JYX
JYVÄSKYLÄN YLIOPISTO
UNIVERSITY OF JYVÄSKYLÄ

This is a self-archived version of an original article. This version may differ from the original in pagination and typographic details.

Author(s): Tadesse, Abraham; Eskelä-Haapanen, Sirpa; Posti-Ahokas, Hanna; Lehesvuori, Sami

Title: Eritrean teachers' perceptions of learner-centred interactive pedagogy

Year: 2021

Version: Accepted version (Final draft)

Copyright: © 2020 Elsevier Ltd. All rights reserved.

Rights: CC BY-NC-ND 4.0

Rights url: https://creativecommons.org/licenses/by-nc-nd/4.0/

Please cite the original version:

Tadesse, A., Eskelä-Haapanen, S., Posti-Ahokas, H., & Lehesvuori, S. (2021). Eritrean teachers' perceptions of learner-centred interactive pedagogy. Learning, Culture and Social Interaction, 28, Article 100451. https://doi.org/10.1016/j.lcsi.2020.100451

Eritrean Teachers' Perceptions of Learner-Centred Interactive Pedagogy

This is the Authors' accepted manuscript. To cite the article:

Tadesse, A., Eskelä-Haapanen, S., Posti-Ahokas, H., & Lehesvuori, S. (2021). Eritrean teachers' perceptions of learner-centred interactive pedagogy. *Learning, Culture and Social Interaction*, *28*, 100451. doi:10.1016/j.lcsi.2020.100451

Abstract

In most sub-Saharan African countries, mainstreaming learner-centred interactive pedagogy (LCIP) is defined as a policy priority. Similarly, Eritrea has adopted the same policy to seek a solution to its educational challenges. Rather than rote mastery of course content, the LCIP approach prioritises learners in constructing knowledge through interaction, active participation and controlling the learning process. This paper explores secondary school teachers' perceptions of LCIP and their challenges in implementing this pedagogical approach. Constructivism and sociocultural learning theory are considered conceptual frameworks to highlight LCIP as an approach for teaching and learning. Qualitative data from 12 teachers' interviews were analysed through qualitative content analysis and inductive reasoning. The findings suggest that without laying the necessary foundation, the policy emphasis on LCIP, which is considered critical in addressing educational challenges, puts pressure on teachers to employ LCIP while it remains idealised. Furthermore, the findings indicate that diverse challenges should be addressed to generate change in classroom practices in Eritrean secondary schools by implementing the LCIP approach.

Keywords*:* Learner-centred interactive pedagogy, teachers' perceptions, Secondary school teachers, Eritrea

1 Introduction

Learner-centred interactive pedagogy (LCIP) has become a common approach at the policy level in most sub-Saharan African countries, including Botswana, Ethiopia, Kenya, Namibia, South Africa, Tanzania and Uganda, with the aim of improving the quality of education (e.g. Altinyelken, 2010; O'Sullivan, 2004; Vavrus, 2009). However, since being put into practice, increased attention has been placed on whether LCIP is achieving its intended goal of enhancing the quality of learning. For instance, in Ethiopian primary schools, Serbessa (2006) noted that transforming the traditional lecture approach into an innovative pedagogical practice was a difficult task. Furthermore, in Uganda, Altinyelken (2010) showed that the implementation of learner-centred pedagogy has not been realised due to a conflict between policy and practice. Since its independence in 1991, Eritrea has also gone through different educational challenges, mainly due to a traditional learning approach, a lack of quality teacher training, limited hours of instruction and poor facilities, as indicated by students' high repetition and dropout rates. In 2002, the Ministry of Education (MoE) proposed the introduction of LCIP as an approach to reform the educational system, considering it an effective method to renew existing pedagogical practices in response to educational quality challenges. The MoE (2008, p.41) stated that teaching is to be conducted through a learner-centred and interactive pedagogy, and pedagogies used in teacher education must model learner-centred and interactive pedagogy practices.

Even though LCIP is included in the official policies (MoE, 2003a; MoE, 2008), and different in-service training programmes, workshops and seminars have organized (MoE, 2012b, p.7), the goals of reform are proving challenging to implement in practice (Brodie, Lelliott, & Davis, 2002; Chisholm & Leyendecker, 2008), as the implementation of new policy too easily overlooks teacher agency and the socio-cultural context that shapes teachers' practices (e.g. Brinkmann, 2016; Elmas, Ozturk, Irmak, & Cobern, 2014). If teachers can internalise the practice according to the introduced reform, they will have established a positive mindset to achieve the goal (Vetter, 2012). Information should be collected also from teachers, not only from policy documents, to get deeper understanding of Eritrean education system, because teachers are actual policy implementers (Sium & Tessema, 2019). Thus, this article explores how experienced secondary school teachers in Eritrea conceptualise, understand and implement their teaching approach in relation to LCIP to better understand, and ultimately bridge, the existing gap. It is noted that little is known regarding teachers' own perceptions of

LCIP at secondary schools in developing countries. This research addresses this gap by exploring teachers' perceptions of LCIP and adds to the limited research in the Eritrean educational context.

The aim of this study is to explore the perceptions, understanding and challenges of implementing LCIP in Eritrean secondary schools. The results are reflected and discussed through consideration of the MoE's (2003a) policy of LCIP in education and in relation to relevant literature and theory.

1.1 LCIP – Learner-Centred Interactive Pedagogy

The constructivist theory asserts that learners receive knowledge through self-direction and connection with their environment (Kumar, 2006). Therefore, this study draws on social constructivism and sociocultural theory (Kozulin, Gindis, Ageyev, & Miller, 2003; Vygotsky, 1978). It explores pedagogical practices—more specifically LCIP principles—and aims to explore classroom teachers' perceptions of teaching and learning. Self-directed learning decreases students' dependency on teachers and changes teachers' main role, which is to support the learning process. From a constructivist perspective, the teacher's role is to help students construct meaning, both individually and socially. Project work, group-based assignments, flexible questioning strategies, dialogue and active learning processes are all considered useful instructional approaches for the constructivist teacher (Pathmarajah, 2014; Sikoyo, 2010). The benefits of this approach make learning more engaging, rather than the teacher merely dispensing knowledge to the class, LCIP also shares the idea that knowledge is a human construct that is established through the interactions between social actors in a particular context. This can be achieved through active engagement with peers, which is supported by teachers as facilitators (Tabulawa, 2003). According to the Eritrean National curriculum framework (MoE, 2008) LCIP can provide broad, balanced and relevant learning possibilities to all Eritrean students based on the needs and interests of each individual. It also states that LCIP requires a high level of learner participation in the construction of knowledge. This idea "to promote learning with understanding" is considered essential to lifelong learning and teachers play a central role in this educational change, which aims to enhance national productivity and innovation (MoE, 2008; Posti-Ahokas, et al. 2018).

Sociocultural perspectives of learning emphasise that learners acquire new strategies and knowledge as they discuss topics in front of the whole class and in peer interactions (Teo,

2019). The sociocultural approach to learning and development highlights learning through interactions and communication between the teacher and the students and among one's peers in school (Vygotsky, 1978). It views human cognition and learning as social and cultural processes, rather than an individual process (Kozulin, et al., 2003). Learning can be a dialogic process involved in social interactions among students and teachers working within settings that reflect the values and social practices of schools as cultural institutions (Matthews, 2003).

According to the above theories, the aim of learning is for the learner to actively explore, cooperate and interact, rather than to passively attend lectures and read textbooks (Norman & Spohrer, 1996). LCIP classrooms include the idea of learning partnerships among learners, teachers and student peers. These partnerships imply that practices promoting positive relationships between teachers and students are crucial for high learner motivation and achievement (McCombs, 2003). Both theories take a similar stance on learners' acquisition of knowledge through exploration, discovery and reflection, rather than the passive absorption of facts through rote memorisation (Nykiel-Herbert, 2004).

