Influence of Excursions Approach on Learner Participation in Environmental Conservation Activities Among Pre-Primary Learners

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Abstract: The Learner participation in an instructional process, Environmental Education (EE) included means that the education provided to learners is of relevance, value and supportive of achievement of learning outcomes. The teacher as the manager of the instructional process has the task to promote active learner participation especially among young learners like those at the ECDE level through use of child-friendly approaches. Such approaches should include learner participation in listening to sounds in the environment, interviewing people, observing people in action or examining real things like tools and reports. Empirical literature links such approaches to excursion teaching approach. However, limited empirical literature on the extent and influence of use of the approach in instruction of environmental activities especially among ECDE learners’ limits a discussion on best practices for teaching ECDE learners’ environmental activities. The purpose of the study was therefore, to examine the influence of excursions approach on learner participation in environmental conservation activities. Descriptive survey research design was used. The population of the study comprised of 119 headteachers, all the parents of pre-primary children and 238 pre-primary school teachers. The sample unit was 65 headteachers, 30 parents of pre-primary children and 131 pre-primary teachers of the public pre-primary schools. Data was collected using two research instruments which included questionnaires for pre-primary teachers and the headteachers and interview guides for parents. Descriptive and inferential statistics were used to analyze quantitative data using Statistical Package for Social Sciences version 25.0. Qualitative data was analyzed thematically. The findings of the study demonstrated that excursions approach influenced on learner participation in environmental conservation activities. The findings of the study may benefit teachers, curriculum developers and policy makers in ensuring that pre-primary learners are taught using instructional approaches that promote learners’ participation in environmental conservation activities. Chi-square results indicated a significant influence of excursions approach on learner participation in environmental conservation activities. The study recommends that the use of excursions approach should be promoted since it improves learner participation.

Keywords: Excursions Approach, Learner Participation, Environmental Conservation, Environmental Conservation Activities, Pre-Primary Learners, Instructional Approach

1. Introduction

Environmental education for ECDE learners includes methods, tools and plans that facilitate the development and sustenance of environmentally associated boldness, principles, consciousness, knowledge and skills which makes individuals take actions that promote environmental conservation. A successfully implemented environmental education is an inclusive course to help individuals understand their environment better, their position the environment, environmental hitches and interrelated issues [1]. Educationalists are convinced that research on learners understanding of various aspects of environmental matters will be a treasure to instructors so as to facilitate their
teaching by considering research findings on issues learner participation in environmental conservation activities. It may therefore require an exhaustive assessment of the progression curricular of any environmental education program. When the curriculum for developed nations is assessed, it is evident that environmental conservation concepts are included in the contexts of learning. However, for the underdeveloped and the developing nations, the same cannot be replicated.

At the pre-primary level, learners are curious and have interest in environmental conservation activities. Pre-primary learners get fun in exploring and experimenting in the environment. Pre-school learners have a solid sense of natural and environmental consciousness established, but they later drop as a result of influence by instructional approaches used [2]. It is therefore necessary to use instructional approaches that provide opportunities to learners to engage in activities during their formative years. This will in turn promote the child’s knowledge about the environment and ways of conserving it. Learners will in turn participate in environmental conservation activities. Early childhood environmental education involves the growth of a sense of curiosity in learners, gratitude for the aesthetics and exploration of the natural flora and fauna [3]. Environmental education gives opportunity to learners to experience the familiarity to nature and respect for creatures in their environment. Environmental education also involves the development of problem-solving skills, interest and appreciation of our immediate environment. Early childhood and education teachers should avail the opportunities for learners to experience joy and excitement with the natural environment since these feelings brace up the development of knowledge, skills and dispositions [4]. This is achieved when teachers vary the teacher-centered and learner centered instructional approaches used. Hence, to promote environmental attitudes in learners during the early years of life, environmental education should be considered as of significant importance.

