

# Geography Teachers' Perspectives on Research Engagement in Selected Secondary Schools in Serenje District of Central Province of Zambia

Lako Patricia and Kaiko Mubita

*Department of Language and Social Sciences Education, University of Zambia*

**Abstract:** The purpose of this study was to establish the views that Geography teachers in selected secondary schools in Serenje district had regarding the importance of teacher research engagement. Interviews were conducted with 14 Geography teachers and two heads of social sciences departments. Purposeful sampling was used to select participants. Two focus group discussions were also conducted with teachers of Geography. The focus was on whether or not teachers of Geography in selected secondary schools in Serenje district viewed research engagement to be important and whether or not they could welcome the integration of teaching and research. Data was analysed thematically. Findings showed that teachers viewed research engagement to be very important for a teacher of Geography. They had a positive view about teaching and research integration.

**Key Words:** Mandatory, Engagement in Research, Engagement with Research

## I. INTRODUCTION

Ministry of Education (MOE) wishes to attain innovative and productive lifelong education and training for all by 2030 (Vision 2030). MOE (1996) also recognizes that quality education depended heavily on teacher competence, innovativeness and resourcefulness. The Educational reforms of 1977 state that, "Good teaching demands the teacher to possess correct attitude and adequate knowledge of the subjects he teaches, keep abreast with developments in those subjects and in the objectives and methods of teaching" (MOE, 1977:61). The teacher's job is to impart relevant knowledge, attitudes, values and skills (Lako and Mubita, 2021). Researching helps teachers to become competent in that it builds and rebuild skills as well as improve cognitive abilities, critical and logical thinking which teachers can transmit to their learners (Elton, 2008; Khan, 2017). The policy document 'Educating Our Future' explains that research engagement is in line with the idea of lifelong learning for teachers and that institutions of learning from preschool up to university should be places where research take place so as to have quality education (MOE,1996). Teachers of Geography, therefore, should be research engaged especially that they teach about the dynamic earth and also because they teach field research to learners which requires that they perfect their research skills and knowledge (Lambert and Balderstone, 2000; Lako and Mubita, 2021).

The Zambian senior secondary school Geography curriculum has included field work following its revision in 2000. The teachers' research skills and competencies such as awareness, perception, and analysis should be enhanced and perfected first before teachers can hope to give support to their learners who are trying to develop research skills (Lambert and Balderstone, 2000). MOE (1996) recognizes the need for a lifelong professional teacher development because of the ever increasing and changing knowledge teachers' professional life revolve around. Research engagement therefore is in line with the idea of lifelong learning for teachers which is always available to them (MOE, 1996). To be able to engage in and with research, Geography teachers need to understand what research is and also the importance of being research engaged. What teachers understand about: research, their role and the role of research will determine their engagement with and in research (SOE, 2014; Borg, 2007, Brew, 2010).

Despite the fact that Geography teachers should be research engaged, there seems to be no reflection on the views that Geography teachers in Zambian secondary schools have regarding research and the importance of being research engaged, a gap this research attempts to bridge.

1. *Aim:* the purpose of this study was to establish the views Geography teachers in selected secondary schools in Serenje district had regarding research engagement.
2. *Research Questions:* To address the aim, the following questions were asked:
  - a. What is research in your view?
  - b. What are the benefits of doing and reading research?
  - c. Should research engagement be made mandatory for Geography teachers?

## II. THEORETICAL FRAME WORK

This study made use of the Deliberate Practice Theory Framework propounded by Ericsson, Krampe and Tesch-Rome (1993). According to this theory, expertise is gradually attained through engaging in extended amounts of designed deliberate practice over time. Deliberate practice refers to domain specific activities that gives optimal opportunity for acquiring skills and knowledge and thus improving performance. For these tasks to be initiated and sustained over

time, they need to be recognized by the performers as highly relevant to improving performance. It can be argued that doing and reading research are domain specific tasks teachers of Geography should engage in to improve practice. This theory helped to explain whether or not Geography teachers in selected secondary schools in Serenje district in central Zambia viewed research engagement and therefore, teaching and research integration positively.

