

BUSINESS REVIEW

EFFECT OF HANDS-ON INSTRUCTIONAL APPROACH ON PUPILS' ACHIEVEMENT AND RETENTION IN CULTURAL AND CREATIVE ARTS

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ABSTRACT

Purpose: The purpose of this study was to examine the effects of a hands-on educational approach on pupils' achievement and retention in the Cultural and Creative Arts.

Theoretical Framework: The theoretical framework for this study is based on cognitive learning and experiential learning.

Methodology: Study participants were primary five pupils in Oshimili South Local Government Area, Delta State. As part of this study, ten hands-on activities were used to engage primary five pupils in the learning process. Hands-on activities included magazine family puppets, musical glasses, painting to music, PVC sculptures, roll an activity, sound boxes, sound cans, sun shadow pictures, and swinging to music. Using a quasi-experimental design, two research questions and two hypotheses were developed and tested at a 0.05 level of significance. The study involved 100 primary five pupils from ten primary schools. Participants were divided into experimental and control groups (n=50). Culture and creative arts were taught through hands-on activities in the experimental group, but not to their counterparts in the control group. Despite this, after four weeks of experimentation, pretest and posttest data were collected from both groups. Data were collected using the Cultural and Creative Arts Achievement Test (CCAT) and the Cultural and Creative Arts Retention Test (CCRT). Participants were given the instruments directly by their respective group leaders. Based on the mean and standard deviation of the test scores, ANOVA was used to test the hypotheses.

Findings: A significant effect of hands-on instruction on pupils' achievement and retention in cultural and creative arts was found. Based on the findings, the researchers recommended that pupils should be exposed to sophisticated hands-on materials to improve their achievement and retention in cultural and creative arts, and that teachers also be trained on how to use hands-on instructions in the classroom.

Research, Practical & Social Implications: The study promotes active engagement and participation, which allows pupils to actively participate in the learning process. They gain a better understanding of the subject matter and retain more information. The hands-on approach promotes creativity and problem-solving skills. Pupils are encouraged to think critically, solve problems, and come up with innovative solutions through hands-on activities. As a result, their creative thinking skills are enhanced, and they are prepared for future challenges in the creative arts industry.

Originality/Value: In the cultural and creative arts domain, hands-on instructional methods offer originality and uniqueness. Pupils gain a deeper understanding of subjects through interactive and hands-on classroom experiences. Hands-on activities

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| can assist teachers in creating a more engaging and effective learning environment, resulting in improved pupil performance and retention. |
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EFEITO DA ABORDAGEM PEDAGÓGICA PRÁTICA NA REALIZAÇÃO E RETENÇÃO DOS ALUNOS EM ARTES CULTURAIS E CRIATIVAS

RESUMO

Objetivo: O objetivo deste estudo foi examinar os efeitos de uma abordagem educacional prática sobre a realização e retenção dos alunos nas Artes Culturais e Criativas.

Estrutura Teórica: A estrutura teórica para este estudo é baseada na aprendizagem cognitiva e aprendizagem experiencial.

Metodologia: Os participantes do estudo foram cinco alunos primários na Área de Governo Local do Sul de Oshimili, no Estado do Delta. Como parte deste estudo, dez atividades práticas foram usadas para envolver cinco alunos primários no processo de aprendizagem. As atividades práticas incluíam marionetes de família de revistas, óculos musicais, pintura para música, esculturas de PVC, rolar uma atividade, caixas de som, latas de som, imagens de sombra de sol e balançar para a música. Usando um desenho quase experimental, duas questões de pesquisa e duas hipóteses foram desenvolvidas e testadas com um nível de significância de 0,05. O estudo envolveu 100 alunos de cinco escolas primárias de dez escolas primárias. Os participantes foram divididos em grupos experimentais e de controle (n=50). Cultura e artes criativas foram ensinadas através de atividades práticas no grupo experimental, mas não para seus homólogos no grupo de controle. Apesar disso, após quatro semanas de experimentação, dados pré e pós-teste foram coletados de ambos os grupos. Os dados foram coletados usando o Teste de Realização de Artes Culturais e Criativas (CCAT) e o Teste de Retenção de Artes Culturais e Criativas (CCRT). Os participantes receberam os instrumentos diretamente por seus respectivos líderes do grupo. Com base na média e desvio padrão dos escores de teste, ANOVA foi utilizado para testar as hipóteses.

