classes observed in the secondary schools for the purposes of this article.

Class size

Two of the three classes that were observed were large, especially in the light of the Zimbabwean government's stipulated class size being limited to 30 to 35 learners. One teacher conducted a lesson with 60 learners, with another having to cope with 61 learners in a class.

Seating plan

We observed that the learners' desks were arranged in column formation.

Lesson delivery

The lesson observations revealed that the form of lesson delivery reflected the participants' views regarding the obstacles to the teaching of critical thinking to Form 3 history learners.

Teaching methods employed

Lectures and the dictation of notes were used by two of the teachers, whereas the other teacher used presentations. The majority of questions in class were of a lower order and learners' responses to the questions were mainly poor.

Teacher and learner roles

We observed that the teachers assumed the major roles in class, dominating class activities and dictating notes, while the learners were largely inactive listeners who spent most of their time taking down notes.

Classroom atmosphere

We noted that, overall, the learners appeared to lack self-efficacy and motivation, which affected their participation in class negatively.

Discussion of Findings

Discussion of Findings from the Semi-structured Interviews

The first main theme to materialise was the view that the obstacles to the enhancement of critical thinking in the learning of history in secondary schools was influenced by the nature of critical thinking.

Conceptualisation of critical thinking

The results reveal that there was a lack of understanding of critical thinking. The learner participants outlined one or two aspects of critical thinking skills, despite the Delphi report having defined critical thinking as the ability to analyse, interpret, explain, evaluate and reach a conclusion (Facione, 2011:10). Teachers also did not fully

grasp the notion of critical thinking; one teacher seemed to have equated critical thinking with the lessons learnt on a topic and with the learners' appreciation of historical events. The teacher's inability to fully comprehend the notion of critical thinking hindered the learners' development of critical thinking capabilities. This is in line with Vygotsky's socio-cultural theory, which holds that the teacher is expected to be better skilled than the learner, and to be capable of modelling critical thinking (Shabani, 2016:6).

Critical thinking capability

The research findings reflect various factors that hindered learners' ability to think critically. One such factor was the negative attitude towards critical thinking. The importance of the attitude adopted towards critical thinking is supported by Dewey (Lai, 2011:10) who defines critical thinking dispositions as habits or attitudes of the mind. A lack of resources, sufficient time and adequate teacher training on how to instruct critical thinking also obstructed learners' development of critical thinking. Teacher training colleges failing to train prospective teachers to teach critical thinking is affirmed in the literature. Radulović and Stančić (2017:22) and Sekoubaou (2017:749) stress that teachers need training on how to teach critical thinking. Aliakbari and Sadeghdaghighi (2013:1) assert that the teachers' lack of knowledge of critical thinking leads to a need for additional training on how to teach critical thinking skills.

Belief systems

The participants revealed that their belief systems hindered learners' acquisition of critical thinking in the teaching of Form 3 history.

Cultural beliefs

During the semi-structured interviews most of the participants noted that cultural beliefs negatively influenced the teaching and learning of critical thinking in secondary schools. The literature supports such findings, with Massa (2014:388) expressing an awareness of teachers' cultural beliefs influencing their choices and the teaching practices in which they engage.

Classroom activities

Many of the participants' responses showed that the classroom practices followed did not promote the teaching and learning of critical thinking.

Teaching methods employed

The literature notes that the teaching tactics used by teachers in class may influence the development of critical thinking in the learners (Murphy, 2015:62). Sternberg (2018:189)

recommends certain teaching methods that can encourage learners' critical thinking, with such methods including the lively engagement of the child, and the use of appropriate and attractive materials. Most of the participants reported the use of a variety of teaching methods, of which few constructively contributed toward the development of the learners' critical thinking abilities.

