European Journal of Education Studies
ISSN: 2501 - 1111
ISSN-L: 2501 - 1111
Available on-line at: www.oapub.org/edu

doi: 10.5281/zenodo.3700822 Volume 7 | Issue 1 | 2020

# NEW TEACHERS' SOFT SKILLS AND PRODUCTIVITY IN SECONDARY SCHOOLS IN RIVERS STATE, NIGERIA

**Evelyn O. Umeghalu[1i], Chidinma E. Obi[2]**
[1]PhD Scholar,
Department of Educational Management,
Faculty of Education,
University of Port Harcourt,
Nigeria
[2]Research Fellow (Alumni (PhD)),
Department of Educational Management,
Faculty of Education,
University of Port Harcourt,
Nigeria

**Abstract:**
The study investigated new teachers' soft skills and productivity in senior secondary schools in Rivers State, Nigeria. Three research questions were answered while three null hypotheses were tested at 0.05 of significance. The theory was anchored on transformational (transformative) learning by Jack Mezirow in 1978. The study adopted a correlational research design. The population comprised all of the 268 government owned Secondary Schools in Rivers State with 8452 teachers. The sample size for this study was 470 representing 5.56% of the population size using the Taro Yamane formula. Proportionate stratified random sampling technique was used to draw the 470 respondents from the strata. Two sets of instruments titled New Teachers' Soft Skills Questionnaire (NTSSQ) and Productivity of Teachers Questionnaire (PTQ) were used for data collection. Face and content validities were ensured by experts. The reliability coefficient of the NTSSQ and PTQ were 0.90 and 0.88 with the use of Cronbach alpha. Multiple regression and Pearson Product Moment correlation coefficient were used to answer the research questions. ANOVA associated with multiple regression and z-ratio were used to test the null hypotheses at 0.05 alpha level of significance. It was found that emotional intelligence and creative and critical thinking as well as creative and critical thinking and productivity have significant positive moderate and high relationships of 0.50 and 0.64 respectively in Public Senior Secondary Schools in Rivers State. It was recommended among others that; teachers should mostly use exploration teaching method in order to allow the students to critically think out of the box.

[i] Correspondence: email dr.evelynumeghalu@gmail.com

**Keywords:** new teachers, soft skills, emotional intelligence, creative and critical thinking, secondary schools, productivity

## 1. Introduction

### 1.1 Background to the Study

Productivity in education is intangible and invisible and can only be deduced from turnover, and the rate at which educational objectives are achieved; it is a process in cycle (Umeghalu, 2019). It is of utmost importance that new teachers understand that they are expected to be good leaders and the type of leadership with intrinsic value that the students could learn from, which is the essence of Soft Skills (Kanokorn, Pongtorn, & Sujanya, 2013).

Having Soft Skills is vital for new teachers so that they can be good leaders who are able to lead the students from the front and in turn encourage the students to become good leaders themselves. Hence, the teachers' development in Soft Skills became the crucial factor to improve the new teachers' competency in their profession into professionals (Kanokorn, *et al*., 2013).

New teachers' productivity happens to have more interpretations arising from different perspectives. For instance, it means students are creating solutions and projects that have meaning and purpose whereby the students gladly take initiatives and assume responsible ownership of class time, and on the other hand, it means that students love their learning while the new teacher is ensuring that students are interested and invested in tasks that develop higher-order thinking and problem-solving abilities (Umeghalu, 2019).

Additionally, new teachers' productivity is perceived as the ability to use high-tech model to help liven up the classroom and improve the learning experience for young minds (Scott, 2016). This is in line with Aja-Okorie, (2016) who affirmed that the Federal Government of Nigeria has stated that for the benefit of all citizens, the country's educational goals shall be clearly set out in terms of their relevance to the needs of the individual and those of the society, in consonance with the realities of our environment and the modern world.

Most noteworthy is that the idea of boosting new teachers' proficiency in their profession with the use of Soft Skills is targeted at enhancing the new teachers' level of productivity (Umeghalu, 2019). The teacher is a major factor in learning process management for organizing the content material as well as the activity to be congruent with the students' needs, practicing their thinking skills, management and application of knowledge in daily life (Umeghalu, 2019). Hence, majority of the components of Soft Skills include among others:

1) Emotional Intelligence: This is the capability of an individual to identify access and produce emotions in order to facilitate the judgments. It deals with the ability of an individual to regulate his/her personal, and others' emotions as well as feelings (Umeghalu, 2019).

2) Creative and Critical Thinking: This is the application of the imagination to finding a solution to ones learning task, with reasonable reflective thinking focused on deciding what to believe or do (Ennis, 1993; Coughlan, 2008). Critical and Creative Thinking is a process which has to do with the new teachers collaborating with the students in using their minds to think widely and intensely with the use of prudence, attitude and affinity involving appraisal, synthesis, innovation, deliberation and meditation in all areas of learning both formally and informally (Umeghalu, 2019).

Soft Skills in the secondary school are very crucial for new teachers because they require these skills when it comes to communicating with their colleagues and students in working as a proper system (Kpee & Umeghalu, 2019). It is however worthy of note that it is yet unclear if most of our new teachers in the secondary school system have been able to appreciate the impact of Soft Skills as it relates to productivity (Kpee, *et al*., 2019). To this end, this study investigated new teachers' Soft Skills and productivity in Secondary Schools in Rivers State, Nigeria.

### 1.2 Aim and Objectives of the Study

This study examined the relationship between new teachers' soft skills and productivity in Secondary Schools in Rivers State. Specifically, the objectives were to:

1) determine the relationship between new teachers' Soft Skills (emotional intelligence and creative and critical thinking) and productivity in Secondary Schools in Rivers State.
2) ascertain the relationship between emotional intelligence of new teachers and productivity in Secondary Schools in Rivers State.
3) determine the relationship between creative and critical thinking of new teachers and productivity in Secondary Schools in Rivers State.

