

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

¹ABDULRAZAK MOHAMMED, ²DR. I. ADAMU, ³DR. A. J. HARUNA

^{1&2}Department of Vocational and Technology Education, Faculty of Technology Education, Abubakar Tafawa Balewa University, Bauchi

³Department of Vocational and Technical Education, Faculty of Education, Federal University Lafia, Nasarawa State

E-Mail: abhabiba086@gmail.com

Abstract

The study assessed the content Knowledge needs for shorthand instructional delivery of lecturers in tertiary institutions in Northern, Nigeria. Research question were used to guide the study, while hypothesis was formulated and tested at significance level of 0.05%. Survey design was used for the study. The entire 120 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 null hypotheses used in the study. All the null hypotheses formulated for the study were accepted. The findings of the study revealed that shorthand lecturers need content knowledge for effective shorthand instructional delivery in tertiary institutions in Northern, Nigeria. Based on the findings, the study recommended among others that government and professional organizations should organize workshops and seminars that will improve the content knowledge of shorthand lecturers in Northern Nigeria.

Keywords: Content Knowledge, Shorthand, Instructional delivery

Introduction

Conversely, some scholars argue that teachers need to have knowledge beyond curricular knowledge when students ask questions that force teachers to “go off script” when discussing current civic issues (Jones, 2013). Others argue that “standards and textbooks are not curriculum” except for teachers who lack sufficient content knowledge and subject-specific instructional practices (Brain & Mirel, 2014). Teacher’s beliefs about the world at large or about particular subject areas are formed through years of complex experiences unique to each teacher’s own upbringing, life choices, and disciplinary backgrounds. It stands to reason, then, that what teachers believe about the subjects they teach likely differs. Examples of subject-specific teacher orientations that have been found to impact instructional practices include the “nature of science” orientation (Borko & Putnam, 2016) “knowledge about business” vs. “knowledge of business” orientation (Ball, 2012) and English literature text analysis orientations (Grossman, 2012).

Content knowledge refers to the body of knowledge and information that teachers teach and those 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).

Research on subject content indicates that teacher's knowledge of subject matter influences instructional practices across subject's area at different levels (Lee, 2015). Heading that without the essential base of subject matter knowledge, teachers are simply unable to

produce effective instructions. Subject content knowledge is particularly an important issue in business education. Research in business education reported that teachers who possess subject content expertise and ability to represent subject content to their students engage in those class activities that facilitate students' learning, such as free ranging class discussion of content (Anderson & Smith 2010). In contrast, teachers with weak subject content knowledge rely heavily on the textbook as the primary source of subject matter content (Olorukooba, 2010). During whole-class activities, teachers with weak subject matter knowledge tend to choose lecture or recitation, rather than solicit student's questions or engage in class discussion. Also, these teachers tend to minimize students' participation in public forum (e.g. assigning individual seat work) in an effort not to display their inadequacy of subject content knowledge (Lee, 2015).

Content knowledge is the pillar for effective instructional delivery for any business lecturer (Adamu & Muktar, 2018). 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 (2017) reported that poor instructional delivery, lack of shorthand background and inefficacy from teachers are the major factors affecting students' academic achievement in the shorthand. 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 (2018) 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 minutes of meetings, composing letters, report writing, recording messages among others as a secretary (Chip, 2013). 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 into secretary work in Nigeria.

Research Question

What are the content knowledge needs for shorthand instructional delivery of lecturers in tertiary institutions?

Hypothesis

In line with the specific research question, the following null hypothesis were formulated and tested at the significant level of 0.05%:

Ho₁: 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 of lecturers in tertiary institutions.

Methods

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.

The geographical area of the study comprised of nineteen (19) Northern state of Nigeria. Northern Nigeria is the largest region in the giant and heart of Africa (Nigeria) it's have up to 70% of the land mass of Nigeria. Northern Nigeria has three (3) geo-political zones comprises of North-East, six (6) states, North-West, seven (7) states and North-Central six (6) with FCT. The entire region has sixty (60) tertiary institutions offering shorthand. These tertiary institutions include thirty-six (36) colleges of education, seventeen (17) polytechnics and seven (7) universities study. The population for this study constitutes entire shorthand lecturers in the 60 tertiary institutions in the Northern, Nigeria, with population of 120 lecturers.

Census sample size was used for the study, since the numbers of the lecturers for the study were manageable; the researcher used the entire 120 shorthand lecturers for the study. This is in line with Nworgu (2012) who 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.

The instrument for data collection was developed by the researcher for the purpose of this study which was titled "Content Knowledge Needs for Shorthand Instructional Delivery" (CONSID). A-four-point rating scale structured questionnaire was used to generate data from the respondents. The instrument was made up of sections "A" and "B". Section "A" sought for the institution of the respondents, Section "B" consisted of 7 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.

To establish the internal consistency or stability of the measuring instrument, data collected were sought using Cronbach Alpha method. The data obtain from the pilot study were subjected to statistical analysis using SPSS in order to obtain reliability coefficient of the measuring instrument. The result gave reliability co-efficient of 0.70.

