

From ambition to practice: An Analysis of Teachers' Attitude Toward Learner-Centered Pedagogy in Public Primary Schools in Rwanda

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Abstract

Learner-centered pedagogy (LCP) is one of the best approaches in developing knowledge, skills, and attitudes of learners to cope with the changing world. Implementation of LCP practices tend to vary from one context to another. It is within this perspective that this study was conducted with the aim of investigating the teachers' attitudes toward LCP in public primary schools located in Nyarugenge District. A sample size of 165 teachers was selected from 13 public and government-aided primary schools. Simple percentages, and chi-square analysis were used to analyze data, and the findings were triangulated with questionnaire and interview responses. Results show that primary school teachers manifested negative attitude toward LCP. The study also indicates that both institutional and individual factors, such as insufficient and inadequate trainings, lack of clear indicators on LCP, and lack of prior experience on LCP among colleges and university tutors during preservice training, affect the attitude of teachers. It is further revealed that gender does not influence the attitude of teachers; however, training was found to be significant at .05 level. It is therefore important that authorities ensure proper training to head teacher, school subject leaders, and teachers on LCP and avail clear indicators on those methods.

Keywords

learner-centered pedagogy, attitude, competence based curriculum, institutional and individual factors, teachers, training

Introduction

The adoption of Education for All (EFA) in 2000 required African countries to improve the quality of education by reviewing and redesigning curricula and teaching methods to make them relevant to learners' needs (UNESCO, 2000). The attainment of some EFA goals necessitates the use of active and participatory approaches which are significant in allowing learners reach their fullest potential (UNESCO, 2000). From 1979 until 2015, there have been a number of attempts to restructure Rwandan education system with a clear focus of putting the learner at the center of teaching/learning. For example, the 2003 Rwanda draft curriculum policy document stressed on learning by doing and active rather than passive learning (MINEDUC, 2013). Considering education as a fundamental human right and an essential means that facilitates all citizens to realize their full potentials, education system in African countries, Rwanda included, adopted to promote the use of learner-centered pedagogy (LCP) in the learning process. It is in this perspective that Rwanda committed to achieve certain international

development targets notably EFA by 2015. Rwanda registers a current enrolment rate of 96.9% (MINEDUC, 2015). However, these quantitative achievements give rise to a new concern on the quality of education as more and more children attend school.

In the 21st-century education system, teachers are encouraged to use innovative strategies which allow learners to acquire knowledge and skills to cope with the changing world. One of the innovative adopted strategies is the LCP where learners are placed at the center of teaching/learning and are actively involved in the learning process (Huba & Freed, 2000). LCP originated from constructivist learning theory that is opposed to traditional teacher-centered practices (Baeten, Dochy, & Struyven, 2012). Research has

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demonstrated that learner-centered methods not only enhance student learning but also increase retention (Gardiner, 1994; Vavrus, 2009). Accordingly, effective learner-centered teaching strategies assist students in learning how to organize knowledge around major concepts and principles and also contribute to student development of metacognitive abilities (Thompson, Licklider, & Jungst, 2003)

LCP is often seen as mitigation to challenges of quality education, and this explains among others, why so many countries have embraced this approach (Vavrus, 2009). The choice for a learner-centered approach ideally is reflected on several levels, for instance, in the official national curriculum, in classroom activities, and in the individual interaction of teacher with the learners. Teachers who use a learner-centered model view learning as multidimensional that favors a democratic approach to teaching (Cornelius-White, 2007). It shifts the teacher from the center to the periphery in a learning environment. It is imperative that in its effective implementation, teachers have to be trained in teaching approaches that reflect LCP as stipulated in the teacher development management policy: “the strategy was to provide teachers trained in participatory, learner-centered and gender sensitive methods for the needs of learners at the various levels”(MINEDUC, 2007, p. 4). These teachers promote collaborative work among students by integrating learning experiences both in and outside the classroom to foster learner independence. This expectation is only possible with significant changes in teachers’ attitude and the ways in which they interact with students, peers, and the community (Jobs for the Future & the Council of Chief State School Officers, 2015).

In response to this, some development partners to the ministry of education in Rwanda (e.g., VSO, VVOB, and British Council) provide both technical and financial support in building teachers’ capacity toward implementing active teaching techniques that reflect LCP at all levels of education. Despite the vast resources (time, expertise and money) invested, observations in classrooms reveal that teaching still remains teacher oriented where a teacher talks throughout the lesson and does not allow students to actively participate in the learning process (Peeraer, Nzabairwa, Uworwabaye, Nizeyimana, & Kabanda, 2016). In fact, changing teaching practice is a huge challenge. Although teacher training colleges might advocate learner-centered approaches, they are unlikely to be practiced or are little understood. This means that teachers have difficulty to shift from teacher-centered to learner-centered. The critical question is, “What are the reasons hindering implementation of LCP in schools?”

