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Bi-Annual

# IMPACT OF COMPETENCY-BASED TEACHING METHOD ON STUDENTS' PRACTICAL SKILLS PERFORMANCE IN MOTOR VEHICLE MECHANICS WORKS: A CASE STUDY OF DELTA STATE TECHNICAL COLLEGES IN NIGERIA

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**Abstract**
*The study determined the Impact of Competency-Based Teaching Method on Students' Practical Skills Performance in Motor Vehicle Mechanics Works.The study adopted quasi-experimental design. It was guided by three research questions and three null hypotheses tested at 0.05 level of significance. The population was 136 National Technical Certificate II Students (NTC II) from the six technical colleges in Delta State. Purposive sampling technique was used to sample four schools with sample size of 92 NTC II Students. Motor Vehicle Mechanics Works Practical Test was the instrument used for data collection and was validated by five experts. Kuder Richardson 21 formula was used to obtain reliability co-efficient of 0.87 for the study. Statistical mean and ANCOVA were used to answer the research questions and test the hypotheses. The findings revealed that students in experimental group performed better than those in control group. It was concluded that CBTM is more effective in improving students" practical skills' performance. The study recommended that CBTM should be integrated into MVMW curriculum for effective teaching.*
**Keywords:** Competency-Based Teaching Method, Practical Skills Performance, Demonstration Teaching Method, Motor Vehicle Mechanics Works and Technical Colleges.

## Introduction

Education is a variable tool for national development which requires deliberate plan to outfit the improvement needs of a nation. It is geared towards the system producing the right type of manpower in the right quality and quantity especially, for nation building. Thus, it could be a process that enables the individuals to live and be useful and acceptable members of a society. The level of economic growth in any developing nation is tied to the level of technological development that exists therein. However, there is no doubt that the nations of the world that are technologically and economically strong have the story of their success rooted directly to investment in technology education. Accordingly, Eze and Okorafor (2012) stated that technology education is constituted to prepare individuals for practical skills required in the field of work. Incidentally these practical skills are acquired through relevant vocational and technical education programmes offered at technical colleges and other vocational institutions. Technical colleges are regarded as specialized institutions of erudition where trades and modular courses are offered in addition to general education and science subjects. It is also a post basic institution established by Federal and State Governments to implement Vocational and Technical Education programmes (Okotubu, 2022). Thus, technical skills training programmes prepare individual graduates for profitable employment opportunities in both private and public sectors of the nation's economy. Sequel to the foregoing, Ndomi, (2015) affirmed that it requires well-trained technicians who possess the required competencies and technical know-how to operate, maintain, service and refurbish the available technical equipment in automobile technology workshop/laboratory. Consequently, it is therefore expected that graduates of technical colleges are sufficiently prepared and furnished with needed practical knowledge; understanding and practical skills that would enable them become self-employed, self-sufficient and financially autonomous. It also encourages occupational skills development of individuals in various trades Thus, one of the major core course offered at technical colleges 'level is Motor Vehicle Mechanics Works (MVMW).

MVMW simply encompasses the attainment of scientific knowledge, collection of materials, construction of machineries, operation and maintenance of motor vehicles of different modern. MVMW at technical college level consists of three components/subjects namely: Service Station Mechanics Work (SSMW), Engine Maintenance and Refurbishing (EMR) and Automobile Electricity (AE). Furthermore, in the recently reviewed curriculum of National Board for Technical Education (NBTE), the three subjects were embedded as MVMW in the Automobile Technology Department in Nigerian Technical Colleges (NBTE, 2013). Thus, it was particularly envisioned to produce competent motor vehicle craftsmen for technical manpower as well as industrial development. This implies that, upon completion of MVMW course in technical college, students' practical skills would be ascertained through the practical examinations. It is therefore, imperative that teachers in technical colleges should possess the requisite practical know-how to impact the

essential skills to learners. The acquisition of such requisite skills could improve the students' excellent practical skills performance in work places.

