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TRANSFORMATIVE CLASSROOM MANAGEMENT (TCM) STRATEGIES FOR ENGAGING THE HEAD, THE HEART AND THE HANDS IN SECONDARY SCHOOLS IN RIVERS STATE, NIGERIA

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ABSTRACT

This study investigated transformative classroom management strategies for engaging the head, the heart and the hands in secondary schools in Rivers State, Nigeria. Three research questions and one hypothesis guided the study. A descriptive research design was adopted. The population comprised all the 6,893 teachers in the 286 public senior secondary schools in Rivers State. Out of these 6,893 teachers, 3,021 are males while 3,878 are females. A sample of 690 teachers (302 males and 388 females), representing 10% of the population was drawn using both the simple random sampling and proportionate stratified random sampling techniques. This was determined by the Taro Yamane Formula which gave a minimum sample size of 378 teachers. The instrument that was used for data collection was a researcher-based 30-item questionnaire entitled: “Transformative Classroom Management Strategies for Engaging the Head, the Heart and the Hands Questionnaire (TCMSHHQ).” It was structured after the four-point modified Likert rating scale and duly validated by experts. The internal consistency of the instrument was determined using Cronbach’s Alpha. Reliability coefficients of 0.89, 0.74 and 0.81 were obtained respectively for the various sections of the instrument, which showed that the instrument was reliable. Mean and standard deviation were used to answer the research questions while z-test was used in testing the null hypothesis at 0.05 level of significance. The findings of the study revealed, among others, that transformative classroom is a holistic education approach to engaging the head, the heart and the hands in collaborative problem-solving exercises that inspire students to think critically. Based on the findings, it was recommended, among others, that in-service training should be regularly conducted for teachers on affective domain so as to make them pay more attention to engaging the heart in their lesson plans since learning is deeply influenced by feelings (heart), which determine whether students will be interested in a lesson or not.

KEYWORDS: managing, teachers, transformative, learning, imperative and sustainable

INTRODUCTION

Schools are basically established to develop learners' knowledge, skills and attitudes necessary for them to successfully function as productive citizens in an ever-changing world. Education is therefore viewed as an indispensable tool and catalyst that positively influences the development of a nation and the quality of lives of its citizenry. Teachers are critical in determining the quality of education learners receive that will enable them to contribute to national development. In recognising the enormous roles teachers play in the education sector, the Federal Republic of Nigeria (2014) stipulated in the National Policy on Education that no education system can rise above the quality of the teachers. It is pertinent to note that quality education cannot be achieved if teachers, who are the implementers of curriculum, are incompetent and inefficient in the classroom. Transformational learning therefore requires competent-flexible teachers, who use multiple teaching strategies for engaging their students' three Hs – head, heart and hands in the classroom. Thus, teaching and classroom management are interrelated and interdependent as transformational teaching strategies are dependent on transformative classroom management.

A transformative classroom engages learners in collaborative problem-solving exercises that change their reasoning and perceptiveness by bringing out the best in them. Shindler (2021) defined transformative classroom management (TCM) as approaches or practices that have positive long-term effects on student development and teachers' abilities to be successful. Humphrey (2020) described TCM as the ability of the teacher to effectively engage his/her students with activity-based tasks in the classroom. Virkkunen (2021) viewed transformative classroom management as an approach to holistically meet students' learning styles by ensuring their reflection in cognitive (head), affective (heart), and psychomotor (hands) domains. Slavich and Zimbardo (2013) noted that to achieve transformational teaching goals, teachers should enhance students' strategies and skills for learning and discovery and also promote positive learning-related attitudes, values, and beliefs in them. The students in a transformative classroom are never passive; rather, they are active. Thus, transformative classroom management is effective when teachers plan the lesson objectives to holistically incorporate the three educational domains – cognitive (knowledge), affective (attitudes) and psychomotor (skills).

In this technology-driven era, approaches to classroom instruction are evolving. This advancement has been spurred by the development of several learning principles and methods of instruction, which include but not limited to: hands-on learning, participatory learning, activity-based learning, student-centred learning, collaborative learning, brain-storming learning, experiential learning and problem-based learning. These different learning approaches require transformational teaching strategies that will inspire students to critically reflect on the given tasks using their heads, hearts and hands simultaneously. Singleton (2015) asserted that the head, heart and hands (HHH) approach is a holistic and transformative approach to learning due to the interconnected parts of the approach working together as a whole. In corroboration, Shindler (2021) observed that this approach engages students in transformative learning requirements as its goal is to allow students to learn deeply and expand their world views and knowledge through critical thinking. Slavich and Zimbardo (2013) posited that

teachers can inculcate self-efficacy in students by having them complete interdependent discovery learning exercises – such as group projects, problem-solving, role play, peer teaching, case studies and simulations that engage students with concepts in a way that they will be relevant and meaningful to them.