Descobertas: Um efeito significativo da instrução prática sobre a realização e retenção dos alunos em artes culturais e criativas foi encontrado. Com base nesses resultados, os pesquisadores recomendaram que os alunos fossem expostos a materiais práticos sofisticados a fim de melhorar seu desempenho e sua retenção nas artes culturais e criativas, e que os professores também fossem treinados sobre como usar instruções práticas em sala de aula.

Investigação, Implicações Práticas e Sociais: O estudo promove o envolvimento ativo e a participação, o que permite aos alunos participar ativamente no processo de aprendizagem. Eles obtêm uma melhor compreensão do assunto e retêm mais informações. A abordagem prática promove a criatividade e habilidades de resolução de problemas. Os alunos são incentivados a pensar criticamente, resolver problemas e chegar a soluções inovadoras através de atividades práticas. Como resultado, suas habilidades de pensamento criativo são aprimoradas, e eles estão preparados para desafios futuros na indústria de artes criativas.

Originalidade/Valor: No domínio das artes culturais e criativas, os métodos instrucionais práticos oferecem originalidade e singularidade. Os alunos obtêm uma compreensão mais profunda dos assuntos através de experiências interativas e práticas em sala de aula. As atividades práticas podem ajudar os professores a criar um ambiente de aprendizagem mais envolvente e eficaz, resultando em um melhor desempenho e retenção dos alunos.

Palavras-chave: Instrução Prática, Alunos, Realização, Retenção, Arte Cultural, Artes Criativas.

EFECTO DEL ENFOQUE INSTRUCCIONAL PRÁCTICO EN EL RENDIMIENTO Y RETENCIÓN DE LOS ALUMNOS EN LAS ARTES CULTURALES Y CREATIVAS

RESUMEN

Objetivo: El objetivo de este estudio fue examinar los efectos de un enfoque educativo práctico sobre el rendimiento y la retención de los alumnos en las artes culturales y creativas.

Marco Teórico: El marco teórico para este estudio se basa en el aprendizaje cognitivo y el aprendizaje experiencial.

Metodología: Los participantes en el estudio fueron cinco alumnos de primaria de la zona de gobierno local de Oshimili Sur, en el estado de Delta. Como parte de este estudio, se utilizaron diez actividades prácticas para involucrar a cinco alumnos de primaria en el proceso de aprendizaje. Las actividades prácticas incluyeron títeres familiares de revistas, gafas musicales, pintura a la música, esculturas de PVC, rollo de una actividad, cajas de sonido, latas de sonido, imágenes de sombras solares y columpios a la música. Mediante un diseño cuasi-experimental, se desarrollaron dos preguntas de investigación y dos hipótesis, las cuales se probaron en un nivel

de significancia de 0,05. Participaron en el estudio 100 alumnos de primaria de cinco escuelas de diez escuelas primarias. Los participantes se dividieron en grupos experimentales y control (n=50). La cultura y las artes creativas se enseñaron mediante actividades prácticas en el grupo experimental, pero no a sus contrapartes en el grupo de control. A pesar de esto, después de cuatro semanas de experimentación, se recolectaron datos pretest y postest de ambos grupos. Los datos se recolectaron mediante el Test de Logro de las Artes Culturales y Creativas (CCAT) y el Test de Retención de las Artes Culturales y Creativas (CCRT). Los participantes recibieron los instrumentos directamente de los líderes de sus respectivos grupos. Con base en la media y desviación estándar de las puntuaciones de las pruebas, se utilizó ANOVA para probar las hipótesis.