Though there is increased public awareness on environmental conservation issues, inadequate environmental understanding can be a great hindrance towards achieving sustainable future for mankind at both international and local levels. There is need for proper education and awareness campaigns on the importance of environmental health which is in the enhancement of the conservation and appropriate use of environmental resources for purposes of a sustainable future. Environmental Education (EE) incorporates a designed and strategic process seeking the development and execution of an environmental curriculum at all levels of the educational structure. The imperative requirement to edify people on protection and sustainable uses of environmental resources through environmental education is a global necessity. Learner participation in early learning and childcare settings is core to a good education for children [5] Learner participation means the education provided to learners is of relevance, value and supportive of achievement and attainment. Teachers are particularly positioned to promote learner participation through use of child-friendly approaches. Participation is inclusive, respectful and involves transparency and power sharing. To achieve participation among learners, the teaching and learning arena must engage learners in classrooms, play rooms, sports, science laboratories and other learning spaces [5]. Through participation, learners exercise a key role in actively supporting learner participation. In ECDE, learners’ participation in activities has raised concern and discussion whereby, there has been problems of deficiency in involvement of learners in experiences in the education settings [6, 7]. A survey study conducted in Helsinki, in 2010 focusing on instructors’ perception and the conceptions of children’s participation in ordinary educational practices revealed that children’s opportunities to make autonomous initiatives and selections were considered as a right and an element of learning and developing participation skills among the children. Findings revealed that children had weak probabilities of participating in pedagogical processes. The less participation was connected to both school issues such as procedures, instructional approaches used and beliefs about children’s competences.

In the United States of America, the United Kingdom, Australia, Germany, Mexico, India and Taiwan, there are some critical issues that face learner participation during the teaching of environmental conservation activities. Use of inappropriate teaching methods in teaching environmental activities is one of the issues. In early childhood, environmental conservation instruction is planned and executed using reputable developmentally apt practices. Matching the learning environment, curriculum and instructional procedures to the developmental stages of children promotes developmentally appropriate practice and education of learners [8]. This will in turn help in promoting active learner involvement in activities. In a study with first grade learners in Germany during individualized instruction [9] reported that the interactions between teachers and pupils were rather superficial and did not deal with the learning content in depth.

Curriculum modifications in Sub-Saharan Africa have concentrated on revolutionizing instructional approaches in classroom, moving from instructor governed class to more effective models of learning in order to allow learners to be part of the learning experience [10]. The reforms are geared towards improving learner participation in activities. Studies which focused on strategies on how to help teachers to prepare a learning environment that allows learning in a meaningful way by actively involving the learner [11, 12]. Learning should take place in the context of authentic tasks and such environments should present opportunities for learners to visualize and concretize concepts introduced in class [13]. The findings of the study reported that learners who experience opportunities during learning remember abstract concepts and displays with real activities.

Learners should be given chances to create meaning of their personal experiences during teaching and learning process [14]. This is achieved through activities such as engaging learners in hands-on experiences and observation activities. research findings indicate that a change is required in terms of promoting an understanding of individuals as part of nature who are proficient in caring and supporting the
network of life [15, 16]. In this sense, nature contact is a central component of the teaching and learning process [17]. Pre-primary school teachers need to expose learners to activities that promote learning through interaction with their environment such as through excursions.

Learner participation is considered to be vital in education systems that encourage democracy as a pedagogical right [18]. Learner involvement is considered as part of instructional processes in early childhood education in the policy papers in the Republic of Finland. For instance, the main program for pre-school education in Finland, [2016] recognizes learner involvement as a part of their learning through taking part in preparation and assessment of instructive activities. The program takes into consideration the children’s initiatives and actions when planning and developing instructional practices. Instructors are encouraged to ensure that they back-up and lead learners in becoming aware of their own learning through ensuring use of instructional approaches that promote active learner participation in activities. Environmental conservation activities include the practices that children participate in to ensure that the environment is being used in a way that is safe, sustainable and to reduce environmental problems. Learners carry out activities such as proper waste disposal, litter picking and classroom cleaning. A case study conducted in Botswana on learner participation in waste management among primary learners. The instruments for the study were observation schedules, focus group discussions and participatory approaches. The respondents were teachers, grade six learners and school cleaners. The results of the study revealed that learners participated in school waste management activities such as litter picking and classroom cleaning [19]. This promoted their participation in environmental conservation activities.

