

Pedagogical Preferences in the Teaching of Agriculture in Inclusive Settings to Learners with Physical Challenges: The Case of Grade 6 Classes in Domboshava, Mashonaland East Province

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ABSTRACT

This study sought to analyse facilitators' pedagogical preferences in the teaching of Agriculture in inclusive Grade 6 Agriculture classes with specific reference to physically challenged learners. The researcher adopted a qualitative, descriptive case study design, which employed a triangulation of interviews, document analysis, and participant observation as data collection methods. A sample of three purposively sampled facilitators and ten learners from Domboshava, Mashonaland East, participated in the study. It emerged from the study that whilst some facilitators were aware of the need for individualization in inclusive classes, others were setting conditions for its provision. The study also revealed that whilst some facilitators exhibited sound subject-content knowledge, their pedagogical content knowledge left a lot to be desired. The application of learner-centred pedagogies like project-based learning (PBL), collaboration, demonstration, and question and answer was evident from the study. However, it also emerged that the application of such pedagogy was flawed. It was also clear from the study that physically challenged learners exhibited a relatively dwindling enthusiasm during the agriculture practical. Findings from the study implied that facilitators could do well by regarding the holistic study of the child as the basis for pedagogical selection. Facilitators might also need to apply differentiation as a responsive, inclusive pedagogy not only in Agriculture theory sessions but also in practical sessions. There might be a need for facilitators to practice reflective teaching to enhance pedagogical practices. Mainstream school administrators could also help the situation by maintaining the recommended facilitator: learner ratio for inclusive classes and also mobilising parents to augment schools' efforts. Pre-service Teacher Education could also help by considering Special Needs Education as a stand-alone course in professional studies. Facilitators who have not gone through the Theory of Education courses are also encouraged to undertake various forms of Continuous Professional Development to enhance their pedagogical-content knowledge in handling classes with physical exceptionalities.

Keywords: pedagogy, facilitator, agriculture, inclusive education, physically challenged learners.

INTRODUCTION

The onset of the Competence-Based Curriculum (CBC) gave birth to Agriculture as one of the standalone examinable learning areas at the primary school level in Zimbabwe. As a hands-on learning area, the subject calls for the active involvement of learners in the teaching-learning process. This study sought to analyse the pedagogical preferences of facilitators in the teaching of Agriculture in inclusive classes with physically challenged learners.

Background of the Study

A facilitator's pedagogical preference tends to have a great bearing on learner efficacy in any learning area. The teaching of Agriculture at the primary school level is no exception. The onset of the CBC saw the introduction of Agriculture as an examinable standalone subject at the Grade 7 level since 2017. This development led to the adoption of learner-centred, progressive, and multicultural pedagogies within the education discourse in

Zimbabwe. If well handled, the application of learner-centred pedagogies could go a long way in developing the much-needed enterprise skills in diverse learners from the grassroots level.

However, the teaching of Agriculture has been received with scepticism by some facilitators. Lack of subject content knowledge and pedagogical content knowledge by most facilitators is cited as the major driver of this scepticism (Teacher Education Curriculum Review (TERC, 2015). This scepticism can translate into wrong epistemology on the subject by these facilitators. It, therefore, follows that the selection of appropriate pedagogy in the teaching of this key practical subject need not be overemphasised. The emergence of Inclusive Education (IE) within education circles further compounds the situation.

There is no doubt that inclusive classes require careful selection of pedagogy. Any wrong pedagogical choice by a facilitator in an inclusive Agriculture class may lead to disastrous learning outcomes. Unresponsive pedagogical choices make the teaching of Agriculture practical problematic especially when there are physically challenged learners involved. Unresponsive pedagogies might cause such learners to show a relatively higher level of enthusiasm only in theory, as compared to practical sessions. Thus, correct pedagogical selection in teaching agricultural practices in inclusive classes is a key driver in the success of the subject.

Statement of problem

The facilitators' inability to come up with responsive pedagogies in an inclusive class may hinder the realisation of enhanced learning outcomes in Agriculture learners. This is further compounded by the challenges some learners have. More so, practical activities might end up being a daunting and time-consuming process for learners with exceptionalities. Consequently, facilitators may not be able to satisfy all the pedagogical expectations of these diverse learners, thus making Agriculture pedagogy in inclusive settings problematic. In that respect, the employment of unresponsive pedagogy may cause those Agriculture learners with physical challenges in inclusive settings to display a relatively dwindling enthusiasm in practical as compared to theory sessions.

Main Research Question

Which are the preferred pedagogical practices in the teaching of Agriculture at the primary school level?

Sub Research Questions

1. Which pedagogies do facilitators mostly prefer in the teaching-learning of agriculture theory in inclusive settings with physically challenged learners?
2. Which are the most prevalent pedagogical preferences for Agriculture practical in inclusive classes with physically challenged learners?
3. What is the level of participation by physically challenged learners during practical Agriculture sessions in inclusive settings?

LITERATURE REVIEW

Frameworks for Inclusive Education

IE has been a war cry in education circles not only in Zimbabwe but the world over. Many International declarations call for inclusion. These declarations include the Salamanca Statement and Framework for Action (UNESCO, 1994) and the Dakar Framework (UNESCO, 2000). By being a signatory to these international declarations, Zimbabwe is taking some strides towards the provision of IE, which is in tandem with these international requirements. Back home, the Zimbabwean Constitution (2013), the Education Act (2006), Chapter 25:04, and the Disabled Persons Act (1996), among other legal instruments, act as the driving forces behind the implementation of IE.

This international goal explicitly calls for schools all over the world to effectively embrace inclusive education

and regard it as the only sensible way of developing every child's potential. This then should have a bearing on Agriculture facilitators' pedagogy, hence the need to carry out this study.

This means that the state made it mandatory for the physically challenged learners to enjoy their right to education on an equal opportunity basis with their normal peers. However, it should be noted that while there are all those legislative frameworks, Zimbabwe has not boldly put in place a policy on IE.

THEORETICAL FRAMEWORK

This study was foregrounded on the theory of constructivism. Constructivism is an educational theory rooted in the ideas of various educational philosophers and psychologists (Ramsook & Thomas, 2016; Dagar & Yadaf, 2016). Such psychologist includes Piaget and Bruner of cognitive constructivism, Bandura and Vygotsky of social constructivism, and Rousseau and Dewey of progressive constructivism (Ramsook & Thomas, 2016; Dagar & Yadaf, 2016). At the core of constructivism is the idea that knowledge is constructed either individually or collaboratively (Ramsook & Thomas, 2016; Dagar & Yadaf, 2016). This means that learning is a constructive activity that demands the active engagement of learners.