1.1.1 Teachers' perceptions and implementation of LCIP

Teachers' perceptions, knowledge and beliefs play a fundamental role in the effective implementation of reforms, and they have an impact on learners' attitudes and, thereby, their learning achievements (Park & Sung, 2013; Zepke, Leach, & Butler, 2014). The Greenwood Dictionary of Education ('Perception', 2003, pp.261–262) defines perception as an awareness of the elements of the environment. Teachers' perceptions are shaped when they properly understand what constitutes the elements of the environment, which is the LCIP approach in the context of the present study. Thus, when teachers understand the approach, positive attitudes are produced among the students, and their intrinsic motivation to learn and acquire new knowledge increases (e.g. Wigfield & Harold, 1992; Wigfield & Karpathian, 1991). If teachers are involved and oriented towards students and changing their perceptions, students are inclined to learn (Baeten, Kyndt, Struyven, & Dochy, 2010). Learning is developed by motivational and affective factors within the learner and in the learning environment (Wigfield, Eccles, Schiefele, Roeser, & Davis-Kean, 2006). Thus, learners' positive attitudes and their inherent motivation to learn are conditioned by the teachers' motivation and preparation (Oroujlou & Vahedi, 2011).

Teachers' involvement is critical in implementing educational change (Fullan, 2001; Sium & Tessema, 2019), also in developing countries like Eritrea (Author 3, et al., 2018). While the role of teachers as change agents is recognised, changing the way teachers teach has been found challenging. The evidence as to whether teachers are changing their approach to teaching is scarce, irrespective of reforms towards progressive pedagogy (Wheatley, 2002). Furthermore, Bernstein (2000) argued that progressive pedagogy is sophisticated and, thus, requires teachers who possess a strong theoretical knowledge base. The evidence from South Africa, as in other developing countries, shows that the majority of teachers lack this type of knowledge base (Taylor & Vinjevold, 1999). For LCIP to become a practice, teachers need to understand the underlying idea, which is to change their practices, adapt and apply appropriate pedagogies, and have the capacity to do accomplish this.

In contrast to LCIP in many developing countries' contexts, traditional teaching approaches have been criticised for not providing enough opportunities to involve students in the classroom (Ameir 2020; Akyeampong, 2017; Lauwerier & Akkari, 2015; Mulkeen, 2010). In teacher education programmes in Ghana, Akyeampong (2017) identified that teachers cannot internalise the principles of LCIP approaches, as they are rarely given the opportunity to explore students' higher-order thinking, questioning and critiquing, or to develop alternative approaches in light of what the realistic classroom context might present. Thus, lessons in Ghana are almost exclusively teacher-centred and content-driven (Chisholm & Leyendecker, 2008). Undoubtedly, the process of changing an instructional technique is time and labour intensive (Stevenson, Duran, Barrett, & Colarulli, 2005), although students positively take the opportunity to participate in LCIP, with beneficial implications for their learning.

1.1.2 Students' roles in LCIP

Learner-centred interactive pedagogy (LCIP) is the official term adopted in Eritrean policy documents (MoE, 2008; MoE, 2011) to emphasise the focus on students' active role in classrooms and their responsibility for their own learning. Moreover, learner-centred approaches have been strengthened with the development of constructivist and sociocultural, theories of education that emphasise the active role of students in their own education (Vygotsky, 1978).

Starting in the early 19th century, LCIP has been related to democratic learning cultures, which expose students to democratic learning arrangements (Moate & Cox, 2015; Schweisfurth, 2013). To realise students' increasing freedom and autonomy, it is important to create, on the one hand, a learning environment that anticipates their need for freedom, and on the other hand, their need for transparency about the learning objectives and assessments (Keengwe, Onchwari, & Onchwari, 2009). In a learner-centred environment, students work together, choose a variety of tasks, share work, and learn social and leadership skills (Zeichner & Ndimande, 2008). Classrooms involve different interaction configurations, including learner-learner, teacher-learner and learner-content interactions, all of which contribute to the development of meaning construction (Ekwunife-Orakwue & Teng, 2014). Lehesvuori et al. (2013) identified that in learner-centred environments, students are involved and engage critically and constructively with each other's ideas. Therefore, the focus in learner-centred pedagogy is on the learner's learning, rather than the teacher's teaching (Weimer, 2002; Wohlfarth et.al, 2008).

1.1.3 LCIP in the Eritrean school system

In Eritrea, children start their schooling at the age of six after they have had a possibility to attend two years of pre-school. Formal education consists of five years of elementary school (Grades 1– 5), three years of middle school (Grades 6–8) and four years of secondary school (Grades 9–12; MoE, 2016). Basic education (grades 1–8) is compulsory for all school-age children (MoE, 2003). The language of instruction at the elementary level is the mother tongue, whereas from middle school onwards, English is the official language of instruction. The shortage of qualified teachers together with the increase of enrolment rates have led the country to adopt the practice of double shift schooling at all levels (Sium & Tessema, 2019). In addition, average class sizes of 50–60 and fixed furnishing of classrooms are not ideal for LCIP practice (Finn Church Aid, 2015; Zemichael, et al., 2017).

Successful completion of secondary school and satisfactory results in the Eritrean Secondary Education Certificate Examinations (ESECE) allow candidates to continue to tertiary education in one of the seven institutions of higher education in the country. Ministry of Education provides also adult education programmes and complementary elementary education for out-of-school children to those children who are over school age. In turn, public and private vocational centres provide various programmes of training in diverse fields (Asfaha, Belay,

Eskelä-Haapanen & Leskinen, 2017; MoE, 2016). Education is primarily the responsibility of the government and it is free at all levels, including tertiary education (MoE, 2003). Teacher education, curriculum design, setting standards for education, preparing textbooks, and the supervising of teaching and learning processes come under jurisdiction of the Ministry of Education (MoE, 2013).

Secondary school teachers are college graduates, who have completed a four-year bachelor's degree programme. Many teachers do not choose the profession themselves; on the contrary, low performing students are recruited to teacher education college. Because of the inadequate number of secondary school teachers being trained, graduates with degrees from any other college are selected to fill the gap of secondary school teachers. To address concerns over the lack of pedagogical orientation among these graduates, the MoE deploys graduates as teachers after short training (Idris, Asfaha, & Ibrahim, 2017). It is regonized that teachers with shorter initial training programmes will require intensive in-service training and follow-up on the job (Sium & Tessema, 2019).

The study is carried out at secondary school level, where teachers are being given in-service training in LCIP and students' peer education along with teacher classroom practices are employed to enable students to be autonomous learners through LCIP. Such practices are believed to boost students' confidence in their quest for higher education entrance (MoE, 2013). Remarkably, large class size is assumed to deter the implementation of LCIP. Learning isn't as effective as can be if classrooms are crowded. With the introduction of LCIP, there is a need for more trained teachers (MoE, 2013). According to LCIP guidelines (MoE, 2003b), teachers are expected to demonstrate different skills, such as, relating lesson with learners' experience, supporting learners to construct their own knowledge, presenting sequenced, challenging and manageable learning tasks, providing direct hands on experience, creating democratic classroom environment, promoting cooperative learning, making learners responsible and facilitating learning. Therefore, it is indispensable to explore secondary school teachers' perception in implementing the LCIP guidelines and skills.