An engaged classroom seeks to ensure that every student is on-task and participates actively in class activities. It also does not give room to off-task or disruptive behaviour among students. Williams (2013) defined classroom engagement as students' active participation in class activities that requires them to be committed to a task and find some inherent value in what they are asked to do. Obasi and Adieme (2021) observed that engaged students have the skills to work with others and know how to think critically to solve problems creatively. Saeed and Zyngier (2012) noted that by using the appropriate pedagogies, teachers can make their classrooms more engaging for students to learn. The research findings of Taylor and Parsons (2011) revealed that the use of multimedia technology such as whiteboard interaction, cameras, videos, projectors, web conferencing, sound recording equipment, animations, gaming software and PowerPoint presentation have proven helpful in engaging students in learning. The indicators of student engagement, according to Kahu (2013), include: interest in learning, interaction with instructors and peers, meaningful processing of information, retention, personal growth, enthusiasm, diligence and high academic achievement. Hence, an engaged class performs outstandingly in academics.

Head refers to engaging the cognitive domain through, inquiry, discovery, questions, problem-solving activities, reflections, among others. The head is simply the cognitive learning of a child. Engaging the head in classroom activity is what the revered American Educational Psychologist, Benjamin Bloom referred to as the cognitive domain. Engaging the head centres on mental skills (intelligent quotient) and knowledge that bestirs critical reflections and problem-solving skills. Engaging the cognitive domain (the head) involves knowledge and development of intellectual skills. Agih (2019) outlined the six major categories of cognitive processes, starting from the simplest to the most complex as follows: knowledge (remembering), comprehension (understanding), application (applying), analysis (analysing), synthesis (creating) and evaluation teachers can adopt to engage the head in a transformational learning. Thus, lower order cognitive strategies are knowledge and comprehension while higher order cognitive strategies are analysis, synthesis and evaluation. Slavich and Zimbardo (2013) emphasised that to actively engage the head, teachers should assign guided activities and exercises that require students to articulate and communicate ideas, explore attitudes and values. Hence, teachers can achieve this by scaffolding the teaching-learning process and using brainstorming questions.

Teachers should possess the skill for multiple teaching strategies for engaging the head or students' cognitive in a transformative classroom. In corroboration, Shindler (2021) maintained that a great teacher knows the approach or method that is appropriate for every learner and vary his/her technique in a transformative classroom. Smith et al. (2012) conducted a study and discovered that problem-

solving learning approach encourages students to restructure their own knowledge and understanding of concepts and teaches students to synthesize or create, communicate, and discuss ideas in ways that advance conceptual understanding. Yoder and Hochevar (2015) observed that Bloom's education taxonomy provides teachers with a great tool that can enable them to apply, analyze, evaluate and synthesize the teaching-learning process while engaging the head for critical thinking skills. Rosebrough and Leverett (2011) revealed in their study that teachers' questions help students from basic understanding of concepts to questioning assumptions. Skott and Ward (2012) posited that teachers can engage the head by adopting active learning techniques such as telling short reflective stories, analysing and reacting to videos, debating topics, think-pair share, role playing situations, class discussion, and answering questions in class. Thus, engaging the head (cognitive) domain is a problem-based learning approach that provides students with opportunities to identify and tackle complex, multifaceted problems in both small groups and on their own.

Heart refers to engagement of the affective domain in forming values and attitudes that are translated into behaviours. Engaging the heart (affective) domain in a class activity is simply making the teaching-learning process relevant to students, so they can be interested and eager to learn more. Agih (2019) pointed out that the affective (heart) domain is very important in the upbringing of a child as it is the foundation of morality, attitudes and ethics. The affective domain processes are classified from simple to complex as follows: receiving, responding, valuing, organising and charactering. Shindler (2021) observed that teachers in a transformative classroom understand every learner's needs and learning styles and so adopt differentiation teaching strategy in inspiring and developing their self-efficacy. Saeed and Zyngier (2012) asserted that engaged students aim not only at high grades but also in understanding the topics and internalising them in their lives. Rosebrough and Leverett (2011) observed that cooperative learning approach occupies students' attention and interest in class tasks and also fosters their willingness and desire to participate in the learning process. The findings of Yoder and Hochevar (2015) revealed that engaging students with teaching aids such as games, role plays and simulations give them a strong feeling that learning is fun.