Practical skills performance of students in MVMW could be measure of their achievement in practical trainings done in the workshop. Also, practical skills could be an act of performance, manufacturing and constructions, manipulating theoretical knowledge gained with the use of material resources, tools, equipment and machines. Skill could be acquired through all phases of education ranging from informal to formal sectors. According to Bedir, (2019), skill therefore is the expertness in practical ability. He further reiterated that all practical courses should stress on practical activities so that students could be proficient in their respective fields of specialization. However, Okotubu (2020), asserted that the predominantly teaching method used in technical colleges is the demonstration method.

Demonstration teaching method refers to the type of teaching method in which the teacher is the principal actor while the learners watch with the intention to act later (Okotubu, 2020). Similarly, Aliyu (2018), opined that DTM involves displaying, Illustration or exhibition or attempt showing clearly a given concept, facts, diagrams, tables' procedure or activities which are usually carried out by the teacher while the students watch, listen and imitate. Demonstration method could be used to introduce a new lesson to the students. It could be regarded as attention inducer because the students will be eager and enthusiastic to see and know what the demonstrator is trying to do. However, the demonstration method does not ensure a suitable method that could meet students' different learning style in this present digital era. It is therefore, necessary to incorporate the 21$^{st}$ century competencies into teaching and learning such as competency-base teaching method.

Competency-based teaching method (CBTM) could be described as an outcome-based approach to education system that incorporates instructional delivery and assessment efforts designed to evaluate mastery of learning through the demonstration of practical knowledge, attitudes, values, skills, and behaviours required for the degree sought (Negrea, 2015). Competency-Based Education is the process in which learners progress according to their competencies certified by formative process evaluation rather than the time they spend at school, they are supported in every stage of their education for mastery learning, and they gain the knowledge, skills, and attitudes necessary for them to become lifelong learners. The fundamental idea of competency-based education could be described as providing students with knowledge and skills as well as procedure for practical applications in the workshop setting (Ford, 2014). Thus, students may perhaps advance to higher levels of learning and could possess mastery of practical skills (Competency-Based Education, 2017). Consequently, competency-based learning could begin by identifying specific competencies that would enable learners develop at their own pace and working with a mentor (Chomsky, 2010). Thus, the use of CBTM could help students develop flexible knowledge; acquire effective problem-solving skills, self-directed learning, active collaboration and intrinsic motivation (Bakare, Adelaja and Iliya, 2011). In the same way, competency-based learning places an emphasis on

influential rich learning environments that could enable students engage in meaningful learning processes. Accordingly, Nodine, (2015) stated that flexible self-paced learning, practical experience, personalized teaching and learning, clear communication with mentors and global edge to careers are the benefits of competency-based teaching on students especially in MVMW trade area.

More so, Ford (2014), stated that competencies based on desired learner performance; Use of scaffolding to support achievement of an entire set of competencies; Structure of competencies to accelerate learning; Criterion-reference and flexible competency assessments; Determination of appropriate competency assessments; Balance of the use of locally and commercially available assessments; Implementation of a competency-based education tracking system and Successful evaluation of competency based education instruction are the universal principles and practices employ incompetency-based teaching.

In studying impact of competency-based teaching method on students' practical skills performance, learners could be classified as high achievers, middle achievers and low achievers as well as gender. Also, difference in academic achievement owing to gender disparity could be of great significance to the educationists. However, gender refers to the socially, culturally constructed characteristic roles which are ascribed to male and female in any society (Eze, Obidile & Okotubu, 2020).

Graduates of technical colleges are expected to be employed in the industries with the task to operate, maintain and repair machines, engines and engine components in their mechanical workshop. However, consider the technological revolutions, multinational oil industries have reviewed and adopted modern machine, engines, technical equipment strange to obsolete machines, engines and engine components available in the vocational and technology education workshops of technical colleges. This situation has created a vacuum where graduates of MVMW technology are not be able to identify, be familiar and utilize modern mechanical facilities for production and maintenance purposes of multinational oil industries (Okotubu, 2022). This has diverted the focus of multinational oil industries from given employment opportunities to graduates, especially in automobile technology since they are no longer relevant in the production process and maintenance processes of the industries.

