

ASSESSMENT OF SELF-EFFICACY AND CONTENT KNOWLEDGE NEEDS FOR SHORTHAND INSTRUCTIONAL DELIVERY OF LECTURERS IN TERTIARY INSTITUTIONS IN NORTHERN, NIGERIA

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Abstract

The study was intended to assess the self-efficacy and content Knowledge needs for shorthand instructional delivery of lecturers in tertiary institutions in Northern, Nigeria. Two research questions were used to guide the study, while two hypotheses were formulated and tested at significance level of 0.05. The entire 125 shorthand lecturers from sixty (60) tertiary institutions offering shorthand in Northern Nigeria formed the population and sample of the study. Mean and standard deviations were used to answer the stated research questions, using a benchmark of 2.5 as a criterion for agreement. Analysis of Variance (ANOVA) was used to test the null hypotheses used in the study. All the two (2) null hypotheses raised for the study were accepted. The findings revealed, among others indicates that performance outcomes, vicarious experiences and content knowledge of shorthand lecturers are needed for instructional delivery in all the tertiary institutions in Northern-Nigeria. In view of the findings, one of the recommendations made was that, universities, colleges of education and polytechnics lecturers should possess self-efficacy and content knowledge for shorthand instructional delivery in all the tertiary institutions offering shorthand in Northern Nigeria.

Keywords: Self-efficacy, Content Knowledge, Shorthand, Instructional Delivery

Introduction

In recent years, discuss on teachers' pedagogy knowledge and teachers content knowledge has attracted increasing attention from several agents in the education industry. Any nation whose government strives to achieve greatness provides their students with highly qualified teachers that are vast in pedagogical and content knowledge in area of their specialization. Evidences available from researches suggest that teachers' intellectual resources significantly affect students' learning experiences (Odumosu, 2017) it therefore means that knowledge of the subject and pedagogical skills are very essential to teaching and learning.

Self-efficacy can be defined as the power to produce an effect (Lacour & Wilkerson, 2001). Henk and Melnick (2015) define self-efficacy as a personal judgment of one's ability to successfully participate in an activity which has effect on future activities. Akhtar (2008) defined self-efficacy as the belief an individual have on his abilities to meet the challenges ahead of him and complete a task successfully. Generally self-efficacy refers to one overall belief in one's ability to succeed. Bandura (2004) opined that teachers' perceptions about their abilities influence how their behaviours thought patterns, and their emotional reactions in difficult situations. It therefore means that, teachers with a high self-efficacy will be confident and motivated to work toward a learning goal. The components of self-efficacy according to Bandura (2004) include performance outcome, vicarious experiences, verbal encouragements and physiological feedback. According to Bandura (2004) Performance Outcomes is the teacher's actions in the classroom. Vicarious Experiences are experiences that deal with an individual's ability to attain opportunities for success. Verbal

encouragements is the source of experiences that deals with the ability of individuals to receive feedback on their action from a coworker or supervisor and Physiological feedback deals with an individual's ability to have influence on physiological forms of information.

Content knowledge refers to the body of knowledge and information that teachers teach and that students are expected to learn in a given subject or content area, such as English language arts, mathematics, science, or social studies. Content knowledge refers to the stuff of a discipline: factual information, organizing principles, and central concepts of the subject (Grossman 2011). Shorthand otherwise known as stenography is one of the core subject to all business education students or secretaries in tertiary institutions in Nigeria. It is anchored for secretarial educators and administrators in Nigeria. It is a system of rapid handwriting employing symbols to represent words, phrases, and letters. Ismaila (2008) defines Shorthand as a skilled subject which aids the ability to concentrate on taking account of events using special outlines. Proficiency in the subject enables an individual to be efficient in taking down of minutes of meetings, composing letters, report writing, recording messages among others as a secretary (Chip 2013).

Instruction according to Oxford Advanced Learner Dictionary 8th Edition by Hornby (2015) as an adjective derived from the concept of instruction and it connotes when someone teaches people something. An instruction has been defined as the last phase of curriculum implementation. Jeremiah and Alamina (2017) has described instruction as all activities engaged in by the teacher with the aim of facilitating change in learner behavior using different kinds of delivery methods. Instructional delivery on the other hand is a methods, strategies, approaches or even techniques that teachers employ to deliver his/her subject matter to the learners. Instructional delivery has been seen as the process showing every activity the teacher and the learner does in a classroom setting. So every effort that the teacher makes in order to have a fruitful time with the students by exposing the contents, employing methods, strategies, the pupils interaction with the environment, resources available and even the evaluation process sums up to mean instructional delivery (Mezieobi, 2009).