Teachers actively engage the heart in the learning process by considering students' learning needs, abilities, interests and styles. Moon (2014) noted that student-centred learning approach is very important for maximizing the likelihood that students will gain valuable skills from one another, including emotional intelligence skill. Gasser (2011) observed that learning approaches that give students autonomy such as participative, teamwork, peer teaching, class activities, role play, fieldwork, among others engage the heart actively in the class. In engaging the heart, Bruner and Haste (2013); Keaton and Bodie (2015) emphasised that teachers must focus on the needs of the learner; rather, than on the content to be taught in order to know what types of experiences will be most helpful for advancing understanding and giving them worthwhile experiences. Slavich and Zimbardo (2013) revealed that for the heart to be actively engaged, teachers should adopt participatory learning approach, which focuses on transforming students' disposition toward learning by increasing their academic self-efficacy, improving their self-regulatory capabilities, instilling self-directed learning

skills and enhancing their learning-related attitudes and values. Thus, engaging the heart actively is critical to transformational learning process. This supports the adage: “What the heart does not admire, the eye (head) does not go for it. Teachers must vary their teaching strategies to get their students actively involved in the teaching-learning process.

Hands refer to the engagement of the psychomotor domain for learning practical skill development and physical work such as writing, building, planting, painting, drawing, typing, among others. Engaging the hands (psychomotor) domain in a transformative classroom is simply learning by doing. Students’ skills (psychomotor) are developed when they practise what they have been taught. Smith et al. (2012) observed that students generate knowledge and meaning best when they have experiences that lead them to realise how new information conflicts with their prevailing understanding of a concept or idea. This supports the Constructivist Theory that learning occurs best when students are actively engaged in the discovery process through hands-on-activities. Bandura (2012) asserted that involving students in class activities help them to build self-efficacy, which is a strong determinant of success. Keaton and Bodie (2015) pointed out that at the heart of active learning is the notion that students must read, write, discuss, and engage in problem-solving to maximize their potential for intellectual growth. Slavich and Zimbardo (2013) revealed that experiential or hands-on learning approach engages students in activities that enable them to experience course content.

To be engaged is to actively participate and to be involved in doing something. Skott and Ward (2012) posited that engaging students in active learning requires teachers to carefully assign guided activities and exercises that will make students to explore the world around them. In a related study, Moon (2014) discovered that experiential learning approach promote learning by having students directly engage in and reflect on personal experiences that take place in four stages (concrete experience, reflection, abstract conceptualization, and active experimentation), thereby, leading to increased knowledge, skill development and values clarification. Rosebrough and Leverett (2011); Yoder and Hochevar (2015) observed in their studies that teachers can actively engage the hands by exposing the students to observing phenomena, conducting interviews or experiments, playing games or simulations, taking fieldtrips, role playing situations, building a model, drawing, solving a problem, presenting or teaching and writing exercises. Singleton (2015) noted that engaged learners exhibit characteristics of being attracted to their task, persistence in their task despite obstacles or challenges and take visible joy in accomplishing their task. Thus, students are more motivated and engaged when they can use what they have learnt to accomplish a task.

A teacher in a transformative classroom is expected to effectively manage the students’ behaviours by actively engaging the head, the heart and the hands (HHH) with varieties of teaching strategies and skills that will transform them. James (2013) posited that each individual element of the HHH approach works on its own and inter-connectedly. In order to achieve the three education domains holistically during instructional delivery, Gazibara (2013) emphasised that teachers must engage in activities or exercises that require students to reflect on their understanding and examine or explain their thinking.

Hence, education should be more about inspiration than information. In this 21st century, teachers must equip students with knowledge (cognitive), attitudes (affective) and skills (psychomotor) that are needed for overcoming challenges and contributing to sustainable national development.