**Problem Statement**

In the technical colleges under study, DTM have been mostly used in instruction delivery especially in MVMW. Thus, the students who take public examinations in this course from the technical colleges have been presenting poor results especially in practical test (National Business and Technical Examination Board, 2017). However, if these ugly circumstances of students' poor practical test performance are not brought under control, technical colleges would continue to produce graduates that lack requisite practical skills. Invariably, the purpose of Technical and Vocational Education and Training (TVET) will be defeated which act

as tool required in equipping the learners with attitude, knowledge and skill thereby producing technical competent, vocationally oriented and skilful workforce. Thereby making students and graduates of vocational and technology education programme not valuable, less resourceful and job seekers who cannot be self-employed or engaged in the production and maintenance processes of the industry. This could as well in turn upsurge unemployment and further cripple technological advancement of the nation especially in automobile technology sector. Thus, it is important to explore appropriate and practical-oriented technique of teaching MVMW in government owned technical colleges; preferably, student–centred method such as competency-based teaching that would improve students' overall practical skills performance. Sequel to that, MVMW students of the technical colleges in Delta State, Nigeria were chosen for the study because of the problems of poor grade in practical test. It is against this backdrop the researchers therefore seek to find out if competency-based teaching could enhance students' practical skills performance in MVMW in government owned technical colleges in Delta State.

**Purpose of the Study**

The purpose of this study was therefore to determine if using CBTM could improve students' practical skills performance in MVMW in Delta State technical colleges. Specifically, the study determined the:

1. Mean practical skills performance scores of students taught MVMW with CBTM and those taught with DTM.
2. Mean practical skills performance scores of male and female students taught MVMW with CBTM and those thought with DTM.
3. Mean practical skills performance of high and low achieving, students taught MVMW with CBTM and those thought with DTM.

**Research Questions**

The study was guided by the following research questions:

1. What are the mean practical skills performance scores of students taught MVMW with CBTM and those taught with DTM?
2. What are the mean practical skills performance scores of male and female students taught MVMW with CBTM and those thought with DTM?
3. What are the mean practical skills performance scores of high and low achieving students taught MVMW with CBTM and those thought with DTM?

**Hypotheses**

The following null hypotheses were tested at 0.05 level of significance

1. There is no significant difference between the mean practical skills performance scores of students taught MVMW with CBTM and those taught with DTM.
2. There is no significant difference between the mean practical skills

performance scores of male and female students taught MVMW with CBTM and those thought with DTM.

3. There is no significant difference between the mean practical skills performance scores of high and low achieving students taught MVMW with CBTM and those thought with DTM.

**Methods**

Quasi-experimental design was adopted for the study. Specifically, the pretest, posttest non-randomized control group design was adopted for the study. The design was adopted because it was not possible for the researchers to randomly sample the subjects and assign them to groups without disrupting the academic programme and timetable of the technical colleges involved in the study. The study was conducted in technical colleges in Delta State. The population of the study was 136 National Technical Certificate (NTC II) students from the six-state owned technical colleges in the State who are offering MVMW(Delta State Ministry of Vocation and Technical Education, 2024). Purposive sampling technique was used to select four schools based on availability of professionally qualified staff, technical colleges offering MVMW, availability of modern tools/facilities for teaching and willingness of classroom teachers to participate as research assistants.

One intact class was used in each of the four schools giving a total of four intact classes. For the purpose of this study, two intact classes were assigned to experimental groups and the other two intact classes to control groups respectively. The instruments for data collection were MVMW Achievement Test (MVMWAT) adapted by the researchers from the NABTEB past examination questions between 2020, 2021 and 2022. MVMWAT contained 40 multiple choice test items with four options (A-D) and 10 theory questions to test thespatial ability of students. MVMWAT lesson plan were validated by a panel of two experts from the Departments of Mechanical Engineering, Delta State University of Science and Technology, Ozoro and three from Department of Technology and Vocational Education, Nnamdi Azikiwe University, Awka. The experts verified the appropriateness of the items and suggested possible solutions. Based on the comments, corrections and advise of the experts, the original package was edited by the researchers for the final draft. The copies of the research instruments were administered to the technical college students drawn from the Government Technical College Onitsha, Anambra State who were not part of the population studied. The instrument was tested for reliability using test–retest method and was calculated using Pearson Product Moment Correlation and the overall correlation coefficient value of 0.87 was obtained.