### 1.3 Research Questions

The following research questions guided this study.

1. Is there any relationship between new teachers' soft skills (emotional intelligence and creative and critical thinking) and productivity in Secondary Schools in Rivers State?
2. What is the relationship between emotional intelligence of new teachers and productivity in Secondary Schools in Rivers State?
3. Which relationship exists between creative and critical thinking of new teachers and productivity in Secondary Schools in Rivers State?

### 1.4 Hypotheses

To achieve the objectives of the research stated herein, the following three (3) null hypotheses were formulated to guide the study at 0.05 level of significance.

1) There is no significant relationship between new teachers' soft skills (emotional intelligence and creative and critical thinking) and productivity in Secondary Schools in Rivers State.

2) There is no significant relationship between emotional intelligence of new teachers and productivity in Secondary Schools in Rivers State.
3) There is no significant relationship between creative and critical thinking of new teachers and productivity in Secondary Schools in Rivers State.

## 2. Literature Review

### 2.1 Conceptual Review

The concepts of this study is situated on emotional intelligence by new teachers as well as the impact of creative and critical thinking on new teachers' productivity in the use of Soft Skills in secondary schools as indicated diagrammatically below.

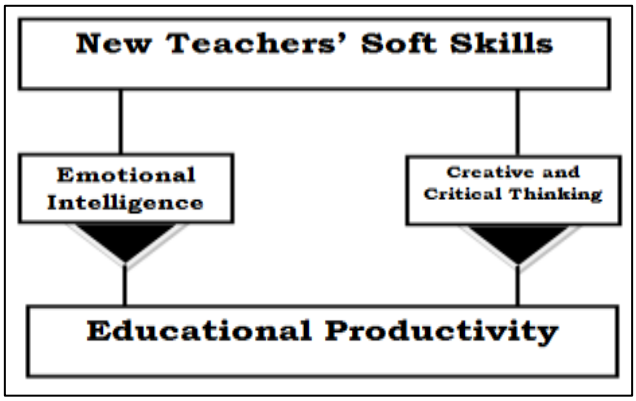


**Figure 1:** A schematic diagram showing relationship between variables
(Source: Researchers' conceptualisation (2019))

### 2.2 Emotional Intelligence of New Teachers and Productivity

In new teachers' productivity, there are quite a lot of factors but the new teacher as a major factor remains constant. New teachers' productivity in secondary schools can be defined as the extent at which a newly hired or appointed post-primary educator could contribute to the achievement of the overall objectives of the nation's educational goal (Umeghalu, 2019).

Also, various research findings have indicated that there is a strong relationship existing between emotional intelligence and productivity (Kpee, *et al.*, 2019; Muhammad, Sadia & Misbah, 2017; Gardner, 2013; Ingersoll & Smith, 2003; Thorndike, 1920). As substantiated by the trio of Muhammad, Sadia and Misbah, (2017) the concept of emotional intelligence (EI) originated back in 1920s when Thorndike, (1920) for the first time conceptualized the emotional intelligence into three dimensions i.e. abstract intelligence, mechanical intelligence and social intelligence. Afterwards, in the 1980s, several scholars made further contributions to the concept of emotional intelligence, for example, Gardner, in Strauss, (2013) came up with the idea of intra-emotional intelligence and inter-emotional intelligence.

Therefore, it is crucial to study the emotions of new teachers as well as their management of emotions which has been found to affect their thinking, categorization as well as problem-solving. There are various dimensions that are related to the teacher's

performance in the class which has traces of emotional intelligence components such as classroom management, teaching methods, and styles, individual differences, and problem-solving, use of motivational tools and direct teaching methods (Umeghalu, 2019).

Evertson and Weinstein, (2006) observed that classroom management can be described as actions of the new teachers which aim at the development of the environment which helps in improving the social-emotional learning and academic learning of the students. In relation to the classroom management, Ingersoll and Smith, (2003) were of the opinion that those new teachers who fail to maintain discipline in the class by managing their behaviour cannot perform well in their initial phase of their career, which necessitates a high emotional intelligence.

**2.3 The Role of Critical and Creative Thinking in New Teachers' Productivity**

Students have a tendency to try to make their lives easier, but that is not the way to develop and grow as a person. They need to learn to think differently and apply what they have learnt. There is a long-term trend away from routine-oriented work, which requires people to do the same things every day, and toward creativity-oriented jobs that ask people to engage in analysis and to make judgments (Umeghalu, 2019). The creative class includes people whose work it is to create new forms (for example, writers, engineers, and designers) and people who work in a wide range of knowledge-intensive industries that ask them to make critical and creative decisions about specific problems in their fields. Successful universities in the twenty-first century will be those that educate graduates who contribute to a critical and creative workforce (Patel, 2018).

Creative and Critical Thinking is not just a "nice to have" skill in the 21st century, it is essential. We live in an age where both the young and old have more information at their fingertips than ever before. But how can the new teacher assist in ensuring that the students discern what information is correct, relevant and unbiased? How can the students know when to accept what someone is saying, and when to question it? (Zulfiqar, 2018). This is where Creative and Critical Thinking plays a vital role in the job of a new teacher because those who fall most times as prey to incorrect information littered all over the media are the adolescents.

The merging of creative and critical thinking is best for productive thinking which is one of the soft skills that the evolving world of the 21st century requires at all levels of education and in all aspect of the human life. Creative and Critical Thinking is common to all but must be developed for optimum performance (Padget, 2012).

The assumption that the ordinary person can be creative (Craft, 2003) and it is our creativity that allows us to handle the novelty of everyday situations of problem recognition and problem solving combined with the ability to evaluate possible solutions and reflect on the success of our actions (Halpern in Padget, 2012). Creative and Critical Thinking can be regarded as two sides of the same coin. Nickerson in Padget, (2012) noted that it can be argued that to think well requires both creative and critical capabilities, that neither can be effective without the other'. These are not therefore mutually exclusive personal attributes and part of the role of the teacher is to provide the appropriate stimuli

and environment that will allow both to develop in concert. The development of these will define the individual in life.