Pajares cited by Azuka, Durojaiye, Okwuozu, and Jekayinfa (2013) suggests that attitudes and beliefs of teachers influence ways they organize content and teaching methods they use in classroom. In addition to that, Okenyi (2011) articulated that adoption of any innovation involves altering human behavior, and the predisposition to accept change. Positive attitude will push teachers to adopt and use

effectively LCP, whereas the negative ones will handicap it. According to this, the study took the starting point that attitudes of teachers in Rwanda may be a major factor in determining how LCP would take place in schools. Here attitude is defined as an organized predisposition to respond in a favorable or unfavorable manner toward a specified class of objects (Sawant & Rizvi, 2015). This study therefore aimed at investigating teachers’ attitudes toward the use of LCP and the causal factors. The specific questions are as follows:

- What are the overall attitudes of teachers toward LCP in public primary schools located in Nyarugenge District?
- What factors influence teachers’ attitudes toward LCP?

The study further put the following hypotheses to test:

Hypothesis 1: There is no difference in attitudes toward LCP between male and female teachers.

Hypothesis 2: There is no difference in attitudes between trained and nontrained teachers toward LCP.

Because primary and secondary schools in Rwanda from the year 2016 are now utilizing the competence-based curriculum, identifying and analyzing factors impeding on teachers’ attitudes toward LCP in primary schools will contribute to effective curriculum implementation.

Teacher-Centered Versus Learner-Centered Pedagogy

Traditional approach to teaching involves directed passage of information from teacher to student (Raine & Colett, 2003). Typically teacher-centered pedagogy refers to learning situations in which the teacher has control over student learning. In this approach, the teacher is the most active person in the classroom and does most of the talking (Sawant & Rizvi, 2015). Instruction is unilateral during the teaching process as it proceeds from the active teacher to passive learners (Khalid & Azeem, 2012). The default image of a teacher as an adult talking to students, assigning them same textbook, and assessing them the same way with the expectation of a “normal distribution” of achievement is way gone (Stanford Center for Opportunity Policy in Education [SCOPE], 2014). These methods have been criticized to focus on rote memorization on the part of the students which result in surface learning.

On the contrary, LCP emerged from constructivist learning theory that represents as a countermovement to teacher-centered teaching practices (Moate & Cox, 2015). The learner is seen as an active participant and the teacher as a guide (Sablonniere, Taylor, & Sadykova, 2009). In an effective learner-centered environment, it is not easy to tell who the teacher is and who the student is (Zophy, 1982). LCP can

also be seen as those procedures where the role of the teacher is guiding, engaging students with active learning and discovery (Salema, 2015). They ensure increased autonomy in the learner, interdependence between teacher and learner (O'Neill & Tim, 2005). These procedures use a series of assessment tools that require individual and collaborative accountability. They help learners to identify, analyze, and solve problems using acquired knowledge.

In essence, LCP puts the learner at the center. Students are encouraged to work together in groups and together with the teacher they are all seen as active participants (Price, Pierson, & Light, 2011). This approach is grounded in the belief that learners' prior knowledge can help them to discover new things (Al-Zube, 2013). LCP allows learners to have considerable control and responsibility for classroom activities with effective facilitation from the teacher. They adopt a deep learning approach which allows a deep understanding of the subject and its relation with the changing world. In the learning process, each learner constructs meaning by taking new information and making connections between that information and what is already known. Rightfully put, the teacher is seen as a gardener who establishes a fertile environment for learning to thrive (Lucelle, Gary, & Allen, 2000).

Types of LCPs

Whereas there are many LCPs, the common ones include cooperative methods, problem-based methods, discovery/inquiry methods, discussion methods, and self-regulated learning (Prince & Felder, 2006). All those methods use different techniques like group's works, case studies, games, role-play, brainstorming, field visits, questions in corners, roundtable, project work, and practical work (MINEDUC, 2015). In the cooperative learning method, learners are presented with different tasks to work on in different groups or in pairs. The teacher encourages and motivates them to help one another to learn rather than being in competition (Prince & Felder, 2006). In the problem-based learning, the teacher provides learners with problems that occur in actual life situations and helps them in constructing knowledge.

Inquiry learning on the contrary involves the use of real-world cases. The teacher presents a scenario related to the concept or skill under study. Through discussions, students then analyze, synthesize, and evaluate the facts or circumstances associated with the case (Attard, Ioio, Geven, & Santa, 2011). In discovery method, teachers often provide students with a common experience by presenting them with materials and encouraging them to make observations on a given hypotheses. Prince and Felder (2006) observe that in project-based learning, learners are challenged with an assignment to carry out one or more tasks called a project that lead to the elaboration of a final product that can be presented. Discussion methods are also popular in LCP. Learners work in groups to express their ideas and to reflect on views that oppose their own ideas (Prince & Felder, 2006). This

helps learners to accommodate others' viewpoints as well as to develop communication and interpersonal skills. Finally, there is self-regulated learning in which the learner assumes responsibility and organizes and completes activities under limited guidance and facilitation of the teacher.

Moving From TCP to LCP

Krogull and Scheunpflug (2010) conducted an evaluation of the participatory and active pedagogy and found that there is a difference between schools where teachers have been trained and where they are not. Those who were trained created friendly environments that improved the interaction between teachers and students in their classrooms. Their students had more self-confidence and were motivated. It can be therefore deduced that teachers who aim to shift from teacher-centered to learner-centered need first to adapt their teaching methods to include more interactions in classrooms, consider students' entry levels, and effectively facilitate the learning process. Teachers will need to accept that the relationship between teaching and learning is now different (Sablonniere et al., 2009).