As confirmed by the literature, the dictation of notes was found to hinder the learners' acquisition of critical thinking skills. According to Davies and Barnett (2015:84), the use of the lecture method should be discouraged, since the content provided tends merely to be memorised. Clark and Biddle (1993, in Olatunji, 2017:213) assert that the teaching of critical thinking cannot be done by means of a teacher presenting a lecture in class, as more active communication between the teacher and the learner is required. The lack of learners' active involvement in the learning experience obstructs the development of critical thinking skills. The literature states that the teacher's responsibility should change from delivering information to promoting the learners' involvement in learning to encourage the development of their critical thinking ability (Murphy, 2015:50).

Big class sizes

The participants observed that the big class sizes influenced the choice of teaching method and prevented the use of dynamic teaching methods that could promote critical thinking, which resulted in the teachers resorting to the lecture method. The literature also confirms the impact of class size and teaching techniques on the ability to teach critical thinking. Omidvar and Ravindranath (2017:346) assert that having an exceptionally large class can result in unproductive teaching. The seating arrangements in large classes also do not permit working in small groups.

Questioning techniques used

The participants' statements reflected that the questioning techniques used in class hindered learners' critical thinking. With the Socratic questions, Socrates was the first to note that motivated learners become involved in deep thinking and reflect on truth (Orstein, Pajak & Orstein, 2011:67). Murphy (2015:62) expresses that teachers can use a variety of questioning techniques, like waiting a moment before responding to their questions, the redirecting of questions, observing the halting point in time, and providing backup. Most of the participants' statements reflected that the questioning techniques used did not motivate the learners to think critically, since simple questions with straight-forward answer were asked.

Teacher-learner roles

As is confirmed in the literature, for learners to acquire critical thinking skills in the learning of history, the learner should be central to the learning experience (Olatunji, 2017:214; Ritchhart, Church & Morrison, 2011). Dewey's theory supports learning as a child-centred activity. The majority of the participants pointed out that, in secondary schools, the teachers tended to be at the centre of the learning experience, playing the active role, whereas the learners tended to be passive and inactive in class. Consequently the requisite critical thinking skills were not developed.

Nature of the syllabus

Most of the participants expressed the view that the syllabus was overly demanding, which, in order for teachers to finish the syllabus in time, their classroom activities and teaching methods did not suit the promotion of critical thinking. Sazant (2014:16) asserts that several teachers face the problem of having insufficient time in which to cover the whole curriculum, forcing them to opt for the lecture method.

Impact of the public examinations

The participants agreed that the requirement of public examinations adversely influenced the learning of critical thinking in the secondary schools. Such a shortcoming was also witnessed in the Hong Kong curriculum, where it was found that the public examinations hampered the teaching of critical thinking (Fung, To & Leung, 2016). From the literature it is clear that examination-centred teaching forces learners to memorise facts for tests, after which they tend to forget all that they have learned under such conditions of duress (Chopra, 2015, in Omidvar & Ravindranath, 2017:345).

Discussion of Findings from Lesson Observations

Classroom appearance

Classroom appearance obstructed the teaching and learning of critical thinking in Form 3 history classes.

Class size

What we observed about the large class sizes at schools confirms what the participants articulated in the semi-structured interviews. Group work, which might have led to the promotion of critical thinking, could not be implemented due to the large classes. Alwadai's (2014:68) research support our findings. The overcrowding of Saudi classrooms posed a problem, with the teachers being unable to engage in activities requiring the active participation of the learners and being unable to use seating arrangements favourable to working in small groups.

Seating plan

The desks arranged in column formation hindered the learners' acquisition of critical thinking skills. Having the learners face one another in class encourages what Lipman (2003:212–25) calls a "community of inquiry", which allows for the learners to become involved in dialogue that is capable of promoting critical thinking (Jones, 2012:59; Schoper & Wagner, 2013, in Wisdom & Leavitt, 2015:204). The placing of desks in circles to allow group work would be very difficult to achieve in overcrowded classes.

Teaching methods employed

We further observed that the teaching methods used by the teachers largely hindered the promotion of critical thinking. The lecture method and the dictation of notes were used by two of the teachers at two schools. The other teacher used presentations which were not properly managed and consequently, largely failed to stimulate the learners' critical thinking. Dewey's constructivist learning theory asserts that the teacher's responsibility is not to deliver knowledge but to create a learning environment that enhances critical thinking (Topolovčan & Matijević, 2017:52). Our findings from the lesson observations were confirmed by what the participants had said in the semi-structured interviews.