Creative and Critical Thinking go hand in hand and help to provide different ways of making sense of a situation; after applying analytical and logical critical thinking to our problem we can move towards the construction of a solution using our creative thinking (Umeghalu, 2019). This is the place where creativity and critical thinking meet as we then go on to assess whether the solution, we have arrived at is the best solution available (Umeghalu, 2019). We will know this because we will have applied our critical thinking to the results of our creative thoughts. As we edge towards a working definition of creativity that will be meaningful in the context of learning and teaching it is essential that we focus on the dispositions of both the teacher and the learner and appreciate how these impact on the products of their creative endeavours knowing that in school these are intimately linked (Padget, 2012).

Facione, (1990) averred that creative thinking is the kind of thinking that leads to new insights, novel approaches, fresh perspectives, and whole new ways of understanding and conceiving of things. The products of creative thought include some obvious things like music, poetry, dance, dramatic literature, inventions, and technical innovations (Umeghalu, 2019). But there are some not so obvious examples as well, such as ways of putting a question that expand the horizons of possible solutions, or ways of conceiving of relationships that challenge presuppositions and lead one to see the world in imaginative and different ways (Umeghalu, 2019; Facione, 1990).

Padget, (2012) agreed with Umeghalu, (2019) and Facione, (1990) that creative learning and teaching start with the adoption of a particular view and understanding of the dynamics of the learning process and the respective roles of both teachers and learners in that process. It is imperative therefore, to examine the positions of creativity and critical thinking in the stimulation and support of what has been called deep learning as the three factors above are brought together. The following points are essential in actualizing creative teaching and learning as stated by Padget, (2012):

1) The use of pedagogical approaches by the new teachers involving both themselves and learners in looking at possibilities, looking for flexibility, taking risks and experimenting. Creativity is being employed when there are unusual and exciting learning opportunities which provide high quality stimuli combined with the structure to generate enquiring language and provide deep support for the learners' thinking and efforts.
2) Students are being creative when they are fully engaged in making meaning together through stimulating learning tasks of which they feel ownership, they will feel confident enough to make speculations and assertions, and feel empowered to articulate their learning to any of the other people round them.
3) Students are thinking critically when they step back and reflect on what they have achieved in relation to a desired outcome; when they can discuss and evaluate these achievements either individually or collectively against appropriate criteria and be conscious of and be able to comment on the quality of the process of which they have been a part.

4) When what links each of these ideas is the planned and deliberate use of language stemming from a clear understanding of its importance as an integral part of thinking and learning in a social context.

Creative and Critical Thinking, as substantiated by Ennis in Coughlan, (2008) is the application of the imagination to finding a solution to ones learning task, with reasonable reflective thinking focused on deciding what to believe or do. Also, Australian Curriculum, Assessment and Reporting Authority (ACARA, 2018) described Critical and Creative Thinking as a process involving the students in thinking broadly and deeply using skills, behaviours and dispositions such as reason, logic, resourcefulness, imagination and innovation in all learning areas at school and in their lives beyond school. It is the 'thinking' that is productive, purposeful and intentional which is at the centre of effective learning. Umeghalu, (2019) agreed with ACARA, (2018) that by applying a sequence of thinking skills, students develop an increasingly sophisticated understanding of the processes they can use whenever they encounter problems, unfamiliar information and new ideas.

In addition, the progressive development of knowledge about thinking and the practice of using thinking strategies can increase students' motivation for, and management of, their own learning. They become more confident and autonomous problem-solvers and thinkers. Creative and Critical Thinking is the foundation of strategic thinking which implies good judgment and good decision making (Umeghalu, 2019; Zulfiqar, 2018). Adequate Creative and Critical Thinking result in the ability to draw the right conclusions more often (Zulfiqar, 2018). It helps to:

a. ask the right questions;
b. recognize the existence of problems;
c. read between the lines;
d. recognized implicit and explicit assumptions;
e. identify relevant and irrelevant information in arguments;
f. recognized bias in one's perspective and that of others (Zulfiqar, 2018).

Treffinger, (2008) averred that creative thinking involves searching for meaningful new connections by generating many unusual, original, and varied possibilities, as well as details that expand or enrich possibilities. Critical thinking, on the other hand, involves examining possibilities carefully, fairly, and constructively—focusing on ones thoughts and actions by organizing and analyzing possibilities, refining and developing the most promising possibilities, ranking or prioritizing options, and choosing certain options (Umeghalu, 2019; Zulfiqar, 2018; Treffinger, 2008). Effective problem solvers must think both creatively and critically, generating options and focusing their thinking (Treffinger, 2008).

Paul, (1990) noted that the term *critical* and *creativity* have an intimate relationship to the ability to figure things out. There is a natural marriage between them; indeed, all thinking that is properly called *excellent* combined these two dimensions in an intimate way. Whenever our thinking excels, it excels because we succeed in designing, or engendering, fashioning or originating, creating or producing results and outcomes appropriate to our ends in thinking (Umeghalu, 2019; Paul, 1990).

The duo of Paul and Elder, (2012) emphasised that there are ways to teach simultaneously for both creative and critical thinking. To do so requires that we focus on these terms in practical, everyday contexts, that we keep their central meanings in mind, that we seek insight into how they overlap and interact with one another. Umeghalu, (2019) averred that when we understand critical and creative thought truly and deeply, we recognize them as inseparable, integrated, and unitary. To live productively, we need to internalize and use intellectual standards to assess our thinking (criticality). We also need to generate —through creative acts of the mind — the products to be assessed. That minds create meanings is not in doubt; whether they create meanings that are useful, insightful, or profound (Umeghalu, 2019; Paul & Elder, 2012). Imagination and reason are an inseparable team. They function best in tandem, like the right and left legs in walking or running. Studying either one separately only ensures that remain mysterious and puzzling, or, just as unfortunate, are reduced to stereotype and caricature (Paul, *et al*., 2012).