Like in other countries, contrary to the policy discourse, LCIP has faced myriad implementation challenges. In a previous study conducted at Asmara Community College of Education in Eritrea (Author 3, et al. 2018), Eritrean teacher educators perceived LCIP as challenging and problem-focused, emphasised as a method instead of a philosophy, represented

as a list of theoretical concepts without contexts and, thus, resulting in uncertainty on its practical implementation. The teachers' capacity to internalise the approach has not yet developed and matured. Thus, engaging teachers in meaningful and continuous professional development is necessary to make classrooms more learner-centred and interactive (Author 3, et al., 2018). Exploring teachers' perceptions can clarify the need for competencies related to LCIP, as well as the main factors preventing teachers from implementing LCIP. This would help policy makers set policies that enable appropriate learning conditions and environments.

2 Method

2.1 Participants and procedure

This study is based on the purposeful selection of 12 secondary school teachers to gain rich and illuminative ideas (Patton, 2015). The teachers came from four public urban and suburban secondary schools from two regions in the country (Table 1). The main criterion for selecting these particular participants was their teaching experience, awareness of the LCIP as an approach, and competence, as discussed with the school principals.

Table: 1 Teachers' profiles

Identifier T1-T12	Teaching Experience (years)	Gender/ age	Educational level (Diploma/BA/BSc)	Subject	Average class size	Urban/ suburban
T10	37	M/64	BA	History	56	urban
T3	30	M/54	BA	English	54	suburban
T4	27	M/46	BA	English	67	suburban
T8	22	M/46	BSc	Biology	67	suburban
T6	21	M/42	BSc	Biology	56	urban
T2	20	M/48	BA	English	56	urban
T1	18	M/43	BA	English	55	urban
T9	17	M/38	BA	History	55	urban
T5	13	M/36	BSc	Chemistry	55	urban
T11	11	M/40	BA	History	54	suburban
T12	8	M/33	BA	History	67	suburban
T7	8	M/32	BSc	Chemistry	54	suburban

The four selected secondary schools varied in terms of class size, academic performance, resources and other activities, and were located in different parts of the country. The participants' academic qualifications were a bachelor's degree of arts and science (BA/BSc) with more than 8 years of teaching experience. The participants were teaching core subjects in Grades 9 to 11 as follows: English (4 teachers), biology (2 teachers), chemistry (2 teachers)

and history (4 teachers). Each participant provided signed consent forms for recorded interviews beforehand.

2.2 Data Collection

The in-depth, semi-structured interviews of approximately 45 minutes in length were conducted by the first author in Tigrigna, one of the local languages in Eritrea. This semi-structured interview had a set of fixed questions; however, it was flexible, allowing us to change the sequence and the form of the questions whenever necessary to follow up on the main theme of the study (Kvale, 1996). The interviews focused on the policy and practice of LCIP and pedagogic innovation more generally. To support comparability across the participants' responses, all participants were asked the same questions designed to elicit their understanding of LCIP. The questions included teachers' views and implementation of the approach, types and merits of professional development, influence of LCIP on teaching and learning, benefits of LCIP on students, the kinds of communication and interaction in the classroom, and opportunities and challenges of LCIP (see Appendix-1). Depending on each participant's responses, different probes were used to help each of them deepen their responses. The probes employed in the interviews were detail-oriented probes, i.e. where, when, what and how questions, elaboration probes with such follow-up questions as 'Would you elaborate on that?', 'Could you say more about that?', and 'Could you explain that more', and clarification probes, i.e. 'What do you mean by that word or sentence?' (Patton, 2015). In order to give the participants an opportunity to have a final say, the interview ended with the following question: Is there anything we haven't talked about that you would like to add? All recorded interviews were transcribed verbatim. The transcripts were translated into English in order to share the data with the other members of the research team. The data consists of 157 pages in total.

2.3 Data analysis

The data were analysed using qualitative content analysis and inductive reasoning (Krippendorff, 2013; Patton, 2015). The analysis was conducted via the following five phases: 1. The first author read the literally transcribed texts to get the general idea of emerging themes. Every teacher had a unique identification (ID) number; 2. Verbatim texts were used to find recurrent and repetitive expressions to answer the research questions; 3. Theoretical literature

and previous studies on learner-centred pedagogy were used to construct meanings from the emerging expressions (Patton, 2015); 4. Main themes came into prominence through the thematic analysis of careful examination and constant comparison (Patton, 2015), which were based on discussions between the researchers and implementing researcher triangulation (Miles & Huberman, 1994); 5. the main meanings were categorised and arranged accordingly to give sense to six identified themes. To guarantee teachers' anonymity, each teacher was given a pseudonym from T1 to T12.

3 Results

Table 2 presents an analysis of teachers' perceptions of LCIP. The main themes and sub-themes are indicated with numbers of respondents in order to present the spectrum of perceptions and their prevalence across the interview data (Miles & Huberman, 1994).

Table 2: Teachers' LCIP Perceptions

Types of perceptions	**Main themes** (Number of Respondents Mentioning Item)	**Sub-themes** (Number of Respondents Mentioning Item)	**Examples of verbatim text**
Positive perceptions	**Positive attitude towards LCIP** (11)	Positive/helpful approach (11)	It is a helpful and positive approach in the new curriculum, in which students can discover, participate and acquire knowledge (T1).
		Engage students in group work (6)	Students engage and discuss in groups; they share experiences from their group of students (T4).
		Promote independent learning (3)	It allows teachers to teach the students how to think about the topics, not what to think (T7).
		Learning with understanding (2)	Students construct knowledge based on past experiences (T4).
	Necessiates school based professional development	Encourage school-based training (6)	The workshops given at schools are the most effective because you know one another so well (T3).
Negative perceptions	**Barriers with LCIP in the classroom** (12)	Large number of students (10)	Classroom reaches 70 students per class; this impedes implementing the approach (T12).
		Lack of English language skills (9)	Since some students are the breadwinners in the family; they cannot focus on their learning wholeheartedly (T6).
		Poor student exposure to LCIP (7)	Students are not exposed to LCIP (T7).

	Socio-economic problem (2)	Despite English as the language of instruction, it is not spoken by the students. Their lack of proficiency becomes a bottleneck. (T3).
Lack of professional development (9)	No LCIP course during pre-service training (9)	I was introduced to the approach during in-service training (T7).
	Short training on weekends (8)	We cannot call teachers qualified personnel with a one- or two-day training (T2).
	Lack of deep knowledge (4)	Teachers have knowledge of the theory but fail to translate it into interactive pedagogy (T2).
Poor student engagement in learning (9)	Low student motivation (9)	The few motivated students are a teacher's joy (T10).
	Avoidance of studying and reading (6)	Students come to class without doing an assignment; students at this time are not hardworking (T12).
	Students lack fundamental skills (3)	There are students who struggle to read and to calculate basic arithmetic (T6).
	Socio-economic problem (2)	Not all students visit the library due to the socio-economic problems they have. They are part-time workers (T6).
Challenges in understanding and confronting individual differences (7)	Variations in students' potential (4)	We sometimes ask our students to write the English alphabet. We had a number of students who couldn't do that (T5).
	Support based on student's needs (4)	Each student has to participate according to his/her own ability and needs (T11).
	Identifying students' needs (2)	Students should study a field in which they could perform very well (T9).
	Intolerable learning loads (2)	Students' capacities deteriorate when they are promoted from lower to higher secondary schools because learning subjects increase from 5 to 10 (T5).
Conflict between LCIP and classroom practice (6)	Absence of practical activities (6)	I'd prefer if more practical activities could be done and the content of the book could be reduced (T3).
	Exam-oriented curriculum (5)	Students only study to pass exam (T1).
	Strong authoritarian culture (4)	Students remain silent, so that they may not interrupt and question the teacher (T10).
	Minimum teachers' exposure (4)	After short training, teachers are left on their own (T5).

