

UNIJERPS
Unizik Journal of Educational Research and Policy Studies VOL.16 (1);
https://unijerps.org
2021 Impact Factor: 5.641; 2020 Impact Factor: 5.355.
July-December, 2023
Indexing and Impact Factor URL: http://sjifactor.com/passport.php?id=21363

IMPACT OF HOWARD GARDNER'S MULTIPLE INTELLIGENCE TEACHING-BASED STRATEGY ON LEARNING OUTCOME OF INTERNALLY DISPLACED CHILDREN IN BORNO STATE

A. K. Sandabe[1], V. E. Okereke[2] and I. M. Danjuma[3]
[1]Department of Art Education, Faculty of Art and Education, Borno State University
[2,3]Department of Educational Foundations, Faculty of Technology Education, Abubakar Tafawa Balewa University, Bauchi

ABSTRACT

This study focused on impact of Howard Gardner's multiple intelligence teaching-based strategies on learning outcomes of internally displaced children in Borno State. Child's right to education does not end in times of conflict and displacement. During conflict and displacement education plays a critical role as a building block of recovery, resilience and long -term development. The Internally displaced children in Borno state are out of school for a significant period of time before they are enrolled into non-formal learning centers to continue with their education in the non-formal learning settings. Therefore, the study adopted multiple intelligence teaching strategies in teaching Basic science. This study was guided by two objectives and two hypotheses. The study was a pre-test- post-test quasi-experimental design with study sample of sixty (60) post literacy level three learners from two non-formal learning centers for internally displaced children. Both the experimental and control groups consist of thirty (30) participants each. The samples were selected through purposive sampling techniques. The experimental group was drawn from the Agency Model Non-Formal Learning Center and the control group from Maimusari Non-Formal Learning Centers. The researcher selected two (2) intact classes from the sampled learning centers. The experimental group was instructed through teaching strategy based on Multiple Intelligence while the control group was instructed using teaching strategy based on traditional (conventional) methods. The treatment lasted for 12 weeks. Data was collected using a Learners' Ability Test (LAT) for pre-test- post -test. Collected data were analyzed using Independent Sampled t-test. The study revealed that, there was significant difference in the mean score of learners in favour of the experimental group who were taught using multiple intelligence strategies, $(t = 1.342, df = 58, p - value = 0.038)$. *The study also revealed that, there was no significant difference in the learning outcome of male and female when taught using multiple intelligence based teaching strategy*$(t = 1.092, df = 28, p - value = 0.284)$. *The study recommended that, teachers should be trained in ways to infuse their content with a multiple intelligence context to help create more reliable and engaging learning experience for Internally Displaced Children in the formal learning centres.*

Keywords: Howard Gardner's Multiple Intelligence Teaching-Based Strategies; Learning Outcomes of Internally Displaced Children

Introduction

Educational system in Nigeria has been undergoing series of transformations with corresponding changes in the curriculum. The content of the curriculum has seen many changes due to various developments in Nigerian system of education. As it is evident that nothing in this world is fixed and rigid, as every entity is subject to change, so the curriculum is no exception. The societal changes are complex, and they call for curriculum changes to ensure functionality of the members of the society. Since the curriculum is a vehicle through which educational goals are attained, such changes are introduced in the school programs to align the educational goals to the needs and desires of the society. Modern-day society imposes a pedagogy of diversity, so the current curriculum must recognize the diversity of human being and individual differences. Therefore, the educational instructions in schools as a matter of fact be organized in such a way to adapt to variety of students. This will go a long way with the shift from the traditional teacher-centered approaches to learner –centered.

Shifting focus from one approach of teaching to the other has been a constant tradition and necessary as asserted by Gray (1997). To Gray the process in which humans learn and understand information is constantly evolving because educational curricula and teaching methods are ever changing. He further stressed that one component of the current redevelopment of all subject area curricula is the change in focus of instruction from the transmission curriculum to transactional curriculum. According to him, in traditional curriculum, a teacher transmits information to students who passively listen and acquire facts, but in a transactional curriculum, students are actively involved in their learning to reach new understandings. Therefore, the teaching practices used in the current education system in Borno state's non-formal learning centers need to be reorganized. Internally displaced children have lost out of education due to the description experience during the conflict of insurgency. Learners are known to be different naturally, couple with the disruption in learning, they need a different learning design to carter for their unique needs.