Excursions approach refer to an instructional method in which children visit places of learning where they interact with individuals, things around their environment and get first-hand information about things within their vicinity [20]. An excursion is a journey, trip or tour planned for learners to get first-hand information. Through excursions, learners are involved in listening to sounds in the environment, interviewing people, observing people in action or examining real things like tools and reports. Any form of instruction that is conducted outside the formal classroom setting in a school which involves gaining knowledge by interacting with living and non-living objects constitute an excursion [21]. Experience is a powerful source of knowledge which emphasizes natural learning environments where children have the chance to encounter factual occurrences and phenomena from outside the classroom [22]. Excursions are inclusive in that all learners are given an opportunity to participate unless exceptional circumstances exist. Excursions approach is a way of presentation by taking the students to study outside the environment of class. Field excursions using the environment as a learning resource, stimulates the creativity of the students, information can be more comprehensive and real time, students can seek and process. Field excursions have several advantages which are: field excursions have modern teaching principles that utilize the real environment in teaching, excursions make the lessons in school more relevant to the reality and the needs of the community, stimulates the creativity of learners and the information used in teaching is wider and more actual.

Exploration of the world should be promoted during learning activities as it fosters critical thinking in learners concerning the content of the lesson in relation to what they had learnt earlier learnt by being actively engaged [23]. These emphasizes on interactive learning such as engaging learners in nature walks, field trips and visits to the environment for purposes of learning. Interactive learning promotes learner participation. Learners should never be coerced into a passive rote-education structure [24]. Instead, the teacher should avail to children the opportunities for them to explore and consider discussing things instead of simply delivering knowledge. Social constructivists observe that learners are active participants in the environment, and both ideas agree that interaction is a powerful means of learning [25]. Research findings document two main reasons for preferring practices that enable learners to engage in investigation and intervention. First reason is that direct investigation is essential because it leads to children's successful constructivism, whereas social engagement allows for a diversity of cultural ideas to be learned. Combining vision, comprehension, actual events, and then determining if the results are better or worse than expected permits the learner to become proficient in perception and evaluation [25].

Fieldtrips and nature walks are important aspects of excursions. A study of elements of winning a field trip notes that over 82% of students described an advantage of an interactive learning environment as a way to get out of the classroom and break from daily routine of school which tends to add interest in learning [26]. Activities that combine academic study, problem-solving, and practical on-the-spot observation have been found to improve student skills and self-views while bolstering lasting connections in learning the value of land and ecosystems. A study conducted on the use of excursion activities and its effect on learning indicated that students benefited from social interaction and need to feel free about themselves [27]. During the early childhood years, any outdoor encounter with nature should be full of fun and give learners the feeling that they are part of something altruistic and bigger than themselves. The findings confirmed that excursions approach to learning had positive effects in improving participation in learners through reducing stress, increasing health and focus in activities [27]. In another study on nature walks-based instruction, nature walks which are part of excursions were considered viable alternative to classroom-based instruction for any topic that referenced the natural environment such as environmental conservation activities. The findings confirmed that nature walks promoted active participation among students [28].

Learners desire to have curriculum and materials that were designed to be flexible and adaptable to allow them take field excursions for their students [29]. Research findings show that
the environment forms human history and that opportunities for community engagement in school activities were vital to learning [30]. The studies show most of the work done centered on general teaching methods without specifically showing how field excursions method is used in environmental activities. A study on the effects of using field excursions among learner revealed that field excursion activities promoted learner participation through engaging in scientific concepts such as questioning, discovering and engaging with real life phenomena [31]. Student participatory processes increase when learners are engaged in excursion activities [32]. Students learn through direct observation and tactile interaction with phenomena. This makes remembering of concepts easier for the learners.