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

Results

Table 1: Content Knowledge need for shorthand instructional delivery of lecturers in tertiary institutions

S/N	Items	Mean Scores				Remark
		\bar{X}_u	\bar{X}_c	\bar{X}_p	\bar{X}_y	
1	Knowledge of vowels for effective shorthand instructional delivery.	3.33	3.36	3.67	3.45	HN
2	Knowledge of consonants for effective shorthand instructional delivery.	3.83	1.93	3.11	2.96	HN
3	Knowledge of diphthongs for effective	4.00	4.00	3.56	3.85	VHN

4	shorthand instructional delivery. Speed writing and accuracy in transcription for shorthand instructional delivery.	4.00	2.79	4.00	3.60	VHN
5	Knowledge of assessment shorthand for shorthand instructional delivery.	4.00	4.00	4.00	4.00	VHN
6	Knowledge of instructional strategies for shorthand instructional delivery.	3.50	3.93	4.00	3.81	VHN
7	Knowledge of curriculum as guide for shorthand instructional delivery.	3.83	4.00	3.89	3.91	VHN
Grand Mean		3.78	3.43	3.74	3.65	VHN

Note: \bar{X}_u Mean of Universities Respondent

\bar{X}_c Mean of Colleges of Education Respondent

\bar{X}_p Mean of Polytechnics Respondent

\bar{X}_y Mean of Universities, Colleges of Education and Polytechnics Respondent

Ho₁: 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 2: One-way analysis of variance for mean difference among the three in tertiary institutions on 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 1 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 1 is supported. 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

Based on the analysis and summary of findings, the following discussions were made. 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 consistent with the submission of Adebayo (2012) 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 content knowledge is significantly needed in all the tertiary institutions that offer shorthand in Northern-Nigeria. This cannot be achieved in the hands of lecturers that lack content knowledge for teaching shorthand. Based on the present study, it was confirmed that lecturer's needs to apply appropriate skills in teaching shorthand in tertiary institutions in Northern-Nigeria, while the professional in business educators adjudged those skills as needed skills, if there should be proper transfer of learning. There is need for training and re-training of lecturers in 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.

Recommendations

- (i) The school management through the Heads of Departments should organize programme where experience lecturers will be invited to train shorthand lecturers on the modern teaching method that will enhance teaching and learning.
- (ii) Federal and state ministry of education should provide programme that will provide shorthand lecturers in the needed content knowledge needed for effective instructional delivery in tertiary institutions in Nigeria.

References

- Adamu, I., & Muktar, A. (2018). Students' perception of and attitude to shorthand in era of office technology and management. *Business Education journal*, 1 (5), 113-116.
- Adebayo, A. E. (2013). Information technology and secretarial profession: Implications and the way forward, *Journal of Office Management and Technology*, Auchi: Polytechnic, Auchi, Edo state. Nigerian 1(1), 26-32
- Amoor, S. S. (2009). Secretarial Education in Nigerian secondary schools. The challenges and strategies. Ahmadu Bello University, Zaria.
- Anderson, C. W., & Smith, E. L. (2010). Plants as producers: A case study of elementary science teaching. *Journal of Research in Science Teaching*, 21(7), 685-698.
- Ball, D. (2012). Bridging practices: Intertwining content and pedagogy in teaching and learning to teach. *Journal of Lecturer Education*, 51(3), 241-247.
- Borko, H., & Putnam R. T. (2016). Learning to teach, In D. C. Berliner & R. C. Calfee (eds.) *Handbook of Educational Psychology*, New York, MacMillan.
- Brain, E. M., & Mirel, E. D. (2014). Effect of investigatory laboratory instruction on content knowledge and pedagogical skills. A National Research Conference of American Association for the Advancement of Science.
- Chip, R. (2013). *Differentiated assessment strategies: One tool doesn't fit all* 2nd Ed. Thousand Oaks, California: Corwin Press Inc.
- Douglass, Y. (2006). Principles of determining Sample in Educational Research. Unpublished reading materials in Research
- Grossman, P. L. (2011). *The making of a lecturer: Lecturer knowledge and lecturer education*. New York: Lecturers College Press

- Ismaila, B. A. (2018). Progressive Approach to Secretarial Classification. *Pearson Journal*.11 (3), 28-32
- Jones, M. T. (2013). Implementing inquiry kit curriculum: Obstacles, adaptations, and practice knowledge development in two middle school science lecturers. *Science Education*, 91, 492-513.
- Kerlinger, F. N. (2005). *Foundations of Behavioural Research* Second Edition Holt, Rinehart and Winston, Inc.
- Lee, O. (2015). Subject matter knowledge: Classroom management and instructional practice in middle school science classrooms. *Journal of Research in Science Teaching* 32(4) 423-440.
- Olorukooba, S. B. (2010). Science, technology and mathematics education for all students: Promoting effective teaching of STM subject in schools through lecturer preparation. *Journal of Science Lecturers Association of Nigeria* proceedings of STAN 2007.pg 3-6.
- Vottz, L., Sims, M. J., & Nelson, B. (2010). Connecting teachers, students and standards strategies for success in diverse and inclusive classroom. www.asedexpress.