Hallazgos: Se encontró un efecto significativo de la práctica en el rendimiento y retención de los alumnos en las artes culturales y creativas. Sobre la base de los resultados, los investigadores recomendaron que los alumnos estuvieran expuestos a materiales prácticos sofisticados para mejorar su rendimiento y retención en las artes culturales y creativas, y que los maestros también recibieran capacitación sobre cómo utilizar las instrucciones prácticas en el aula.

Investigación, Implicaciones Prácticas y Sociales: El estudio promueve el compromiso activo y la participación, lo que permite a los alumnos participar activamente en el proceso de aprendizaje. Adquieren una mejor comprensión del tema y conservan más información. El enfoque práctico promueve la creatividad y las habilidades para resolver problemas. Se anima a los alumnos a pensar críticamente, resolver problemas y proponer soluciones innovadoras a través de actividades prácticas. Como resultado, sus habilidades de pensamiento creativo mejoran, y están preparados para futuros desafíos en la industria de las artes creativas.

Originalidad/Valor: En el ámbito de las artes culturales y creativas, los métodos de instrucción práctica ofrecen originalidad y singularidad. Los alumnos adquieren una comprensión más profunda de las materias a través de experiencias interactivas y prácticas en el aula. Las actividades prácticas pueden ayudar a los maestros a crear un entorno de aprendizaje más atractivo y eficaz, lo que redunda en un mejor rendimiento y retención de los alumnos.

Palabras clave: Instrucción Práctica, Alumnos, Logros, Retención, Arte Cultural, Artes Creativas.

INTRODUCTION

Primary and junior secondary schools in Nigeria offer courses in Cultural and Creative Arts (CCA). Primary and junior secondary schools are required to teach it as part of Universal Basic Education (UBE). It was designed to develop pupils' aesthetic talents and equip them with more entrepreneurial skills (Igbokwe & Ogboji, 2014). As a result, CCA combines art, crafts, drama, and music; as such, it is taught as both visual arts and performance arts. As well as providing pupils with manipulative skills to become job creators and self-reliant entrepreneurs, CCA encourages partnerships that enrich the nation's cultural heritage (Igbokwe & Ogboji, 2014). Through a variety of art experiences (creative growth), CCA provides pupils with opportunities to express ideas, feelings, emotions, and moods. Moreover, it enhances the mental and physical abilities of pupils.

As such, CCA should provide for all Nigerian children, regardless of their creed, ethnicity, or socioeconomic background, while advocating the education of the whole child, ensuring the integration of cognitive, affective, psychomotor, aesthetic, and cultural development. Consequently, to ensure that children maintain meaningful connection with their roots without losing their ability to cope with modern living problems- without losing their ability to entertain themselves, and others- culture as part of the dynamic life of society should also grow and change to respond to societal changes (e.g., economic changes). This is why teachers are so important.

It is critical that teachers' roles are not undermined when it comes to implementing the CCA curriculum. There are many ways in which teachers are involved in the work that pupils do in school. In teaching and learning situations, teachers play a central role, and they are held to high standards. A good teacher is endearing to his or her pupils because of some personal characteristics. For their teaching to be interesting to pupils, they need to have knowledge of both content and subject pedagogy. An effective teacher produces effective pupils. The effectiveness of both teaching and learning depends largely on the ability of the teacher. To acquire learning and achieve CCA objectives, elementary and junior secondary school pupils need guidance from their teachers through planned activities.