Cognitive constructivism proffers that learning is an active mental activity in which learners construct personal meaning from exploring the world around them (Piaget, 1980). In that respect, learning Agriculture should be a pragmatic process achieved through pedagogies like experimentation, project-based, or inquiry-based learning. On the other hand, social constructivism emphasises the collaborative nature of learning and the role of cultural and social environment (Ramsook & Thomas, 2016). This argument situates learning as a collaborative process in which meaning is derived from social interaction. In that manner, peer collaboration should become a key feature in agricultural teaching-learning. The significance of the socio-cultural environment in cognitive development (Vygotsky, 1978) situates the teaching of Agriculture as an integral curriculum area, as it is cherished by the agro-based Zimbabwean society. Progressive constructivists argue that the study of the child should be made the basis through which a sound education is built (Samkange, 2015). Therefore, curriculum planning, which includes the selection of pedagogy, should be highly sensitive to the needs of diverse learners. Put in educational vernacular, the teaching-learning of Agriculture in inclusive classes should be a meaningmaking process for diverse learners.

Factors Influencing the choice of pedagogy

The conceptualisation of pedagogy brings out the fact that pedagogy is a dynamic issue. Traditionally, pedagogy was only synonymous with the four walls of the classroom, but modernisation has pushed it beyond that. Eliassen (2014) pointed out three major causes of constant changes in pedagogy. According to Watkins &) the global continuity in the knowledge base, the differentiation of learning environments and resources according to learners' level, and the extension of learning beyond the four walls of the classroom are the main causes for pedagogical changes. These causes imply that pedagogy should be tailor-made to serve specific purposes. Factors like learner diversity, learning styles, resource availability, nature of content, and class size present as contextual factors that, in a real sense, should act as determinants of a facilitator's pedagogical selection (Karki, 2014).

Learner Diversity

The learner should be at the centre of the learning-teaching process. There is no doubt that the twenty-first-century class is characterised by learner diversity. Suleyman (2019) articulates that diversity refers to the range of differences that encompass factors such as ethnicity, learning ability, and special needs. In the same vein, Tomlison (2014) is of the view that learners vary in terms of physical, cognitive, and affective domains. This, therefore, implies that there is a need for facilitators to have a holistic understanding of the needs of their learners to improve the efficacy of every learner, despite the presence of physical challenges or other distinctions.

"No two persons are exactly alike" (Sharma, 2017). Learners differ in their level of intelligence, aptitude, interests, creativity, and so on. This diversity calls for a holistic understanding of learners. Facilitators use

psychological, philosophical, and sociological tools to gain insight into learner characteristics, how they acquire knowledge, their motivation, and learning environments, among other issues (Sharma, 2017). The fact that learners are uniquely endowed should form the basis for any facilitator's pedagogical choices. Concerning the study, a facilitator's pedagogical choice for both the agriculture practical and theory lessons should be driven towards meeting the needs of each learner. Each selected pedagogy should strive to contribute to meeting the needs of both the normal and the physically challenged learner in an inclusive Agriculture class.

Learners style

Once the new knowledge to be grasped by learners is presented in a fashion that enables it to be perceived in terms of the learners' prior knowledge, then learning would never become a burdensome process to learners. However, this could only be feasible if a facilitator's pedagogy corresponds to the learners' learning styles. Therefore, to establish responsive pedagogy, inclusive classes, it becomes imperative to conceptualise a learning style.

It is important to note that some scholars do not find a clear distinction between learning styles and cognitive styles or sensory styles (Alwa, 2014). Hence, the terms may sometimes be used interchangeably. A learning style indicates an individual's preferential focus on different types of information, the different ways of perceiving, and the rate of understanding the information (Alwa, 2014). The definition situates a learning style as one's best medium of learning. A learning style is the complex way in which, and conditions under which learners effectively perceive, process, store, and recall what they are endeavouring to learn (Alwa, 2014). A learning style is a way used by a learner to make meaning out of the teaching-learning process. It enables the learner to decipher, relate, and retain the acquired knowledge. Thus, attuning an Agriculture facilitator's pedagogy with a learner's learning styles enables learners to perform to the maximum extent appropriate.

Ozerem & Akkoyunlu (2015) argue that it should never be the learners who have to struggle to match their learning styles with the facilitator's pedagogy. Knowledge of learning styles assists learners in 'learning how to learn' (Alwa, 2014). This means that knowledge on learning styles helps learners to become autonomous Agriculture learners who take charge of their learning. This is quite crucial, especially in this era of IE. A learning style can be regarded as the drawing board from which an Agriculture facilitator's pedagogy should be derived. In this regard, a learning style becomes an indispensable factor in determining agricultural pedagogy in inclusive settings.

Learning as a social phenomenon

Learners, like all beings, are social creatures who always attach meaning to the interaction process (Carter & Fuller, 2016). Sociocultural constructivists argue that knowledge and learning emanate from the interactions between persons and the contexts they live in as well as the activities they partake in (Wilson & Peterson, 2006). This argument situates learning communities as very critical components of learning. It is through social interaction that learners learn first by observing others (Bandura in Sharma, 2017) and then gradually become active participants in a group through collaborative learning (Sharma, 2017).

Learning is a process of active engagement

Contemporary changes within the education discourse have seen a paradigm shift in learning. Consequently, learning has moved from being perceived as the passive regurgitation of factual information to the active construction of meaningful knowledge (Sharma, 2017; Curriculum Framework, 2015-2022). The teaching-learning pedagogies have shifted from the use of the 'mug and jug' principle characterised by rote learning (Freire 1970) to the active construction of knowledge through collaboration, experimentation, and problem solving (Curriculum Framework 2015-2022; Slavin, 2011). In that respect, an inclusive pedagogy takes into cognisance the fact that learners are not blank slates (Samkange & Samkange, 2015; Freire, 1970) but are creatures who are trying to actively create meaning by making sense of the world around them (Sharma, 2017; Slavin, 2011). Hence, Agriculture teaching-learning in inclusive classes demands active involvement of learners.

METHODOLOGY

This study employs a qualitative approach to investigate the various pedagogical preferences in the teaching of Agriculture to learners with physical disabilities in primary schools in Domboshava district of Mashonaland East Province, Zimbabwe. The qualitative approach aims to articulate and elucidate the sentiments, outlooks, and experiences of the participants (Martic, 2018). This approach was particularly well-suited for this research, as it facilitated a comprehensive exploration of pedagogies used in teaching agriculture. The interpretive paradigm, as advocated by Cresswell (2024), underpinned this research, emphasising participants' subjective experiences within their social context. It acknowledged knowledge as socially constructed and was influenced by researchers' ontological and epistemological beliefs (Braun & Clarke, 2022a; Thomas, 2020).