The positive and negative perceptions of LCIP were presented by the teachers. At the same time, it is evident that LCIP is welcomed in teachers' views, there is a call for further

professional development to overcome the identified barriers. The content of each theme is discussed in more detail in the following sections.

3.1 Positive attitude towards LCIP

The participants in this study believed that LCIP is helpful and positive for instilling knowledge in students. The data revealed that attitudes to LCIP were overwhelmingly positive, with the teachers being very receptive to this change. The teachers were quite positive about the benefits of LCIP, and they cited a number of advantages of this approach. One teacher stated:

> *Students participate and discover the truth through the teacher's guidance. Students gather information, which they can use to participate in the lesson. Students work as a group through discussion or on an individual basis on the given task to acquire knowledge, attitudes and skills. I believe that LCIP is very useful and positive.* (T1)

The teacher participants shared the opinion that LCIP makes learning engaging, involving, enjoyable, challenging and relevant to students to acquire knowledge and skills. One of the teachers contended: *'LCIP is a teaching approach, which involves students in the learning process and helps them to become autonomous, to express their thoughts independently, and to develop their mental creativity'* (T4). The participants acknowledged LCIP's positive contributions to students' mental development. One teacher explained this benefit:

> *LCIP enables sharing and creating an understanding of students' hidden knowledge and thoughts. I describe LCIP as learning with understanding, and students teach themselves using what they have, and they relate it to their life experiences, and it is an approach in which the teacher teaches students how to think.* (T8)

The teachers support the learners at their desks in class. A teacher explained that the *'teacher does not dump knowledge on the students; instead, the teacher gives solutions as he or she visits the students at their seats, and identifies the students' weaknesses, where teaching and learning take place'* (T3). Hence, the data seems to suggest teachers' positive attitudes towards LCIP. As indicated in the following sections there is a call for further professional development programmes that help teachers to face the challenges and overcome the barriers when heading towards more student-centred classrooms.

3.2 Barriers of implementing LCIP in classrooms

The participants in this research believed that they are far from implementing LCIP in classrooms due to a variety of reasons. The dominant learning strategy is still the traditional approach. There are also many challenges, such as large class sizes, a lack of resources, e.g. technology, and time constraints, a content-laden subject-based curriculum, an assessment culture, traditional cultural values and socio-economic issues. Challenges that focus on teachers and their learning are, for example, a lack of English language proficiency, teaching outside of one's field of specialisation, adhering to a teacher-centred pedagogy, heavy workloads, minimal teacher training, mismatched competencies, demotivation and a lack of parents' awareness. One teacher explained the challenges of the class size: *'The class size makes LCIP difficult. Teachers cannot make the group size it should be. Teachers cannot make the class size small enough. Teachers need to use a bigger group size, and that class size influences you'* (T1). LCIP faces impediments on different levels. *'There are many challenges; among these, class size, large number of students, facilities (textbooks) and demotivated students are the major ones; students are not exposed to LCIP properly and it is far from being implemented'* (T10). The participants repeatedly emphasised that the size of the student groups was too big, which leads to inadequate time or space to support students' work. A teacher reported:

> *It is almost impossible to use LCIP in our class because it has 70 students. Working with very large groups is very hard for both students and teachers. It's hard to manage discussions in crowded classrooms. The physical conditions of the class are inadequate for putting students into groups because of the inflexibility problems.* (T12)

On top of the large class size, the physical condition of the classroom was also a difficulty, as one teacher described: *'Desks are not comfortable for students to work on in the classroom, so teachers cannot move the desks now and then. LCIP becomes an impossible task in relation to the sitting arrangement'* (T11).

3.3 Teachers' lack of professional development

In terms of training, many of the teachers indicated that they feel ill-equipped to change the way they teach; thus, they would like access to structured, formal and practical training. Currently, the teachers do not receive proper and structured pre-service and in-service training. Only three participants (T6, T8 and T11) were given a limited introduction to LCIP during their

pre-service training, and nine participants were introduced to LCIP during a brief in-service training. Regarding training, one teacher stated:

> *There was no course on LCIP during pre-service training. LCIP came later on. I think there was a workshop once about it. There was something about LCIP in a two-week workshop. However, the workshop was all subject panels in the same venue. Teachers were not divided into specific subject panels; it was not very effective.* (T1)

Another teacher also confirmed that *'I came to know much about LCIP in the workplace. Perhaps there are some LCIP approaches, but teachers should enrich this approach in their workplaces'* (T3). Regarding the weekend workshops, one teacher explained: *'The workshops were short ones and given during the weekends; they were on pedagogy, which informed teachers of LCIP. Then, the teachers are asked to teach the LCIP approach, which they are not accustomed to doing'* (T5). Another teacher added: *'There was no course with a credit given at the training institution. I was trained in applied English. I was not trained in English language teaching. But, according to my understanding, short courses on LCIP are not enough'* (T4).

After teachers participate in these limited trainings, they become excited about implementing new teaching strategies; however, they face difficulties in implementing them once they return to their workplaces. One teacher asked: *'There has been training on LCIP, but there is no instruction as to how to apply it. How do teachers involve a student in it, and what ways do you use, and what resources do you use?'* (T12). Another teacher added: *'There is a risk that teachers cannot apply a training they have received. I can take a training; however, if I did not apply it, it means that the training has not helped me.'* (T2). Furthermore, trying to achieve pedagogical change through short training sessions seems incompatible with the notion that pedagogical change for any teacher is a continuous and ongoing process. The teachers do not receive formal training, and they forget what they learned in a weekend. It is possible that teachers revert to their old habits when they go back to their work. Thus, it would be essential to proceed from principles to actual strategies and implementation of pedagogy that engages students through shared responsibility and distributed ownership of ideas.

3.4 Students' engagement in learning

The participants in this study thought that the lack of student engagement in learning would make the task of implementing LCIP difficult. The teachers maintained that their students' unwillingness and demotivation to participate in this approach is one of their biggest challenges, as the students are very much used to the traditional approach. One teacher asserted: '*I want to give group work. However, due to the students' low motivation, I am aware that it is a waste of time to divide the class into groups and make them discuss'* (T10). In the traditional approach, students are more focused on memorisation, grades and the final result; thus, it is difficult for them to adjust to a new system. One of the participants indicated that the *'students' parents will also be disappointed if their children do not have much writing and graded results in their exercise books'* (T1). One teacher reported that the students are also part of the problem:

> *The problem is not in the approach of LCIP, but the students, to whom teachers try to apply the approach. If the students had been interested and motivated, my conclusion is that LCIP would have become very successful. Hard work on the students' part is necessary to bring about fruitful results from the approach.* (T7)

One interesting feature to motivate learners to take responsibility for their learning is to expose them to the significance of their learning, which is well in line with objectives of LCIP. Responsible learners can only be developed through the teacher's consistent behaviour and high expectations, and setting attainable goals. One teacher commented on the students' skill level: *'There are students who cannot write basic alphabets, despite their level'* (T5). Students' low motivation and academic abilities further challenge teachers' practice and implementation of LCIP. To address the problem of demotivated students, some critical issues may need to be addressed. In this regard, it is important to explore how teachers understand LCIP, and how they enact it in their classrooms and perceive its effectiveness to build upon the potential of LCIP in enhancing student and teacher motivation.

An additional issue was brought up by one participant complained that students lack vision and do not focus on their learning due to socio-economic problems:

> *The school catchment area is affected by social and economic problems. Teachers expect students to be full-time learners; however, you find some students selling things at the market. You cannot blame students for neglecting their studies because they should first have a full belly*. (T6)

Another teacher added that *'some students are the breadwinners of the family. They cannot study full time. If students spend their time on solving their families' economic problems, they*

won't have time to prepare for LCIP and enrich their knowledge' (T9). Students' involvement in their families' basic income generation reduces their opportunities to put effort into their learning. Thus, creating a positive classroom atmosphere within the LCIP environment is undoubtedly a genuine challenge in such situations.