STATEMENT OF THE PROBLEM

In recent times, Nigerian secondary education curriculum has been criticised for several reasons, including the general objectives which focus mainly on the cognitive (head) and the psychomotor (hands) domains, but neglect the affective (heart) learning domain of Blooms' Education Taxonomy. For this reason, most teachers pay little or no attention to the affective domain in their lesson plans forgetting that learning is deeply influenced by feelings (heart), which make students to be interested in the lesson and understand various subject matters. It is pertinent to note that the emotions (heart) of students, which the affective learning domain takes care of is the epicentre in any classroom setting because it is the foundation of ethics that determines the behaviour of students in the class. Hence, the heart is responsible for engaging and disengaging in any activities. The fact that most students in public secondary schools in Rivers State appear not to be interested in learning is simply as a result of the inability of teachers to engage the heart in the teaching-learning process. The researchers' experiences in supervising both teachers and pre-service teachers have also proved that teachers hardly engage the heart (affective) domain in their instructional delivery. Thus, the researchers are bothered about teachers' classroom management approaches in this digital era, which contradict the transformative classroom management approaches that engage the head, the heart and the hands as individual elements and also holistically for achieving educational goals.

AIM AND OBJECTIVES OF THE STUDY

The aim of this study was to investigate transformative classroom management strategies for engaging the head, the heart and the hands in secondary schools in Rivers State, Nigeria. Specifically, the study sought to:

1. ascertain ways the head can be engaged for transformational learning in secondary schools in Rivers State;
2. determine ways the heart can be engaged for transformational learning in secondary schools in Rivers State; and
3. find out ways the hands can be engaged for transformational learning in secondary schools in Rivers State.

RESEARCH QUESTIONS

The following research questions guided the study:

1. In what ways can the head be engaged for transformational learning in secondary schools in Rivers State?
2. What are the ways the heart can be engaged for transformational learning in secondary schools in Rivers State?

3. In what ways can the hands be engaged for transformational learning in secondary schools in Rivers State?

HYPOTHESIS

The following null hypothesis was formulated at 0.05 alpha level:

Ho₁ There is no significant difference between the mean ratings of male and female teachers on the ways the heart can be engaged for transformational learning in secondary schools in Rivers State.

METHODOLOGY

This study adopted a descriptive research design. The population of the study comprised all the 6,893 teachers in the 286 public senior secondary schools in Rivers State. Out of these 6,893 teachers, 3,021 are males while 3,878 are females (Planning, Research and Statistics Department, Rivers State Ministry of Education, 2023). A sample of 690 teachers (302 males and 388 females), representing 10% of the population was drawn using both the simple random sampling and proportionate stratified random sampling techniques. This was determined by the Taro Yamane Formula which gave a minimum sample size of 378 teachers. The instrument that was used for data collection was a researcher-based 30-item questionnaire entitled: “Transformative Classroom Management Strategies for Engaging the Head, the Heart and the Hands Questionnaire (TCMSHHHQ).” The questionnaire was structured after the four-point Likert rating scale of Strongly Agree, Agree, Disagree and Strongly Disagree with weights of: 4, 3, 2 and 1. The instrument was duly validated by five experts in Test and Measurement Department, Curriculum Department and Educational Management Department of Faculty of Education, University of Port Harcourt.

The internal consistency reliability coefficient of 0.81 for (TCMSHHHQ) was computed using Cronbach’s Alpha. The subscales’ reliability for engaging the head, the heart and the head for transformational learning are 0.89, 0.74 and 0.81 respectively; hence, they were adjudged to be reliable for the field study. Mean and standard deviation were used to answer the research questions. Any mean score from 2.50 and above was agreed upon, and the mean below 2.50 was disagreed upon. z-test was used in testing the null hypothesis of no significant difference. The acceptance or rejection of the hypothesis was based on the critical value of z-test, which is ± 1.96 at 0.05 level of significance.

RESULTS

Research Question 1: In what ways can the head be engaged for transformational learning in secondary schools in Rivers State?