Research design, according to Martic (2018), refers to the strategic plan used to address research questions. In this study, a case study design was adopted to understand the pedagogies preferred in teaching Agriculture. Case studies are well-known for providing in-depth analyses of single or limited units in real-world contexts and offer rich qualitative insights (Cherry, 2022). To understand and analyse facilitators' pedagogical preferences, the researcher opted for an in-depth inquiry to unpack the complexities of the phenomenon. The researcher's focus was therefore to be able to analyse facilitators' pedagogical preferences in an inclusive agriculture class situation. Although case studies have a qualitative nature and limited generalizability, they provide valuable insights into complex phenomena (McCombes, 2021).

Data collection tools

The study primarily used semi-structured interviews to gather data on participants. These interviews were chosen for their flexibility and rigour and involved open-ended questions to obtain detailed and nuanced responses (Buestrol, 2020). To ensure data integrity, all interviews were audio-recorded for accurate transcription and analysis. In addition, observations and document analysis were other tools used to collect data. By combining audio recordings and

document notes, the study aimed to capture the richness of participant responses and enhance the credibility of the findings. Bonache and Festing (2020) emphasise the adaptability of semi-structured interviews, which allows for coverage adjustment and exploration of unexpected issues while also accommodating individual differences among interviewees (Buestrol, 2020).

Data analysis

The study used thematic analysis to identify and analyse emerging themes within the collected data (Maguire & Delahunt, 2017). This approach allowed the researchers to understand shared meanings and experiences present in the data. This rigorous approach facilitated the systematic identification of recurring themes and patterns across the data, enabling a thorough exploration of the factors, including the attitudes and perceptions of the participants. The researchers made sure that the themes were interconnected in a logical and meaningful way, creating a coherent and convincing narrative that accurately represented the data, in line with Braun and Clarke's (2022b) guidelines.

Presentation and findings

Facilitators' awareness of individualised attention

It was established by this study that the participants had an awareness of learner diversity and the need for Individualised Attention in inclusive grade 6 Agriculture classes with physically challenged learners. The interview responses indicated that the participants had an awareness that some learners call for special attention from the facilitator. Judging from the participants' responses, the researcher could tell that the sample had basic knowledge of learner diversity. This happened to be in tandem with what facilitators are required by the local and international legislative frameworks about teaching and learning in inclusive learning environments

(Zimbabwe's Constitution, 2013; The Education Act, 2006, Chapter 25:04; Dakar Framework of Action, 2000; Salamanca Statement, 1994).

Participant X's responses indicated that he was aware of what inclusive or responsive classroom pedagogy calls for. The response, I do not think there is any class without learners who need special attention, revealed that the facilitator was aware of the demands of the twenty-first-century pedagogies, which call for putting the needs of the learner at the core of the teaching-learning process (Gudjonsdottir & Óskarsdóttir, 2016). According to Florian & Spratt (2014), inclusion is all about the embrace of all learners. In the same vein, Gudjonsdottir & Óskarsdóttir (2016) posit that inclusion emanates from the notion of diversity rather than disability. This, therefore, means that participant X was well aware that physical challenges are just a form of diversity. Thus, the presence of physical challenges in learners should be celebrated through inclusive pedagogy.

Upon observation of Participant X's theory lesson, the researcher noted that X paced his classroom activities quite well. The researcher noted with amusement that participant X was always on the lookout for the learners whom he had said needed special attention. However, the scheme cum -plan had nothing insofar as the provision of differentiated instruction was concerned. Rasheed & Wahid (2018) contend that internal differentiation, in which a facilitator modifies the learning content and methodology in a classroom, is one of the most appropriate ways of meeting the needs of diverse learners. In that regard, the absence of differentiation in the scheme-cum plan raised a red flag on part X's pedagogy. It was clear that participant X used a 'one-size-fits-all' pedagogy (Suleyman, 2019) even though he was aware that he had diverse learners. This defeated the essence of celebrating learner diversity, which calls for the employment of different teaching-learning instructions for different learners.

Nevertheless, not much difference was noted between the participation of able-bodied learners and the physically challenged in that theory lesson. The same learner performance was also confirmed by data gathered from the facilitator's progress record book. For the practical sessions, participant X paced his teaching-learning activities quite well. To a larger extent, participant X's pacing of practical learning activities showed that he was aware of learners' need for special attention. However, some learners, especially the amputee and the learner with a deformed leg, could be seen struggling in carrying out the given steps for seedbed preparation. The one with a deformed leg seemed better off than his counterpart. Their working pace was too slow for the tasks to be done in the given time. This was also confirmed by the recordings in the learners' practical diaries, which revealed that a few learners, including the physically challenged, were always lagging in most of their practical tasks. Upon analysis, one could suggest that there was a need for differentiation in time allocation during practical tasks.

Participant Y responds that I have some learners who need more time to master even a very simple concept. For instance, when pot-holing trees for water conservation, certain learners constantly require your assistance in making basins; otherwise, it would be a disaster.....

Indicated that she was also aware that some learners required more attention than others, particularly during practical sessions. During the theory lessons, the researcher did not note any significant differences in performance among the diverse learners in Y's class. However, challenges were noted in the practical sessions. Learners had to construct basins around three trees each. This meant that there was no variation between the practical activities given to the learners despite the presence of physical challenges and the need for special attention. Even the learners' practical diaries revealed that the class always received the same quantity of practical activities. The implication is that the physically challenged learners were somehow facing "exclusion in inclusion" (Magwa & Jenjekwa, 2016). Participant Y needed to subscribe to Gudjonsdottir & Óskarsdóttir's (2016) idea that new classroom thinking, reasoning, and progressive beliefs should be derived from learner diversity.

Furthermore, in her interview response,... *this (giving attention to physically challenged) hinders me from assisting the gifted learners*, one could pick that participant Y was oblivious that even gifted learners were also part of the learners who needed special attention. This was also evidenced by the unnecessarily slow pacing of the teaching-learning activities in the practical lesson observed under the topic *Water Conservation through Pot*

Holing. This is problematic insofar as IE in Agriculture classes is concerned. The same challenge was noted by Bukaliya (2016) when he expounds that, “if not properly handled, facilitators in inclusive classes end up finding themselves in a dilemma on whether to pitch lessons at either a basic level to accommodate the mediocre or at an advanced level to ensure that gifted learners are not held back.” Holding back some learners defeats the notion of taking the learners’ diverse needs as the basis for the provision of special attention during classroom teaching-learning activities. On the same note, Florian & Spratt (2014) posit that inclusive pedagogy embraces all learners and assumes learning together to be beneficial to everyone and not just those who are labelled as having differences. Thus, special attention was not to be confined to the physically challenged learners only.