Second, those who have been passive will require to actively participate in their own learning process (Weimer, 2012). This is not an easy task because teachers will have to ensure that learners are dynamically involved in taking initiative of reading, research, working with others, taking responsibilities, and focusing on transferring knowledge and skills to real-life situations. Third, the learning environment will have to be conducive for purpose. This requires a more creative participation of school administration, the family, and the community at large (Weimer, 2012).

Learning institutions today are struggling with the issue of accountability, especially in responding to the calls for quality education. This expectation has called for change which has necessitated shifting the dominant pedagogy to a learner-centered focus. Attempts to refocus education to be more learner-centered have been influenced by new developments in the neuroscience of learning (Harris & Cullen, 2008). Research (e.g., Harris & Cullen, 2008; Zull, 2002) has demonstrated that motivation and self-confidence are hindered by lack of control. In other words, the more teachers employ strict control measures, the more students are resistant to learning (Zull, 2002). However, when they are allowed to make decisions regarding different activities, they assume ownership and subsequently become responsible for their learning (Kreber & Cranton, 2000). The paramount feature of LCP is the shift from teaching to emphasis on student learning rather than delivery of content (Perry, 1997).

Attitude Toward LCP

Attitude is a mental or neutral state of readiness, organized through experience, exerting a direct or dynamic influence upon the individual's response (Oskamp & Schultz, 2005). It

can also be a psychological tendency expressed by evaluating a particular entity with some degree of favor or disfavor (Schwarz & Bohner, 2001). Some kinds of attitudes are more likely than others to motivate and guide behavior (Eaton & Visser, 2008). People's beliefs about certain things affect their own attitude toward them (Hamed Al Harthy, Jamaladdin, & Abdelaziz, 2013). Similarly, in the teaching profession, the relationship between attitudes and a method of teaching have an effect on their use or their nonuse. A positive attitude of a teacher toward certain teaching strategies will influence their usage and even determine the way they organize content in classrooms (Azuka et al., 2013). Sometimes, negative attitude formation can be as a result of teachers feeling the need to be in complete control of a class and be seen as principal performers (Zophy, 1982). They feel threatened when students are encouraged to raise challenging questions as a process of learning. In particular, Moffart cited by Westberg (2014) argues that female teachers may dislike student-centered classrooms in general due to the typical female role within groups.

Mtutu's (2014) study on geography teachers' perceptions and experiences on learner-centered teaching established factors such as education national policy and curriculum which do not feature LCP beliefs, and the lack of appropriate knowledge on constructivism which pushes teachers to have a surface application of LCP. A study by Okenyi (2011) examined the problems and constraints that hinder the use of learner-centered methods in Africa; among them that stands out is that many teachers are not convinced by the importance of the change to LCP. Others are lack of proper training in the innovative assessment system, big class sizes, and many responsibilities for students.

An analysis on the uptake of LCP in initial teacher education in Rwanda revealed that although teachers adhere to constructivist approaches of learning, they still use teacher-centered method (Peerear et al., 2016). Studies investigating teachers' knowledge about LCP and the extent to which they use it in their practices revealed that lack of teachers' motivation and limited lesson time contribute a lot to the level of usage of LCP (Mukamwambali, 2012; Ntahobavukira, 2014). It is therefore clear that teachers' attitudes influence ways of lesson preparation, interaction with learners, methods they use, and activities they choose to engage students in. This in equal strength applies to the way teachers will perceive LCP.

Learner-centered approach requires shifting student and teacher attitudes so that the methodology can be applicable in conjunction with the traditional methods particularly in large classrooms. The focus is the shift in the learning process from the teacher to the student. It is important to observe that there is no method that does not have demerits in terms of applicability. Learner-centered approaches require more effort in preparation because the teacher must demonstrate mastery of content as well as be creative in designing

activities that will facilitate the achievement of learning objectives.

From above discussions, it can be drawn that attitudes of teachers toward LCP could be affected by individual, institutional, and sociocultural factors. In this way, constructivist learning theory is of great importance for this study as learner-centered methods emphasize on learners' active use of their prior knowledge to discover new knowledge while the teacher serves as a facilitator of the learning process.

Method

The study adopted the embedded design which is a type of concurrent mixed method research design (Creswell, 2012) by which qualitative and quantitative data approaches are used in parallel (Creswell & Plano Clark, 2007). This design was used due to the fact that a single data set was not sufficient; therefore, different types of questions required different types of data.

The study was carried out in Nyarugenge District, located at the center of Kigali City in Rwanda. The population was 626 teachers across the District of Nyarugenge serving in 19 government/public primary schools known as "Nine/Twelve Year Basic Education." Among the 19 existing schools, 13 public or government-aided schools having only primary education (primary one to primary six) totalizing 312 teachers were selected. Among them, 27.6% were male and 72.2% female; 69.6% worked in public schools while 31.4% were working in government-aided schools.

A final sample size of 175 teachers representing 58% of the population was obtained from 312 teachers through Guilford and Fruchter's (1973) formula as used by Mawoli and Babandako (2011, p. 5). The study used stratified random sampling to ensure effective representation of public and government-aided schools. Random sampling was then used in selecting the number of schools from each stratum. The sample size of each stratum was obtained using D'Hainaut's (1986) formula as shown in Table 1.

There is a need to notice that the number of participants used in data analysis is 165 instead of the 175 sampled. The reason is that 10 respondents did not answer 20% of items; and hence, they were not considered for analysis.