3.5 Understanding learners' individual differences

The participants firmly believed that teachers should know as much as possible about learners' backgrounds and their potential to understand them; then, teachers can assign group work to enhance learners' participation. Due consideration should also be given to learners' backgrounds in terms of forging positive classroom relationships. One teacher reported: '*Individual differences mean that within the student population, there are differences among students. There are students who grasp the concept very fast as the teacher teaches, some students who grasp it after they have revised it at home, and some who do not revise their lessons at home'* (T9). In addition, students' interests should also be considered to support their understanding of their learning. A teacher remarked:

> *Not all students can be described as bright. There are students who have skill in technical matters. For example, not everyone has the same kind of gifted skill. The education system should not waste students' time on academic matters with such students. By identifying a student's inclination right from the very beginning, students can be assigned to a field in which they are skilled.* (T11)

No mechanism exists whereby students can attend to their lessons according to their interests and potential. The educational provisions fail to meet learners' diverse needs. One teacher stated: *'Teachers should take into account the average and the slow-learners; it is right that teachers should make these students catch-up through parental encouragement and by organising additional classes'* (T5). It is paramount that students get support from teachers and parents.

3.6 Conflict between learning theories of LCIP and instructional experiences

Half of the teachers explicitly mentioned conflict between theory and practice, which again foregrounds the need for further professional development and training. The shortage of resources, large class sizes and learners' low involvement in the activities hinder their implementation. One teacher explained that different approaches can involve students:

> *Teachers could have used a variety of teaching approaches, such as group work, pair work, debating, presentation, discussion, role-play, field observation, laboratory activities, case study, reporting, interviewing, small research projects and drama; however, it is difficult to implement in practice*. (T4)

Instead, the teachers focus on lecturing, individual question-answer sessions to confirm the correct answer, limited group work activities with less student interaction in the group, and students' presentations of their own work by a few capable students. The materials mostly used by the teachers included chalk, blackboard and textbooks. All the activities conducted by teachers were limited, and the teachers admitted that many LCIP features are absent. One teacher argued: *'There are some practical lessons; if it were not for economic constraints, there are historical sites. There are sites of ancient history. There are many historical places, but there is no financial capacity to visit them'* (T11).

The teachers may be aware of the need to make learners participants in the learning process. However, this was understood more in theoretical terms, rather than as something that promotes learning. The teachers found it challenging to translate theoretical knowledge into practice:

> *If we had taken a structured course (not like the pedagogy workshops given during weekends), workshops that last for two or three months, the knowledge would help to have a rich experience of the LCIP approach. The lessons we teach would have the LCIP format and principles. Otherwise, all teachers will carry out activities the way each of us sees fit. (T5)*

The participants confirmed that a variety of LCIP approaches would provide the students with enjoyment and satisfaction; however, it is not practiced in the classroom. One teacher explained: *'If teachers use a pictorial representation, the lesson becomes more attractive, pictures become the better instruments of teaching. If I also use pictures prepared by students, the lessons become more interesting'* (T6). The participants noted that there is a core problem in teachers' professional development due to the failure to relate theory with practice. The participants reflected on the positive aspects of LCIP, but teachers are struggling with the practical application of the approach. Although the drawbacks of connecting theory and practice are manifested by the teachers, teacher's awareness of LCIP theory is truly significant in terms of taking the next step towards more student-centred teaching. This will be discussed in-depth in the following section.

4 Discussion

Despite the challenges of implementing LCIP and acknowledged lack of professional development, the study revealed that the LCIP approach is perceived positively by the experienced Eritrean teachers participating in this study. The teachers believed that LCIP would not only teach students what to think; it would also support them in learning how to think and to develop as critical thinkers (Tsui, 2002). Previous research in different contexts have proved that teachers have positive attitudes towards learner-centred instruction to affect learners' attitudes and learning positively (An & Reigeluth, 2011; Yilmaz, 2008), also in challenging contexts (Ameir 2020). The participants in this study also viewed LCIP positively and believed in its teaching approach in secondary school settings. Teacher participants acknowledged that through the provision of school-based professional development LCIP could improve teacher competence, subject knowledge and confidence, leading to more interactive teaching and learner-centred approaches for a wider repertoire of pedagogic strategies in the classroom. Furthermore, teachers are in a better position to understand LCIP efficiently and effectively; as Fullan (2001) stated, educational change depends on what teachers think. Shifting teachers' pedagogy towards the LCIP approach requires targeting teachers' understanding as well as their professional competencies and educational context. This will empower teachers as rational agents, who can bring about ongoing changes in their own beliefs, practices and contexts.

Eritrean teachers are expected to follow the national curriculum strictly and to teach theoretical topics that require lecturing and listening. A teacher-centred approach would be suitable for this type of teaching as it could help to cover several topics at a time. Kennedy and Kennedy (1996) argued that teachers might express a positive attitude towards an innovation, yet they might not actively implement it in classroom due to a conflict between their attitudes and their actual classroom practices. Similarly, Brodie et al. (2002) found that when an interactive approach was implemented in the classroom, teachers showed evidence that they had contained the form, rather than the spirit and content of the ideas. When teaching approaches are shifted to new ways of teaching, teachers need enough knowledge about and participation in the changes to increase their capacity to accept and implement the new practice. In this study, the teachers explained that the learning process is too theoretical. As a result, educational achievement in Eritrea has been doomed by frequent dropouts, a lack of interest in school and failure in academic subjects (Idris & Asfaha, 2019). To minimise the situation, through LCIP,

learners could be supported in participating actively and discovering real-life problems with a view to solving them.

In line with previous research (Author 3 et al., 2018), the findings of this study showed how a lack of systematic training led to insufficient and ill-equipped teachers, who usually possessed a fragmented understanding of LCIP, making it difficult for them to implement it. Brinkmann (2016) argued that in many developing countries, often teachers are either untrained or receive training that is unable to address the demands of teacher development capacities. Brief limited training does not prepare teachers for meaningful changes. Regarding real professional development, Idris and Asfaha (2019) pointed out that teachers should be given space to critically reflect on their practices; then, it may be possible for them to implement innovative and contextually relevant approaches that tend to be meaningful to learners. Recent research from Zanzibar (Ameir 2020) points to the potential of longitudinal, well-designed in-service training modelling active learning in generating significant change in attitudes and teacher practices. The existing structures for in-service training of Eritrean teachers could be utilized to create such conducive environments for generating gradual change.

According to the teachers, students have different individual skills and potential, and teachers should be aware of students' needs to better implement LCIP approaches and support learners. LCIP principles provide opportunities for learners to draw on their own experiences and interpretations of the learning process. However, the findings show that supporting students according to their capacities, interests and choices has not materialised. The teachers only focused on whole class teaching, ignoring individual learners in solving their real problems. According to Idris and Asfaha (2019), students' learning needs to be highly sensitive to their realities, thereby departing from traditional teaching to address diverse learning needs. However, where traditional approaches dominate, this is rarely practiced, and classrooms lack interaction and participation. In this study, the teachers explained that only a few students outperform in their studies. Most low-achieving students are excluded from interacting and participating in class, and they have poor skills when it comes to their learning. The teachers in this study suggested that a mechanism should be created that fosters the active participation of all learners, which is consistent with other previous studies (see also Kutnick, Blatchford, & Baines, 2005; Layle, Jules, Kutnick, & Layne, 2008).