**Experimental Procedure**

Permission was obtained from the Head of Department of Automobile Technology and the principals in the four technical colleges to allow the study to be carried out in their schools. In the first week, the researchers visited the schools for

orientation for the participating research assistants. The technical teachers were trained on how to conduct the experiment treatment and were given prepared lesson plans and notes. Teachers of the control groups were instructed to use DTM, while the teachers of the experimental groups used CBTM. The pretest was administered to the two experimental groups with the help of research assistants to determine the initial abilities of the students prior to the experiment.

In the second week, the teaching commenced and ended on the fifth week. The primary focus of the teaching process was concentrated on CBTM. Each lesson lasted for 80 minutes while the treatment lasted for five weeks respectively. The teaching was conducted during the normal school period using the school time table. At the end of the treatment exercise a posttest was administered on both groups using the MVMWPT. To reduce experimental bias, the regular classroom teachers in the participating schools taught their own students. Hence, the researchers were not directly involved in administering the research instruments and the treatments. The experimental groups wrote the examination in the workshop setting and control groups wrote the examination in the classroom and the research assistants supervised the examination, marked the scripts, recorded the marks and made the scores available to the researchers.

Data collected for the study were analysed using mean scores and standard deviation to answer the research questions while the Analysis of Covariance (ANCOVA) was used to test the hypotheses at 0.05 level of significance. In the test of null hypotheses using ANCOVA, when the p-value was less or equal to the level of significance (0.05), the null hypothesis was rejected. Also, when the p-value was greater than the level of significance (0.05), the null hypothesis was not rejected. The pre-test and post-test mean scores were used for data analyses using Statistical Package for the Social Sciences (SPSS) Version 25.

**Results**

**Research Question1:** What are the mean practical skills scores of students taught MVMW with CBTM and those taught with DTM?

**Table 1:** Summary of Pre-test and Post-test Practical Skills Performance Mean Scores of Technical College Students taught MVMW with CBTM and those taught with DTM

| Treatment Method | N | Pre-test Mean | Post-test Mean | Gain in Mean |
|---|---|---|---|---|
| Experimental group (CBTM) | 46 | 35.67 | 56.70 | 31.09 |
| Control group (DTM) | 46 | 28.34 | 32.35 | 5.67 |