Educational institutions across the country are looking for solutions –new ways to teach critical thinking, measure student learning and demonstrate efficacy (Zulfiqar, 2018; Paul, *et al*., 2012). The challenge is identifying the best practices and incorporating them into the curriculum on a systematic basis (Zulfiqar, 2018). Across most institutions, the majority of the new educators have not been formally trained in and how to impact Creative and Critical Thinking to the students as Soft Skills (Umeghalu, 2019). New educators do not know where critical thinking best fits into the curriculum or where to access quality educational resources and, as a result, they are not in the best position to teach others or to evaluate the most effective teaching models for Creative and Critical Thinking (Zulfiqar, 2018).

## 3. Theoretical Review

### 3.1 The Transformational Learning Theory

The transformational (transformative) learning theory was originally developed by Jack Mezirow- an American Sociologist, in the year 1978. It stated that: Individuals must engage in critical reflection on their experiences, which in turn leads to a perspective transformation (Mezirow, 1991).

The term *'critical reflection on experience'* here implies both the teacher and learner being objective with their norms in the course of teaching and learning. The word objective can also be described as openness to new ideas by thinking out of the box.

O'Sullivan (2003) observed critical reflection in the use of Soft Skills as:

> *"…experiencing a deep, structural shift in the basic premises of thought, feelings, and actions. It is a shift of consciousness that dramatically and irreversibly alters our way of being in the world. Such a shift involves our understanding of ourselves and our self-locations; our relationships with other humans and with the natural world; our understanding of relations of power in interlocking structures of class, race and gender;*

*our body awareness's, our visions of alternative approaches to living; and our sense of possibilities for social justice and peace and personal joy" (p. 327)*

Reflection is a very important process in professional education and a most important educational goal (Vithanarachchi, 2000; Atkins & Murphy 1993, Tanner, 1993). As such, fostering critical reflection through transformation may result in emancipatory education (Hendricks-Thomas & Patterson, 1995). Students are more successful when they are aware of their own ways of learning (Highfield, 1988) and this is more of the reasons why critical reflection is essential because it ensures that students are aware of their learning styles. Reflection is similar to problem-solving and Mezirow talked about how we reflect on the content of the problem, the process of problem-solving, or the premise of the problem (Mezirow, 1991). Through this reflection, both the students and the new teachers are able to understand themselves more and then understand the process of teaching and learning better (Umeghalu, 2019).

## 4. Empirical Reviews

Siti, Sharifah and Nik (2012) investigated teaching quality and performance among teachers in Malaysia. The framework of this investigation measured the teacher's cognitive ability (skills of assessment and evaluation, IT skills, and co-curricular knowledge) and the teacher's personality or interpersonal skills (Soft Skills). The respondents were experienced teachers working in Malaysia. A set of questionnaires with 120 questions were constructed by the researchers and were administered among 2000 school teachers from different types of schools. However, only 1366 copies of the completed questionnaire were analyzed while 634 responses were removed due to incomplete data. Utilizing structural equation model (SEM), this study attempted to ascertain the validity of the structural model of which teacher's cognitive abilities and personalities predict teacher's performances. The results revealed a model fit with both cognitive abilities and personality predicting classroom management. Good personality alone, however, is insufficient in terms of enhancing the teachers' commitment and responsibilities towards their students unless it is complemented by the teachers' cognitive competency (cognitive abilities).

Yusuf, Yusuf and Gambari (2015) completed a study on emotional intelligence of student - teachers in relation to their future productivity. Three hundred and twenty one student-teachers selected randomly from Faculty of Education, University of Ilorin, Nigeria formed the sample. Emotional Intelligence Scales (EIS) developed by Goldman, (1996) was adopted to collect data on student-teachers level of emotional intelligence. Data obtained were analyzed using t-test and one-way ANOVA. The findings revealed that the emotional intelligence of student-teachers was high. There was a significant difference between emotional intelligence of male and female student-teachers. An emotional intelligent student-teacher is likely to be high achiever and become more productive in future irrespective of gender. This implies that improving the emotional

competencies of the student-teachers will help them to develop the same among their students.

Palaniappan (2015) completed a study on academic achievement of groups form based on creativity and intelligence sample size of 497. Four Malaysian students were used. Intelligence was measured using Cattel's Culture Fair Intelligence Tests and Creativity was measured using Torrance Tests of Creative Thinking. Four groups were formed based on creativity and intelligence scores, namely, High IQ – High Creative, High IQ – Low Creative, Low IQ – High Creative and Low IQ – Low Creative. The mean academic achievement scores of these four groups were compared. One-way ANOVA indicate that there are significant differences in the mean academic achievement scores among the four groups. There were significant differences between High IQ – Low Creative and Low IQ – Low Creative groups as well as between High IQ – High Creative and Low IQ – Low Creative groups. These findings are only to be expected as the differences in IQ between these pairs of groups are 48 and 50 points respectively. However, there are no significant differences in academic achievement between the High IQ - Low Creative and Low IQ - High Creative groups. This supports the findings reported by Getzels and Jackson, (1962) Torrance, (1959) and Yamamoto, (1964) of equivalent academic achievement among the highly intelligent and highly creative groups. Although the Low IQ – High Creative group had a mean IQ of 46 points lower than the High IQ – Low Creative group, the former appears to be able to compensate for this with their higher level of creativity. Another significant finding is the equivalent academic achievement levels of the High IQ – High Creativity and the Low IQ – High Creativity groups although the latter has a mean IQ 50 points lower than the former group. This further accentuates previous findings that creativity may help compensate the lack of intelligence in enhancing academic achievement. These findings have important implications in curriculum design and instruction aimed at infusing creative thinking and enhancing academic achievement among students of varying level of intelligence.