Research Instruments and Data Collection Procedures

The development of different items was inspired by the desk review done on attitudes, learner-centered methods, and constructivism as applied by Azuka et al. (2013) in Nigeria. The questionnaire ensured that items were tapping into the cognitive, behavior, and affective components of attitudes. The study chose to use five precoded responses: strongly agree, agree, neutral, disagree, and strongly disagree. The questions were elaborated around three main topics, namely the use of

Table 1. Number of Participants in the Study per School Status.

School status	Number of teachers		
	Male	Female	Total
Government aided			
School size	27	68	95
Participants in sample	14	39	53
Public			
School size	59	158	217
Participants in sample	34	88	122
Total participants	48	127	175

Source. Primary data.

LCP, their significance, and the problem encountered while applying this approach. Consequently, 35 items were elaborated in which 18 indicate positive tendency and 17 indicate negative tendency. The positive tendency was represented by items to which the responses strongly agree and agree denote a favor of the attitude object to LCP, while the negative tendency was illustrated by items to which the responses strongly agree and agree denote a disfavor to LCP. By including a mix of both positive and negative items, respondents are forced to consider the question and hopefully provide a more meaningful response which should reduce acquiescent bias and extreme response bias (Sauro, 2011). In fact, with positive statements, the response strongly agrees shows a favor to LCP while for negative it shows a disfavor. During data entry, the positive items were scored 5 for strongly agree, 4 for agree, 3 for neutral, 2 for disagree, and 1 for strongly disagree responses while it was the contrary for negative ones.

After developing the 35 statements, the questionnaire was piloted on 30 primary teachers in Ruhango district, in Southern province. As Javeau (1985) substantiates, the questionnaire has to be pretested to a limited number of the study population. In the group pretested, 65.4% were women, the remaining were men; 25% have been trained and 50% have more than 5 years of experience in teaching. By using Bravais Pearson correlation coefficient (r), all items were correlated to the total score of the questionnaire and those having a coefficient inferior to 0.5 were eliminated (Javeau, 1985). This process led to having a final scale composed of 24 items among which 15 indicate positive tendency and nine indicate negative tendency.

To find out factors underlying attitudes, unstructured interviews were conducted with teachers. In total, 13 teachers were purposely picked each representing a school for the interviews. The excerpts are denoted by T1, T2, and so on. All interviews were tape recorded on obtaining authorization and consent from the respective respondents.

Data Analysis Techniques

Quantitative data were coded where the codification involved defining all the variables on the research instrument.

Variables were named and then labeled with their values; afterward, data were entered in SPSS. This enabled us to have both descriptive statistics (e.g., percentage of participant teachers were in favor and disfavor for each item) and cross-tabulation of groups of teachers (e.g., by gender, teaching experience, training received) responses. Because the study used a random stratified sample and needed a more quantitative analysis item by item, analysis by chi square was judged the most appropriate. The SPSS outputs include the chi square value, the degree of freedom (df), and the asymptomatic significance (p). In this study, all items having p value which is greater than .05 brought us to accept the null hypothesis. The analysis of qualitative data was elucidated by the literature review, in relation with the responses gathered from interviews. It was then thematically analyzed.

Discussion of Findings

As indicated in Figure 1, 27.3% of the respondents were male and 72.7% were female. This reflects the overall gender distribution of teachers in public and government-aided primary schools where the number of male is a quarter of all the participating teachers. The number of respondents who have been trained (38.2%) was lower than the number of those who declared not being trained on LCP (61.2%). Furthermore, less experienced teachers represented 41.8% within the respondents while the high experienced represented 58.2%.

Overall Attitudes of Teachers toward LCP

From Figure 2, it can be observed that participants exhibited both negative and positive attitudes toward LCPs. In general, teachers demonstrated positive attitude toward the use of LCP to 20% of items and negative attitude to 80% of items. They displayed negative attitude to the items that are focused on the use, significance, and problems they encounter while using LCP. Their positive attitude was displayed on the preference of using LCP more than traditional and they are convinced that LCPs develop high-level thinking skills. The predominant negative attitude clearly indicates that teaching to a large extent relies on students copying notes from the blackboard. It further indicates that the curriculum delivered in schools is theory based, with little time for problem solving and written exercises (MINEDUC, 2015). This was evident in lesson planning where 70% represented the teachers' activities while 30% of time was allocated to learners. If many of the teachers like to use LCP (affect) and demonstrated not having enough knowledge on them (cognitions) and consequently did not practice them in class (behavior), this denotes first that the attitudes revealed were inconsistent as the affective, cognitive, and behavioral components were not coherent.