The teachers in this study perceived that the students' engagement in learning is low. According to Schweisfurth (2013), intrinsic motivation helps to focus students on learning, and this engagement is crucial to the learning process. The absence of intrinsic motivation makes it difficult for learners to excel in learning. The students' involvement will improve their ability to learn the content. It will also increase their opportunities to interact and cooperate with their peers and teachers; thus, they will be more focused on mastering their learning, rather than rote-memorisation (Orlich, Harder, Callahan, Trevisan, & Brown 2007.). Both the teachers and students will have to prepare differently for the LCIP classroom. Vygotsky (1978) explained in his development theory that teachers and more capable peers or parents can support students by modelling and scaffolding students' learning processes. Schooling is a collaborative practice, in which, through assisted participation in appropriate activities, learners reconstruct the resources of their culture for responsible social living (Light & Littleton, 1999; Wells, 1999). In contrast, the teachers in this study faced challenges from the students' side due to several but interrelated factors, such as shyness, poor English language skills, a lack of time for practice, students' socio-economic problems and a lack of awareness from the parents' side, all of which created bottlenecks for the implementation of LCIP. Therefore, learning progress in Eritrean secondary schools seems slow and requires revisiting the policy discourse. Learners should be active and engaged in interactions and cooperation throughout the learning process (Nykiel-Herbert, 2004). When successfully implemented, LCIP could enhance collaboration between teachers and students and thereby provide opportunities to influence motivation of both students and teachers. For example, interactional feedback has proven effective in enhancing student motivation (Abdollahifam, 2014). Also, modelling LCIP in Eritrean teacher educators' professional development was reported to enhance motivation (3rd Author et al. 2018). Therefore, instead of focusing on the challenges, LCIP could be considered as a potential catalyst for change in tackling the fundamental challenges, including low motivation and poor learning outcomes.

The teachers reported that there are large numbers of students in the classrooms, making it harder to implement student-centred approaches. The students also suffer from socio-economic problems within their families. Proper resources to foster LCIP instruction in schools should be ensured by culturally responsive teaching approaches. Simon, Leach, and Moon (2002) argued that Western learning approaches may not be suitable for developing countries, where resources are limited, learning cultures are different and classes are large. To the present day, researchers explain that this pedagogical approach seems difficult on the ground in the

developing countries, although some more positive accounts have been given recently (Ameir 2020). Yun (2019) argued that learner-centred pedagogy has made a 'round trip' between developed and developing countries that sideline teachers in the developing world. In Nigerian higher education, for instance, the challenges of making LCIP practical include a low-quality educational system, a low level of pedagogical understanding among educators, large class sizes, demands of the curriculum, assessment challenges, and lack of facilities (Anyanwu & Iwuamadi, 2015). According to Baeten (2010), inadequate relation of practice with theory, a lack of teachers' professional training, teachers' weak abilities and willingness to teach by a new approach, a lack of persistence, students' needs, demotivation or disinterest, insufficient teaching resources and learning materials are some common factors that may influence LCIP classrooms. All these barriers are congruent and consistent with this study, where teachers have attempted to develop alternatives to teacher-centred practices in the Eritrean classroom environment. These accounts of barriers call for contextual interpretations of LCIP by teachers, teacher educators and policy developers. As shown by Author 3 et al. (2018), pedagogical dialogue with international colleagues can generate new ideas and enhance motivation. However, localized models have to be developed in line with the contextual particularities. Also, LCIP by nature is a social construction and thus challenging, if not impossible, to introduce from above or from outside.

There are many existing policy guidelines in the country, e.g. formative assessment, grade promotion, teacher education, teaching and learning approaches, etc., but overall, educational policy is not supporting the change process. Thus, policies themselves do not guarantee the implementation of educational change. The findings are also consistent with previous studies, which state a mismatch between policy and pedagogical practice. For example, Nakabugo and Sieböarger (2001) found that the curriculum change in South Africa, which conceptualises teaching as an interactive activity, has not been realised adequately in classrooms. Closer attention needs to be paid to what happens and to the ways in which meaningful changes can be facilitated successfully. Schweisfurth (2013) pointed out that successful LCIP implementation requires teacher professionalism that nurtures teachers' own commitment, motivation and professional autonomy, rather than being enforced top-down by a quick fix of implementation. The practice of LCIP in the Eritrean context suggests that the teachers' initiative is restricted by their familiarity with lecturing and writing on the chalkboard. The LCIP package (MoE, 2003b) does not seem to contain sufficient detail to engage teachers in LCIP implementation and positively bring about change in teachers' and students' teaching

and learning practices. One possible avenue could be to include LCIP in the existing pedagogical planning procedures. As an example, Eritrean teachers are required to submit their detailed lesson plans to the head master every week. If the provided templates and guidelines would emphasize LCIP more explicitly, concrete shifts in approaches could occur.

In the Eritrean context, action research with teachers has shown remarkable potential in improving practice (e.g. Idris and Asfaha 2019). Action research is also included as part of initial teacher education. Despite the challenging conditions, Eritrean teachers may be relatively well equipped to work towards meaningful local solutions to bridge the policy-practice gap. This of course requires space and support from higher levels of the educational structure. Further research into school level practices would be required to understand the gradual change towards a new paradigm.

5 Conclusions

This study demonstrates that more effort is needed to consolidate and expand the introduction of LCIP in secondary schools in Eritrea. There is a concern about embracing the new pedagogical approaches in the view of teacher development and policy initiatives. Real learner-centred approaches of teaching have not yet been established beyond theoretical articulation. As teachers have been the focus in teacher-centred approaches, the responsibility to shift towards LCIP starts with them. In this sense, teachers and pedagogical developers play a key role in secondary schools. Although David (2004) claimed that in Eritrean schools educational reforms may not be achievable due to a shortage of facilities for teacher training, a lack of professional development and demotivated teachers, there may be room for improvement by revisiting the policy practice to reconcile it with the teachers' view for practical implementation of LCIP.

However, more importantly, it requires that the teaching approaches embed the LCIP culture in every level of the system. Teachers should also internalise and experience the approaches, and shift very gradually with the transformation of the overall education system. Rather than a teaching approach, LCIP could be viewed as a fundamental paradigm. Paradigmatic shifts are complex and require a long time. Initiating change can and should be done simultaneously on many levels of the education system, and the expected changes will come afterwards. In Eritrea, relevant policies to support LCIP are in place, although much groundwork related to LCIP is

absent. Important factors, such as efficient pre-service and in-service education, adequate facilities and services, changing learning cultures, e.g. rote memorisation and content-driven, understanding learners' individual needs and differences, and their genuine interests, including their motivation and their social realities, are required from the education system. Thus, only when LCIP practices reach classrooms throughout the country can genuine change occur.

Acknowledgements

The research was conducted under the Finnish-Eritrea higher education cooperation funded by the Ministry of Foreign Affairs of Finland and with a research grant from University of Jyvaskylä.

References

Abdollahifam, S. (2014). Investigating the effects of interactional feedback on EFL students' writings. *Procedia-Social and Behavioral Sciences, 98,* 16-21.

Akyeampong, K. (2017). Teacher educators' practice and vision of good teaching in teacher education reform context in Ghana. *Educational Researcher, 46*(4), 194–203. DOI: 10.3102/0013189X17711907

Altinyelken, H. K. (2010). Pedagogical renewal in sub-Saharan Africa: The case of Uganda. *Comparative Education, 46*(2), 151–171. DOI: 10.1080/03050061003775454

Ameir, M. (2020). Supporting active learning teaching techniques through collaborative learning and feedback in Zanzibar, a challenging educational context. PhD. Dissertation, University of Oulu. Retrieved from: http://urn.fi/urn:isbn:9789526225586

An, Y. J., & Reigeluth, C. (2011). Creating technology-enhanced, learner-centered classrooms: K–12 teachers' beliefs, perceptions, barriers, and support needs. *Journal of Digital Learning in Teacher Education, 28*(2), 54–62.