### III. METHODOLOGY

This study was a qualitative study which made use of a descriptive design. Interviews were conducted with fourteen teachers of Geography and two Heads of Social Sciences Departments. Purposeful sampling was used to select participants. Two focus group discussions were also conducted with teachers of Geography. Data was analysed thematically.

### IV. LITERATURE REVIEW

Making use of research findings enabled teachers to make decisions that were evidence based (Borg, 2007; 2010). Doing research made teachers critical, analytical and reflective on their practice (Atay, 2008). It also enhanced teachers' ability to make sound professional judgement on their own (Lankshear & Knobel, 2004).

Researching helps create new knowledge that could help deepen the curriculum (Alpay and Jones, 2012; Durning and Jenkins, 2005). Doing action research increased the knowledge base of teaching, made teachers better at teaching, and helped teachers reflect on their instructional practices during the inquiry (Bilgili, 2005). Striking an appropriate balance between researches and teaching activities would increase the overall education quality and standards (Khan, 2017). Practitioner research resulted in professional growth as it enhanced research skills and improved classroom or school-wide practice (Hilton and Hilton, 2017). Being taught by teachers with high quality publications led to better performance of master students (Palali et al, 2017). Teacher research engagement had several positive influences notably on teaching planning, teaching methods and strategies, teachers' knowledge base, reflective abilities and educational objectives (Campbell and Jacques, 2004).

Researching helped teachers to become competent in that it builds and rebuild skills as well as improve cognitive abilities, critical and logical thinking which teachers can pass on to their learners (Elton, 2008; Khan, 2017). Biesta (2007) and Lako and Mubita (2021) also revealed that research had the potential to improve and inform practice in that it presented to the teacher the diverse ways of interpreting and understanding educational activities.

#### 4.1 Importance of research engagement for teachers of Geography

Long and Roberson's (1966:128) explain that "Much if not most raw material of Geography is the surface of the land"

and therefore these should be studied through field research and not theoretically. Research is a powerful tool in the generation of knowledge (UNESCO, 1995). Field work is an essential aspect in the training of a geographer (Sauer (1965). The teachers' research skills and competencies such as awareness, perception, and analysis should be enhanced and perfected first before teachers can hope to give support to their learners who are trying to develop these skills (Lambert and Balderstone, 2000). Perfecting skills require experience and deliberate practice (Ericsson et al, 1993). "Good teaching demands the teacher to possess correct attitude and adequate knowledge of the subjects he teaches, keep abreast with developments in those subjects and in the objectives and methods of teaching" (MOE, 1977:61). Teachers should deepen and extend their knowledge and professional skills, be current with developments in their fields as well as make personal advancements or improvements in their areas of specialisation (MOE, 1996). Researching could empower Geography teachers with professional knowledge and skills and provide them opportunities to write local text books (Ntalasha et al, 2004).

### V. FINDINGS AND DISCUSSIONS

#### 5.1 Meaning of research according to Geography teachers in selected secondary schools in Serenje

Teachers viewed research as a complex process that is very involving. Teachers gave several definitions of research. Some of their definitions were as follows:

*A scientific method of finding facts about certain problems and it requires many stages to be done. (FGD 1)*

*Research is the systematic process of collecting, analysing, and interpreting data so that you make meaning out of it either to contribute to a body of knowledge or to find solutions to problems (B1).*

What was common among the definitions was that research involved looking at a problem in details to understand it and that research was aimed at finding solutions to a problem. Teachers viewed research as a complex and systematic process involving a lot of stages. The views that one holds regarding something will determine whether they will engage in it or not. It was important to get the views teachers of Geography had regarding research engagement so as to establish whether or not they could be receptive to integrating teaching and research. The view that research was a complex process seemingly could hinder teachers from involved in it.