Instructional delivery in tertiary institutions could be described as the application of professional teacher's knowledge, skills, attitude and value systems transmission towards enhancing the learning ability of students. The essence of the use of different instructional delivery according to Voltz, Sims and Nelson (2010) is to enable the instructor (teacher) surmount the challenges on the organization and passage of the instruction to students who are assumed to have come from different backgrounds, therefore, possess different learning styles, pace and understanding the lessons based on their previous knowledge. Amoor (2009) reported that poor instructional delivery, lack of shorthand background and inefficacy from teachers are the major factors affecting students' academic achievement in the shorthand. Having gone through the variables that constitute the background of this study, it can be understood that shorthand is one of the core subjects for essential working skills, career competency for employment opportunities in Nigeria. Considering this relationship between the variable, the researcher "Assessed the self-efficacy and content knowledge needs for shorthand instructional delivery of lecturers in tertiary institutions in Northern, Nigeria."

Literature Review

Self-efficacy was first introduced by Bandura (2007). According to the study, self-efficacy refers to a person's belief in their ability to achieve something successfully. Self-efficacy beliefs are constructed from four primary sources of information or experiences. Bandura (2007) described these four types of experiences as Performance outcomes in which one

successfully practices a skill or behavior, vicarious experience in which one observes respected role models, verbal persuasion in which one receives encouragement and support from valued others, and physiologic and affective states in which one learns to keep emotions and physiological arousal at a self-supporting level. The definition of self-efficacy was developed further by other scholars. Stajkovic and Luthans (2011) defined self-efficacy as self-confidence and beliefs which would influence human resources. From this definition, it is clear that self-efficacy prepares a person with a confidence to utilize their human capital pool in order to achieve their goals.

Self-efficacy is commonly defined as the belief in one's capabilities to achieve a goal or an outcome. Teachers with a strong sense of efficacy are more likely to challenge themselves with difficult tasks and be intrinsically motivated. These teachers will put forth a high degree of effort in order to meet their commitments, and attribute failure to things which are in their control, rather than blaming external factors. Pajares and Schunk (2011), self-efficacious teachers also recover quickly from setbacks, and ultimately are likely to achieve their personal goals. Pajares and Schunk (2011) teachers with low self-efficacy, on the other hand, believe they cannot be successful and thus are less likely to make a concerted, extended effort and may consider challenging tasks as threats that are to be avoided. Thus, teachers with poor self-efficacy have low aspirations which may result in disappointing performances becoming part of a self-fulfilling feedback cycle.

According to Pajares and Schunk (2011) contend that self-efficacy beliefs impact students in a variety of ways. Self-efficacy plays a role in academic self-motivation (Bandura, Martinez-Pons, & Zimmerman 2002). Students with high self-efficacy tend to perceive themselves as capable of regulating learning and are apt to set challenging personal goals. More efficacious students are able to be more resistant to negative affective impacts of failure (Bandura, 2006). Students make choices based upon what they are confident in attempting. For instance, efficacious students will select rigorous coursework having the confidence to complete challenging material. Students with low self-efficacy may even perceive a task as more difficult than it really is and will give up prematurely. Williams and Williams (2010) attest that while students with high self-efficacy feel motivated to approach complicated tasks, students with low self-efficacy develop anxiety and nervousness.

Sources of Self-Efficacy

Self-efficacy beliefs are constructed from four primary sources of information or experiences. Bandura (2007) described these four types of experiences as Performance outcomes in which one successfully practices a skill or behavior, vicarious experience in which one observes respected role models, verbal persuasion in which one receives encouragement and support from valued others, and physiologic and affective states in which one learns to keep emotions and physiological arousal at a self-supporting level. Information relevant for judging personal capabilities becomes useful only through cognitive processing of efficacy information and reflective thought (Bandura, 2007). Any given influence may operate through one or more of these four sources of efficacy.

The first and most influential of the four types of experience in which self-efficacy is derived is enactive mastery experience (Bandura, 2006, 2007). Enactive mastery is defined as the "experience of overcoming obstacles through perseverant effort" (Bandura, 2007). Individuals engage in activities, interpret the results of their behavior and use their interpretations to develop beliefs about their capability to engage in subsequent activities (Pajares, 2012). Mastery experience is subjective in that if a student's interprets the outcome of their actions to be successful, their self-efficacy is increased and they tend to remain resilient and persevere in the face of difficulty. Once established, enhanced self-

efficacy tends to generalize to new situations. In contrast, self-efficacy is likely to decrease when a student's believes they did poorly on a task. Failures undermine self-efficacy, especially if they occur before a sense of mastery has been firmly established (Pajares, 2012).