Sehata (2010) completed a study on the relationship between principals' creativity and personnel's productivity in technical –vocational colleges. This study used a correlation research design in order to examine the relationship between principals' creativity and personnel's productivity in technical-vocational colleges in Tehran, Iran. Sample of 7 principals and 311 personnel of seven colleges were used. Data were analyzed via Pearson correlation. The correlation between creativity and productivity turned out to be significant ($r = 0.12 > 0.004$).The relationship between principals' creativity and personnel's motivation is positively significant ($r = 0.043$, Į $< 0.04$). Also, the relationship between principals' creativity and personnel assessment is positively significant ($r = 0.056$ Į $< 0.04$). However, there was direct but not significant relationship between principals' creativity and job readiness, role perception, organization support, credit and environmental factors. It was recommended that culture and attitudes toward the organization be studied in order to find out factors influencing productivity.

Ketabi, Zabihi and Ghadiri (2013) explored bridging theory and practice: how creative ideas flourish through personal and academic literacy practices: A sample of 300

intermediate EFL learners in Iran participated in this study by filling out a self-report questionnaire and completing the Abbreviated Torrance Test for Adults (ATTA). The questionnaire inquiries about the total courses taken in reading and writing as well as the total hours spent on reading and writing in both L1 and L2. The results revealed that creative thinking scores (fluency, originality, elaboration, flexibility, and the Creativity Index) showed significant correlations with the amount of time spent on reading and writing.

Nuswowati and Taufiq (2015) completed a study on developing creative thinking skills and creative attitude through problem-based green vision chemistry environment learning. Mixed methods research design experimental models embedded with the pretest-posttest control group were used in this study and the differences between assumed initial end-tests as the effects of the treatment. Creative thinking skills measured by the essay tests, non-test while the creative attitude is measured from the completed questionnaires consisting of positive and negative statements of markers creative attitude. Data measurement N-gain of creative thinking skills for the control and experimental group were 0.40 and 0.71, while the creative attitude was 0.08 and 0.34. Improved tests of creative thinking skills or creative attitudes were analyzed by t-test. Implementation of research findings indicates environmental chemistry lecture-problems based Green Chemistry vision can improve thinking skills of a creative student.

## 5. Summary of Reviews

In summary, the conceptual review and framework as well as the theoretical review examined in this paper in relation to new teachers' soft skills are of essence since they are in adherence to a behavioural approach to social phenomena. Soft skills are social phenomena required for exceptional performance at school and of course, at work. It was discovered that the variables on the concept adopted for new teachers' Soft Skills and their productivity in Public Secondary Schools in Rivers State are sacrosanct in the realization of the new teacher that is capable of delivering on the national goals on education. However, the researcher could not discover any work that has been done on new teachers' Soft Skills and their productivity in Public Secondary Schools in Rivers State by ascertaining components of Soft Skills such as creative and critical thinking in joint relationship with emotional intelligence. This is the gap this study bridged.

## 6. Methodology

### 6.1 Research Design

The researcher adopted a correlational research design for this study. Kpolovie in Kpee, *et al*., (2019) highlighted that correlational research is adopted for investigation of the magnitude and direction or nature (positive or negative) of relationship that exists between a dependent variable (criterion variable) and one or more independent variables (predictor variables). In this study the dependent variable is productivity of teachers and the independent variables are emotional intelligence, teamwork. Therefore, the

correlational research design becomes essential since the study involves the calculation of correlational coefficients which measures the extent to which the soft skill variables vary in the same way (Kpee, *et al*., 2019).

### 6.2 Population for the Study

The population comprised all of the 268 government owned Senior Secondary Schools in Rivers State with 8452 teachers. This includes: 4413 male staff and 4039 female staff. There are 4654 teachers in rural areas and 3798 teachers in urban areas [Planning, Research and Statistics Department, Rivers State Senior Secondary Schools Board, January 2018 (in Kpee, *et al*., 2019)].

Hence, 15 Public Senior Secondary Schools are to the nearest whole number of the 5.56% of the total population of 268Public Senior Secondary Schools in Rivers State. Proportionate stratified random sampling technique for the study was applied as follows: Rivers East, 3 urban and 2 rural (134 teachers) Public Senior Secondary Schools, Rivers West, 3 urban and 2 rural (133 teachers) Public Senior Secondary Schools and Rivers South-East, 3 urban and 2 rural (133 teachers) Public Senior Secondary Schools (Kpee, *et al*., 2019).

### 6.3 Sample and Sampling Technique

The sample size for this study was 470 representing 5.56% of the population size using the Taro Yamane formula. Proportionate stratified random sampling technique was used to draw the 470 respondents from the strata (Kpee, *et al*., 2019).

### 6.4 Instrument for Data Collection

The research instruments utilised for data collection in this study were two sets of instruments: New Teachers' Soft Skills Questionnaire (NTSSQ) and Productivity of Teachers Questionnaire (PTQ).The first instrument is a self-structured instrument titled ''New Teachers' Soft Skills Questionnaire'' (NTSSQ). The NTSSQ had two sections A & B. Section A consists of the demographic information of the respondents while section B consists of 3 sections having a total of 28 items (Umeghalu, 2019).

The second instrument was also a self-structured instrument titled ''Productivity of Teachers Questionnaire'' (PTQ) and consists of 20 associated items. Both NTSSQ and PTQ were structured after the modified Likert's rating scale of 4 points as follows; Strongly Agree (SA), Agree (A), Disagree (DA), and Strongly Disagree (SA) (Kpee, *et al*., 2019).