We observed that, to a large extent, the questioning techniques employed did not assist learners in acquiring critical thinking skills. Most of the questions were of a lower order and the teachers spent too little time encouraging the learners to think before they responded to questions in class. Evidence from the literature confirms our observations. Gul, Khan, Ahmed, Cassum, Saeed, Parpio, Profetto-McGrath and Schopflocher (2014:37) argue that, although numerous teaching strategies can be used by teachers to stimulate the learners' thinking, the teacher's questions tended to have the most impact on the learners' critical thinking ability.

Linked to the teachers' questioning techniques, the lessons observed showed that the learners' responses to the teachers' questions were largely poor. The learners responded by providing short answers that were not analytical. These observations were confirmed by the participants' responses in the interviews. Simple, one-word answers failed to show that the learners engaged in critical thinking, since they were neither analytical nor evaluative. Our observations are supported by the relevant literature. Watanabe (2012, in Wilen, 1991:5), for instance, argues that a teacher needs to start a class with a question that promotes an inquiry on the available information. The teachers appeared not to see the importance of asking

higher-order questions that could stimulate the learners' critical thinking skills.

Teacher and learner roles

The teachers' roles in the lessons observed hindered the development of the learners' critical thinking. Dewey's constructivist learning theory affirms that child-centred learning, in which the learner takes an active role in learning tends to promote critical thinking (McLeod, 2018:1). As confirmed by the relevant literature, the teacher's dominant and the learners' passive roles hamper the development of learners' critical thinking ability (Brookfield, 2012, in Wisdom & Leavitt, 2015:256). Our findings are supported by the findings from the interviews.

Classroom atmosphere

Learners' lack of self-efficacy observed in the Form 3 history lessons is supported in literature. Bandura asserts that a lack of self-efficacy hinders the individual's desire to apply skills in learning (Gangloff & Mazilescu, 2017). From the lesson observations we concluded that the learners tended not to answer higher-level questions due to their lack of self-efficacy, and because of their beliefs that they lacked the ability to respond to such questions. The learners in the lessons observed seemed to lack the motivation to answer higher-order questions that could have promoted critical thinking.

Conclusion

In the study reported on in this article we used qualitative research methods to investigate the factors affecting the development of critical thinking among Form 3 history learners at secondary schools in the Masvingo urban area in Zimbabwe. The overall findings reveal the fact that the learners' acquisition of critical thinking skills was negatively affected by the teachers' and learners' lack of self-efficacy and motivation. This was largely caused by a lack of full understanding of the meaning of the concept of critical thinking, as well as by their belief systems, the poor teaching and learning environment, and the lack of adequate teaching resources. The research findings also reflect that policy-related factors hampered the advancement of critical thinking in the secondary schools. Such factors included the policy implemented in terms of enrolment, the curriculum and history syllabus, and the organisation of the education system and of public examinations. Consequently, we recommend that the government, the Ministry of Education, the Zimbabwe Schools' Examination Council and the teachers should work together to ensure the enhancement of learners' critical thinking at secondary schools in Zimbabwe.

The limitations of our study are as follows:

Firstly, the study participants were teachers and learners. The views of key role players such as the policy designers in the Ministry of Primary and Secondary Education and Zimbabwe Schools' Examination Council who play a significant role in designing and implementing of the educational programmes were not taken into consideration.

Secondly, the study sample was limited to 15 participants (learners and teachers) from only three secondary schools in the urban area of Masvingo in which there are more than 100 secondary schools. The results might thus not be applicable to other schools, especially those in rural areas, in Zimbabwe.

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Authors' Contributions

PW wrote the manuscript and conducted the semi-structured interviews and lesson observations. LH contributed to the exposition on the research design, data analysis and interpretation of the research findings. Both authors read and validated the final manuscript.

Notes

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- ii. Published under a Creative Commons Attribution Licence.
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