The second source affecting self-efficacy beliefs is vicarious experience. As the second most potent influence, vicarious experience is defined as learning "mediated through modeled attainments" (Bandura, 2007). Bandura proposes that direct observation of others succeeding can bolster an individual's belief that they too can succeed. When an observer sees a role model perform successfully, the observer's self-efficacy is increased (Bandura, 2007). For example, if a student watches two other classmates effectively resolve a difficult situation, the student might end up thinking, "I can do that too!" If the model successfully performs the skills needed to achieve a behaviour, the student will then be likely to judge their self-efficacy beliefs about their abilities as high.

The third and most common source affecting self-efficacy beliefs is verbal persuasion. Verbal persuasion is defined as feedback from others about one's capabilities and probability of success (Maddux & Gosselin, 2013) and widely used due its ease and ready availability in attempts to influence human behavior (Bandura, 2007). For example, if a student is persuaded verbally that they possess the capabilities to master a specific task, the student will be more likely to exert greater effort. Positive verbal persuasions tend to increase the self-efficacy beliefs of the individual; whereas negative verbal persuasions can undermine self-efficacy judgments through criticism or if told by others that they do not possess the skills for success (Bandura, 2007). It is easier to weaken self-efficacy beliefs through criticism than to strengthen such beliefs through encouragement.

The fourth source of information regarding self-efficacy judgments, physiological and affective states, informs individuals about how they feel physically and emotionally when they contemplate an action (Bandura, 2007). Known also as emotional arousal, one of the main ways individuals evaluate their ability to engage in demanding activities is by attending to their physiological and affective states (e.g., anxiety, excitement, stress, fatigue). Self-efficacy is boosted in a positive emotional state and lowered in a negative emotional state (Bandura, 2007).

How people interpret the emotional arousal will vary depending on their perceptions of the situation. Thus, "the problem is not arousal per se but one's interpretation of it" (Bandura, 2007) for example, if a student is stressed or frustrated, has sweaty palms or increased heart rate when performing a skill, they will likely interpret those states and judge their self-efficacy as low. Conversely, a student with high self-efficacy for their abilities will likely have positive interpretations of their physiologic and affective states when performing behaviors.

Content Knowledge

Content knowledge can therefore be defined as the teachers' knowledge which they teach their students and the content knowledge of the prospective teacher is developed primarily in shorthand courses taught by business education department (Jegade 2012). Content knowledge provides the teachers with adequate knowledge to make connections and see relationship between concepts. Research on subject content indicates that teacher's knowledge of subject matter influences instructional practices across subject area at different levels (Lee, 2015). Heading that without the essential base of subject matter knowledge, teachers are simply unable to produce effective instruction.

Content knowledge is particularly an important issue in education. Researches in education indicate that teachers who possess subject matter content expertise and ability to represent subject matter to their students engage in those class activities that facilitate students' learning, such as free ranging class discussion of content (Anderson & Smith, 2010).

Several authors (Higgins, Katsipataki, Kokotsaki, Coleman, Major, & Coe, 2013) have defined effective teaching as that which leads to improved learner achievement using outcomes that matter to their future success. The teachers' content knowledge is significantly important to the improvement of teaching and learning in the classroom. Unquestionably, teachers need to have deep knowledge of the subjects they teach; a strong understanding of the learners and the ways in which learners think about the content; ability to evaluate the thinking behind learners' own methods and identify learners' common misconceptions. Furthermore, in their professional capacities, teachers should have abilities to use lesson time, efficiently; coordinate classroom resources and space, and to manage learners' behaviour with clear rules that are consistently enforced and are all relevant to maximize the learning in the classroom.

Shulman (2008) defines the pedagogical content knowledge as follows: The most useful forms of representation of those ideas, the most powerful analogies, illustrations, examples, explanations, and demonstrations in a word, the most useful ways of representing and formulating the subject that makes it comprehensible to others. Content knowledge also includes an understanding of what makes the learning of specific topics easy or difficult: the conceptions and preconceptions that students of different ages and backgrounds bring with them to the learning of those most frequently taught topics and lessons". A number of studies (Saeli, Perrenet, Jochens, & Zwaneveld, 2012; Koehler and Mishra, 2009) have found a relationship between measures of a teacher's knowledge of the content they are teaching and the gains made by their learners. It seems naturally obvious that 'Teachers cannot help children learn topics that teachers themselves do not understand' (Higgins et al., 2013). Furthermore, they suggested that when teachers' knowledge falls below a certain level, it is a significant impediment to learners' learning. A teacher's subject knowledge is related to assessment procedures since knowledge of the subject provides teachers with some focus for learning. Teachers use their subject knowledge base for decision-making and activities they do in class. According to Carr (2010) teacher subject content knowledge positively affects decisions to change pedagogical strategies on assessment, implementation of curriculum and curriculum development.