Gardner (1999) stressed that every learner has a unique configuration of intelligence that uniqueness should be taken into consideration when teaching. He further maintained that teachers need to take into consideration the best ways students learn and understand information in their unique ways. For this reason, there is need for teachers to provide different learning opportunities by creating an enhanced learning environment that can explore students' areas of strength, while broadening their ways of thinking. In the same vain Lumei and Turda (2021) observed that as long as diversity is what characterizes the class of students, then it must also characterize the instructive -educational process with all that entails, diversity in topics covered, methods and techniques and Materials used.

The conflict of insurgency of the recent years has brought the rapid influx of internally displaced persons into Maiduguri, the Borno

state capital, which resulted to population growth; overstretching existing school structures; challenges of access, retention, and school completion for the children of the internally displaced persons (UNICEF 2021). According to the UNICEF report in 2021, the internal displaced children in Borno face unique challenges: having fleet their homes to find safety after experiencing violence, trauma or loss of their loved ones. Compounding this situation, the Covid-19 pandemic has complicated the existing challenges in accessing quality education. To support the internally displaced children in the state, the report further submit that donor agencies and Non-governmental organizations provide packages such as the provision of vocation skills acquisition and non-formal education to young people. The education of displaced children in an essential part of providing them with some of form of knowledge, emotional stability and security.

The non-formal educational programme for the internally displaced children teach an accelerated curriculum, aiming to get these children catch up and matriculated into formal schools in nine months. The non-formal centers operate an inclusive class instruction, where every child is given lesson at same time under same roof by the same teacher using multi-grade teaching strategies at time. The learner-centered approach may not necessarily accommodate the general class setting provided in the non-formal school. Thus, the need to explore the best strategy to teach those children with different needs under the care of the same teacher for a just period of 6 months Kalean & Batlolona, 2023.

Every child has more than one intelligent as claims by Gardner, which is often not tapped by teaching in the conventional practice. As such, teachers should employ different strategies that can ignite learners' different learning capabilities for effective learning. For this, employing the idea of multiple intelligence as a teaching strategy may resolve the general all-inclusive classroom teaching in the non-formal learning settings as a result of emergency. Previous studies have shown that, multiple intelligence teaching strategy is effective in teaching and learning (Abdelhak and Romaissa, 2022; El-Bassiouny, Wilson and Esmat, 2017; Haddaji, 2022; Hasan, 2023 and Spirovska, 2013).

Borno State Government in its realization and commitment to the fact that education is a critical driver of constructive social change and development. The state has invested heavily in the development of its education infrastructure, the state embarked on empowering its entire population through improve and non-discriminatory access to qualitative education, which would enable everyone in the state to be more productive member of the community, as stated in the State Education Sector Operation Plan (SESOP 2017). However, achieving education for all children in Borno State need a secure teaching and learning environment. The state education sector has seen some good times before its devastation by the conflict of the insurgency in the 2009 which brought the development initiative of the

state to a sudden halt (Chavarría-Garza et al., 2022).

In the past years, education sector has negatively been affected and schooling has continuously been interrupted, children were displaced leading to a high level of trauma, for these children, not only is their education development denied, but they are deprived of other important benefits as well. Going to school is known to provide a degree of stability and normalcy in the traumatized lives of internally displaced children and access to education is an important element of internally displaced persons (IDPs) integration into the local community where they are displaced. With the large number of children out of school, as reported by UNICEF 2015, most of whom are internally displaced children. Borno State will suffer socially, economically and even politically unless meaningful intervention is devised to circumvent the situation. It is a fact that, failure to provide learning opportunities for uprooted children has profound consequences for individuals and nations, children and youths on the move with low levels of education are at increased risk of exploitation and the tendency to be vulnerable in the community to be employed as political thugs and later become criminals, (UNICEF 2017).