#### 5.2 Views of teachers of Geography regarding the importance of teacher research engagement

##### 5.2.1 Importance of engagement in research for teachers of Geography

Geography teachers were of the view that doing field research was cardinal for the teachers of Geography. They cited updating knowledge; enhancing teaching; improving and increasing research skills and knowledge; creating knowledge;

and solving educational and societal problems as the reasons why doing research is important for Geography teachers.

a) *Updating and increasing knowledge*

Teachers said doing research was important for teachers to enhance their knowledge and to get up to date with what was happening in the world they taught about. The following were some of the responses:

*Geography deals with the environment and when you look at the environment, there are so many things that are happening, the environment is always changing so Geography teachers need to acquaint themselves with what is happening in the natural environment where they live. (B1)*

*Teaching and research go hand in hand because they say that, he who dares to teach never cease to learn, most certainly you have to involve yourself in research, find out new information so that as you are imparting knowledge you are sure that you are giving pupils the right information (B2).*

The world is dynamic so the environment keeps changing. What was true about a given place years ago might not be true now. Geographical aspects keep changing for example, rate of deforestation in a given area, climate change and its effect on particular groups of people, and so on and so forth. Since the earth and human interactions change, the subject contents also change. Geography teachers cannot therefore depend entirely on text books or entirely on researches done years ago, because things on the ground change.

Doing research could help teachers update knowledge as it could make them be in touch with reality. As Long and Roberson (1966:128) explained, "Much if not most raw material of Geography is the surface of the land" and therefore these should be studied through field research and not theoretically. Doing research is therefore very important for Geography teachers. The foregoing argument is in correlation with (MOE, 1996) which noted that the teacher should be a lifelong learner and that doing research is one way of continuing learning. Researching also enhances the knowledge of teachers. Bilgili's (2005) study revealed that doing action research increased the knowledge base of teachers making them better at teaching. A teacher should have sufficient and updated knowledge of the subjects they teach. That's why MOE (1996) stipulated that the teacher should extend and deepen their knowledge and be lifelong learners because teaching is a learning profession.

b) *Enhancing teaching*

Those who had done research in line with what they taught said it enhanced teaching and learning of Geography. These teachers reported that doing that had enabled them teach better the topics they researched on since they gained more knowledge. C2 also said she did research on farming so as to have more information and this was what she had to say:

*I don't struggle when teaching that topic because I'm very sure of the information I teach. I use some of my research findings as examples. I don't give examples from without but from the reality I know and I'm sure of and learners benefit. (C2)*

Teacher research engagement enables teachers teach better as it increases the teacher's knowledge base, understanding and critical thinking. Bilgili's (2005) study revealed that doing action research increases the knowledge base of teaching, makes teachers better at teaching, and helps teachers reflective on their instructional practices during the inquiry. Furthermore, studies by Elton, (2008) and Khan (2017) also show that researching helps teachers to become competent in that it builds and rebuild skills as well as improve cognitive abilities, critical and logical thinking which teachers can pass on to their learners. Researching enables the teacher researchers to be confident as they teach because they know what they are teaching about and they give examples from the reality they know very well and this makes teaching and learning interesting and smooth in their classes.

Ministry of education wishes to produce an innovative learner equipped with high level thinking skills, therefore, a teacher should develop critical thinking skills if they have to develop critical thinking in learners. Doing research continually can improve teacher competence by enhancing high order thinking skills, and building and revamping skills, hence making them experts at teaching. It is not necessarily the experience that makes one a better teacher, but steady efforts to better teaching performance through involvement in activities (such as doing research) that can better their teaching. Ericsson et.al (1993:363) posit that "...the maximal level of performance for individuals in a given domain is not attained automatically as a function of extended experience, but the level of performance can be increased even by highly experienced individuals as a result of deliberate effort to improve". Experienced Geography teachers, therefore can further improve their performance through engaging in research because teaching as MOE (1996:115) states is "a learned and learning profession". Attaining high levels of competence is not an event but a process requiring prolonged effort to improve.

c) *Research skills and knowledge*

All the teachers interviewed viewed doing research as being very helpful in acquiring skills and knowledge to enable them teach field research to learners.

*Whoever is handling Geography should do research since he or she is required to teach research. It does not ogre well for a teacher to fail to teach fieldwork and give another teacher to handle that for them. They should do it themselves hence the need to be conversant with research and report writing (B3).*

*I acquired some skills of data analysis and interpretation and this has been of help in teaching*

*research. I'm able to teach research and impart the same skills to pupils. (D1).*

They viewed it to be of particular importance to the teaching of field research and thus agreeing with Lambert and Balderstone, (2000) that for one to effectively guide learners through the inquiry process (field research) they have to perfect and enhance research skills and knowledge first.