Traditionally, teachers stand in front of classes and deliver lectures based on textbook recommendations. The most common reason why pupils struggle in school activities is their inability to pay attention and retain what the teacher teaches. Learning is primarily a kinesthetic experience, whether it is for adults or children. Taking a hands-on approach to learning, they learn by doing. As a result, they can retain information and focus on the topic at hand. Incorporating hands-on learning activities into the teaching curriculum is helping teachers create a rewarding learning experience for pupils. Pupils remain interested and remember information through hands-on learning methods that combine visuals, listening, and doing. All topics and subjects can be covered with it, but CCA is especially suitable. For pupils engaged in hands-on methodology learning, learning goes beyond lectures and books. Using hands-on activities in the classroom encourages pupils to attend class and helps them retain information. As part of hands-on learning, pupils participate in activities while the lesson is being taught. By encouraging lifelong learning, it motivates pupils to explore and discover new things (Bass, Danielle, & Julia 2021).

In primary schools and junior secondary schools, the traditional teaching methods are not working in teaching CCA, a subject that combines arts, crafts, drama, and music. In primary and junior secondary schools, most pupils leave school with only a basic understanding of ideas and facts. Due to this, learners' innate potential and skills are stifled and underdeveloped since they pass tests without thinking creatively, skillfully, or "beyond the box." Due to this, learners lack the ability to learn and cope in a rapidly changing world of culture and creativity, which makes it difficult for them to adjust to adulthood.

Primary and secondary education encourages active participation, creativity, and curiosity through practical activities. To engage pupils in learning through doing, teachers are expected to use more participatory, exploratory, and practical methods. Teaching and learning

can be effectively accomplished through hands-on methods. Science and mathematics have a long and successful history of hands-on instruction (Basista & Matthews, 2018; Bredderman, 2020). As a result, hands-on teaching appears to be effective in teaching CCA. Providing hands-on instructions fosters 21st-century skills that pupils need to succeed, including critical thinking, communication, collaboration, and creativity (Bass, et al., 2021).

Researchers examined the effects of hands-on instruction in cultural and creative arts on pupils' achievement and retention. A specific focus of the study was to investigate:

- 1. Effect of a hands-on instructional approach on primary five pupils' cognitive achievement in Cultural and Creative Arts.
- 2. Effect of a hands-on instructional approach on primary five pupils' retention of learning in cultural and creative arts.

LITERATURE REVIEW

Getting hands-on means being involved in the process. Therefore, a hands-on instructional approach engages pupils in learning. Taking part in hands-on instruction allows pupils to learn from each other and their mistakes. Hands-on learning activities are designed to take pupils outside of their classrooms, out of their books, sometimes out of their seats, sometimes out of their schools, and sometimes out of any familiar thinking, according to Silberman (2016). Through hands-on activities, pupils become active participants in their own learning (Buehi, 2021). It has been shown that hands-on teaching enhances learners' performance and depth of knowledge and supports 21st-century skills such as communication, creativity, collaboration, and critical thinking (Partnership for 21st Century Skills, 2019), which emphasize learning and innovation. To achieve learning outcomes, well-designed hands-on activities spark learners' curiosity, guide them through engaging experiences, and help them focus their attention on the world around them.

Teachers are less involved in learning when pupils engage in hands-on activities. Teachers do not have to speak at every step. They need only to provide pupils with instructions and directives on how their activities would be graded at the introduction of a task. In addition, they need to provide pupils with the requirements for each performance level. By setting clear expectations of what the teacher expects pupils to know and do, CCA makes pupils active learners who gain expertise on the subject as they get involved. Lizardi (2015) says hands-on learning builds on social interaction and allows pupils to input as they acquire various skills. Cooperstein and Kocevar-Weidinger (2017) stated that hands-on activities make intangible

ideas tangible, articulable, exchangeable, and recallable since people are more committed when performance is involved. In other words, when learners take learning into their own hands, they become proud and motivated to continue to grow and develop.