The teachers' understanding of the nature and purpose of the subject strongly influences their personal pedagogical content knowledge, that is, what they highlight as important. Stetsenko and Arieivitch (2011) argue in essence that teachers must organize their work around the most intellectual and coherent philosophies that depict a particular realm of knowledge. These ideologies are the core conceptual tools, the internalization of which enables learners to think powerfully about a whole range of phenomena. This means that teachers need to have a sense of what the nature of the subject is, understanding its establishing concepts as well as its content.

Like all other definitions, the concept of shorthand has been subjected to lots of definitions by different authors, writers and scholars. A few of them are highlighted for the purpose of this study: Pitman (1978) viewed shorthand as the art of representing spoken sounds by written signs and made provisions for how to represent every sound heard in English words with signs. Encyclopedia Americana (1987) defined shorthand as any brief, rapid method of writing that is used principally in recording the spoken word, most commonly by substituting characters or abbreviations for the conventional letters and words. It is any system of rapid

writing using symbols or shortcuts that can be made quickly to represent letters of the alphabet, words or phrases. Chambers Twentieth Century Dictionary (2000) has a similar definition that shorthand is a swift writing to keep pace with speaking. Standard Dictionary (2000) asserted that shorthand is any system of handwriting that reduces the number of muscular movements required to present words and sentences in graphic outline as opposed to longhand. Shorthand according to Oxford Dictionary of Current English (2010) is a method of rapid writing by means of abbreviations and symbols, used for recording what is said. Shorthand is the process of writing as fast as a man speaks. To buttress this definition University English Dictionary (2001) put it as a shorter mode of writing that is usually employed.

Methodology

Survey research design was used for this study. The choice of the design was based on the opinion of Douglass (2006) who highlighted that survey research design is the most dominant technique for educational research. Kerlinger (2005) emphasized that this design should be employed when a research work involves the use of questionnaire to seek the opinions of respondents. The design was considered suitable because it enables the researcher to understand the social phenomenon from the participants' perspective.

Population for the Study

The population for this study constitutes entire shorthand lecturers in the sixty (60) tertiary institutions in the Northern, Nigeria, with population of 125 shorthand lecturers.

Sample Size and Sampling Procedure

Census sample size was used for the study, since the numbers of the lecturers for the study were manageable; the researcher used the entire 125 population for the study. This is in line with Nworgu (2012), stressed that the whole population could be studied if the size of the population of the study is small in order to obtain an ideal response. Thus purposive sample was used and there was no sample size and sampling technique for this study.

Instrument for Data Collection

The instrument for data collection was developed by the researcher for the purpose of this study which was titled "Self-Efficacy and Content knowledge Needs for Shorthand Instructional Delivery" (SECNSID). A-four point rating scale structured questionnaire was used to generate data from respondents. The instrument was made up of sections "A" and "B" as seen in Appendix II. Section "A" sought for the institution of the respondents, Section "B" consisted of (52) items used to collect data for answering the research questions and test of null hypotheses. All the items were measure, using the four point rating scales of "Very Highly Needed" (VHN) 4, "Highly Needed" (HN) 3, "Moderately Needed" (MN) 2, and "Fairly Needed" (FN) 1. Respondents were instructed to respond in accordance with their desire of needs in the instrument

Procedure for Data Analysis

The null hypotheses were tested using Analysis of Variance (ANOVA). This method was based on suggestion of Stevens (2016), who endorsed that ANOVA is a collection of statistical model and their associated estimation procedures (such as the' variation among and between groups) used to analyze the difference among group mean in a sample. In support of this, Nworgu (2012) is of the view that the use of ANOVA allows researcher(s) to test whether a sample mean (of a normally distributed interval variable) significantly differs from a hypothesized value. In the analysis, if calculated value is less than table value or ($P \geq \alpha$), the null hypothesis was accepted and if the calculated value of any of the null hypothesis

is greater than the table value or the ($P \leq \alpha$) the null hypothesis was not be retained and all the null hypotheses were tested at significance level of 0.05.

Results

H₀₁: There is no significant difference among mean responses of universities, colleges of education and polytechnics lecturers on their performance outcomes needs for shorthand instructional delivery.