2. Theoretical Framework

The study was guided by the constructivism learning theory and Reflective Model [33, 34]. Constructivism learning theory proposes that knowledge is best acquired through the process of reflection and active construction in the brain [35]. Knowledge is thus an intersubjective interpretation. The constructivist theory by emphasizes on instructional approaches where children learn through active interaction with their environment. The learner must ponder the information being communicated based on previous experiences, own opinions and cultural context so as to build an understanding. Constructivism is divided into two main aspects namely radical and social aspects. The first form radical (or cognitive) constructivism suggests that the process of creating knowledge is dependent on the individual's subjective interpretation of their active experience. The theory emphasized on learner-centred methods where children learn through Problem-based learning and integrated learning approaches, learner engagement, dialogic teaching and critical inquiry. It also emphasized on learners learning by doing. The theory advocates for an education grounded on real experiences and practical activities. Constructivism emphasizes on learner engagement in activities. Constructivism theory is therefore relevant to this study since it addresses the objective of the study which is to establish the influence excursions approach on learner participation in environmental conservation activities.

Through excursions, learners are able to interact with the environment and therefore get firsthand information about the environment. This could be achieved by engaging in excursion activities like nature walks, field trips and visits to a nearby river. Through excursions, children explore, question, experiment and discover aspects of the environment thus promoting participation in environmental conservation activities. Therefore, it is necessary to use instructional approaches that promote learners’ active interpretation of knowledge field excursions during the teaching and learning of environmental activities.

Reflective model advocates for learners’ active engagement in concrete experiences and reflective observation. Reflective model is also referred to as experiential learning. The basis for this model is an individual’s experience, which is then studied, scrutinized and assessed thoroughly in four stages. Once the four-stage cycle is completed, new experiences and understandings form the beginning of another cycle. The four phases of reflective model include:

Concrete experience: in which an individual deliberately and substantially experiences a situation, which makes one to realize the need for thorough reflection so as to acquire new knowledge or to improve on prevailing skills and practices. In this stage a learner will take note of the exact situation and just describe what they see, their feelings and what they think. The second phase is reflective observation: in which an individual having written down the description of the experiences, they engage in deeper reflection on what has occurred in a situation. The inquiries that could be asked include: what functioned? What botched? Why did the condition rise? Why did others and I act in the manner that we did? The third stage is abstract conceptualization: The controlling query for this stage emanates from the questions asked in the reflective observation stage: what could have been done better or in a different way? How can I advance? Initially, individuals try to come up with a different way of handling a situation and create techniques for using when a similar condition arises in the future. Also, this is the stage where an individual should look up to classmates, teachers and books in order to get a clear conceptualization and more ideas concerning an issue at hand.

The final stage is active experimentation: This stage involves working on the acquired knowledge by applying and practicing it in new situations. An individual takes their own thoughts and opinions about enhancements as well as the philosophies back into practice and trying out the new approaches. Some of the approaches will work while others may not, so this becomes the foundation of a completely new cycle in experiential learning since the practices within the active experimentation phase now become the new concrete experiences.

Reflective model was modified to suit the study to address the dependent variable, that is, learner participation in environmental conservation activities. As learners explore, interact, question and experiment with the environment, they participate in activities which conserve the environment. By engaging learners in environmental conservation activities using excursions approach, learners will develop concrete experiences by carrying out environmental conservation activities. During environmental conservation activities, learners will question, reflect and develop abstract conceptualizations about their environment and how to conserve it.