On the provision of PIA, participant Z said, *I think all the learners need my attention. However, due to a high teacher-pupil ratio, I end up giving special attention to only those who have the potential to do better.* This showed that participant X was also cognisant of the fact that some learners require special attention than others in the teaching-learning process. However, her lamentation over the prevailing high-teacher pupil ratio, which she cited as the major push factor for her failure to provide individualised attention to every learner who required it, showed that there are some grey areas in her pedagogical beliefs. Tamimy (2015) confirms that once a facilitator possesses low beliefs on how learners acquire knowledge, then pedagogy is automatically compromised. The researcher also noted that the way Y provided special attention to learners implied that her pedagogy was not grounded in the theories of learning. Even the learners’ practical diaries revealed that the physically challenged learners were lagging behind the rest of the class in their project activities. For instance, the recordings showed that physically challenged learners failed to finish their practical on tying six tomato plants per learner for moisture conservation, unlike the majority of learners. The same thing occurred on the recordings of tomato wire trellising, which was the third observed lesson. Such data confirmed that indeed not all learners received specialised attention in participant Z’s class.

Setting conditions for the PIA to learners in an inclusive agriculture class not only defeats the whole purpose of inclusive education but also violates the notion of responsive pedagogy, which brings about meaningful learning. In his expert-novice theory, Vygotsky (1978) elucidates: scaffolding, which leads to the Zone of Proximal Development (ZPD), is essential in the cognition of a child. ZPD is the distance between the actual development level as determined by independent problemsolving and the level of potential development, as determined through problem-solving under adult guidance or in collaboration with more capable peers.

This, therefore, implies that unconditional provision of special attention to learners in inclusive classes is essential as it enables even the physically challenged learners to reach higher operational levels, which they might fail to reach independently. Even those learners who did not show the slightest signs of improvement still needed special attention from their facilitators. Otherwise, failure to provide special attention to deserving learners like those with physical challenges may have devastating effects on those learners’ self-concept, which Cooley in his ‘looking glass-self’, regards as the self-image that reflects how others respond to us (Ritzer & Stepnisky, 2014).

Subject and pedagogical content knowledge

In terms of pedagogical content knowledge, the study established that some Agriculture facilitators perceived learners’ differences as a serious factor to be considered in pedagogical selection. The response, *I have to consider individual differences among learners. As I stated earlier, I have two physically challenged learners; thus, I have to consider them in whatever pedagogy I select. In addition, I also consider the learning time as well as the nature of the content to be taught, indicating that participant X always considered the physically challenged in every pedagogy he selected.* From the lesson observation, the researcher noted that participant X made sure that he had explained every finer detail so that all learners understood. In other words, the researcher noted that he was more conversant with explanations, questions, and answer and group work in theory lessons. This observation resonated well with what participant X had singled out as recommended pedagogies for Agriculture theory in inclusive classes. Apart from that, X also pointed out teacher-pupil ratio and the nature of the content to be taught were other factors to be considered in the selection of Agriculture pedagogy.

The theory lesson observations showed that question and answer, explanations, and the group work in which the learners listed the methods of trellising tomatoes indeed yielded positive results in terms of learner efficacy. Participant X's response, from my experience, I would recommend facilitators to employ explanations, questions, and answers, and group work. These should be effective in teaching Agriculture theory lessons revealed as he aimed at improving learner efficacy. Research has shown that 40% of classroom interaction is spent on questioning (Amatari, 2015). Question and answer actively engage learners in the teaching-learning process, keep learners on track, enable learners to share views with their peers, and help the facilitator to evaluate learner understanding (Amatari, 2015). The researcher noted that the questions and responses enabled learners to stay focused, as these had a motivational stimulus for learners, especially in theory sessions. It was through questioning that learners were kept on track on the topic, *tomato trellising*. The researcher also noted that the explanations which enabled the learners to have a deeper insight into the growing and caring of tomatoes were well complemented by the collaborative work and the question and answer, as if confirming deep understanding. An analysis of the progress record showed that the learners had grasped the topic. Most of the learners did well insofar as theory sessions were concerned. All learners finished their work timeously.

Since participant X was hailed for keeping learners on track through his group work, questions and answers, and explanations, the researcher noted some flaws in how these were carried out. From the theory lesson observation, the researcher noted that despite the engagement of learners in collaborative work, the pedagogy was, to a large extent, facilitator-centred. The researcher sadly noted that most of the questions and explanations were generated by the facilitator himself. This was problematic in my view, especially when one is dealing with a curriculum that aims at developing critical thinking and problem solving (Curriculum Framework, 2015-2022).

More so, the way the questions were asked contradicted what classroom interaction proponents advocate for. According to the famous Flanders' Interaction Analysis Category System (FIACS), classroom interaction, be it questioning or explanations, has to be characterised by more pupil-initiated talk than teacher-initiated talk (Amatari, 2015). Amatari (2015) further elucidates that FIACS categories 8, 9, and 10 indicate that facilitators need to build on learners' ideas. All this is in line with the principles of learner-centred pedagogy. Most of the explanations and the questions on caring for a tomato plant should have been generated by the learners themselves to promote meaningful learning. Research indicates that there is a positive correlation between learner-centred classroom questioning and pedagogy effectiveness (Young, 2017). Instead of participant X spending too much time explaining concepts and asking questions to ensure that all the learners have understood, he could have presented learners with opportunities for constructing their own questions and establishing their explanations through collaboration. In a similar vein, Vygotsky views knowledge as being acquired through a co-construction process between the expert and the novice (Sharma, 2017). That way, meaningful learning would have taken place.

Moving on to the practical, the researcher noted that participant X's response is a bit different from the theory lessons. Therefore, like I stated earlier, I recommend explanations, questions and answers, demonstrations, and the addition of Project-Based Learning was in tandem with what was obtained in his scheme-cum plan under the topic Growing and caring for a fruit or vegetable (tomato)

Participant X employed explanations and questions and answers just in the same manner he conducted the theory lessons. He also added PBL and demonstrations, as he had stated that some learners could not do anything without him by their side. The three observed lessons, that is, one theory and two practical also showed that participant X used all the outlined methods in his teaching-learning process.