Table 1: ANOVA results of tertiary institutions lecturers' performance outcomes on the needs for shorthand instructional delivery

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.086	2	.043		
Within Groups	.623	26	.024	1.792	.187
Total	.709	28			

The statistical result of analysis of variance presented in table 1 revealed that there was no statistically significant difference in the mean responses of lectures on performance outcomes needs for shorthand instructional delivery: $F(2, 26) = 1.792$, $p = .187$. Hence, Hypothesis 1 is accepted. The result suggests that the mean responses of universities, colleges of education and polytechnics lecturers on performance outcomes needs for shorthand instructional delivery is not differed significantly.

H₀₂: There is no significant difference among mean responses of universities, colleges of education and polytechnics lecturers on their vicarious experiences needs for shorthand instructional delivery.

Table 2: ANOVA results of tertiary institutions lecturers' vicarious experiences needs for shorthand instructional delivery

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.270	2	.635		
Within Groups	3.814	26	.147	4.330	.094
Total	5.085	28			

The statistical evidence documented in table 2 shows that the result of analysis of variance for mean difference among universities, colleges of education and polytechnics lecturers on vicarious experiences needs for shorthand instructional delivery was not statistically significant: $F(2, 26) = 4.330$, $p = .094$. Hence, Hypothesis 2 is accepted. This finding suggests that there was no significant difference in the mean responses of universities, colleges of education and polytechnics lecturers on vicarious experiences needs for shorthand instructional delivery.

H₀₃. There is no significant difference among mean responses of universities, colleges of education and polytechnics lecturers on their content knowledge needs for shorthand instructional delivery.

Table 3: ANOVA results of tertiary institutions lecturers' content knowledge needs for shorthand instructional delivery

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.810	2	.405		
Within Groups	1.817	26	.070	5.796	.098
Total	2.628	28			

The statistical evidence document in table 3 shows that the result of analysis of variance for mean difference among universities, colleges of education and polytechnics lecturers on content knowledge needs for shorthand instructional delivery was not statistically significant: $F(2, 26) = 5.796, p = .098$. Hence, Hypothesis 3 is accepted. This finding suggests that there was no significant difference in the mean responses of universities, colleges of education and polytechnics lecturers on content knowledge needs for shorthand instructional delivery.

Discussion

The result of research question 1 and the test of its corresponding null hypothesis revealed that Performance outcomes of lecturers for shorthand instructional delivery are needed. The finding is in line with the study of Nurudeen (2013) and Adeboye (2013) which recommended there studies that there is some level of compliance with the National Universities Commission Standard on Entrepreneurship Education in the Library and Information Science Schools studied. Bandura (2007) emphasized, "simply adopting a goal without knowing how one is doing, or knowing how one is doing in the absence of a goal, has no lasting motivational effect". Thus, the most persuasive way for enhancing self-efficacy is to help clients in practicing specific behaviors required to achieve their goals.

The result of research question 2 and the test of its corresponding null hypothesis revealed that vicarious experiences of lecturers for shorthand instructional delivery are needed. The finding is supported by the study Adeboye (2013) that teachers' vicarious experiences are needed in teaching Business Studies. Schmuck & Schmuck, (2012) teachers may have difficulty relating to the learners' point of view and explaining concepts that the students can understand. Small group projects in which students help guide each other through a complex task are therefore a suitable strategy to enhance the students' vicarious experience. Bandura (2007) experiences gained from observing successful peers in a similar situation. The efficaciousness of vicarious experiences depend on how close the peer or person in a similar situation is experienced to be to oneself, and how similar the situation.

The finding of research question 3 and the test of its corresponding null hypothesis revealed that content knowledge of lecturers for shorthand instructional delivery are needed. The finding is consistent with the submission of Adebayo (2013) that the performance of the students can be improved upon if teaching is made more effectively. Lee, (2015) the teachers' content knowledge is significantly important to the improvement of teaching and learning in the classroom. Teachers need to have deep knowledge of the subjects they teach; a strong understanding of the learners and the ways in which learners think about the content; ability to evaluate the thinking behind learners' own methods, and identify learners' common misconceptions.

Conclusion

From the findings of the study, it was observed that self-efficacy and content knowledge are significantly needed in all the tertiary institutions that offer shorthand in Northern-Nigeria. This cannot be achieved in the hands of lecturers that lack self-efficacy and content

knowledge for teaching shorthand. The study confirmed that lecturer's needs to apply content knowledge in teaching shorthand in tertiary institutions in Northern-Nigeria, while the professional in business educators adjudged that contents knowledge is highly needed, if there should be proper transfer of learning. There is need for training and re-training of lecturers in self-efficacy and content knowledge to enable them impact knowledge to the learner which will in turn help them acquire relevant skills to cope with challenges faced in mastering and teaching the subject effectively.

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