3. Methodology

This study adopted descriptive survey design. Simple random sampling technique was used to select 65 schools out of 119 schools in Kaiti Constituency. The headteachers of the randomly selected schools were respondents to the instruments of the study. With a total population of 357, the
researcher used the sample size determination table to select a sample at 95% confidence level which gave 196 respondents [36]. The 196 respondents comprised of teachers and headteachers. Based on proportionate sampling, the researcher selected 65 headteachers and used simple random sampling technique to sample 131 pre-primary teachers. Since the study sought to conduct interviews with the parents of pre-primary school children, the researcher used convenience sampling technique to sample 30 parents of pre-primary children based on availability of the parents. Headteachers were selected because they are the policy implementers. Teachers were selected because they are the implementers of curriculum in the classroom. Parents were selected because Competency Based Curriculum outlines parental engagement as a pertinent and contemporary issue. Parents monitor and assist learners in carrying out environmental conservation activities at home and school. Data was collected using questionnaires and interview schedules. Qualitative data was analyzed thematically. Quantitative data was analyzed using SPSS version 25.0 computer software using descriptive and inferential statistics. The inferential statistics involved was Chi-square to establish the influence of excursions approach on learner participation in environmental conservation activities.

### 3.1. Research Questions

The study sought to answer the following questions:

1. What is the extent of adoption of excursions approach in teaching environmental conservation activities?
2. What is the influence of excursions approach on learner participation in environmental conservation activities?

### 3.2. Study Variables

The study utilized the following variables:

1. Independent variable: Extent of adoption of excursions approach with a reliability index of 0.619.
2. Dependent variable: Learner participation in environmental conservation activities with a reliability index of 0.775.

### 4. Results and Findings

#### 4.1. Extent of Adoption of Excursions Approach

The researcher sought to establish the extent of adoption of excursions approach in environmental conservation activities. The results obtained are as shown in Table 1:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Not At all</th>
<th>Once in two weeks</th>
<th>Once a week</th>
<th>Twice a week</th>
<th>More than twice a week</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visits to the school farm</td>
<td>-</td>
<td>3.1</td>
<td>5.6</td>
<td>26.0</td>
<td>65.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Nature walks</td>
<td>-</td>
<td>-</td>
<td>8.7</td>
<td>52.6</td>
<td>38.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Field trips</td>
<td>-</td>
<td>39.3</td>
<td>50.0</td>
<td>8.2</td>
<td>2.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Visit to various sites including a dumping site, a nearby river</td>
<td>1.5</td>
<td>5.6</td>
<td>14.8</td>
<td>69.9</td>
<td>8.2</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The findings obtained showed that almost all of the respondents (91.3%) engaged learners in visits to the school farm more than twice a week. A slightly higher percentage (91.4%) engaged learners in nature walks twice a week. Nature walks which are part of excursions are considered viable alternative to classroom-based instruction for any topic that references the natural environment such as environmental conservation activities [28]. Findings illustrated that a very low number of respondents (10.8%) engaged learners in field trips. Low use of fieldtrips could be due to challenges of logistical planning of transport for learners, safety issues time lost trying to organize large groups [37]. More than three quarters (78.1%) engaged them in visit to various sites including a dumping site, a nearby river. School visits to protected areas provide opportunities for conducting practical activities which promote direct experience with physically present material, natural environment and social world [38]. On average, more than a half of the respondents (67.9%) acknowledged adopting excursions approach in teaching environmental conservation activities. The respondents who reported to engage learners in excursion activities twice a week and more than twice a week were considered to be high extents of adoption of excursions approach while those that engaged learners in excursion activities once a week, once in two weeks and not at all were considered to be low extents of adoption of excursions approach.

To gain more understanding of the influence of excursions approach on learner participation in environmental conservation activities parents of pre-primary children gave responses which also indicated that pre-primary learners engage in excursion activities which promote environmental conservation activities. Responses given by some respondents were as follows:

**Respondent 9 reported:**

“The teacher always informs us about upcoming trips and the requirements. I always pay money for trips. There was a time the children visited an animal farm in Isinya. After the trip, my child is always excited about animals we keep at home and always wants to feed them. I have even bought a rabbit for them. They usually collect leaves and weeds from the shamba to feed the rabbit every day.”

To add on that, **Respondent 11 supported by reporting that:**

“My child informs me about the occurrences at school. There was a day she told me that they had a walk to a forest near the school where they observed different trees and plants. Upon consulting with their teacher, she informed me that the learners usually have nature walks frequently to learn about their environment and how to take care of it.”