Table 1: Mean Scores and Standard Deviations on the Opinions of Male and Female Teachers on Ways the Head can be Engaged for Transformational Learning in Secondary Schools in Rivers State

S/ N	Ways the Head can be Engaged for Transformational Learning Include:	Male Teachers = 302		Female Teachers = 388		\bar{X}_1 \bar{X}_2	Decision
		\bar{X}_1	SD ₁	\bar{X}_2	SD ₂		
1.	Giving brainstorming questions during set inductions that can inculcate critical reflections in students about the topic to be learnt.	3.09	0.40	3.12	0.35	3.11	Agreed
2.	Using active learning approach where students are given situations to analyse.	3.15	0.39	3.10	0.35	3.13	Agreed
3.	Grouping students for class activities that can develop problem-solving skill.	3.08	0.40	3.18	0.35	3.13	Agreed
4.	Adopting questioning and answering techniques during instructional delivery.	3.03	0.40	3.05	0.35	3.04	Agreed
5.	Assigning class discussions that make students to develop conceptual skill.	3.11	0.40	3.14	0.35	3.13	Agreed
6.	Using scaffolding teaching strategies which develop discovery skill.	3.12	0.40	3.15	0.35	3.14	Agreed
7.	Using student-learner centre approach that is activity based.	2.86	0.41	2.93	0.36	2.90	Agreed
8.	Class competitions that will make students use the higher order cognitive to analyse, synthesise and evaluate a task before presentation.	2.95	0.41	2.91	0.36	2,93	Agreed
9.	Think-pair-share class activities that boost creative skill.	3.07	0.40	3.12	0.35	3.10	Agreed
10.	Giving students challenging tasks that develop their critical thinking skill.	3.01	0.40	3.08	0.35	3,05	Agreed
Aggregate Mean/SD		3.05	0.40	3.08	0.35	3.07	

Table 1 shows the mean responses of male and female teachers on ways the head can be engaged for transformational learning in secondary schools in Rivers State. Both male and female teachers agreed on all the items with high mean scores above the mean criterion of 2.50. Their aggregate mean scores of 3.05 and 3.08 respectively, indicate that they agreed that ways the head can be engaged for transformational learning in secondary schools in Rivers State include: giving students brainstorming

questions during set inductions; using active learning approach; grouping students for class activities that can develop problem-solving skill; adopting questioning and answering techniques; class discussions; using scaffolding teaching strategies which develop discovery skill; using student-learner centre approach that is activity based; class competitions that will make students use the higher order cognitive to analyse, synthesise and evaluate a task before presentation; think-pair-share; class activities that boost creative skill; giving students challenging tasks that develop their critical thinking skill.

Research Question 2: What are the ways the heart can be engaged for transformational learning in secondary schools in Rivers State?

Table 2: Mean Scores and Standard Deviations on the Opinions of Male and Female Teachers on Ways the Heart can be Engaged for Transformational Learning in Secondary Schools in Rivers State

S/ N	Ways the Heart can be Engaged for Transformational Learning Include:	Male Teachers = 302		Female Teachers = 388			Decision
		\bar{X}_1	SD ₁	\bar{X}_2	SD ₂	$\bar{X}_1 \bar{X}_2$	
11.	Creating a friendly classroom learning environment where students feel loved.	3.11	0.40	3.16	0.35	3.14	Agreed
12.	Teaching with instructional materials to concretise learning.	3.15	0.39	3.17	0.35	3.16	Agreed
13.	Using captivating stories to illustrate a concept.	2.97	0.41	3.01	0.36	2.99	Agreed
14.	Involving students in role playing a real life situation that helps to internalise the lesson.	2.94	0.41	2.99	0.36	2.97	Agreed
15.	Grouping students in class competitions that foster team spirit among them.	3.13	0.40	3.10	0.35	3.12	Agreed
16.	Adopting peer-teaching approach which helps students to develop self-efficacy.	3.01	0.40	3.04	0.35	3.03	Agreed
17.	Using differentiation teaching strategy to meet students' learning styles.	3.18	0.39	3.12	0.35	3.15	Agreed
18.	Using cooperative learning approach where students gain valuable skills from one another.	2.92	0.41	2.97	0.36	2.95	Agreed
19.	Using class presentation where students develop character formation.	3.10	0.40	3.15	0.35	3.13	Agreed

20.	Using verbal/non-verbal cues to praise, encourage, motivate, etc students that are participating actively in class activities.	3.17	0.39	3.19	0.35	3.18	Agreed
	Aggregate Mean/SD	3.07	0.40	3.09	0.35	3.08	

Table 2 reveals the mean responses of male and female teachers on ways the heart can be engaged for transformational learning in secondary schools in Rivers State. Both male and female teachers agreed on all the items with high mean scores above the mean criterion of 2.50. Their aggregate mean scores of 3.07 and 3.09 respectively, indicate that they agreed that ways the heart can be engaged for transformational learning in secondary schools in Rivers State include: creating a friendly classroom learning environment where students feel loved; teaching with instructional materials to concretise learning; using captivating stories to illustrate a concept; involving students in role playing a real life situation that helps to internalise the lesson; grouping students in class competitions that foster team spirit among them; adopting peer-teaching approach which helps students to develop self-efficacy; using differentiation teaching strategy to meet students’ learning styles; using cooperative learning approach where students gain valuable skills from one another and using class presentation where students develop character formation; using verbal/non-verbal cues to praise, encourage, motivate, etc students that are participating actively in class activities.