Since the Geography curriculum has included field work, their involvement in research during their studies at universities were of help in teaching learner's field work and also guiding them to write reports. It can be argued in this case that doing research is a domain specific task that Geography teachers should continually engage in to become better teachers of research. Doing research helps sharpening and perfecting research skills of teachers. This is in line with the assertion that expertise is gradually attained through extended amounts of designed deliberate practice over time (Ericsson, et.al, 1993). Continued involvement in research could make them understand research better and perfect the skills which they can then transfer to learners.

Research skills are becoming increasingly important in this era of rapidly changing knowledge base. It is the teachers' duty to transfer research skills and abilities to their learners (Deakin, 2006; Jenkins et al, 2003). Imparting skills to learners requires that the teacher has the skills to begin with and then these skills have to be sharpened and perfected. The policy document 'Educating our Future' states that the teacher has the responsibility to themselves and their profession to deepen their knowledge and extend their professional skills (MOE, 1996). Among the skills a teacher of Geography should acquire and extend are research skills. Doing research could be instrumental in acquiring and perfecting research skills and knowledge.

One of the goals of the ministry of education is to produce a learner who among other things is "capable of developing an analytical, innovative, creative and constructive mind; appreciating the relationship between scientific thought, action and technology on one hand, and sustenance of quality of life on the other; ...participating in preserving ecosystems in one's immediate and distant environments..." (MOE, 1996:5). These aspirations justify the inclusion of field research (field work) in the Geography curriculum. For this goal to be achieved, teachers should also develop this analytical, innovative, creative and constructive mind before they can hope to produce such a learner. In line with this, Mayne (2014:48), states "improving all aspects of quality of education is dependent on preparing teachers to become critical citizens." Deliberate engagement in research is therefore cardinal for teachers for it has been proven to build and revamp skills as well as enhancing critical thinking. In other words, for learners to be properly and adequately guided through the inquiry process the teachers themselves should have sufficient and up to date inquiry skills and knowledge and these skills should be sharpened and perfected. Research

skills and knowledge can be acquired and perfected through doing research. Doing research can be a task set for Geography teachers so that they can perfect skills and knowledge and become better teachers. If teachers continually do research, they can progressively perfect their skills and knowledge and gradually become better researchers and teachers. Becoming an expert is not an event but a process which is gradual. Expertise is slowly attained through involvement in great amounts of deliberate practice over time (Ericsson et.al, 1993). In this case engagement in research can be considered as deliberate practice aimed at improving research skills and knowledge.

#### *d) Knowledge creation*

Geography teachers were aware that doing research could enable them create knowledge and thus add to a body of knowledge. Some of the responses were as follows:

*Instead of being a traditional teacher, by doing research you become a modern teacher who can supplement information that is not there or documented. (B4). Research should be taken seriously by us Geography teachers so that we can be able to create new knowledge and be writers... I think as Geography teachers we need to get interested in coming up with new information and challenging existing theories (B2).*

This supports Alpay and Jones (2012) and Durning and Jenkins, (2005) who stated that new knowledge which can help enhance the curriculum is created through researching, therefore, it is important to integrate research and teaching. Doing research also enhances writing skills and can make Geography teachers good writers. According to Mundende, (2015:51), "Zambian Secondary Schools were not fully stocked with the relevant literature on Geography field project to facilitate the successful implementation of the field projects." Mulemi's (2011) study also brought to light the teachers' and pupils' complaint that the available books on the sub-region could not provide enough information. This shows that there is lack of Geography reading material in secondary school in Zambia. On this issue Mulemi recommended that Geography teachers should as much as possible take part in writing books that could provide enough information about Zambia and the sub-region (Mulemu, 2011). Engagement in research could enable them fill the gaps in knowledge and therefore supplement information that is in textbooks.

Writing books requires an inquiring and critical mind, extensive reading as well as researching because "geographies are written records of field investigations" (Long and Robertson, 1966:128). Ntalasha et al (2004) also posited that researching could empower Geography teachers with professional knowledge and skills and accord them opportunities to write local text books. Teachers can then be motivated to write textbooks using the information they gathered through research. Field research, therefore, as UNESCO (1965) noted could be instrumental in knowledge

creation. Researching could also help teachers create research evidence and could enable them supplement information that is in textbooks. According to Firth (2016) teachers should help create research evidence.