For LCP to be effective, there should be an environment that is supportive and one that natures a wide range of individual students' prior knowledge, skills, and attitudes (Bransford, Brown, & Cocking, 2000). In essence, the learner-centered

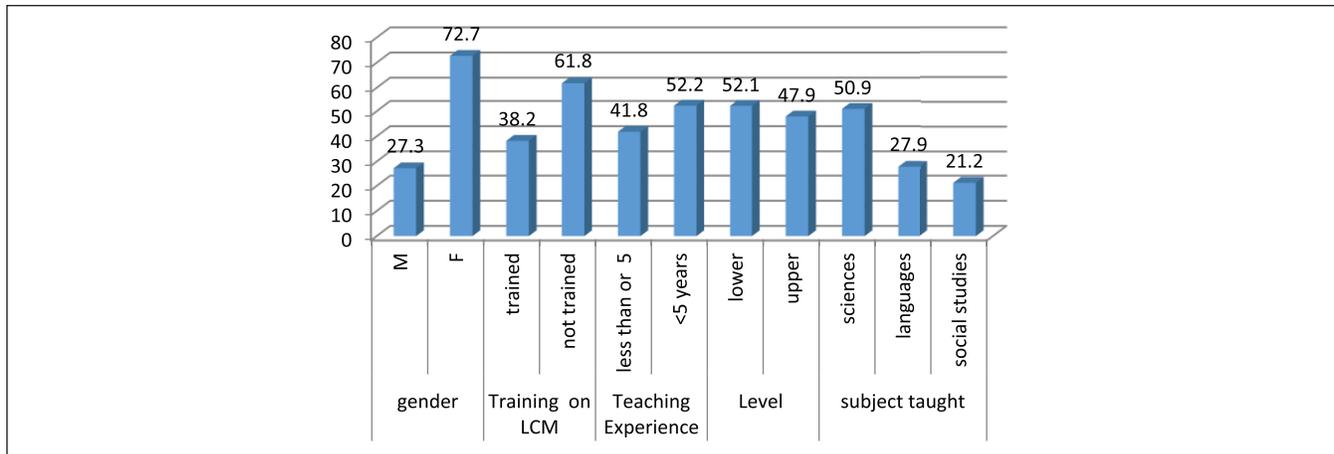


Figure 1. Characteristics of respondents to Likert-type scale questionnaire (numbers are expressed in percentage).
 Note. LCP = learner-centered pedagogy.

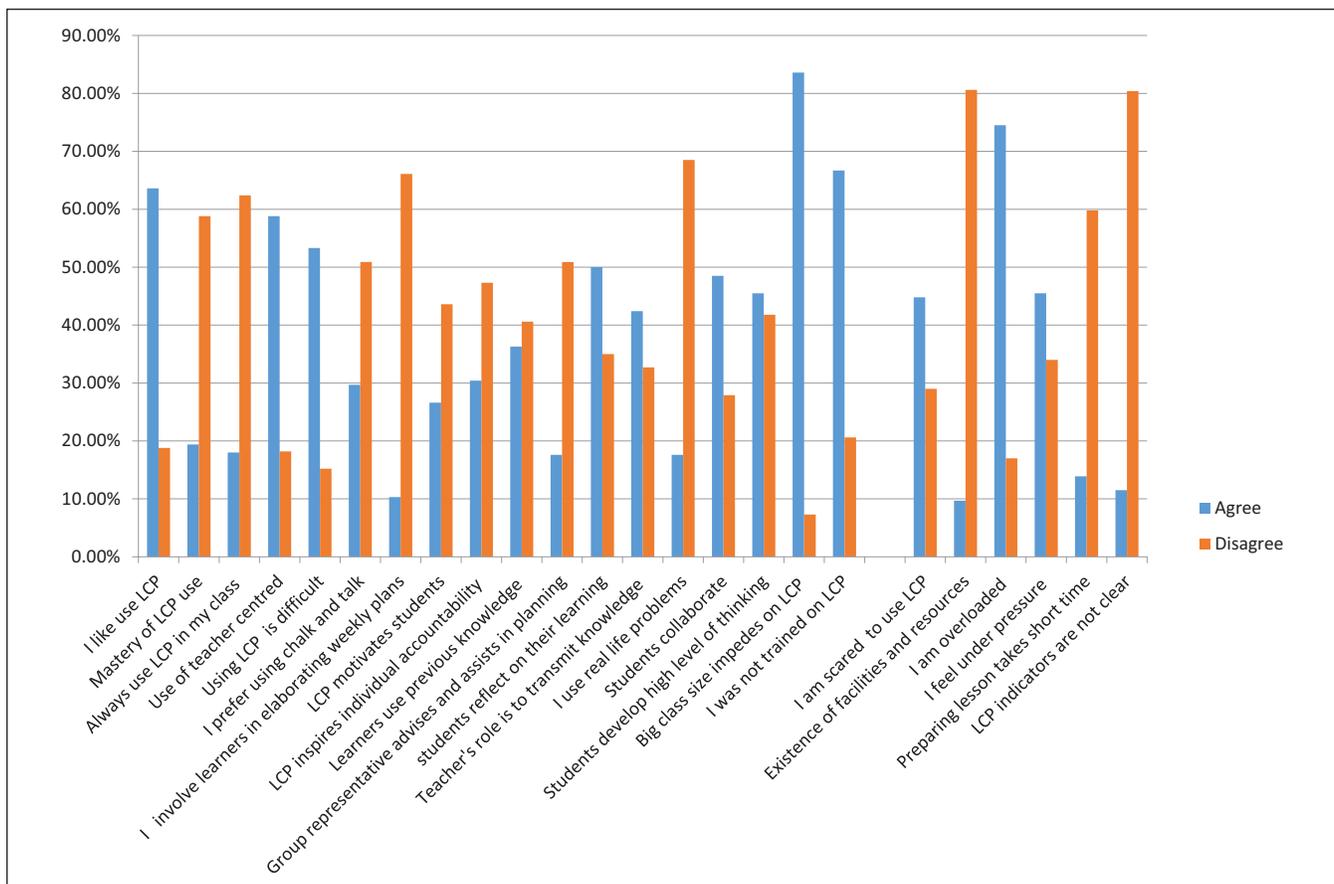


Figure 2. Percentage of agreement and disagreement on attitudinal items.
 Note. LCP = learner-centered pedagogy.

classroom is cooperative, collaborative, and supportive, and one in which the teacher and students engage each other (Huba & Freed, 2000). Teachers have the responsibility of providing opportunities for learners to expand their thinking and discover new knowledge through active participation in guided collaborative activities (Stage, Mullen, Kinzie, & Simmons, 1998).