The construction of meaningful ideas can be achieved by pupils through making projects, crafting, or repurposing familiar materials. Cleaver (2015) notes that teachers should provide children with activities that encourage them to move around and engage themselves in their learning since children engage all their senses during learning. Activating children's brains through hands-on activities is important. Several studies (e.g., Bredderman, 2020; Basista & Matthews, 2018; Hmelo, 2019; Bass et al, 2021) have shown the advantages of hands-on teaching to include forwarding skills for analytical thinking, developing communicative abilities and language abilities, responsibility, providing underprivileged learners with a route to success, enhancing the learning experience, and enhancing academic enjoyment.

METHODOLOGY

The procedures involved in executing this study came under the following sub-headings: design of the study, area of the study, population for the study, sample and sampling technique, instruments for data collection, validation of instruments, reliability of instruments, experimental procedure, method of data collection and method of data analysis.

In this investigation, a quasi-experimental research design was used. It was designed using pre-test, post-test, and a non-equivalent control group. A quasi-experimental design is used when it is not possible to randomize subjects in a study since randomization may disrupt the existing academic programmes of the school, according to Gall, Gall and Borg (2007). To avoid disrupting the programmes at the sampled schools, the researchers worked with intact classes.

The study was conducted with ten primary schools in Oshimili South L.G.A of Delta State. Delta State is in the South-South States of Nigeria. The ten primary schools namely, Asaba, Oko, Okwe, Illah, Ebu, Eze, Otuogwe, Elenchele, Anwai, and Ibusa are equipped with the facilities and equipment required for the effective conduction of this study. The target population for the study comprised all 100 primary five pupils in the ten primary schools in Oshimili South L.G.A of Delta State. This population was not small compared to that of previous study (Khelil, 2023). Moreover, the population was similar to that of a recent study (Santhanam & Balaji, 2023).

In this study, data was collected using the Cultural and Creative Arts Achievement Test (CCAAT) and the Cultural and Creative Arts Retention Test (CCART). Twenty multiple-

choice questions are included in each instrument. In the school of Education, three lecturers face-validated the instruments. In the two tests, the scores of 0-49 implies low, 50-59 moderate, and 60-100 high achievement and retention. Pilot testing of the Test CCAAT and CCART was carried out to determine the instruments' reliability. Test-retest reliability technique was adopted to assess the reliability of the CCAAT while inter-raters were employed to determine the reliability of the CCART. Using the Pearson Product Moment Correlation Coefficient, the reliability coefficient of CCAAT was calculated with 20 sampled primary five pupils. The CCART inter-rater reliability was calculated using Spearman's Rho correlation coefficient. From the analysis, the reliability coefficient of 0.87 and 0.77 for CCAAT and CCART respectively. This study gained approval from University of Nigeria Ethics Committee.

The pretest was first conducted before the commencement of the treatment. This exercise provided baseline data that was used to compare pupils in both groups. The treatment for the experimental group was the hands-on lesson plans. The experimental group was taught 8 lessons with the hands-on lesson plans while the control group was taught the same 8 lessons with the conventional lesson plans. Each lesson lasted 30 minutes. The treatment itself lasted four weeks. At the end of treatment, a post-test was administered to both groups with the CCAT and the CCRT. Two weeks after the retention test, the scores obtained from both groups were compared to determine if there was any significant difference in the achievement and retention of learning in the two groups.

Both pretest and posttest scores were recorded and compared between the two groups. The mean and standard deviation of test scores presented in one table while analysis of covariance (ANCOVA) was used to test the hypotheses.