*e) Solving educational and societal problems*

Apart from that, doing research was said to have the potential to give Geography teachers opportunities to solve educational and societal problems.

*Teachers in fact can be better placed to solve the problems they are facing, so researches done by teachers themselves can be very beneficial to the education system (B1). Research opens our minds to what is happening in our environment. It gives us access to solve real problems people are facing. ...the problems we face locally can be solved locally and very quickly (HOD, school A)*

As some teachers said, Geography teachers could be a solution to some of the challenges the educational sector and society faced. Teachers are in a better position to finding solutions to problems they face because they are the ones on the ground. Research can make them relevant in the society they live in because as Khan (2017) puts it, possessing research and consultancy skills and the ability to apply subject based knowledge in solving actual life problems are qualities society and the corporate world needed in a person. The challenges being faced within the schools and the district could be solved locally and immediately if Geography teachers were research engaged. Researching could help them solve identified challenges in the teaching and learning of Geography. Where they have no means to solve those problems they could make recommendations to relevant authorities through research reports.

Through researching, Geography teachers could create research evidence that could lead to solving some of the challenges in their field. Moreover, the skills they could acquire through doing research could help them make sound decisions and judgement which are critical in problem solving. This is in agreement with Jenkin et.al (2003) who stated that research skills and abilities are important in decision making and problem solving.

*5.2.2 Importance of engagement with research for teachers of Geography*

Teachers of Geography viewed reading research as very important to the teacher of Geography. Four reasons were given as to why reading research was important. One of them was that it enhances knowledge and understanding. The other was that it improved research knowledge and skills which they could transfer to learners. Apart from that, reading research was said to improve vocabulary and writing skills of teachers. Furthermore, it could enable teachers of Geography solve educational and societal problems.

*a) Knowledge and understanding*

Participants cited updating knowledge and enhancing understanding as one of the importance of reading research. One of the teachers had the following to say regarding this issue:

*If I can't do field research I should read other people's researches to update my knowledge...Through reading research, I improve the way I teach (C2).*

Geography teachers reported that reading research had increased their knowledge and understanding of the issues they read on. It had enabled them teach confidently as it gave them up to date information. This substantiates MOE's (1977:61) statement that "good teaching demands the teacher to possess correct attitude and adequate knowledge of the subjects he/she teaches, keep abreast with developments in those subjects and in the objectives and methods of teaching." Through reading research teachers could get new and up to date information in their subject area. This could help in teaching the subject effectively and with confidence. A teacher who doesn't have vast and up to date knowledge cannot teach effectively and definitely cannot teach confidently.

Through reading research one's understanding of Geographical phenomena is enhanced and their knowledge of such increases. Teachers could also have an enriched understanding of teaching methods and could therefore employ the best methods that have been proven to promote more learning. They can improve teaching methods using research evidence. The exploratory study done by Campbell and Jacques (2004) shows that engagement with and in research has several positive influences on the professional development of teachers, notably on teaching planning, teaching methods and strategies, teachers' knowledge base, reflective abilities and educational objectives. This is also in support of Lankshear and Knobel (2004) and Lako and Mubita (2021) who stated that reading research enhanced teachers' ability to make sound professional judgement on their own. Participants said that if one was not doing research they should at least read research so as to learn more and update their knowledge and understanding. Reading research in this case improves the teacher's competence. Therefore, reading research could also be considered as deliberate practice to better Geography teachers' performance.

*b) Research skills and knowledge*

Apart from improving understanding and updating knowledge, teachers said reading research improved their research knowledge and skills such as preparing data collection instruments, presentation and analysis of data. The following were some of the responses:

*I acquired some skills of data analysis and interpretation and this has been of help in teaching research. I'm able to teach research and impart the same skills to pupils. (D1). I'm able to impart*

*research skills to learners by showing them how to write the field reports. I keep up to date with methodologies of research as well as new information so I'm able to teach relevant knowledge and skills as a result of reading research. (teacher A4). Reading research has helped me improve skills because I'm able to compare different research works and be able to find how best I can carry out and present my research. (B3).*