The researcher found that some learners, including those who are physically challenged, did not do very well in the practical activity of trellising tomatoes. Despite Participant X's constant explanations and demonstrations on the stages of trellising tomatoes to the learners, those learners still failed to finish their practical. Even other recordings in the practical diaries confirmed that, in most cases, the same learners failed to finish their practical tasks timeously. This repeated failure to complete practical tasks by physically challenged learners should raise an alarm in any sensible facilitator. The researcher noted that there was a need to employ differentiation. Differentiation, which is marked by flexibility of pedagogy which enables facilitators to perceive any form of

disability not as a challenge but rather as a classroom resource (Suleyman, 2019; Rasheed & Wahid, 2018). A pedagogy should not be rigid, or rather homogenous but should be flexible enough to meet the needs of each learner regardless the presence of physical disability. Flexibility in pedagogy through differentiation is an extension of natural teaching, which does not take place at the school but rather develops from the child's socialcultural experiences (Rasheed & Wahid, 2018). This therefore, follows that differentiating learners' practical activities would motivate even the physically challenged learners to finish their tasks.

Participant Y's interview response, in practicals I recommend the same methods as in theory, that is, explanation and discussion. These two methods go a long way in enhancing learner understanding on the steps to take in practicals. However, in projects I have to demonstrate all the steps to those learners who need special attention, revealed that she took demonstrations as a main pedagogy in practicals. From the practical lesson on *preparing brooder houses for poultry chicks*, the researcher noted that participant Y was using explanations and demonstrations as her main pedagogies. She spent much time demonstrating each and every stage of brooder preparation to learners. It was noted that participant Y only explained and demonstrated the next stage after the physically challenged learners had shown understanding. The third lesson observed was a practical lesson on *land preparation for tomato planting*. The observation again showed that demonstration and explanation by the facilitator were the dominant pedagogies. The scheme cum-plan for those particular practical lessons confirmed that PBL, demonstration and explanations were to be employed. Data from the class's practical diaries showed that most learners always needed an extra session to finish the given task. The physically challenged learners needed the facilitator by their side throughout the seedbed preparation process.

Upon analysis, one may note that a practical learning area like Agriculture cannot go without demonstrations. Demonstration is an indispensable teaching pedagogy in practical disciplines (McLain, 2017). Indeed, Agriculture practical activities like brooder preparation and tomato trellising would not be elaborate enough without the application of demonstrations. Demonstration as a pedagogy on its own encompasses the fusion of cognitive and physical tools, explanation, questioning and also caters to the learning styles of diverse learners (McLain, 2017). This argument brings out that agricultural practical demonstrations, if well conducted, develop in learners not only problem solving skills but also technical skills which are essential in solving everyday societal problems.

An analysis of Participant Y's response, that, *however, in projects I have to demonstrate all the steps to those learners who need special attention*, showed that she practically did almost every necessary key step in solving the problem, that is the construction of the brooder for day old chicks, without actively engaging the learners. The researcher noted that Y's demonstrations ended up engulfing the teaching-learning process, making the pedagogy seem like facilitator-centred. Advocates of constructive learning argue that learners should not be regurgitators of knowledge but rather be actively involved in the knowledge construction process (Ramsook & Thomas, 2016; Dagar & Yadaf, 2016; Slavin 2011). This calls for Agriculture facilitators in inclusive classes to actively involve their diverse learners in carrying out demonstrations. Rather than having the facilitator demonstrate all the steps, the learners themselves need to be presented with opportunities to demonstrate to their own peers. Because learning aetiology is largely due to social interaction, children 'scaffold' each other through peer collaborative learning activities (Vygotsky, in Ramsook & Thomas, 2016). For instance, it could have been different if the facilitator had picked a few learners to demonstrate what they had learnt to their peers in pairs or small heterogeneous task groups. That way knowledge on brooder preparation could have been acquired in a relaxed, flexible manner.

From the response, I am a holder of a Diploma in Agriculture from Chibero, therefore am quite sure that I have got the relevant content needed in teaching Agriculture. My methodology is mainly rooted on timeous syllabus completion and examination pass rates. Therefore, question and answer, a bit of lecturing and explanations take a lion's share in my methodology....., the researcher picked out that participant Z used the same pedagogies as the other two facilitators but had the lecture method as an additional. It was also professionally heartening for the researcher to note that participant Z was well grounded in subject-content knowledge as she was a product of Chibero College of Agriculture. However, the researcher wondered whether the absence of the Theory of

Education (TOE) courses or the quest to finish the syllabus timeously could have driven participant Z to resort to the traditional teacher-centred retrogressive lecture method in her classroom practice.

A closer inspection on the responsiveness of participant Z's pedagogical practices showed that like earlier mentioned, explanations and question and answers helped the learners to have a theoretical understanding of how to make different housing systems for day old chicks. This was evidenced by the nature of responses provided by the learners during the theory session. However, lecturing should never go uncriticised especially in this CBC era. It is crucial to note that agriculture theory is crucial since every practical lesson comes as a sequel to the theoretical lesson.

Lecturing, as a teacher-centred methodology has its own flaws as it falls short of the demands of the CBC teaching-learning process. Freire (1970) pronounces a teacher-centred school system as being more similar to that which is being experienced by physically challenged learners in mainstream schools. Chemhuru (2013) castigates:

A school system that is characterised by a teacher who teaches pupils through the mug and jug principle, knows everything, always talks and expects pupils to listen as he/she deposits knowledge into the pupils' minds, whom he regards as 'tabularassas'. The teacher also chooses the content to teach and dictates the pacing of the content.

Zimbabwe's CBC also castigates the school curriculum described above. The CBC calls for facilitators to provide opportunities in which the minority groups such as the physically challenged learners access knowledge. Facilitators need to ensure that whatever pedagogy they employ, it has to avail opportunities for learners to develop critical thinking and problem-solving skills (Samkange & Samkange, 2013; Chemhuru, 2013). Ironically, participant Z denied learners the platform to actively construct theoretical knowledge on *housing systems for small livestock* yet she wanted the same learners to later perceive that knowledge.

Furthermore, timeous syllabus completion should never be used by facilitators in inclusive settings as the orientation basis for pedagogical selection, as alluded to by participant Z in her response. *I usually consider the teaching-learning time available. By this I mean the syllabus content to be covered in this examination-oriented curriculum.* It should be noted that in its bid to make learning a meaningful process, the CBC focuses on competency development. The trend today is to pay increased attention to competency development, whose focus is on the learners' ability to mobilise their skills, knowledge and attitudes creatively and independently to address different challenges (Curriculum Framework (2015-2022)). In the same vein, the means to an end is more important than the end itself (Kant's categorical imperative in Ramaswamy, 2018; Eterovic, 2011). In that respect, facilitators in inclusive Agriculture classes need to focus on how learners can best acquire and retain meaningful knowledge rather than focusing on what is there to teach. This then would enable even physically challenged learners to synthesise, evaluate and correctly apply the acquired knowledge, thus, promoting the development of the much-needed enterprise skills. For instance, a learner may know through mere memorisation that tied ridging conserves soil moisture yet he/she might possess limited knowledge on the real significance of tied ridging in food production and self-sustainability in arid or semi-arid areas. Thus, the lecturing method should be avoided at all cost.