Factors Underlying Attitudes toward LCP

Findings revealed that the factors underlying the teachers' attitudes toward LCP can be classified into two main categories: the institutional factors and individual factors as depicted in Figure 3.

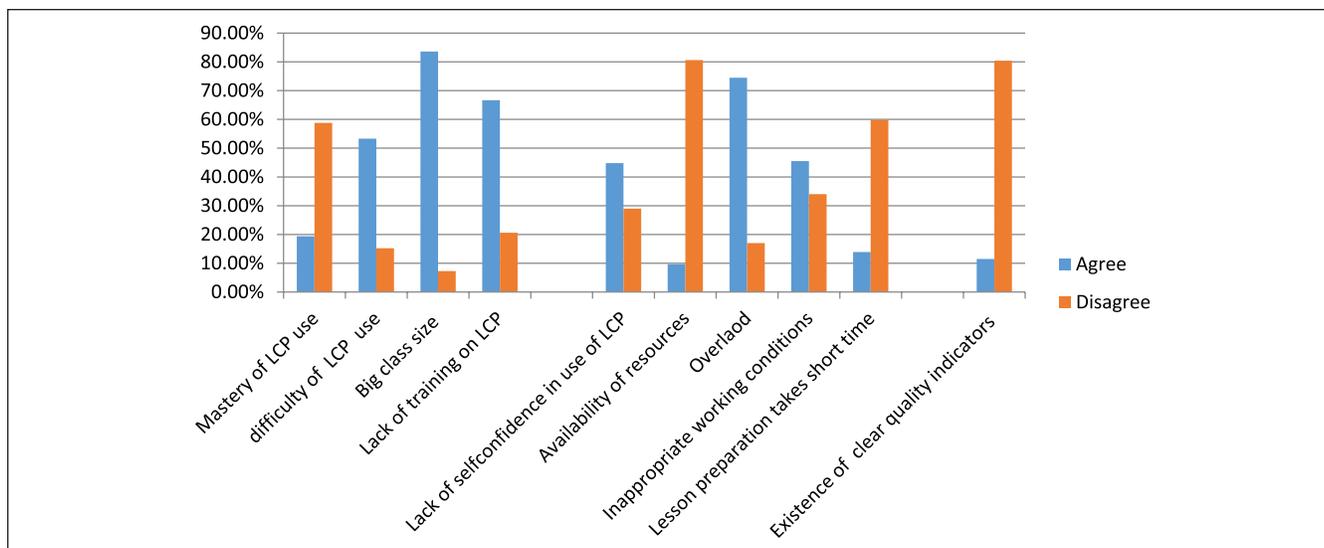


Figure 3. Factors impeding on use of LCP.

Note. LCP = learner-centered pedagogy.

Institutional factors. These factors include insufficient and inadequate trainings, lack of clear quality indicators on LCP, shortage of school facilities and resources, big class size, heavy workload of primary teachers, and language of instruction. Responses to the question related to training on LCPs indicated that many teachers did not receive training on LCP. One of the teachers remarked: “We have not been trained on LCP, the School Subject Leaders (SSL) took us through Competence Based Curriculum (CBC) within two days and they told us that developing competencies required using LCP” (T11). Another teacher said, “this year, all the school administrators asked us to use LCP in Primary one (P1) and Primary four (P4), but I did not know how to prepare, teach and assess such lessons” (T1).

This statement was also confirmed by another one who said: “teachers lack appropriate trainings that focus on LCP” (T2). While referring the training, one teacher trainee added the following:

We had only two days to talk about CBC; it was not possible for us to deepen the understanding of LCP. Even though the two days were dedicated to LCP, they were insufficient because training has to include theory and practice. (T3)

Concerning lack of clear quality indicators on LCP, most participants (80.4%) disagreed with the claim that their schools possess clear quality indicators on LCP. This finding was supported by one teacher who indicated that

Head teachers are struggling with supervision where each one tries to invent indicators or still use teacher centered monitoring tool that is not relevant to LCP. In fact many head teachers have no clear guidance on an effective LCP lesson even though a well

-designed competency—based curriculum was available in schools. (T4)

This is contrary to Barros and Elia (1998) assertion that school guidance from educational authorities is a strong predictor of teachers’ use of learner-centered education approach in teaching. On the contrary, majority of the teachers (80.6%) affirmed that their schools lack resources which are needed to implement the LCP in their classroom. This is in relation to inadequate libraries, lack of laboratories, lack of computer and Internet, lack of electricity, and teaching aids. In one teacher’s words,