Research Question 3: In what ways can the hands be engaged for transformational learning in secondary schools in Rivers State?

Table 3: Mean Scores and Standard Deviations on the Opinions of Male and Female Teachers on Ways the Hands can be Engaged for Transformational Learning in Secondary Schools in Rivers State

S/ N	Ways the Hands can be Engaged for Transformational Learning Include:	Male Teachers = 302		Female Teachers = 388		\bar{X}_1 \bar{X}_2	Decision
		\bar{X}_1	SD ₁	\bar{X}_2	SD ₂		
21.	Making lessons relevant to students by giving them guided activity-based tasks.	2.97	0.41	2.93	0.36	2.95	Agreed
22.	Using students to demonstrate or illustrate a concept.	3.08	0.40	2.96	0.36	3.02	Agreed
23.	Engaging students in hands-on activities that enable them to practicalise what was taught.	3.18	0.39	3.17	0.35	3.18	Agreed

24.	Involving students in writing activities that develop their psychomotor skill.	3.12	0.40	3.08	0.35	3.10	Agreed
25.	Grouping students in class activities according to their levels of maturation that get them actively involved in class activities.	3.17	0.39	3.12	0.35	3.15	Agreed
26.	Teaching with technologies such as computers where students can develop their digital skill.	3.12	0.40	3.14	0.35	3.13	Agreed
27.	Using students to act simulations that foster their active participation.	2.98	0.40	2.92	0.36	2.95	Agreed
28.	Calling students by names to solve some problems on the board.	3.09	0.40	3.01	0.36	3.05	Agreed
29.	Peer teaching tasks.	3.05	0.40	3.02	0.36	3.04	Agreed
30.	Assigning students to group projects that make them learn by doing.	3.14	0.40	3.09	0.35	3.12	Agreed
	Aggregate Mean/SD	3.09	0.40	3.04	0.35	3.07	Agreed

Table 3 reveals the mean responses of male and female teachers on ways the hands can be engaged for transformational learning in secondary schools in Rivers State. Both male and female teachers agreed on all the items with high mean scores above the mean criterion of 2.50. Their aggregate mean scores of 3.09 and 3.04 respectively, indicate that they agreed that ways the hands can be engaged for transformational learning in secondary schools in Rivers State include: making lessons relevant to students by giving them guided activity-based tasks; using students to demonstrate or illustrate a concept; engaging students in hands-on activities that enable them to practicalise what was taught; involving students in writing activities that develop their psychomotor skill; grouping students in class activities according to their levels of maturation that get them actively involved in class activities; teaching with technologies such as computers where students can develop their digital skill; using students to act simulations that foster their active participation; calling students by names to solve some problems on the board; peer teaching tasks and assigning students to group projects that make them learn by doing.

Table 4: Summary of z-test on the Difference between the Mean Ratings of Male and Female Teachers on Ways the Heart can be Engaged for Transformational Learning in Secondary Schools in Rivers State

Status	N	\bar{X}	SD	df	z-cal	Critical Value	Remarks	Decision
Male Teachers	302	3.07	0.40	688	-0.69	± 1.96	Not Significant	Failed to Reject
Female Teachers	388	3.09	0.35					

P < 0.05

Table 4 shows the summary of z-test analysis on the difference between the mean responses of male and female teachers on the ways the heart can be engaged for transformational learning in secondary schools in Rivers State. The result shows that z-calculated value of -0.69 is less than the z-critical value of ± 1.96 . Since the z-calculated value is less than the z-critical value, the null hypothesis failed to reject at 0.05 alpha level. Thus, there is no significant difference between the mean ratings of male and female teachers on the ways the heart can be engaged for transformational learning in secondary schools in Rivers State.