Anyanwu, S.U., & Iwuamadi, F.N., (2015). Student-centered teaching and learning in higher education: Transition from theory to practice in Nigeria. *International Journal of Education and Research, 3*(8).

Asfaha, Y. M., Belay, A., Eskelä-Haapanen, S. & Leskinen, M. (Eds.) (2017). *Educational Reflections from Eritrea Learning for All Eritrea–Finland Collaboration Project in Higher Education (2015–2017).* University of Jyväskylä and Eritrea Institute of Technology.

Baeten M. (2010). Methods of active learning environment. *Educational Research Review, 5*(3), 243–260.

Baeten, M., Kyndt, E., Struyven, K., & Dochy, F. (2010). Using student-centred learning environments to stimulate deep approaches to learning: Factors encouraging or discouraging their effectiveness. *Educational Research Review, 5*(3), 243–260.

Brinkmann, S. (2016). *The role of teachers' beliefs in the implementation of learner-centred education in India.* A thesis submitted for the degree of PhD in Education & International Development, UCL Institute of Education, London.

Brodie, K., Lelliott, A., & Davis, H. (2002). Forms and substance in learner-centred teaching: Teachers' take-up from an in-service programme in South Africa. *Teaching and Teacher Education, 18,* 541–559.

Chisholm, L., & Leyendecker, R. (2008). Curriculum reform in post-1990s sub-Saharan Africa. *International Journal of Educational Development, 28*(2), 195–205.

David, R. G. (2004). Eritrean voices: Indigenous views on the development of the curriculum ten years after independence. *International Journal of Educational Development, 24*(4), 437–450.

Ekwunife-Orakwue, K. C., & Teng, T. L. (2014). The impact of transactional distance dialogic interactions on student learning outcomes in online and blended environments. *Computers & Education*, *78*, 414–427.

Elmas, R., Ozturk, N., Irmak, M., & Cobern, W. W. (2014). An investigation of teacher response to national science curriculum reforms in Turkey. *Eurasian Journal of Physics and Chemistry Education*, *6*(1), 2–33.

Finn Church Aid. (2015) *A day in primary school in Eritrea.* https://www.kirkonulkomaanapu.fi/en/ajankohtaista/blogi/a-day-in-elementary-school-in-eritrea/

Fullan, M. (2001). *The new meaning of educational change*. (3rd ed.). New York: Teacher College Press.

Idris, K., Asfaha, Y. & Ibrahim M. (2017). Teachers' voices, challenging teaching contexts and implications for teacher education and development in Eritrea. *Journal of Eritrean Studies, III*(1), 31–58.

Idris, K. M., & Asfaha, Y. M. (2019). Improving school work in challenging context: Practitioners' views following a participatory action research project from Eritrea. *Nordic Journal of Comparative and International Education (NJCIE), 3*(2), 72–90.

Keengwe, J., Onchwari, G., & Onchwari, J. (2009). Technology and student learning: Toward a learner-centered teaching model. *AACE Journal, 17*(1), 11–22.

Kennedy, C., & Kennedy, J. (1996). Teacher attitudes and change implementation. *System, 24*(3), 351–360.

Kozulin, A., Gindis, B., Ageyev, V. S., & Miller, S. M. (Eds.). (2003). *Vygotsky's educational theory in cultural context*. Cambridge, UK: Cambridge University Press.

Kumar, M. (2006). Constructivist epistemology in action. *Journal of Educational Thought*, 40(3), 246-262.

Krippendorff, K. (2013). *Content Analysis: An Introduction to its methodology* (3rd ed.). Thousand Oaks, CA: Sage.

Kutnick, P., Blatchford, P., & Baines, E. (2005). Grouping of pupils in secondary school classrooms: Possible links between pedagogy and learning. *Social psychology of education*, *8*(4), 349-374.

Kvale, S. 1996. InterViews: An introduction to qualitative research interviewing. Thousand Oaks, CA: Sage.

Lauwerier, T., & Akkari, A. (2015). *Teachers and the quality of basic education in sub-Saharan Africa.* UNESCO Education Research and Foresight: Working Papers Series.

Layne, A., Jules, V., Kutnick, P., and Layne, C., (2008). Academic achievement, pupil participation and integration of group work skills in secondary school classrooms in Trinidad and Barbados. *International Journal of Educational Development, 28*, 176–194.

Lehesvuori, S., Viiri, J., Rasku-Puttonen, H., Moate, J., & Helaakoski, J. (2013). Visualizing communication structures in science classrooms: Tracing cumulativity in teacher-led whole class discussions. Journal of research in science teaching, 50(8), 912–939.

Light, P., & Littleton, K. (1999). *Social processes in children's learning* (Vol. 4). Cambridge University Press.

Matthews, W. J. (2003). Constructivism in the classroom: Epistemology, history, and empirical evidence. *Teacher Education Quarterly*, *30*(3), 51–64.

McCombs, B. L. (2003). A framework for the redesign of K–12 education in the context of current educational reform. *Theory into Practice*, *42*(2), 93–101.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook.* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Moate, R. M., & Cox, J. A. (2015). Learner-centered pedagogy: Considerations for application in a didactic course. *Professional Counselor*, *5*(3), 379–389.

MoE (2003a). The Concept Paper for the Rapid Transformation of the Eritrean Education System. Asmara: Eritrea.

MoE (2003b). Guidelines on learner centered and interactive pedagogy in the national curriculum. Asmara: Eritrea.

MoE, (2008). National curriculum framework. Asmara: Eritrea Ministry of Education.

MoE, (2011). Eritrea: National education policy. Asmara: Eritrea Ministry of Education.

MoE. (2012a). *Concept paper on the production of qualified teachers and TVET instructors,* Asmara: Eritrea Ministry of Education.

MoE. (2012b). *Overview of the education.* Asmara: Eritrea Ministry of Education.

MoE. (2013). *Education Sector Development Plan - 2013 - 2017.* Asmara: Eritrea Ministry of Education.

MoE. (2016). *Essential education indicators 2015/2016.* Asmara: Eritrea Ministry of Education.

Mulkeen, A. (2010). *Teachers in Anglophone Africa – Issues in teacher supply, training and management. Development practice in education.* Washington DC: World Bank.

Nakabugo, M. G., & Siebörger, R. (2001). Curriculum reform and teaching in South Africa: Making a paradigm shift? *International Journal of Educational Development, 21*(1), 53–60.

Norman, D. A., & Spohrer, J. C. (1996). Learner-centered education. *Communications of the ACM, 39*(4). http://dx.doi.org/10.1145/227210.227215

Nykiel-Herbert, B. (2004). Mis-constructing knowledge: The case of learner-centered pedagogy in South Africa. *Prospects, XXXIV* (3), 249–265.

Orlich, D. C., Harder, R. J., Callahan, R. C., Trevisan, M. S., & Brown, A. H. (2007). Teaching strategies: A guide to effective instruction (8th ed.). Boston: Houghton Mifflin.

Oroujlou, N., & Vahedi, M. (2011). Motivation, attitude, and language learning. *Procedia-Social and Behavioral Sciences, 29*, 994–1000.

O'Sullivan, M. (2004). The reconceptualisation of learner-centred approaches: A Namibian case study. *International Journal of Educational Development, 24*(6), 585–602.

Park, M., & Sung, Y. K. (2013). Teachers' perceptions of the recent curriculum reforms and their implementation: What can we learn from the case of Korean elementary teachers? *Asia Pacific Journal of Education, 33*(1), 15–33.

Pathmarajah, M. (2014). *Seeing like a constructivist: Learner-centered pedagogy and teacher education in Chennai, Tamil Nadu.* Submitted in partial fulfilment of the requirements for the Degree of Doctor of Education in Teachers College, Columbia University.