### 6.5 Validity of the Instrument

To ensure face and content validities of the instruments, the manuscripts were submitted to the supervisor and three other experts from the Departments of Educational Management, Psychology, Measurement & Evaluation and Educational Development and Curriculum; all from the University of Port Harcourt. They were requested to review the various items on the instruments in terms of relevance, clarity and response patterns

as they relate to the study. Their contributions and modifications were included in the final copies of the instruments (Kpee, *et al*., 2019).

### 6.6 Reliability of the Instrument

The internal consistency method using Cronbach Alpha reliability statistics was used to calculate the reliability coefficient. The Cronbach Alpha was suitable because the instrument is sectioned and one time administered. The reliability coefficient of New Teachers' Soft Skills Questionnaire (NTSSQ) and Productivity of Teachers Questionnaire (PTQ) were 0.90 and 0.88. Teachers Emotional Intelligence Subscale was calculated to be 0.84 while Role of Creative and Critical Thinking Subscale was calculated to be 0.81. The various reliability coefficients were high enough and guaranteed the use of the instrument for this study (Umeghalu, 2019).

### 6.7 Method of Data Collection

The researcher was assisted in the administration of the copies of the instrument to the respondents for their strong opinion by two trained research assistants. The instrument was retrieved from the respondents on completion immediately. The researcher also engaged a few of the teachers in a brief interaction. This assisted the researcher to ascertain the extent of their sincerity with respect to their responses.

### 6.8 Method of Data Analysis

The first research question was analyzed with the use of multiple regression while the rest were analyzed with the use of Pearson product-moment correlation coefficient (r). ANOVA associated with multiple regression was also used to test the first hypothesis, while the remaining five hypotheses were tested with z-ratio at 0.05 level of significance.

The following index shows the extent of prediction to the independent variable via;

0- 25% = Low;
26- 50% = Moderate;
51- 75% = High;
76- 100% = Very High (Umeghalu, 2019)

## 7. Results

### 7.1 Answers to Research Questions

**Research Question 1:** Is there any relationship between new teachers' soft skills (emotional intelligence and creative and critical thinking) and productivity in Secondary Schools in Rivers State?

**Table 1:** Model summary of the joint prediction of new teachers' Soft Skills (emotional intelligence and creative and critical thinking) on productivity in Secondary Schools in Rivers State

| Model | R | $R^2$ | Adjusted $R^2$ |
|---|---|---|---|
| 1 | 0.75 | 0 56 | 0.57 |

a. Predictors: (Constant), emotional intelligence, creative and critical thinking;
b. Dependent Variable: productivity.

Data in Table 1 revealed that new teachers' Soft Skills have a positive high relationship of 0.75 with productivity. More so, the R squared (R2) value was calculated to be 0.56 meaning that new teacher' Soft Skills contribute 56% (0.56 x 100) of productivity in secondary schools in Rivers State.

**Research Question 2:** What is the relationship between emotional intelligence of new teachers and productivity in Secondary Schools in Rivers State?

**Table 2:** Pearson Product Moment Correlation between emotional intelligence of new teachers and productivity in Secondary Schools in Rivers State

| Categories | n | df | r | Remark |
|---|---|---|---|---|
| Emotional intelligence | 470 | 468 | 0.50 | Positive moderate relationship |
| Productivity | | | | |

Data in Table 2 revealed that Pearson Product Moment correlation coefficient was 0.50. This showed that there is a positive moderate relationship between emotional intelligence and productivity. This showed that increase in emotional intelligence leads to increase in productivity.

**Research Question 3:** Which relationship exists between creative and critical thinking of new teachers and productivity in Secondary Schools in Rivers State?

**Table 3:** Pearson Product Moment Correlation between creative thinking of new teachers and productivity in Secondary Schools in Rivers State.

| Categories | n | df | r | Remark |
|---|---|---|---|---|
| Creative thinking | 470 | 468 | 0.64 | Positive high relationship |
| Productivity | | | | |

Data in Table 3 revealed that Pearson Product Moment correlation coefficient was 0.64. This showed that there is a positive high relationship between creative thinking and productivity. This implies that increase in creative thinking leads to increase in productivity.

### 7.2 Hypotheses Testing

**Hypothesis 1:** There is no significant relationship between new teachers' soft skills (emotional intelligence, creative and critical thinking, student-teacher communication,

teamwork and students' engagement) and productivity in Secondary Schools in Rivers State.

**Table 4:** ANOVA associated with multiple regressions on the prediction of new teachers' Soft Skills on productivity in Rivers State

| Model | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Regression | 7765.52 | 5 | 1553.10 | 12.66 | .00[a] |
| Residual | 56915.11 | 464 | 122.66 | | |
| **Total** | 64680.63 | 469 | | | |

a. Predictors: (Constant), emotional intelligence and creative thinking;
b. Dependent Variable: productivity.

Data in Table 4 above indicated that the sums of squares are 7765.52 and 56915.11 while the mean squares are 1553.10 and 122.66 respectively. With degrees of 5 and 464, the calculated F-value of 12.66 is significant at 0.00 when subjected to an alpha level of 0.05. Therefore, the null hypothesis is rejected. By implication, there is a significant relationship between new teachers' soft skills (emotional intelligence and creative and critical thinking) and productivity in Secondary Schools in Rivers State.