On the recommended methods for Agriculture teaching-learning in inclusive classes, all three facilitators advocated for explanations, PBL, collaborative learning, question and answer and demonstrations for agriculture teaching and learning in inclusive classes. All the participants concurred that Agriculture teaching-learning is incomplete without the use of PBL. Data from the facilitators' scheme-cum plans revealed that all the interviewed facilitators used the above-mentioned pedagogies and PBL appeared in all practical. This was also confirmed by the observed practical lessons in which all three facilitators engaged learners in practical projects. Participant X's project was on growing a fruit or vegetable (tomatoes), whilst Y engaged her learners in caring for small livestock (broilers) and participant Z's class was managing a woodlot plantation. Recordings from the learners' diaries also confirmed that learners were indeed being engaged in project activities. As one of the fundamental inquiry-based learning pedagogies, PBL cultivates critical thinking, problem solving and reflection in diverse learners (Curriculum Framework, 2015-2022).

The researcher also noted with amusement that even the physically challenged were being engaged in agriculture projects. The facilitators' pedagogical preference for PBL was actually in tandem with the demands of the CBC, which advocates for a school education that contributes towards solving the needs of society (Curriculum Framework, 2015-2022). In the same vein, Education 5.0. (2018) calls for the extension of the role of teaching to research, innovation, industrialisation and serving the needs of the communities. This is indeed an implicit call for Agriculture facilitators to desist from using pedagogies that produce learners who merely possess theoretical agricultural knowledge but make a notable contribution to their agro-based Zimbabwean society. If well handled, PBL in inclusive Agriculture teaching-learning at the primary school level could in one way or the other, be the solution to the irrelevant education system Zimbabwe recently used to experience as lamented by (Chemhuru, Makuvaza & Mutasa 2016)

The lack of relevance in our education system has contributed to our producing well-schooled products that are not educated. These are individuals who have reached the highest level of education in terms of paper qualification, but have no contribution to make in their society. They lack skills, attitudes, values and norms that contribute to the development of society.

In light of the foregoing discussion, the employment of PBL in agriculture classes is a good sign that the nation is in the right direction insofar as the development of enterprise skills from the grassroots level is concerned. PBL in inclusive agriculture classes might result in the development of enterprise skills in all learners (including the physically challenged). These project activities can also be extended to solving societal problems, as a school is regarded as a microcosm of society (Ritzer & Stepnisky, 2014).

However, the researcher noted some flaws in the way this PBL was being carried out. It is imperative to note that PBL has distinct attributes that characterise it. A project has to be carried out in such a way that it develops inquiry which leads to problem-solving. The Curriculum Framework (2015-2022) advocates that PBL is characterised by:

the need to know in which learners are curious to gain knowledge, understand concepts and apply skills in order to answer the key question. Learners are also allowed to make choices concerning how they work and how they use their time, guided by the teacher depending on age level or PBL experience. Feedback on the quality of their project work should be obtained leading them to make revisions or conduct further inquiry.

The above sentiments imply that in carrying out PBL, the learners' needs should always be the point of departure. Agriculture learners should be given the platform to fully and independently apply the knowledge they have acquired in intriguing ways. PBL in Agriculture classes should have minimal facilitator demonstrations so as to allow learners the opportunity to showcase what they have learnt theoretically. Learners should have the freedom to work in groups of their own choice. However, all this was contrary to what the researcher observed from all the three facilitators' PBL.

Participant Y made use of several facilitator demonstrations. This in actual sense, defeats the whole purpose of PBL which calls for learners to construct knowledge through inquiry and then apply it in addressing their own generated questions (Curriculum Framework, 2015-2022). In his conditions of learning theory, Lougran (2006) stresses the importance of the enhancement of retention and transferability of knowledge in the teaching-learning process. This means that understanding of agricultural theoretical concepts and its application is enhanced when learners themselves take charge of most of the demonstration activities during the teaching-learning process. Agriculture learners in inclusive classes need to be presented with only guidelines and necessary skills so that they would be able to do the projects by themselves. Availing the physically challenged learners the opportunity to demonstrate might have signaled the facilitators that such learners were going to struggle, hence, the need for peer collaboration which leads to problem-solving in a more relaxed, friendly manner. Peer collaboration and differentiation might have prompted every learner to finish the given tasks. Inquiry and knowledge transferability may as well remain an elusive dream once learners are treated as empty slates (Freire, 2020) in need of constant facilitator demonstrations in carrying out practical work as displayed by the facilitators.

In addition, PBL goes hand in glove with reflective teaching. The failure to finish off practical tasks in time in all the observed practicals by physically challenged learners spells out that the interviewed facilitators somehow lacked reflection in the way they carried out PBL. On this note, Loughran (2006) emphasises that experience alone does not lead to learning, but what is rather essential is reflection on experience. The three facilitators should have used the failure to finish practicals in one lesson by the physically challenged as the basis of their reflective practices. Continuing with the same *modus operandi* which yields unfruitful results clearly indicates that meeting the needs of diverse learners was not the orientation basis for the facilitators' pedagogical choices. More so, the focus of BPL in inclusive agriculture classes should never be the content itself, in this case finishing practical tasks, but it should rather be the development of problem-solving skills through inquiry in learners. The Curriculum Framework (2015-2022), provides that PBL does not only call for significant content and competency but also calls for in depth-inquiry in which the learners engage in a prolonged demanding process of asking intriguing questions and finding answers in relation to the phenomenon under study. However, the researcher sadly noted that all the three facilitators failed to engage learners in this kind of inquiry. It was rather the facilitators who seemed to have been leading the inquiry process as they continuously posed questions to the seemingly passive learners throughout the project. In such a scenario, the learners might even fail to find the questions intriguing and meaningful.

Time Allocated for Agriculture Lesson

It was also evident from the study that time allocation for the theory sessions was adequate to cover the given syllabus content. Only practical were problematic. Participant Y's response, my opinion is that the current 2 by 30-minute slots we are having are quite alright. One hour per week is quite enough to cover the 8 syllabus topics. You can use any teaching-learning activities you like without any hassle, revealed that the facilitators could incorporate any activities they had planned in the teaching-learning process without the fear of running out of time. An analysis of the scheme-cum plan for participant X revealed that she included some group activities in his pedagogy. Participant X's progress record entries showed that most of the learners, with the inclusion of the physically challenged, were doing well in theory assessment. Even the lesson observation carried on the topic caring for a fruit or vegetable (tomato trellising) was carried out in a way that all planned activities were covered timely. Participant Y's progress record also revealed that the majority of learners were deriving meaning from the learning process. A look into Participant Y's scheme-cum-plan revealed that she incorporated group work teaching-learning activities too. The lesson observation carried on the topic Brooder Preparation showed that Participant Y also exhausted all her planned teaching-learning activities within the stipulated time. The same also applied to participant Z, whose theory lesson was on the management of woodlots. The progress record marks also confirmed that the majority of the learners had grasped most of the concepts. Thus, from the gathered data, the researcher noted that the three facilitators agreed that the time allocated for Agriculture practicals did not affect their pedagogical preferences.