RESULTS AND DISCUSSION

Table 1: Descriptive statistics showing mean and standard deviation of pupils' achievements in cultural and creative arts

| | | | | creative arts | | | | |
|-----------------------|----------------------------|-----|---------|----------------|---------------|-------------------------------------|-------------|--|
| | | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | |
| | | | | | _ | Lower Bound | Upper Bound | |
| Achievement pretest | Treatment group | 50 | 16.1200 | 6.76618 | .95688 | 14.1971 | 18.0429 | |
| | No-treatment control group | 50 | 14.2000 | 5.94190 | .84031 | 12.5113 | 15.8887 | |
| | Total | 100 | 15.1600 | 6.40820 | .64082 | 13.8885 | 16.4315 | |
| Achievement post-test | Treatment group | 50 | 66.6000 | 8.35928 | 1.18218 | 64.2243 | 68.9757 | |
| • | No-treatment control group | 50 | 11.7200 | 5.07913 | .71830 | 10.2765 | 13.1635 | |
| | Total | 100 | 39.1600 | 28.42382 | 2.84238 | 33.5201 | 44.7999 | |

Source: Prepared by the authors (2023).

Table 1 summarizes the effect of a hands-on instructional approach on pupils' achievement in cultural and creative art. The table reveals that at pretest, the difference between the mean scores and standard deviations of primary five pupils exposed to a hands-on instructional approach (treatment group) and pupils in the control group who were exposed the conventional instructional approach was not significant statistically as the groups scored the mean scores and standard deviations of 16.1200 ± 6.76618 and 14.2000 ± 5.94190 respectively. The results disclosed that primary five pupils had almost equal mean and standard deviation scores at pretest.

The table, however, revealed that at post-test, after intervention, there was a significant statistical difference between the mean scores and standard deviations of primary five pupils exposed to a hands-on instructional approach and pupils in the control group exposed to the conventional instructional approach with each group scoring 66.6000 ± 8.35928 and 11.7200 ± 5.07913 respectively for mean scores and standard deviations. The results showed that while primary five pupils who were exposed to a hands-on instructional approach had very high mean score and standard deviation score, primary five pupils who were instructed with a conventional approach had very low mean score and standard deviation score. This result demonstrates that hands-on instructional approach is effective in improving primary five pupils' achievement in cultural and creative art.

Table 2: ANOVA statistics showing effect of hands-on approach on pupils' achievement in cultural and creative

| | | a | rts | | | |
|-------------|----------------|-----------|-----|-------------|----------|------|
| | | Sum of | df | Mean Square | F | Sig. |
| | | Squares | | _ | | |
| Achievement | Between Groups | 92.160 | 1 | 92.160 | 2.273 | .135 |
| pretest | Within Groups | 3973.280 | 98 | 40.544 | | |
| _ | Total | 4065.440 | 99 | | | |
| Achievement | Between Groups | 75295.360 | 1 | 75295.360 | 1573.980 | .000 |
| post-test | Within Groups | 4688.080 | 98 | 47.838 | | |
| _ | Total | 79983.440 | 99 | | | |

Source: Prepared by the authors (2023).

Table 2 shows that when treated with a hands-on instructional approach, there was a significant difference in the achievements of primary five pupils in cultural and creative art against pupils not exposed to the hands-on treatment. After using ANOVA to test the hypothesis, primary five pupils exposed to a hands-on instructional approach had a significant score of [F(1,98) = 1573.980, p = 0.000]. Therefore, the hypothesis that there was no significant difference in the mean achievement scores of primary five pupils exposed to a hands-on instructional approach and those exposed to a conventional approach was rejected. By implication, there was

a significant difference between the mean achievement scores of primary five pupils exposed to a hands-on instructional approach and those exposed to a conventional approach.

Table 3: Descriptive statistics showing mean and standard deviation of pupils' retention in cultural and creative arts

| | | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | |
|-----------|----------------------------|-----|---------|-------------------|---------------|----------------------------------|-------------|
| | | | | | | Lower Bound | Upper Bound |
| Retention | Treatment group | 50 | 13.0000 | 4.29998 | .60811 | 11.7780 | 14.2220 |
| pretest | No-treatment control group | 50 | 12.1200 | 5.02094 | .71007 | 10.6931 | 13.5469 |
| | Total | 100 | 12.5600 | 4.67169 | .46717 | 11.6330 | 13.4870 |
| Retention | Treatment group | 50 | 70.2200 | 9.65801 | 1.36585 | 67.4752 | 72.9648 |
| post-test | No-treatment control group | 50 | 8.2800 | 1.93823 | .27411 | 7.7292 | 8.8308 |
| | Total | 100 | 39.2500 | 31.88818 | 3.18882 | 32.9227 | 45.5773 |

Source: Prepared by the authors (2023).