LCP requires learners and teachers to read current books, however our library possess old books which are even not easily affordable to learners. LCP demands working in a laboratory especially in science lessons surprisingly, our school does not have a laboratory. (T5)

This evidence is supported by MINEDUC (2015) observation that students and teachers have very little access to reference books. Big class size was also identified as a factor that impedes on the positive attitude toward LCP. From Figure 3, 83.6% agreed that the big class size does not allow them to use LCP while 7.3% disagreed. Those who agreed noted that it was problematic to organize group works with more than 50 children in class. One trained teacher stated “it is complicated to help every learner when the teacher has more than 60 learners in class” (T6). This was confirmed by 56% of teachers who said that teachers have to respond to the needs and interests of more than 50 children in class. In fact, many of the classrooms are very small and it is difficult to move chairs in forming working groups. This concurs with the ministry of education observation that classes are

overcrowded, and there are not enough teachers at primary level (MINEDUC, 2015).

Another factor identified is the workload of teachers in which 74% agreed being overloaded and cannot find enough time to prepare LCP lessons. In fact, considering primary school schedule, teachers have approximately eight contact hours per day with learners. Preparation of lessons in LCP takes long as indicated by 59.8%. These responses denote that preparing and using LCP requires sufficient time and concentration. Big size of class affects the work of teachers. One of them argued as follows: "I have to prepare more than eight lessons every day, giving tasks to more than 50 learners, correcting them and giving them feedback. This requires me to dedicate three extra hours to my ordinary work" (T7).

Another element which inhibits the adoption of positive attitudes toward LCP is the medium of instruction which is English for upper levels. This was affirmed by 60% of respondents who noted that they struggle to express their ideas in English. Because LCP relies heavily on critical thinking and dialogue, learners and teachers need adequate linguistic skills to express complex ideas. Beyond primary four, where English is used as the medium of instruction, lack of English proficiency among teachers and learners greatly restricts learning for understanding (MINEDUC, 2015). When students cannot understand the teachers' language, it undermines their involvement in learning activities (Ntahobavukira, 2014).

Individual factors. Individual factors include lack of self-confidence and lack of positive attitude and prior experience with LCP among colleges and university tutors and participant gender. Data clearly show that almost a half of teachers are not confident with the knowledge they have on LCP while only 20% are confident. However, among those who have been trained within the sample, only 38.2% feel confident. If teachers are not confident in their knowledge and skills in applying LCP, they cannot use it. This is probably related to the inadequacy of trainings they received. You teach with confidence when you are prepared (Weimer, 2012). Lack of positive and prior experience among tutors in colleges and university on LCP cascades to teachers as well. One respondent said "we learnt different advantages of LCP while in college but none of our tutors used them as a model while teaching" (T4). Another teacher added, "our teacher at university gave us a list of methods called learner centered and argued that they are strong enough to develop skilled learners, however, he used 60% of his time on talking and writing" (T1). This is a demonstration that in spite of having sufficient theories on LCP, teachers who are supposed to be role models in training preservice teachers hardly utilize LCP. It should be noted that student-teachers begin learning how to become teachers through an "apprenticeship of observation" (Lortie, 1975) which starts at the primary level and continues throughout their teacher education programs (Vavrus, Thomas, & Berlet, 2011).

To establish whether there is any difference in attitude between male and female toward LCP, we verified the following null hypothesis: "There is no difference in attitudes toward LCP between male and female teachers in public and government-aided primary schools." Because the study used a stratified random sample, we needed a more quantitative analysis item by item. It was noticed that the distribution of responses by item was not normal; the analysis by chi-square was appropriate. When the asymptomatic significance (two-sided) value represented by p is less than .050, the null hypothesis is rejected. Calculations and simplifications of SPSS outputs produced the Table 2.

It can be observed from Table 2 that p value is less than .050 on the first item and greater than .050 for the remaining 23 items. This confirms that there is a significant difference between male and female primary teachers on their likelihood to use learner-centered methods in teaching. On the contrary, there are no significant differences between female and male primary teachers on the remaining items. This concurs partially with the findings of Azuka et al. (2013) in their report that gender is not a factor of teachers' attitude toward teaching. However, gender can be a factor in determining the difference in attitude of teachers toward preference of teaching methods. This claim is affirmed by Westberg's (2014) findings that females overall preferred teacher-centered classrooms, while males preferred student-centered classrooms. In this regard, females may dislike student-centered classrooms in general due to the typical female role within groups.

While Khayrazad (2013) has indicated that teachers' professional development is a key factor to successful integration of learner-centered method into classroom teaching, the results from this study indicated that majority of the teachers (66.7%) reported that they have not had professional development training on how to integrate LCP into classroom while 20.6% confirmed they have been trained. The findings clearly show that there is a significant difference between trained and nontrained teachers on the majority of items (62.5%) and nonsignificant difference on 37.5% of items only. This is supported again by Karim et al. (2012) where their findings revealed that there were attitudinal differences of untrained and trained teachers toward students who required social and physical accommodation, while no attitudinal differences were found among untrained and trained teachers toward students who required academic and behavioral accommodation. The training received is therefore a factor determining different attitudes between teachers toward the use of LCP; however, the training received did not influence teachers' attitudes on the problems they encounter while using LCP. It can be observed from Table 2 that p value is less than .05 on all items showing a significant difference between trained and untrained. In other words, trained teachers tend to have a positive attitude toward LCP.