However, the story seemed different for practical sessions. According to participant Z's interview response, practical involve a lot of manual work, hence, demand more time, especially in classes where some learners are in wheelchairs. That scenario alone makes agriculture practical a and cumbersome process. I think allocating at least 3 by 30-minute periods to practical alone would be helpful, made it clear that the allocated practical time impacted negatively on the participants' pedagogy. The researcher noted with concern that all the physically challenged learners in the three classes failed to finish their assigned practical task. As earlier stated, the lesson observations carried out on participant X, the researcher picked out that the two physically challenged learners and a few other learners did not finish their task of trellising six tomato plants per learner using the wire trellising method within the stipulated one-hour period. The same also applied to the physically challenged and a few other learners in participants Y and Z's class, who failed to finish their practical on preparing hay box brooders and pruning of trees, respectively. Even the other recordings in the learners' practical records revealed that such learners seldom finished their assigned practical activities.

From the gathered data, the researcher also established that the limited time available for the agriculture practical could also be one of the drivers for the failure to complete given tasks by the physically challenged learners. Research has proven that instructional time is an important variable in the teaching-learning process

(Rintaningrum, 2018; 2016; Lavy, 2015). Even if one hour of instruction has the same productivity for all subjects, it might be that different students profit differently from extra instructional time (Lavy, 2015). This implies that Agriculture practical teaching-learning time can have a bearing on the facilitators' pedagogical effectiveness. Hence, some participants like Y would end up resorting to teacher demonstrations throughout the entire practical session just for the sake of timely task completion.

In his model of school learning, Carroll (1963); (1975); (1989) cited in Rintaningrum (2018) advocates that the time needed to learn (aptitude), the time students should spend on learning (perseverance), the time available for learning (opportunity to learn), instruction quality and the ability to understand instruction are the five major determinants of learner efficacy. This, therefore, follows that learners, especially those who are already disadvantaged by physical challenges, need more time to complete a given Agriculture practical task. Had the three facilitators been cognisant of the fact that their classes were not made of homogeneous learners who could finish the same tasks in the same time, then even the physically challenged learners might have finished their tasks. Indeed, trellising three tomato plants from a wheelchair in thirty minutes ends up being a dreadful task for the physically challenged learners. This observation resonates well with the argument that learner diversity should be a determinant of any teaching-learning activity (Elliassen, 2014) as diverse learners respond differently to the same instruction (Cattaneo, Oggenfuss, & Wolter, 2016; Lavy, 2015). Therefore, in light of the foregoing discussion, the time factor plays an integral role in determining not only learning outcomes but also instructional quality in inclusive classes.

Resource Availability and its impact on pedagogy

The participants faced challenges in the provision of Agriculture teaching-learning resources. Participant Z's response, *there is a rampant shortage of resources, which forces us to rely on one textbook per facilitator, and that is supposed to cater for the whole class. This is why one ends up spending much time elaborating concepts for learners to understand, making the lesson seem like a lecture. You can imagine writing four chalkboards full of notes for learners to copy and digest. We cannot even talk of e-learning because we do not have an internet connection and the necessary ICT tools. For the practical, the garden tools only suit the able-bodied learners*, which signifies a serious resource shortage.

Participant Y concurred with Z that his school lacked basic Agriculture teaching and learning resources. Only participant X pointed out that his school provided adequate textbooks and conveniently used ICTs. The same results were confirmed by data generated from the lesson observation and the scheme-cum plans for the three facilitators. The researcher noted that Y and Z used pictures from textbooks and magazines, respectively. Data from lesson observation pointed out that participant Z might have resorted to the retrogressive teacher-centred pedagogy of lecturing (Samkange & Samkange, 2013) due to the extreme textbook shortage at her school. The researcher, however, noted a difference in participant X's lesson observation in which ICT was used to cater to the learning styles of diverse learners. Even the learner motivation level was relatively higher in X's class.

Although literature has it that effective facilitators adjust their pedagogy to meet the learning styles of their learners (Alexander, 2013; Husbands & Peace, 2012; James & Pollard, 2011), this can only be feasible if the learning environment has adequate teaching-learning resources. Responsive and inclusive pedagogies in the teaching of Agriculture would be incomplete without the use of ICTs. ICTs enable facilitators to cater for the learning styles of diverse learners, including those with special needs, during Agriculture teaching lessons. Husbands & Peace (2012) assert that ICT is one of the best 21st-century learning tools that can be used to aid the practice of differentiation pedagogy, in which more support is provided to specific groups of learners. In that respect, physically challenged learners from participants Y and Z's classes could have benefited from watching videos on how other physically challenged learners prune trees in a woodlot. The videos alone could have catered for those learners with auditory and visual learning styles (Kanchi, et al, 2013) whilst at the same time, the physically challenged would have mastered the "how" part of the pruning process without the facilitators having to demonstrate everything by themselves.

The above argument implies that ICT usage improves the accuracy and presentation of practical agriculture activities by the physically challenged learners. ICT use accompanied by the provision of suitable garden tools might result in all learners, including the physically challenged, being able to demonstrate tree pruning to other learners. Therefore, digital media is quite essential in promoting learner-centred pedagogies in outdoor activities, as alluded to by James & Pollard (2011).

From the lesson observations, the researcher could establish that the physically challenged learners were struggling to use the agricultural tools that were available for use. For instance, the researcher sadly noted that the amputees in participants X's and Z's classes had a difficult time using the ordinary-sized hoes. Data collected from the three facilitators pointed out that the Agriculture tools that were available for use in their schools were not supportive enough for the needs of the physically handicapped learners in their classes. Ironically, this is in contrast to what the new Education Amendment Act (2020) section 68B of Cap 25:04 on learners with disabilities advocates for when it states,

Every registered school shall provide infrastructure, subject to the availability of resources, suitable for use by pupils with disabilities. The secretary shall monitor and enter the premises of every registered school to ascertain whether the rights of pupils with disabilities are taken into account during teaching and learning.