### 8.1 Scatterplot

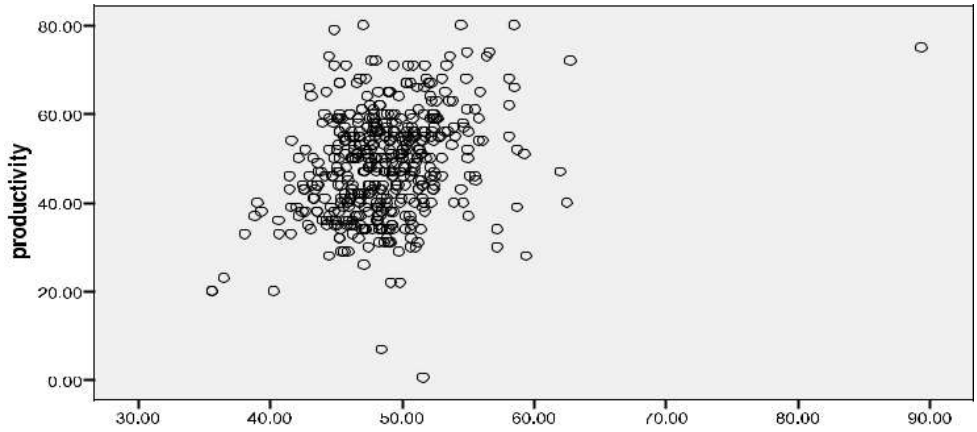


**Figure 4.1:** Graphical representation of the joint relationship between soft skills and productivity (Source: SPSS)

**Hypothesis 2:** There is no significant relationship between emotional intelligence of new teachers and productivity in Secondary Schools in Rivers State.

**Table 5:** z-ratio on the correlation between emotional intelligence of new teachers and productivity in Secondary Schools in Rivers State

| Categories | n | Df | R | z-ratio | t-cal | Remark |
|---|---|---|---|---|---|---|
| Emotional intelligence | 470 | 468 | 0.50 | 10.08 | ±1.96 | Significant relationship |
| Productivity | | | | | | |

Data in Table 5 above revealed that the degree of freedom is 468 with calculated z-ratio of 10.08 which is greater than the critical table value of 1.96. Therefore, the null hypothesis is rejected. By implication, there is significant relationship between emotional intelligence of new teachers and productivity in Secondary Schools in Rivers State

**Hypothesis 3:** There is no significant relationship between creative and critical thinking of new teachers and productivity in Secondary Schools in Rivers State.

**Table 6:** z-ratio on the correlation between creative thinking of new teachers and productivity in secondary schools in Rivers State

| Categories | n | Df | R | z-ratio | t-cal | Remark |
|---|---|---|---|---|---|---|
| Creative thinking | 470 | 468 | 0.64 | 12.52 | ±1.96 | Significant relationship |
| Productivity | | | | | | |

Data in Table 6 revealed that the degree of freedom is 468 with calculated z-ratio of 12.82 which is greater than the critical table value of 1.96. Therefore, the null hypothesis is rejected. By implication, there is significant relationship between creative and critical thinking of new teachers and productivity in Secondary Schools in Rivers State.

## 8. Summary of Findings

1) It was found that teachers' Soft Skills have a significant relationship of 0.75 with productivity in secondary schools in Rivers State.
2) The finding showed that there is a significant relationship of 0.50 between emotional intelligence and productivity.
3) The finding showed that there is a significant relationship of 0.64 between creative thinking and productivity.

## 9. Discussion of Findings

The findings of this study are discussed under the following subheadings:

### 9.1 Teachers' Soft Skills and Productivity

It was found that teachers' Soft Skills have a significant positive high relationship of 0.75 with productivity in secondary schools in Rivers State. The high positive relationship depicted between teachers' Soft Skills and productivity is not questionable owing to the fact that there is great importance of sundry of skills in the achievement of organizational set goals and objectives. This implies that the acquisition of the right skill towards a profession will go a long way to enhance the ability of that worker to achieve the anticipated result.

The finding of this study is in line with Abiola in Kpee, *et al*, (2019) who found that the possession of the needed skills in a given teaching profession is as good as being completed the assignment of the profession. In the same line of thought, Attakorna,

Tayuta, Pisitthawata, and Kanokorna in Kpee, *et al*, (2019) found that Soft Skills fulfill an important role in shaping an individual's personality.

### 9.2 Emotional Intelligence and Productivity

The finding showed that there is a significant positive moderate relationship of 0.50 between emotional intelligence and productivity. The study showed that emotional intelligence has a moderate positive relationship with productivity in secondary schools in Rivers State. The possible reason while emotional intelligence of teachers as soft skill is related with productivity could be because of the immense role emotion plays in the face of work responsibility. The acquisition of emotional intelligence makes one to be stable in assigned responsibility even in the face of provocation by the principal, students or the environment.

This is why Uzonna in Kpee, *et al*, (2019) reported that proper development of emotional intelligence by the teachers brings about enhanced productivity in their job areas. The invaluable measures of emotional intelligence in the achievement of productivity cannot be overemphasized. The finding did not beat the researcher's imagination in the sense that the researcher had expected teachers' good emotional understanding of one self and that of the students to enhance teaching and learning processes. It is still on the importance of emotional intelligence that Adams in Kpee, *et al*, (2019) found that complete emotion intelligence relates very highly with the achievement of human and organizational goals.

### 9.3 Creative Thinking and Productivity

The finding showed that there is a significant positive high relationship of 0.64 between creative thinking and productivity. The researcher is at home with the finding of the study which showed a significant high relationship between critical thinking and teachers' productivity in secondary schools in Rivers State. It is on the view of the researcher that teachers who have developed the required creative thinking skill have gotten the wherewithal to discharge the allocated teaching responsibility with the actualization of the achievable goals.

That is why Siti, Sharifah and Nik in Umeghalu, (2019) revealed a model fit with both cognitive abilities and personality predicting classroom management. The possible reason cognition relates with productivity could be traceable to the fact that it facilitates effective and efficient teaching and learning. A teacher without proper cognitive development may not fully involve the students in critical thinking (Umeghalu, 2019).

## 10. Conclusion

Based on the findings of this study, it was concluded that teachers' usage of emotional intelligence as well as creative and critical thinking as Soft Skills is paramount and indispensable in the realisation of productivity in Public Secondary Schools in Rivers State, Nigeria.

### 10.1 Recommendations

The following recommendations were made:

1) The school administrators should not interfere with the normal teaching process in order not to disrupt the initiation of any form of soft skills in the classroom.
2) The teachers should mostly use exploration teaching method in order to allow the students to critically think out of the box.