Despite the fact that education is a vital prerequisite for protecting children from hazardous, exploitative labour and makes a lot of difference to the survival, growth and development of children. And the fact that education requires learners to be able to use the knowledge and skill gained to create something new, be able to make sensible opinions, communicate and work with other learners to build a more optimal ability. Internally displaced children are more likely to miss out on such knowledge and skills than their peers. Internally displaced children have certain needs that are distinct from the general population, due to their unique needs and vulnerability that arise as result of force displacement. A major challenge facing internally displaced children in Borno State is to get expose to a positive learning environment and gaining access to educational opportunities. Displacement often presents specific barriers to teaching and learning. The major effects of displacement that relate to education includes loss of human resources, pressure on the already overstretched educational infrastructure in the host community and of lack of resources to purchase learning materials among other issues which leads to internally displaced children learning challenges.

This research work focuses on the impact of multiple intelligence teaching– based strategies which is a learner –centered learning strategy, which also focuses on identifying learner talent, and learning preference and providing the best way for learning on learning outcomes among internally displaced children through adopting Howard Gardner's multiple intelligences teaching-based strategies.

Research Hypotheses

The following hypotheses were tested at 0.05 level of significant:

H_{01}: There is no significant difference in the mean scores of learners in basic science

of experimental and Control groups before the intervention.

H_{02}: There is no significant difference on learning outcome of male and female learners taught basic science using multiple intelligence teaching-based strategies.

Research Method

This study employed a Quasi-experimental design, specifically the non- equivalent control group design. This is because the sample (internally displaced learners) of study were located in their intact classes. This study has a target of 60 pupils across the two non-formal learning centers within the internally displaced persons (IDPs) Camps in Maiduguri Metropolitan Council and, Jere local government area of Borno state. Purposive sample technique was used in this study. A personal data sheet and an assessment test prepared by the researcher in Basic science, an interview for learners and Instructional Module was used to examine the impact of multiple intelligences teaching-based strategies in on learning outcome among internally displaced children in non-formal learning centers. The test items were prepared by the researcher taking into consideration the ability of learners, suitability of the content, previous knowledge related to daily life situation and content of the unit learned. The test prepare by the researcher was given out for both content and face validation to two basic science subject teachers, the head teacher of both learning centers and experts. Data collected were analyzed using independent sample t-test.