Further, **Respondent 15 said:**

“When I plan on going to the shamba, my child always follows me to the farm. They help me in weeding and
watering. They ask a lot of questions when we are in the shamba. One day she came home from school very excited and when I enquired from her about the excitement, she informed me that they went to the school farm and irrigated on the plants. My child always follows me to the shamba and tells me stories about the farm at school.”

The responses obtained revealed that pre-primary learners participate in excursion activities such as nature walks, field trips and visits to various sites. The excursion activities that learners engage in influences their participation in environmental conservation activities positively. The responses from parents of pre-primary learners match the findings that use of excursions approach has positive effects in improving participation of learners in learning activities through reducing stress, increasing health and focus in activities [27]. The findings are also supported by the study findings that nature walks promote active participation in learning activities among learners [28].

4.2. Influence of Excursions Approach on Learner Participation in Environmental Conservation Activities

More respondents (72.3%) reported high extent of use of excursions approach compared to those who reported low extent of use the approach (27.7%). A greater number of respondents (56.9%) revealed high learner participation. Cross tabulated results indicated that more respondents (45.6%) with high extent of use of excursions approach perceived influence of excursions approach on learner participation to be high as compared (26.7%) who reported low learner participation. However, (16.4%) of respondents with low use of excursions approach reported low learner participation as compared to (11.3%) who reported high learner participation. Table 3 provides Chi-square analysis results on the influence of excursions approach on learner participation in environmental conservation activities.

| Table 2. Influence of Excursions Approach on Learner Participation. |
|----------------------------------|------------------|------------------|------------------|
|                                  | Learner Participation |                |
|                                  | Low               | High             | Total            |
| Extent of use of excursions approach | 16.4%         | 11.3%           | 27.7%            |
| High                           | 26.7%           | 45.6%           | 72.3%            |
| Total                          | 43.1%           | 56.9%           | 100%             |

| Table 3. Influence of Excursions Approach on Learner Participation in Environmental Conservation Activities. |
|----------------------------------|------------------|------------------|------------------|
|                                  | Value            | Df               | Sig              | CC               |
| Pearson Chi-Square               | 7.976*           | 1                | .004             | 0.198            |
| Continuity Correction*           | 7.089            | 1                |                  |                  |
| Likelihood Ratio                 | 7.936            | 1                |                  |                  |
| Fisher’s Exact Test              | 7.935            | 1                |                  |                  |
| Linear-by-Linear Association     | 7.935            | 1                |                  |                  |
| N of Valid Cases                 | 195              |                  |                  |                  |

Chi-Square results \( \chi^2(1) =7.976, p<0.05 \) indicated as a significance influence of excursions approach on learner participation in in environmental conservation activities. Contingency Coefficient measure of association (CC) illustrated a 19.8% variation of learner participation due to excursion approach. Findings implied that use of excursion approach significantly influences learner participation in environmental conservation activities. Learner participation in environmental conservation improved by 19.8% when excursions approach is used during the teaching and learning of environmental conservation among pre-primary learners. The results concur with study results which revealed that excursions approach has positive effects in improving participation of learners in learning activities through reducing stress, increasing health and focus in activities [27]. The findings are also matching with study findings which revealed that nature walks promote active participation among learners [28].

5. Conclusion

Findings revealed that a great percentage of respondents used excursions during environmental conservation activities. The parents were also involved in excursions by financing the learners for field trips, visiting the home garden with their children and keeping in touch with the teachers concerning the excursion activities organized at school. Learners participated in nature walks, visits to the school farm, visits to various sites and field trips. The study concluded that use of excursions approach highly influenced learner participation in environmental conservation activities. The study recommends that teachers who use excursions approach in low rates to improve its use as this approach increase learners’ participation in environmental conservation activities. Headteachers should encourage the use of excursions approach in instruction of pre-school learners so as to improve learner participation in environmental conservation activities. Parents should cooperate with teachers in promoting excursion activities that promote learner participation in environmental conservation activities.

References