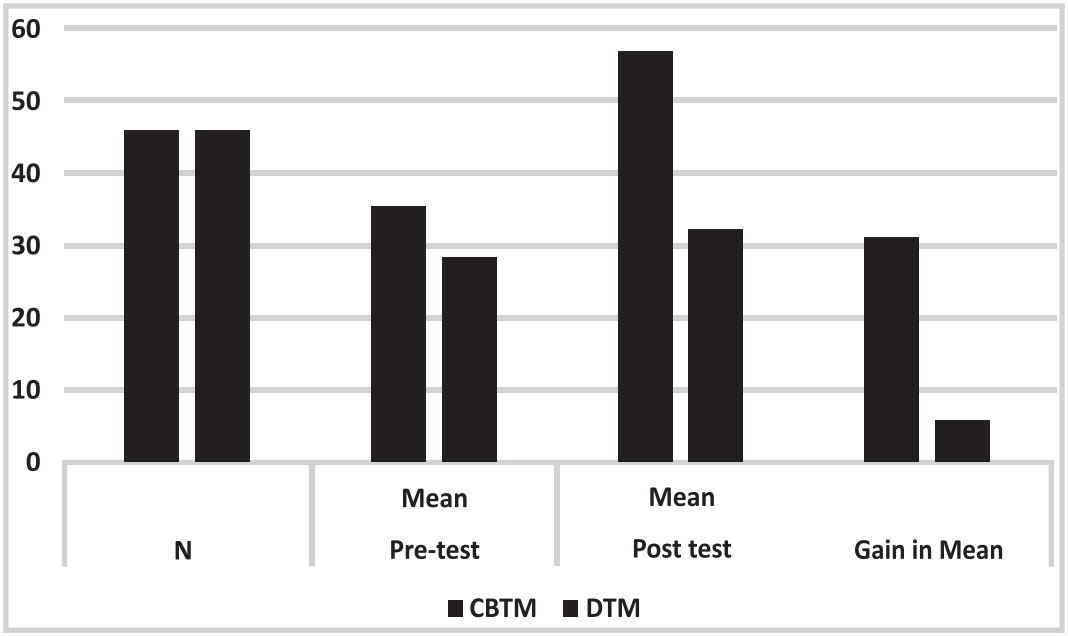


**Figure 1:** Bar Chart showing the Mean Scores of Technical College Students taught MVMW with CBTM and those taught with DTM

Table 1 shows the mean and standard deviation of practical skills scores of students in experimental and the control groups. The mean scores indicated that the experimental group had higher mean scores after pretest. The mean gain for experimental group is 31.09 while that of the control group is 5.67. The mean gain is 25.42 which shows that the experimental group achieved more than the control group. This implies that the students taught with CBTM achieved better than the students taught with control group in terms of their post-test scores. This is because the students were exposed to project works which really encouraged and reinvigorated them to performed better.

**Research Question 2:** What are the mean practical skills scores of the male and female students taught MVMW with CBTM and those thought with DTM?

**Table 2:** Summary of Post-test Practical Skills Performance Mean Scores of the Male and Female Technical College Students taught MVMW with CBTM and those taught with DTM

| Treatment Method | N | Pre-test (Male) | N | Post-test (Female) | Gain in Mean |
|---|---|---|---|---|---|
| Experimental group (CBTM) | 34 | 41.29 | 12 | 41.10 | 0.29 |
| Control group (DTM) | 30 | 39.15 | 16 | 39.33 | 0.15 |

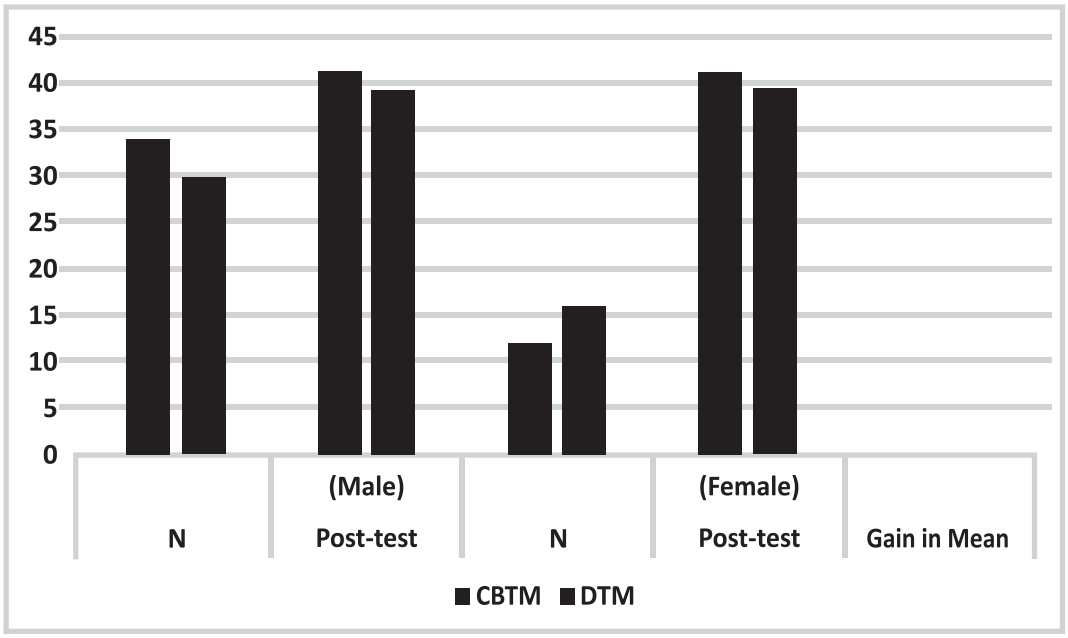


**Figure 2:** Bar Chart showing the Pre-test and Posttest Mean Scores of Male and Female students taught MVMW with CBTM and those taught using DTM