Presentation of Results

Age of the Respondents

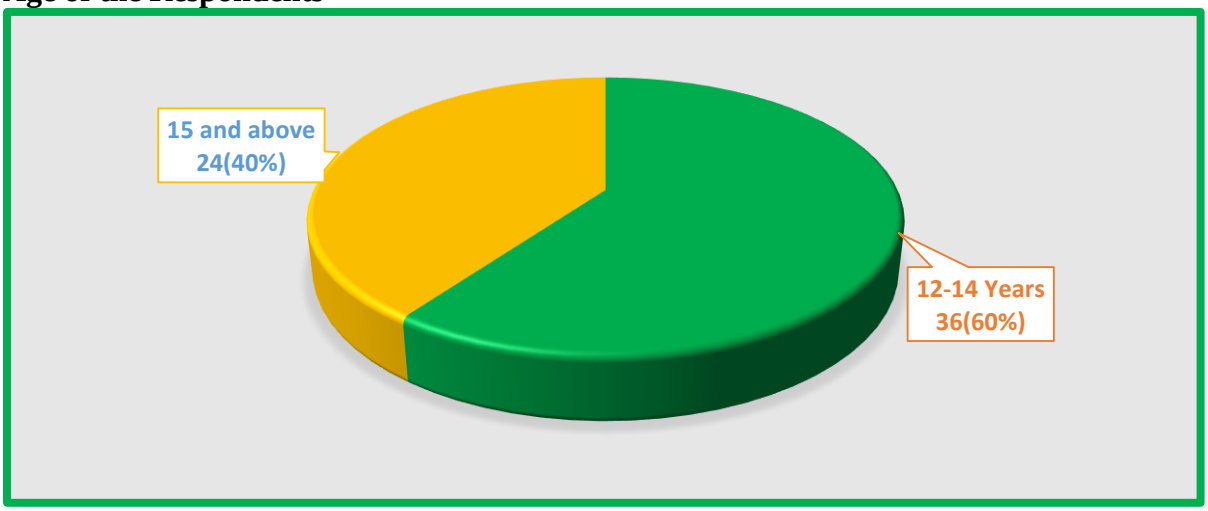


Figure 1: Age distribution of the respondents

Figure 1 gives the age distribution of the respondents. Results revealed that 36 learners representing 60% are between 12-14 years while 24 learners representing 40% are 15 years and above.

Gender of the Respondent

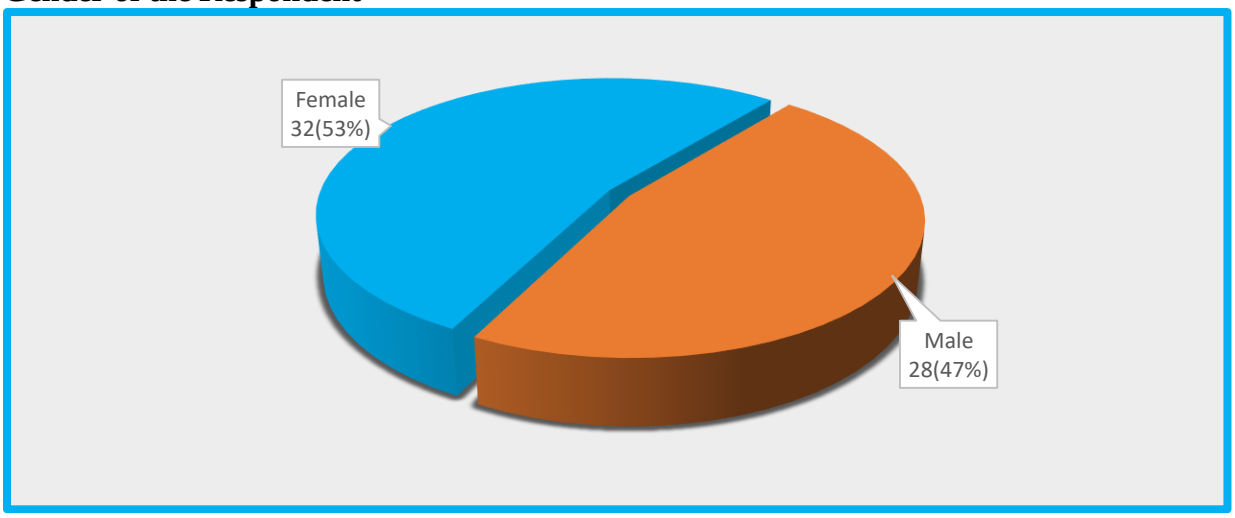


Figure 2: Pie chart showing the gender distribution of the learners

The pie-chart in figure 2 gives the gender distribution of the respondents. The figures revealed that 32 learners representing 53% are female while 28 learners representing 47% are male both from the experimental and control groups. There is almost equal percentage of respondents because of the enrolment of the non-formal learners obtained from the school registers and those from the office of the Director Literacy unit of the agency for mass literacy in the state where the research was carried out. This implies that there is negligible difference in the enrolment potentials of non-formal learners in the selected learning Centers.