Table 2. Relationship Between Participants' Attitudes Toward LCPs, Gender, and Training on LCP.

Items	Difference between male and female teachers			Difference between trained and no trained teachers		
	χ^2	<i>p</i>	Difference	χ^2	<i>p</i>	Difference
1: I like to use learner-centered methods in teaching	11,455	.022	<i>p</i> < .050 Significant difference	41,485	.000	<i>p</i> < .050 Significant difference
2: I master how to use learner-centered methods in teaching	7,784	.100	<i>p</i> > .050 No significant difference	16,797	.002	<i>p</i> < .050 Significant difference
3: I use always learner-centered methods in my class	1,820	.769	<i>p</i> > .050 No significant difference	24,649	.000	<i>p</i> < .050 Significant difference
4: Many primary teachers still use teacher-centered methods.	2,318	.678	<i>p</i> > .050 No significant difference			
5: I find it difficult using learner-centered methods	4,466	.347	<i>p</i> > .050 No significant difference	19,584	.001	<i>p</i> < .050 Significant difference
6: I prefer to use the usual talk and chalk or conventional method of teaching	5,575	.233	<i>p</i> > .050 No significant difference	27,973	.000	<i>p</i> < .050 Significant difference
7: I always involve learners in elaborating weekly plans, according to their interests and needs	2,769	.597	<i>p</i> > .050 No significant difference	39,562	.000	<i>p</i> < .050 Significant difference
8: Learner-centered methods motivate learners by giving them some control over learning processes.	1,895	.755	<i>p</i> > .050 No significant difference	16,133	.003	<i>p</i> < .050 Significant difference
9: Learner-centered methods inspire individual and group accountability	1,683	.794	<i>p</i> > .050 No significant difference			
10: With LCP, learners identify, analyze, resolve problems using knowledge from previous experience	6,461	.167	<i>p</i> > .050 No significant difference	18,747	.001	<i>p</i> < .050 Significant difference
11: In learner-centered methods, a representative group from the school general assembly advises and assists in planning lesson plans	4,360	.359	<i>p</i> > .050 No significant difference	25,959	.000	<i>p</i> < .050 Significant difference
12: Learner-centered methods encourage learners to reflect on what they are learning and how they are learning it.	7,023	.135	<i>p</i> > .050 No significant difference	19,563	.001	<i>p</i> < .050 Significant difference
13: My role as a teacher is to transmit knowledge, children have to follow and taking notes	6,849	.303	<i>p</i> > .050 No significant difference	36,155	.000	<i>p</i> < .050 Significant difference
14: I enhance learners' motivation by providing real life problems	2,109	.716	<i>p</i> > .050 No significant difference			
15: In learner-centered method, learners experience learning in collaborative and supportive environment	.291	.990	<i>p</i> > .050 No significant difference			
16: I believe that learners develop high level thinking skills while using learner-centered methods	2,589	.629	<i>p</i> > .050 No significant difference	39,576	.000	<i>p</i> < .050 Significant difference
17: The big class size does not allow me to use LCP	4,690	.321	<i>p</i> > .050 No significant difference			
18: I am not trained on LCP	8,422	.077	<i>p</i> > .050 No significant difference			
19: Using learner-centered methods in teaching scares me	3,245	.518	<i>p</i> > .050 No significant difference	21,890	.000	<i>p</i> < .050 Significant difference
20: We have enough materials for applying LCP	8,752	.068	<i>p</i> > .050 No significant difference	21,890	.000	<i>p</i> < .050 Significant difference
21: I am overloaded, I cannot find time to prepare LCP lessons	5,694	.223	<i>p</i> > .050 No significant difference	11,246	.024	<i>p</i> < .050 Significant difference
22: I feel under pressure trying to enable learners pass the standard examinations, I cannot use learner-centered methods	5,540	.236	<i>p</i> > .050 No significant difference	12,647	.013	<i>p</i> < .050 Significant difference
23: It takes a short time to prepare learner-centered method lessons than teacher-centered method lessons	2,249	.690	<i>p</i> > .050 No significant difference			
24: There are clear quality indicators in our schools on learner-centered lessons	2,729	.604	<i>p</i> > .050 No significant difference			

Note. LCP = learner-centered pedagogy.

Conclusion

Developing positive attitude toward LCP is a key element for implementation of CBC. All education stakeholders and policy makers should work together in mitigating various factors inhibiting teachers to adopt positive attitudes. Availability of training manuals is not in itself sufficient. Proper coordination system between all educational stakeholders, especially proper training and coaching, would help teachers to have positive attitudes toward LCP. As final thought, it can be inferred that without sufficient professional development opportunities to learn how to apply LCP effectively, Rwandan teachers will continue to rely on the most familiar and conventional approaches and methods. In particular, the way institutions of preservice teachers use active learning to implement LCP is more likely to influence teachers' attitudes positively.

The use of LCP in classrooms is clearly linked to the Rwandan Education mission and is widely recognized as an effective way of teaching. It is through the continued investigation of teaching and learning that this approach will move from policy to practice and contribute to improving the quality of education. Accordingly, in teacher education, active learning is a tool that can be used by educators to reshape their own applications in addition to supporting the progress of preservice teachers.

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