Table 2 shows the mean and standard deviation of achievement scores of students in experimental and the control groups. The post-test means scores of male and female students taught MVMW with CBTM are 41.29 and 41.10 while the post-test means scores of male and female students taught MVMW and those taught with DTM are 39.15 and 29.33 respectively. The study revealed that the difference in post- test mean score between male and female students taught MVMW with CBTM is 0.29. Whereas the difference in the post-test mean score between male and female students taught MVMW with DTM is 0.15. This indicates that the difference is insignificant. Therefore, the application of CBTM was very effective to heighten students' practical knowledge of both male and female respectively.

**Research Question 3:** What are the mean practical skills scores of high and low achieving students taught MVMW with CBTM and those thought with DTM?

**Table 3:** Summary of Post-test Practical SkillsMean Scores of High and Low Achieving Students taught MVMW with CBTM and those taught with DTM

| Treatment method | N | High Achievers | N | Low Achievers | Gain in Mean |
|---|---|---|---|---|---|
| CBTM | 28 | 69.82 | 18 | 49.46 | 20.36 |
| DTM | 20 | 48.08 | 26 | 37.15 | 0.93 |

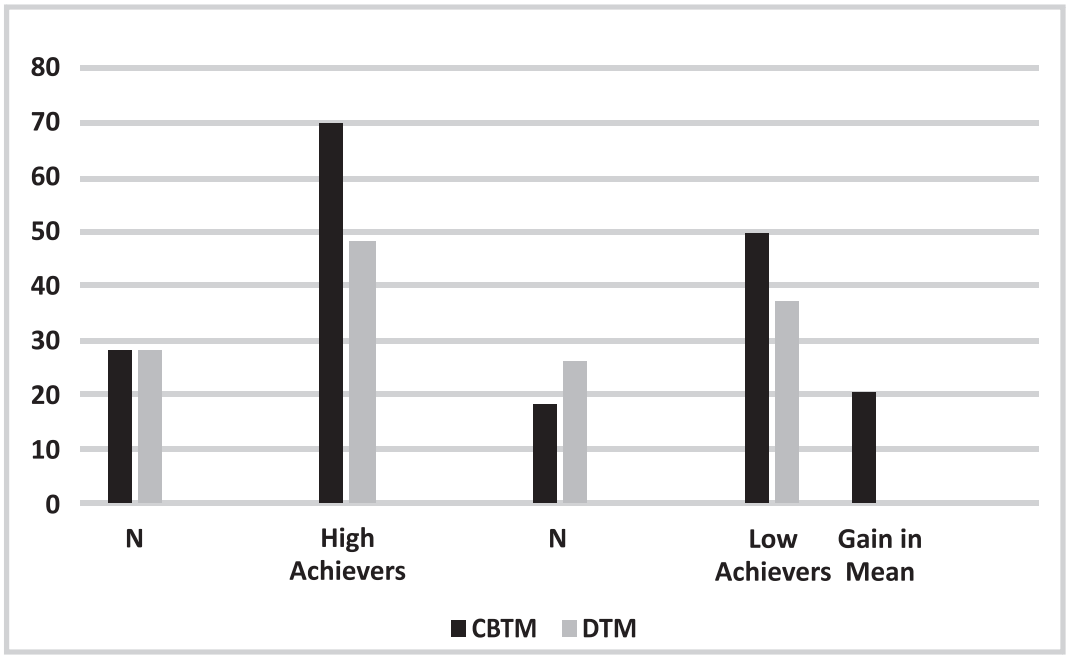


**Figure 3:** Bar Chart showing the High and Low Achieving Students taught MVMW with CBTM and those taught with DTM

Table 3 shows that the post-test mean scores of high and low achieving students taught MVMW with CBTM are 69.82 and 49.46 respectively. The difference in their post-test mean scores is 25.84. The table further reveals that the post-test mean scores of high and low achieving students taught MVMW with DTM are 48.08 and 37.15 respectively. The difference in their post- test mean scores is 12.31. The mean difference between the two teaching methods is 25.84 in favour of experimental group. Therefore, CBTM was highly effective and efficient due to the incorporation of practical exercises that enhance and boost practical abilities of both low and high achieving students in MVMW.