Table 3 summarizes the effect of hands-on instructional approach on primary five pupils' retention of learning in cultural and creative arts. The table reveals that at pretest, the difference between the mean retention and standard deviation scores of primary five pupils exposed to a hands-on instructional approach and primary five pupils in the control group who were exposed the conventional instructional approach was not significant statistically as the groups scored the mean scores and standard deviations of 13.0000 ± 4.29998 and 12.1200 ± 5.02094 respectively, showing that retention of learning between primary five pupils exposed to hands-on approach and those treated with the conventional approach was not statistically significant at pretest.

But at post-test, the table showed that there was a significant statistical difference between the retention mean scores of primary five pupils exposed to hands-on instructional approach and primary five pupils exposed to a conventional instructional approach with each group scoring 70.2200 ± 9.653801 and 8.2800 ± 1.93823 respectively for mean scores and standard deviations. The results showed that while primary five pupils who were exposed to a hands-on instructional approach had very high retention mean and standard deviation scores, primary five pupils who were instructed with a conventional approach had very low retention mean and standard deviation scores. This result demonstrates that hands-on instructional approach is effective in improving primary five pupils' retention of subject matters in cultural and creative art.

Table 4: ANOVA statistics showing effect of hands-on approach on pupils' retention in cultural and creative arts

| | | Sum of | df | Mean Square | F | Sig. |
|---------------------|----------------|------------|----|-------------|----------|------|
| | | Squares | | | | |
| Retention pretest | Between Groups | 19.360 | 1 | 19.360 | .886 | .349 |
| _ | Within Groups | 2141.280 | 98 | 21.850 | | |
| | Total | 2160.640 | 99 | | | |
| Retention post-test | Between Groups | 95914.090 | 1 | 95914.090 | 1976.920 | .000 |
| - | Within Groups | 4754.660 | 98 | 48.517 | | |
| | Total | 100668.750 | 99 | | | |

Source: Prepared by the authors (2023).

Table 4 shows the effect of hands-on instructional approach on primary five pupils' retention of learning in cultural and creative arts. After analysing the data of the hypothesis with ANOVA, primary five pupils exposed to a hands-on instructional approach had a significant score of [F(1,98) = 1976.920, p = 0.000]. Therefore, the hypothesis that there was no significant difference in the retention scores of primary five pupils exposed to hands-on instructional approach and those exposed to a conventional approach was rejected. By implication, there was a significant difference between the retention scores of primary five pupils exposed to hands-on instructional approach and those exposed to a conventional approach.

The findings of this study demonstrate that there is a significant difference between the mean achievement scores of primary five pupils exposed to hands-on instruction in cultural and creative art and primary five pupils exposed to the conventional approach in cultural and creative art in favour of pupils exposed to hands-on instruction. By implication, if pupils are allowed to get involved personally and practically in the learning of CCA, they will gain high achievement because they are active and not passive in the learning process. Thus, taking part in hands-on instructional programmes is effective in increasing the achievement scores of pupils. Similarly, the findings of the study showed that engaging in hands-on instructional activities is beneficial to primary five pupils as it boosts their retention of subject matters in the long run. These findings agree with various scholastic postulations concerning the advantages of hands-on instructional approaches to classroom activities.