This agrees with Doğan (2014) who stated that reading enables one acquire knowledge and skills. Teachers became up to date with research methodologies and their weaknesses and strengths as a result of reading research. Since reading research enhances research skills and knowledge, teachers can become better at teaching field research to learners if they continually read research. Becoming an expert involves prolonged efforts to improve performance (Ericsson *et.al* 1993). Continued engagement with research is one way of acquiring and perfecting skills and should be one of the tasks set for teachers of Geography so that they acquire and perfect research skills for better teaching of Geography. In this case reading research could be considered as deliberate practice to improve performance. Though teachers were trained in research and some of them had vast teaching experience, they needed to engage with research to perfect their skills because as deliberate practice theory posits, even highly experienced teachers can improve their teaching through deliberate effort to improve practice.

Teacher engagement in research also improves their Information and Communication Technologies (ICTs) skills (Chirwa and Mubita, 2021). This is because teacher researchers interact with internet, cell phones, computers, and other communication media. Applications of ICT are mainly used by researchers for its ability to ease the knowledge-gathering process and to enhance resource development. Researchers nowadays use much of ICT tools that provide most open situations to help identify and solve research problems in the most creative way (Chirwa and Mubita, 2021).

#### *c) Thinking, vocabulary and writing skills*

In addition, reading research was viewed as one way of improving vocabulary and writing skills.

*It broadens one's thinking capacity by trying to understand what others have don't. (D1). Reading research helps teachers to be innovative... It has helped improve my vocabulary because as I read other researches I learn new terms (B3).*

This finding is in support of findings in the research by Doğan (2014) that reading improves language skills. As one goes through what others have written they meet new terms and these are added to their vocabularies. They also learn how to present information. This can make them good writers. Some participants attributed the lack of text books and local

writers to poor reading and research culture. There is need therefore to push Geography teachers towards reading research.

#### *(d) Solving problems*

Furthermore, reading research was viewed to have the potential to enable Geography teachers find ways of protecting their environments and overcoming some challenges in the education sector according some participants. One participant had the following to say:

*"Some of the problems the education sector faces have been researched on so reading research will enable the teacher make use of research evidence to handle some of the challenges in teaching" (B1)*

Through reading they may find ways of dealing with some of the challenges in their physical environments as well as the education sector. This agrees with Borg (2010) and Lako and Mubita (2021) who stated that making use of research findings enables teacher make decisions that are evidence based. Decision making is an important aspect in problem solving. According to Jenkin *et.al* (2003) research skills are important in decision making and problem solving. The ability of a person to make sound judgement also depend on what they know and reading is one avenue of acquiring knowledge. Reading research, therefore, could enable Geography teachers use research evidence to make decisions that might solve societal and educational problems related to the field of Geography.

#### *5.3 Views on making research engagement mandatory for teachers of Geography.*

Teachers and HODs were asked if research should be made mandatory for Geography teachers. Three of the teachers, two females and one male, said it should not because it was going to be burdensome on teachers who had a lot of work to do. These accounted for 19 percent of the participants.

According to teacher A2:

*That will be extra work for teachers, it shouldn't be part of the job description of the teacher. Without incentives, it is not welcome (A2).*

However, the rest of the teachers and the HODs said it should be made mandatory because Geography simply couldn't be detached from research and that research for a Geography teacher was a must. These accounted for 81 percent of the participants. During a focus discussion with group1, the following statement was made:

*On our part as Geography teachers we have no issues with that. We can do it as frequently as possible but since any credible research has a big cost, the thorn lies on who should foot the bill. (FGD 1).*

A3 and B3 had this to say respectively,

*The teacher's job is just to impart knowledge. So research should be part of the job of the teacher. (A3). You can't impart relevant knowledge and skills if you solely depend on text books because these might have outdated information which may no longer be what is on the ground. For Geography teachers this means that they have to incorporate field research as part of their job. (B3,*

Although most of the teachers thought their job description excluded research, all the participants were of the view that for Geography teachers to impart up to date and relevant knowledge and skills they had to be research engaged. The purpose of the job of a Zambian teacher is "to teach effectively in order to impart relevant knowledge and skills" (MOE, 2007:13). In a way teachers seemed to agree that the current job description for teachers did imply that they should be research engaged. Research is an important aspect of teaching Geography which should not be detached from the job of a Geography teacher.