**Testing of Hypotheses**

The hypotheses formulated were tested at 0.05 level of significance. Analysis of covariance (ANCOVA) was used to analyse data relating to the null hypotheses.

**Hypothesis 1:** There is no significant difference between the mean practical skills scores of students taught MVMW with CBTM and those taught with DTM.

**Table 4:** Summary of ANCOVA Practical Skills Performance of the Post-test Mean Scores of Technical College Students taught MVMW with CBTM and those with DTM

| Source of Variance | Type III Sum of Squares | Df | Mean Square | F-value | P-value | Decision |
|---|---|---|---|---|---|---|
| Corrected | 222511.155a | 2 | 11255.577 | 9.4430 | .000 | |
| Model Intercept | 3917.808 | 1 | 3917.808 | 4.78990 | .000 | Rejected |
| Post-test RQ1 | 2022.833 | 1 | 2022.833 | 4.675 | .000 | |
| Group | 15778.989 | 1 | 15778.989 | 536.403 | .000 | |
| Error | 2441.555 | 83 | | | | |
| Total | 183537.000 | 86 | | | | |
| Corrected Total | 24952.709 | 85 | | | | |

Table 4 shows that there is a significant main effect of treatment in the mean posttest score of high and low achieving students in the experimental groups and the control groups F(1,100)=536.403, (P< 0.000). This infers that there is a significant difference in the mean achievement scores of technical college students in the experimental and control groups. Therefore, the null hypothesis of no significant mean difference of the achievement scores of technical colleges' students in experimental and control groups was rejected. This could be as a result of integration of tools/ equipment and machines in real life situation during classroom instruction as well as the practical sections during the treatment whichactually encouraged and motivated the students for better performance.

**Hypothesis 2:** There is no significant difference between the mean practical skills scores of male and female students taught MVMW with CBTM and those thought with DTM.

**Table 5:** Summary of ANCOVA on the Practical Skills Performance in the Post-test Mean Scores of Male and Female Technical College Students taught MVMW with CBTM and those taught with DTM

| Source of Variance | Type III Sum of Squares | Df | Mean Square | F-value | P-value | Decision |
|---|---|---|---|---|---|---|
| Corrected | 4427.402[a] | 2 | 2213.701 | 7.983 | .000 | |
| Model Intercept | 530.180 | 1 | 530.180 | 3.067 | .000 | |
| Post-test RQ1 | 4336.642 | 1 | 4336.642 | 6.897 | .000 | |
| Group | 67.210 | 1 | 67.210 | .287.456 | .594 | |
| Error | 19444.133 | 89 | 234.267 | | | |
| Total | 180316.000 | 92 | | | | |
| Corrected Total | 23871.535 | 91 | | | | |

Table 5 shows the post-test mean scores of male and female technical college students taught MVMW with CBTM and those taught with DTMstudents in experimental and control groups F (1.100) =.287.456, p> 0.594). Thus, this suggests that there was no significant main difference of the treatment in the mean

achievement scores of male and female students in experimental and control groups in MVMW trade. Therefore, null hypotheses that there was no significant mean of male and female students taught MVMW with CBTM was retained.

**Hypothesis 3:** There is no significant difference between the mean practical skills scores of high and low achieving students taught MVMW with CBTM and those thought with DTM

**Table 6:** Summary of ANCOVA on Practical Skills Performance of the Post-test of High and Low Achieving Students taught MVMWW with CBTM and those taught with DTM

| Source of Variance | Type III Sum of Squares | Df | Mean Square | F-value | P-value | Decision |
|---|---|---|---|---|---|---|
| Corrected | 8444.319a | 2 | 4222.159 | 9.5610 | .000 | |
| Model Intercept | 1946.302 | 1 | 1946.302 | 117.96 | .000 | |
| Post-test | 2315.551 | 1 | 2315.551 | 2.3990 | .000 | |
| Achievers | 2010.540 | 1 | 2010.540 | 10.703 | .002 | Rejected |
| Error | 15592.111 | 89 | 187.857 | | | |
| Total | 182449.000 | 92 | | | | |
| Corrected Total | 24036.430 | 91 | | | | |