Despite such calls, gathered data revealed that the provision of suitable inclusive learning resources in Zimbabwe seems to be progressing at a snail's pace. Without suitable resources it becomes difficult for the facilitator to employ the process of normalisation (Charema, 2010 in Magwa & Jenjekwa, 2016), which seeks to improve learner efficacy despite the presence of physical challenges. This then compromises whatever pedagogy one selects for inclusive Agriculture classes. In addition, physically challenged agriculture learners also need to be provided with LREs. Magwa & Jejekwa (2016) are of the view that the provision of LRE calls for the redesigning of the educational settings to allow special needs learners to perform to the maximum extent appropriate. This then implies that without the provision of LREs and normalisation, the effectiveness of any chosen pedagogy in agriculture inclusive classes becomes compromised. Mafa (2012) postulates that teachers need resources to produce teaching aids and to differentiate instruction. Had the hoes in question been tailor-made to meet the needs of the learners with dwarfism, then participants Y and Z might even have applied learner demonstration as a pedagogy. It would be meaningless for a facilitator to pick physically challenged learners to demonstrate to his/her peers when these learners are struggling to use the available tools. This scenario indicated that a facilitator's pedagogical choice can be directly linked to the teaching and learning resources available (James & Pollard, 2011).

Response to participation by physically challenged learners

Also evident from the data was the fact that the participants (learners) showed a relatively higher interest in Agriculture compared to other learning areas. The three facilitators concurred that most of their learners, with the inclusion of even the less gifted, showed a lot of enthusiasm, especially during the practical sessions. This also tallied with data obtained from the lesson observations, which revealed that almost all the learners were showing a high level of motivation during the practical sessions. Data gathered from the able-bodied learners' practical diaries also showed that the whole class (with the exclusion of the physically challenged) was performing well. An analysis of the progress record also revealed remarkable improvement even on the nonreaders who tended to perform way much better in most of their practical activities when compared to their performance in theory sessions.

However, with the physically challenged learners, the scenario was the opposite. Participant Y, had this to say: All of the learners enjoy Agriculture lessons. The participation is relatively better when compared to what they do in other learning areas. Even the not-so-gifted learners seem to be enthusiastic, especially in the practical sessions. The only challenge comes when the physically challenged are engaged in practical activities. Probably, the physical disabilities hinder them from finishing their tasks in time, thereby dropping their enthusiasm. From the analysis of the progress record, the researcher noted that there was no significant difference between the

performance of the able-bodied and the physically challenged learners' theory work. In contrast, data from the lesson observations and Agriculture practical diaries revealed a relatively lower level of enthusiasm from physically challenged learners during practical sessions when compared to theory sessions. Participants Y and Z pinned the dropped enthusiasm in practice by physical challenges on their failure to finish practical tasks and the unavailability of tailor-made agricultural tools for inclusive classes, respectively. Indeed, the absence of suitable agricultural tools automatically hinders the provision of LREs (Mafa, 2012), thereby compromising the effectiveness of any selected pedagogy.

Upon scrutiny, the researcher also factored out the absence of differentiation as a pedagogy both in practice and theory, as one of the causes of the lack of enthusiasm displayed by the physically challenged learners during the practical. Learner diversity, which emanates from differences due to learning styles, creative potential, and exceptional conditions like physical challenges (Suleyman, 2019), calls for Agriculture facilitators to differentiate the number of practical tasks given to learners in inclusive classes, as these learners are already placed at a disadvantage. Differentiation motivates even the physically challenged or slow learners to finish off whatever task they are given, hence boosting their enthusiasm towards Agriculture.

As noted from the lesson observation, enthusiasm significantly dropped among the physically challenged. This might also have been due to the absence of motivation prompted by the unavailability of suitable practical tools and the inadequate learning period for practicals. In his hierarchy of needs, Maslow elucidates that every group of people entails individuals at different levels of motivation, with some having failed to meet even the lowest physiological needs, thereby making it difficult to progress to higher levels of self-actualisation (Sharma, 2017). This implies that once a physically challenged learner fails to finish off a given task, then the motivation to finish other similar or more challenging tasks automatically dwindles. Consequently, this results in dwindling enthusiasm towards agricultural practicals by such learners.

The researcher also noted that confining the demonstration to the facilitator only during Agriculture practicals may reduce learner enthusiasm. By its nature, Agriculture is a learning area that promotes continuity between home and school culture (Samakange & Samkange, 2015). Agriculture practical activities learnt at school are not only confined to the four walls of the classroom but rather extend to the home and the community at large, or vice versa. Similarly, Vygotsky's socio-cultural theory posits that the child's socio-cultural background plays a significant role in the process of 'meaning making' (Sharma, 2017). In that respect, confining practical demonstrations to facilitators only in Agriculture practicals does not augur well with the extension of learning beyond the four walls of the classroom. Facilitator demonstrations in Agriculture practicals may limit the development of lifelong learning skills. Whatever pedagogy the inclusive Agriculture facilitators choose has to promote learning without borders, as Agriculture content on its own is not alien to most, if not all, Zimbabwean learners. Awarding learners, especially the physically challenged, the platform to do class demonstrations enhances their enthusiasm towards practicals, especially when the facilitator makes use of positive regard (Sharma, 2017) during these learner demonstrations.

CONCLUSION AND RECOMMENDATIONS

The study investigated the pedagogical preference in the teaching of agriculture to learners with physical disabilities. the findings show that although pbl is addressed as a responsive, inclusive learner-centred pedagogy, the way it is implemented in the teaching of agriculture practical by some facilitators is flawed. the absence of differentiation in the allocation of practical tasks among diverse learners in some agriculture classes tends to marginalise learners with physical challenges. absence of differentiation resulted in some physically challenged learners developing relatively lower self-esteem. this negatively affected their learner efficacy in practical sessions, thus reducing their chances of realising their full potential. over and above the study confines, the stipulated 2 by 30-minute agriculture practical periods in inclusive classes seemed to be insufficient, considering the pace at which the physically challenged learners may perform manual work.

The researcher recommended that the administrators in mainstream schools could help the situation by maintaining the recommended teacher-pupil ratio for inclusive classes to facilitate the feasibility of the pedagogy

of differentiation. There is also a need for the adoption and flexibility of differentiation as a pedagogy by facilitators in inclusive Agriculture classes at the junior primary school level. Differentiation guards against the use of 'one size fits all' pedagogy, which results in the classification of learners as 'able or unable. Pre-service teacher education might need to consider the provision of Continuous Professional Development (CPD) for practising facilitators who do not have the background. Agriculture teaching and learning at junior primary school inclusive classes calls for sound pedagogical content knowledge. Therefore, pre-service TE might need to offer short compulsory courses for in-service practising teachers who possess only a Diploma in Agriculture.

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