Patton, M. Q. (2015). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage Publications.

Perceptions. (2003). In *Greenwood Dictionary of Education*. Westport, CT: Greenwood.

Posti-Ahokas, H., Meriläinen, K., & Westman, A. (2018). Finding Learning in Teaching: Eritrean primary teacher educators' perspectives on implementing learnercentered and interactive pedagogies. In J. Jansen, & A. Breedeveld (Eds.), Education for Life in Africa (pp. 205–227). Leiden: African Studies Centre.

Schweisfurth, M. (2013). Learner-centred education in international perspective. *Journal of International and Comparative Education, 2*(1), 1–8. doi:10.14425/00.45.70.

Serbessa, D. D. (2006). Tension between traditional and modern teaching-learning approaches in Ethiopian primary schools. *Journal of International cooperation in education, 9*(1), 123-140.

Sikoyo, L. (2010) Contextual challenges of implementing learner-centred pedagogy: The case of the problem-solving approach in Uganda. *Cambridge Journal of Education, 40*(3), 247–263, DOI: 10.1080/0305764X.2010.509315.

Simon, B., Leach, J., & Moon, B. (2002). Why no pedagogy in England?. *Teaching and Learning in the Secondary School*, 10–22.

Sium M. T., & Tessema, M. (2019). Eritrean Education System: A critical Analysis and Future Research Directions. *International Journal of Education.* DOI: 10.5296/ije.v11i1.14471.

Stevenson CB, Duran RL, Barrett KA, Colarulli GC (2005). Fostering faculty collaboration in learning communities: a developmental approach. Innovative Higher Education, 30, 23–36.

Tabulawa, R. (2003). International aid agencies, learner-centered pedagogy and political democratization: A critique. *Comparative Education, 39*(1), 7–26.

Taylor, N., & Vinjevold, P. (1999). *Getting learning right. Report of the president's education initiative research project.* Johannesburg: Joint Education Trust.

Teo, P. (2019). Teaching for the 21st century: A case for dialogic pedagogy. *Learning, Culture and Social Interaction*, *21*(2019), 170–178.

Tsui, L. (2002). Fostering critical thinking through effective pedagogy: Evidence from four institutional case studies. *The Journal of Higher Education*, *73*(6), 740–763. http://dx.doi.org/10.1353/jhe.2002.0056

Vavrus, F. (2009). The cultural politics of constructivist pedagogies: Teacher education reform in the United Republic of Tanzania. *International Journal of Educational Development*, *29*(3), 303–311.

Vetter, A. (2012). Teachers as architects of transformation: The change process of an elementary-school teacher in a practitioner research group. *Teacher Education Quarterly, 39*(1), 27–49.

Vygotsky, L.S. (1978). *Mind in society: The development of higher psychological processes.* Cambridge, MA: Harvard University Press.

Weimer, M. (2002). Learner-centred teaching: Five key changes to practice. San Francisco, CA: Jossey-Bass.

Wells, G. (1999). *Dialogic inquiry: Towards a socio-cultural practice and theory of education.* Cambridge, UK: Cambridge University Press.

Wheatley, K. F. (2002). The potential benefits of teacher efficacy doubts for educational reform. *Teaching and Teacher Education, 18*(1), 5–22.

Wigfield, A., & Karpathian, M. (1991). Who am I and what can I do? Children's self-concepts and motivation in achievement situations. *Educational Psychologist, 26*(3 & 4), 233–261.

Wigfield, A., Eccles, J. S., Schiefele, U., Roeser, R., & Davis-Kean, P. (2006). Motivation. In N. Eisenberg (Ed.), *Handbook of child psychology* (Vol. 3, 6th ed., pp. 933 –1002). New York, NY: Wiley.

Wigfield, C., & Harold, R D. (1992). Teacher beliefs and children's achievement self-perceptions: A developmental perspective. In D. H. Schunk & J. L. Meece (Eds.), *Student perception in the classroom* (pp. 95–121). Hillsdale, NJ: Erlbaum.

Wohlfarth, D., Sheras, D., Bennett, J. L., Simon, B., Pimentel, J. H., & Gabel, L. E. (2008). Student perceptions of learner-centered teaching. *Insight: A Journal of Scholarly Teaching, 3*, 67–74.

Yilmaz, K. (2008). Social studies teachers' views of learner-centered instruction. *European journal of teacher education*, *31*(1), 35-53.

Yun, Y. (2019). The seeming 'round trip' of learner-centred education: A 'best practice' derived from China's new curriculum reform? *Comparative Education*, *55*(1), 97–115, DOI: 10.1080/03050068.2018.1541662.

Zeichner, K., & Ndimande, B. (2008). Contradictions and tensions in the place of teachers in educational reform: Reflections on teacher preparation in the USA and Namibia. *Teachers and Teaching: Theory and Practice*, *14*(4), 331–343.

Zemichael, Z., Teweldemedhin, E., Osman, Tesfay, W., Mehari, M., Adgoy, F., & Moate, J. (2017). Parent–teacher partnership in support of student learning in Eritrean elementary schools. In Y. M. Asfaha, A. Belay, S. Eskelä-Haapanen, & M. Leskinen (eds.) *Educational reflections from Eritrea Learning for all. Eritrea–Finland collaboration project (2016–2017)* (pp. 132–142). Jyväskylä, Finland: University of Jyväskylä and Eritrea Institute of Technology.

Zepke, N., Leach, L., & Butler, P. (2014) Student engagement: Students' and teachers' perceptions. *Higher Education Research & Development*, *33*(2), 386–398, DOI: 10.1080/07294360.2013.832160

Appendix-1

Interview Questions

1. Would you give your views and opinion on Learner Centred Interactive Pedagogy (LCIP)? How do you explain LCIP?

2. How do you use LCIP in learning and teaching? How do you apply LCIP in classroom? As a subject specialist, you have different approaches, how do you use LCIP? What approach do you use in the classroom? Could you please share with me clear examples of LCIP?

3. Where did you, for the first time, come to know LCIP approach? Where did you acquire it? How did you acquire LCIP?

4. What problem does lack of training cause in implementing LCIP? How do you explain lack of training in implementing LCIP?

5. What resources or material do you use in implementing LCIP? What resources should be added to maximize LCIP?

6. How does LCIP influence your thinking and teaching and learning? What kind of change has it produced in your teaching? What has LCIP been changed you? What does the contribution of LCIP in teaching and learning? What changes do you think LCIP has produced in teaching and learning?

7. What are the benefits of LCIP for students? What special benefit does it give to students? How LCIP has influenced students?

8. How can teachers support students? How can teachers bring students to the highest level of learning? What does LCIP offer to students?

9. What are the weaknesses and strengths of the LCIP? What are its strengths? What are its weaknesses? What are the opportunities and challenges of LCIP in the teaching and learning activity? What are its future prospects? What benefits and opportunities do LCIP provide? What challenges do LCIP pose?

10. How do you communicate or interact with students in classroom? How do you use LCIP to ensure the participation of students? How do students communicate in the teaching learning process? How do students involve in the lesson? How do you carry out such communication?

11. How does Ministry of Education curriculum fit to LCIP approach? What challenges do you face in the curriculum? What are the positive and negative elements of the curriculum in relation to LCIP? (so that it may be applied properly) something you grasp and never revisit it? Is LCIP approach properly addressed in the curriculum? How?

12. Learner Centered Interactive Pedagogy started 2003 and LCIP is still working on the ground. Tell us your worries or concern about its implementation? What are your worries and concern? Do you share your views and concerns about LCIP implementation in schools?

13. Is there anything we haven't talked about that you would like to add?