## 11. Contributions to Knowledge

The study has been able to make the following contributions to knowledge.

1) The study has empirically documented that the use of emotional intelligence cum creative and critical thinking as soft skills for new teachers brings about productivity in the secondary schools by 56%.
2) The study has proven that emotional intelligence in combination with creative and critical thinking as soft skills for new teachers facilitate improved classroom relationship and engender students' cognitive skills development.

## References

Aja-Okorie, U. (2016). Teachers personnel management as determinant of teacher productivity in secondary schools in Delta state, Nigeria. *British Journal of Education (BJE)*. *4*(8), 13-22.

Atkins, S., & Murphy, K. (1993). Reflection: A review of the literature. *Journal of Advanced Nursing*, 18, 1188-1192.

Australian Curriculum, Assessment and Reporting Authority (ACARA) (2018). Critical and creative thinking. Retrieved on 13/02/18, from: https://www.australiancurriculum.edu.au/f-10-curriculum/general-capabilities/critical-and-creative-thinking/.

Coughlan, A. (2008). Learning to learn: Creative thinking and critical thinking. *DCU Student Learning Resources, 1*(6).

Craft, A. (2003). The limits to creativity in education: Dilemmas for the educator. *British journal of educational studies*, *51*(2), 113-127.

Ennis, R. H. (1993). Critical thinking assessment. *Theory into practice*, *32*(3), 179-186.

Facione, P. (1990). *Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction* (The Delphi Report).

Hendricks-Thomas, J., & Patterson, E. (1995). A sharing in critical thought by nursing faculty. *Journal of Advanced Nursing*, 22, 594-599

Highfield, M. E. (1988). Learning styles. *Nurse Educator*, *13*(6), 30-33.

Ingersoll, R. M., & Smith, T. M. (2003). The wrong solution to the teacher shortage. *Educational leadership*, *60*(8), 30-33.

Kanokorna, S., Pongtorna, P. & Sujanya, S. (2013). Soft skills development to enhance teachers' competencies in primary schools. *Procedia - International Conference on*

*Education & Educational Psychology 2013 in Social and Behavioral Sciences* 112, 842 – 846.

Ketabi, S. Zabihi, R. & Ghadiri, M. (2013). Bridging theory and practice: How creative ideas flourish through personal and academic literacy practices. *International Journal of Research Studies in Psychology*. 2.

Kpee, G. G. & Umeghalu, E. O. (2019). New teachers' soft skills and productivity in secondary schools in Rivers state. *American Journal of Humanities and Social Sciences Research (AJHSSR), 3*(3), 224-235.

Muhammad, A., Sadia, A., & Misbah, H. (2017). Impact of emotional intelligence on teacher' s performance in higher education institutions of Pakistan. *Future Business Journal*, *3*(2), 87-97.

Nuswowati, M. & Taufiq, M. (2015). Developing creative thinking skills and creative attitude through problem-based green vision chemistry environment learning. *Indonesian Journal of Science Education,* 4(2), 170-176.

O'Sullivan, E. (2003). Bringing A Perspective of Transformative Learning to Globalized Consumption. *International Journal of Consumer Studies, 27*(4), 326–330.

Padget, S. (2012). Creativity and Critical Thinking for teachers in training. Retrieved on 11/10/18, from: https://www.steveslearning.com/Korean%20Resources/Creativity%20and%20Critical%20Thinking%20for%20Teachers%20in%20Training.pdf.

Palaniappan, A. (2015). *Academic achievement of groups formed based on creativity and intelligence*: A PhD Thesis; Faculty of Education, University of Malaya.

Patel, M. (2018). Why is critical and creative thinking important to student success? Retrieved on 11/10/18, from: https://think.dasa.ncsu.edu/why-is-critical-and-creative-thinking-important-to-student-success/.

Paul, R. & Elder, L. (2012). *Critical thinking: Tools for taking charge of your learning and your life, 3rd edition*. US: Pearson.

Paul, R. W., & Binkler, J. A. (1990). *Critical thinking: What every person needs to survive in a rapidly changing world.* Rohnert Park, CA: Center for Critical Thinking and Moral Critique.

Sehata, A., (2010). The relationship between principals' creativity and personnel's productivity in technical –vocational colleges. *Procedia Social and Behavioral Sciences* 5, 2277–2281.

Siti, Sharifah & Nik (2012). Abd Hamid, S. R., Hassan, S., Sariah, S., & Ismail, N. A. H. (2012). Teaching quality and performance among experienced teachers in Malaysia. *Australian Journal of Teacher Education*, *37*(11), 5.

Strauss, V. (2013). Howard Gardner: 'Multiple intelligences' are not 'learning styles'. *The Washington Post*, *16*.

Tanner, C. A. (1990). Reflections on the curriculum revolution. *Journal of Nursing Education*, 29, 295-299.

Thorndike, E. L. (1920). A constant error in psychological ratings. *Journal of applied psychology*, *4*(1), 25-29.

Treffinger, D. J. (2008). Preparing creative and critical thinkers. In: Educational leadership: thinking skills now. *ASCD*, 65.

Umeghalu, O. E. (2019). *New teachers' soft skills and productivity in Secondary Schools in Rivers State*. A master dissertation, Faculty of Education, University of Port Harcourt.

Vithanarachchi, S. L. H. (2000). *The ways of learning experienced and described by post-registered nurse learners*. M.Sc dissertation, Open University of Sri Lanka: University of British Colombia.

Yusuf, H. T., Yusuf, A. & Gambari, A. I. (2015). Emotional intelligence of student -teachers in relation to their future productivity. *The African Symposium: An online journal of the African Educational Research Network*. 15(1), 24-34.

Zulfiqar, A. (2018). The importance of teaching critical thinking to students. Retrieved on 11/10/18, from: http://www.talentlens.com.au/blog/teaching-critical-thinking-to-students.