Research should be an integral part of the Geography teacher's job especially that they teach field project and because they teach about the dynamic earth. A teacher of Geography teaches about the earth and human interactions with the earth. The earth is not static and human interactions with the earth keep getting more and more complex making the earth even more dynamic. This makes the subject to be dynamic as well and hence the need for the Geography teacher to be current with the changes the earth is undergoing especially within their locality. The subject by nature requires inquiry.

Apart from that, the subject also has a fieldwork component which teachers have to teach because as Sauer (1956) puts it, the principle training of a geographer should come as much as possible through field work. For a teacher of Geography to impart relevant knowledge and skills, they must be research engaged. One does not impart what they don't have and one who has insufficient skills cannot teach effectively. Research knowledge and skills in a teacher have to be enhanced and perfected before the teacher can hope to guide the learners through the inquiry process. Perfecting skills requires deliberate practice (Ericsson et al., 1993). Teacher research engagement therefore should be encouraged as deliberate practice.

From the statements teachers made, it was clear that they could welcome research as part of their job provided conditions were favourable. They had a positive view about integrating teaching and researching judging from the numbers of those that said they would welcome mandatory research for Geography teachers. Geography teachers understood that it was very important for a teacher of Geography to be research engaged. How one views an activity determines whether or not they would willingly get involved in it. Studies have shown that what teachers understand about research, their role and the importance of research will

determine their engagement or lack of it in research (Soe, 2014; Borg, 2007). It could be possible to establish a culture of research among teachers of Geography in Serenje because teachers had a positive view about teaching and research integration. This is in agreement with Soe (2014) who was of the view that teachers could be motivated to do research if they viewed it positively. It also supports what deliberate practice theory which asserts that for one to engage in deliberate practice, they should view the tasks to be very important (Ericsson et al., 1993).

If relevant authorities advocated for teacher research engagement and enshrined it in policy and job schedules of teachers, teachers would be research engaged and would be highly skilled. As Firth (2016) explained, research engagement produces highly skilled teachers and this can greatly improve quality in education. Teachers of Geography expressed willingness to be research engaged provided the conditions were favourable for that because they viewed research engagement to be very beneficial. This substantiates deliberate practice theory's assertion that individuals need to perceive these tasks as highly relevant for improving their performance for them to engage in deliberate practice (Ericsson et al., 1993).

#### 5.4 Recommendation

- a. Ministry of education should encourage teachers to be research engaged by providing the necessary support and resources for doing so.
- b. Research in education should be aligned to what is in the syllabus so as to make it relevant and significant to teachers.
- c. Research for Geography teachers should be made mandatory since they are required to impart research skills and knowledge to learners. This however would require the education system to be made flexible enough to encourage Geography teachers to read and do research.

#### 5.5 Conclusion

Based on the findings, the conclusion is that teachers of Geography in selected secondary schools viewed research engagement to be important in enhancing teaching and learning of Geography, acquisition of knowledge and skills, creation of knowledge and improving vocabulary and thinking. They viewed it to be of particular importance to teaching field research. The possibility that teacher research engagement could be established and sustained was there judging from the positive views Geography teachers had regarding teaching and research integration. They could welcome mandatory research if conditions were favourable.

#### REFERENCES

- [1] Atay, D. (2008). **Teacher research for professional development.** *ELT Journal*, 62 (2), 139-147.
- [2] Biesta, G. (2007). **Bridging the gap between educational research and educational practice: The need for critical distance.** *Educational Research and Evaluation*, 13 (3), 295-301