Hypothesis One: There is no significant difference on the pre-test mean score of learners in the experimental and control group before the treatment.
Independent sample t-test was used to test the mean difference of the experimental and control groups and the summary of the analysis is presented on table 1 below:

Table 1: Independent sample t-test on the mean difference of results of experimental and control groups

	Group	N	Mean	SD	df	t-value	p-value
Pre-Test	Experimental	30	11.03	4.92	58	-1.342	0.185
	Control	30	12.43	3.01			
Post-Test	Experimental	32	16.25	6.16	58	2.124	0.038
	Control	30	13.53	3.43			

Table 1 gives the mean difference of pre-test and post-test results between the experimental and control groups. Results revealed that, there was no significant difference in the pre-test results ($t-value = -1.342, df = 58, p-value = 0.185$) because the p-value (0.185) is greater than the level of significance (0.05). The post-test results shows that, there was significant difference in the mean score of the learners between the experimental and control group ($t-value = 2.124, df = 58, p-value = 0.038$). Therefore, hypothesis one is rejected and hence, multiple intelligence teaching strategy has significant influence on learning outcomes of learners in the learning centers.

Hypothesis Two: There is no significant effect of multiple intelligence teaching-based strategies on learning outcome of male and female leaners taught using multiple intelligence approach.
Independent sample t-test was used to test the mean difference between male and female students taught using multiple intelligence teaching-based strategies and summary of the analysis is presented on table 2.

Table 2: Independent Sample t-test on gender difference in learners learning outcome when taught using multiple intelligence-based strategy

	Gender	N	Mean	SD	df	t-value	p-value	Remark
Post-test	Male	15	17.93	7.507	28	1.092	0.284	Accept H_{02}
	Female	15	15.53	4.015				

Table 2 show gender difference in learner's learning outcome when taught basic science using multiple intelligence teaching-based strategies. Results revealed that, there was no significant difference on learners' learning outcome based on gender in the experimental group after being taught basic science using multiple intelligence teaching-based strategies because the p-value (0.284) is greater than the level of significant (0.05). Hence, the null hypothesis of no significant effect of multiple intelligence teaching-based strategies on learning outcome of male and female was accepted.

Conclusion and Recommendation

Multiple intelligence teaching strategies in classroom teaching, can provide opportunities for reliable learning based on learners' needs, interest and talents. Hence, the successful results of multiple intelligence teaching based strategies can be concluded as an indication of its effectiveness in improving learner's performance in Basic science. The study concludes that in a multiple intelligence teaching strategy, learners from different backgrounds can identify how they learn best, while exploring various ways of learning and understanding new information. The study recommended that, teachers should be trained in ways to infuse their content with a multiple intelligence context to help create more reliable and engaging learning experience for learners.

References

Abdelhak, H., & Romaissa, C. (2022). Incorporating Multiple Intelligences Theory in the Learning and Teaching Operation: Teacher's Guide. *British Journal of Teacher Education and Pedagogy*, *1*(1), 83-89.

Chavarría-Garza, W. X., Santos-Guevara, A., Morones-Ibarra, J. R., & Aquines-Gutiérrez, O. (2022). Assessment of Multiple Intelligences in First-Year Engineering Students in Northeast Mexico. *Sustainability*, *14*(8), 4631.

El-Bassiouny, N. M., Wilson, J. A., & Esmat, S. (2017). An Islamic macromarketing perspective on sustainability. *Journal of Islamic Marketing*.

Gage, N. A., Grasley-Boy, N., Peshak George, H., Childs, K., & Kincaid, D. (2019). A quasi-experimental design analysis of the effects of school-wide positive behavior interventions and supports on discipline in Florida. *Journal of Positive Behavior Interventions*, *21*(1), 50-61.

Gardner,H. (1993) Frames of mind: Theory of Multiple Intelligences.(10th anniversary Ed).Basic Books.

Haddaji, H. (2022). Incorporating Multiple Intelligences in L2 Writing Classes: New Horizons in Redefining the Classroom. *International Journal of Language and Literary Studies*, *4*(3), 76-94.

Hasan, K. S. (2023). Intelligence Differences between Genders based on Multiple Intelligence (MI) Theory. *AIJR Preprints*, 1-6.

Kalean, A., & Batlolona, J. R. (2023). Gardner intelligence in physics students in Maluku, Indonesia. *Jurnal Penelitian Pendidikan IPA*, *9*(1), 305-314.

Spirovska, E. (2013). Integrating multiple intelligences in teaching English as a foreign language-SEEU experiences and practices. *SEEU review*, *9*(1), 9-20.