For instance, the finding supports Bass's et al. (2021) observation that hands-on instructions are capable of transforming pupils' achievement to a better position. Bass et al. observed that pupils engaged in hands-on instructional learning goes beyond lectures and books and participate in activities that require their active involvement while the lesson is being taught, thereby encouraging lifelong learning and pupils' exploration and discovery of new things. The findings also agree with other researches which encourage learners' active participating in the classroom as a means of effecting a significant improvement in students' achievement and retention in school subjects (Silberman, 2016; Buehi, 2021). The findings also

agree that taking part in hands-on exercises enhances students' retentive memory in the classroom concerning a subject matter, builds on social interaction among pupils, makes intangible ideas tangible, articulable, exchangeable, and recallable, and allows pupils to input as they acquire various skills (Cooperstein & Kocevar-Weidinger, 2017; Lizardi, 2015). In conclusion, the findings of the study agree that hands-on instructions have significant effects on primary five pupils' achievement and retention of subject matters in cultural and creative art.

CONCLUSION

The success of teachers in classroom instructional delivery is associated with pupils' work-related efforts, which, if not properly harnessed can reduce the achievement and retention of subject matters by learners. Activity-based instructions such as hands-on instructional activities are significant if coordinated well in enhancing primary five pupils' achievement and retention in cultural and creative art. Pupils become redundant and passive in the teaching-learning situation if not constructively engaged in the learning process. Therefore, it is paramount for policymakers to ensure the effective implementation of hands-on instructional packages among pupils, especially primary five pupils, in order to foster pupils' improvement in achievement and retention of subject matters in creative and cultural art among primary five pupils. As such, teachers should be made to undergo periodic training on how to utilize hands-on instructional activities in the classroom to make meaning happen for learners.

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REFERENCES

Bass. K. M., Danielle. Y., & Julia. H. (2021). *The Effect of raft hands-on activities on student learning. engagement*, and 21st Century Skills. RAFT Student Impact Study. Rockman et al. 2011. Retrieved from http://www.raft.net/public/pdfs/Rockinan-RAFT-Report.pdf.

Basista. B., & Mathews. S. (2002). Integrated science and mathematics professional development programs. *School Science and Mathematics*, 102(7), 350-370.

Bredderman. T. (2020). Effects of activity-based elementary science on student outcomes: a qualitative synthesis. *Review of Educational Research*. 53(4), 499-518.

Effect of Hands-On Instructional Approach on Pupils' Achievement and Retention in Cultural and Creative Arts

Buehl. D. (2021). *Classroom strategies for interactive learning*. 2nd ed. Newark. DE: Internal Reading Association

Cleaver. S. (2015). Hands-On Is Minds-On. Scholastic.com.

Cooperstein. S. E., & Kocevar-Weidinger. E. (20045. Beyond active learning: A constructivist approach to learning. *Reference Services Review*, *32*(2) 141-148.

Gall. M. D., Gall. J.P. & Borg. W. R. (2007). *Education research:* An introduction. Boston: Pearson Educational Inc.

Hmelo-Silver, & Cindy E. (2019). Problem-Based Learning: What and flow do Students Learn?" Educational Psychology Review, 16, 235-266.

Igbokwe, U.L. & Ogboji, B.A (2014). A study of teachers perceptions of cultural and creative arts curriculum content in junior secondary schools in nigeria. *Global Journal for Research Analysis* (*GJRS*), 3 (9), 4-10

Khelil, I. (2023). The Effect of External Efficacy on the Moral Courage and Self-Efficacy of Internal Auditors. *International Journal of Professional Business Review*, 8(11), e04029-e04029.

Lizardi, R. (2015). Hands-On Activities. Colorin Colorado

P21 Framework Definitions." P2l.org. Partnership for 21st Century Skills (2009). Retrieved from http://www.p21 .ort>/storatxe/documents/P21 Framework Pefinitions.pdf

Silberman. M. (2016). *Active Learning: 101 strategies to teach any subject.* Needham Heights. MЛ: Allyri & Bacon.

Santhanam, G., & Balaji, K. D. (2023). The relationship between stress and remote working in indian information technology companies. *International Journal of Professional Business Review*, 8(12), 4.