- [3] Bilgili, Y. (2005). *The Teachers' Process of Change through Action Research*. (Doctor of Philosophy dissertation). The Florida State University College of Education. Florida
- [4] Borg, S. (2010). **Language teacher research engagement**. *Language Teaching*, 43 (4), 391-429.
- [5] Borg, S. (2007). **Research engagement in English language teaching**. *Teaching and Teacher Education*, 23, 731-747.
- [6] Brew, A. (2010). **Imperatives and challenges in integrating teaching and research**. *Higher Education Research and Development*, 29 (2), 139-150, 2010
- [7] Campbell, A., & Jacques, K. (2004). **Best practiced researched: Teachers' expectations of the impact of doing research in their classrooms and schools**. *Teacher Development*, 17 (1), 75-90.
- [8] Chirwa, C and Mubita, K. (2021). **Preparedness of Teachers and Learners in the integration of Information Communication Technologies in the teaching and learning of geography in selected schools of Petauke district of Eastern Province in Zambia**. *International Journal of Research and Innovation in Social Science (IJRISS)* Volume V, Issue III, ISSN 2454-6186
- [9] Elton, L. (2008) Collegiality and complexity: **Humbolt's relevance to British universities today**. *Higher Education Quarterly*, 62 (3), 224-236.
- [10] Doğan, B. (2014). **Prospective Teachers' Reasons: The Importance of Reading a Book**. *Bilgi Dnyasi*, 15 (1), 159-175
- [11] Ericsson, K.A., Krampe, R. & Tesch-Rome, C. (1993). **The Role of Deliberate Practice in the Acquisition of Expert Performance**. *Psychological Review*, 100 (3), 363-406.
- [12] Firth, J. (2016). **Research Engagement for the School Teacher and Its Role in the Education Community**. *Education in the North*, 23(2), 161-166.
- [13] Hilton, A., & Hilton, G. (2017). **The Impact of Conducting Practitioner Research Projects on Teachers' Professional Growth**. *Australian Journal of Teacher Education*, 42(8). <http://dx.doi.org/10.14221/ajte.2017v42n8.6>
- [14] Khan, M. A. (2017). **Achieving an Appropriate Balance between Teaching and Research in Institutions of Higher Education: An Exploratory Study**. *International Journal of Information and Education Technology*, Vol. 7, No. 5.
- [15] Lako and Mubita, 2021 **Barriers to Geography Teachers' Engagement with Research in Selected Secondary Schools of Serenje District in Central Zambia**. *International Journal of Research and Innovation in Social Science (IJRISS)* 5 (2), 72-78
- [16] Lambert, D., and Balderstone, D. (2000). **Learning to Teach Geography in the Secondary School: A Companion to School Experience**, London and New York: Routledge Falmer
- [17] Lankshear, C., & M. Knobel (2004). **A Handbook for Teacher Research: From Design to Implementation**. Maidenhead: Open University Press.
- [18] Long, M., & Roberson, S. B., (1966). **Teaching Geography**. London: Heinemann Educational
- [19] Mayne, H. (2014). **'The Reconstructionist Approach to Teacher Education: A Necessary Component to achieving excellence and Quality Education for all.'** *Research in Comparative and International Education* 9 (1), 48.
- [20] Ministry of Education. (March, 2007). **Job description/specifications: schools**. Lusaka: Management Development Division.
- [21] Ministry of Education. (1996). **Educating our Future: National Policy on Education**. Lusaka: Zambia Educational Publishing House.
- [22] Ministry of Education. (1977). **Educational Reform: Proposals and Recommendations**. Lusaka: Government printers.
- [23] Ministry of National development and planning (December, 2006) **Vision 2030: a prosperous middle-income nation by 2030**.
- [24] Mulemi, B. (2011) **Effects of the 'New' Zambian High School Geography Curriculum on Learners**. Master of Education in Geography education dissertation. UNZA, LUSAKA.
- [25] Mundende, K. (2015). **Implementation of Geography Field Project in Zambia High Schools: A Survey of Livingstone and Monze Towns of Southern Province**. *International Journal of Research in Geography (IJRG)* 1(2), 38-52'
- [26] Ntalasha, L.S. (2004) **A High School Geography-textbook of Zambia and the Sub-region**. Ndola: Times Printpak(z) limited.
- [27] Palali, L., van Elk, R., Bolhaar, J and Rud, I. (2017). **Are Good Researchers Also Good Teachers? The Relationship between Research Quality and Teaching Quality**. *CPB Discussion Paper / 347*. CPD Netherlands Bureau of Economic Policy Analysis.
- [28] Sauer, C. O (1956). **The education of a geographer: Annals of the Association of American Geographers** 46, 287-99
- [29] Soe, T. (2014). **Research Engagement and Professional Development: English Language Teachers' Perspectives**. English Language teachers' conference, Yangon University, 2014.
- [30] UNESCO, (2005). **Towards Knowledge Societies**. Paris: UNESCO.