DISCUSSION OF FINDINGS

The finding of this study revealed that ways the head can be engaged for transformational learning in secondary schools in Rivers State include: giving students brainstorming questions during set inductions; using active learning approach; grouping students for class activities that can develop problem-solving skill; adopting questioning and answering techniques; class discussions; using scaffolding teaching strategies which develop discovery skill; using student-learner centre approach that is activity based; class competitions that will make students use the higher order cognitive to analyse, synthesise and evaluate a task before presentation; think-pair-share; class activities that boost creative skill; giving students challenging tasks that develop their critical thinking skill. This implies that teachers can make their classrooms more engaging for students to learn by adopting different teaching strategies. The finding agrees with Slavich and Zimbardo (2013); Skott and Ward (2012), who recommended, that to actively engage the head, teachers should assign guided activities and exercises that require students to articulate, explore, discover and communicate ideas. It is also in consonance with Smith et al. (2012); Yoder and Hochevar (2015); Rosebrough and Leverett (2011), who conducted different studies and discovered that problem-solving learning approach encourages students to restructure their own knowledge and understanding of concepts.

Another finding of the study revealed that ways the heart can be engaged for transformational learning include: creating a friendly classroom learning environment where students feel loved; teaching with instructional materials to concretise learning; using captivating stories to illustrate a concept; involving students in role playing a real life situation that helps to internalise the lesson; grouping students in class competitions that foster team spirit among them; adopting peer-teaching approach which helps students to develop self-efficacy; using differentiation teaching strategy to meet students' learning styles; using cooperative learning approach where students gain valuable skills from one another and using class presentation where students develop character formation; using verbal/non-verbal cues to praise, encourage, motivate, etc students that are participating actively in class activities. The implication of this finding is that the heart (affective domain) is the focal point of learning as it is responsible for connecting and engaging the head and the hands actively. The finding is in agreement with Saeed and Zyngier (2012); Rosebrough and Leverett (2011); Yoder and Hochevar (2015), who observed that getting students interested in a teaching-learning process fosters their willingness and desire to participate in the learning process. It is also in line with Moon (2014); Gasser (2011); Bruner and Haste (2013); Keaton and Bodie (2015), who discovered in their studies that learning approaches that engage students actively enhance their learning-related attitudes, values and engage the heart actively in the class.

The finding also revealed that ways the hands can be engaged for transformational learning include: making lessons relevant to students by giving them guided activity-based tasks; using students to demonstrate or illustrate a concept; engaging students in hands-on activities that enable them to practicalise what was taught; involving students in writing activities that develop their psychomotor skill; grouping students in class activities according to their levels of maturation that get them actively involved in class activities; teaching with technologies such as computers where students can develop their digital skill; using students to act simulations that foster their active participation; calling students by names to solve some problems on the board; peer teaching tasks and assigning students to group projects that make them learn by doing. This implies that students learn faster by doing. The finding agrees with Slavich and Zimbardo (2013); Smith et al. (2012), who observed that students generate knowledge and meaning best when they have experiences that lead them to realise how new information conflicts with their prevailing understanding of a concept or idea. It is also in corroboration with Skiott and Ward (2012); Moon (2014); Rosebrough and Leverett (2011); Yoder and Hochevar (2015); Singleton (2015), who discovered that engaged learners exhibit characteristics of being attracted to their task, persistence in their task despite obstacles or challenges and take visible joy in accomplishing their task.

CONCLUSION

From the findings of this study, it can be concluded that transformative classroom is a holistic education approach to engaging the head, the heart and the hands in collaborative problem-solving exercises that inspire students to think critically. Thus, transformative classroom management is the prerequisite approach to ensuring that teachers actively engage the head (cognitive), the heart

(affective) and the hands (psychomotor) not only as individual elements but also holistically in order to attain the educational goals and objectives in secondary schools in Rivers State, Nigeria.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations were made:

1. Teachers should always reflect on their teaching experiences by preparing engaging lessons that inspire students to use their cognitive (head) to articulate, think critically, explore, discover, solve problems, communicate ideas, among others.
2. In-service training should be regularly conducted for teachers on affective domain so as to make them pay more attention to engaging the heart in their lesson plans since learning is deeply influenced by feelings (heart), which determine whether students will be interested in a lesson or not.
3. Principals should ensure that teachers always use multiple teaching strategies that engage students in hands-on activity (psychomotor) so as to meet every learner's learning styles and needs.

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