Table 6 shows that there is a significant main effect of treatment in the mean posttest score of high and low achieving studentsin the experimental groups and the control groups F (1,100) =10703, P<0.002) This implies that there is a significant difference in the mean achievement scores of technical college students in the experimental and control groups. Therefore, the null hypothesis of no significant mean difference the achievement scores of technical colleges' students in experimental and control groups was rejected.

**Discussions of Findings**

Findings of the study therefore, shown that students taught withCBTMachieved significantly higher in their mean post-test scores than those taught MVMW with DTM. However, this is in agreement with the findings of Ndomi, (2015) who reported that CBTM had significant effect on the post-test achievement scores of students. Thus, this could be as consequence of students' active participation and experiences involved in CBTM,

The findings also indicated that male and female students taught MVMW performed significantly higher in their post-test score than those taught with DTM. These findings were in line with the report of Eze, Obidile & Okotubu (2020) who posited that the academic performance between male and female students does exist especially when appropriate method of instruction strategy was employed. Also, boys performed better than the girls particularly in science subjects and technical courses which involves psychomotor skills. However, the finding is in agreement

with the report of Okwelle, Beako & Ojotule (2019) who posited that boys are superior to girls in terms of practical-oriented courses, cognition logical and academic reasoning. Additionally, others factors such as student's attitude, and interest towards the subject is very essential.

The study therefore revealed that low academic achieving students taught MVMW with CBTM performed significantly better in their post-test than those taught with DTM. The high level of improvement in practical skills achievement of low achieving students taught MVMW with CBTM could be as a result of interest ability level, self-motivation, determination and courage of learners employed by the teacher during treatment. However, the report of Ndomi, (2015) was in agreement with the finding of this current study, which postulated that academic achievement in examination was influenced by motivating factors but could be a function of student's study habit and intelligent quotient. The findings further revealed that the achievement of high achieving and low achieving technical college students in MVMW was significant. In support of this finding, Mohammed, (2010) found out that there was significant difference between the achievement of low middle and higher achieving students irrespective of the teaching approach used.

Accordingly, Mishra, cited in Usman, (2013) opined that the low achievers were not motivated towards practical trainings and have not perceived academic learning as being useful. Therefore, low achievers could hardly improve on their practical skills especially, in MVMW. The present study proves the correctness of that assertion. The significant improvement noted on the practical skills of low achievers could be plusses derivable from using CBTM. The students' ability to build self-motivation, creativity and innovative skills was paramount indeed. On the other hand, if low achievers could be motivated through teaching technique whether internal or external, they would certainly improve on their practical skills significantly as found in this present study.

**Conclusion**

Based on the findings of this study, it was concluded that students taught MVMW using CBTM achieved significantly higher in their posttest scores than those taught using DTM. Therefore, it was clear from this study that CBTM is an effective mode of instruction which incorporates lots of student-centered methods with the capacity for improving students 'performance, creative, novelty, developing highly skilled and hands-on oriented attitude amongst learners. Therefore, CBTM should be appropriately adopted in teaching and learning of MVMW in technical colleges to enhance students 'fundamental practical knowledge and skills that would enable them carry out maintenance in allied industries as well as oil and gas sector in Delta State, Nigeria.

**Recommendations**

From the findings of this study, the following recommendations were made:

1. Curriculum planners should incorporate strategies for using CBTM into Teachers' Education Curriculum. This will equip the MVMW trade teachers with competencies needed for effective use of CBTM in teaching.
2. MVMW students should be encouraged to engage and apply competency-based learning, since it could enhance practical skills proficiency especially, among the low academic achieving students.
3. Government technical college principals should provide instructional facilities and enabling environment for employing CBTM. Also, MVMW trade teachers should be given opportunities for in-service training to prepare them with the requisite skills for teaching MVMW.

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