



Assessing the suitability of course contents and learners' satisfaction in open and distance learning programmes in Dual-Mode Universities in North-Central, Nigeria

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Abstract

This study assessed the suitability of course contents and learners' satisfaction in open and distance learning programmes in Dual-Mode Universities in North-Central, Nigeria. The population of the study was 193 undergraduate distance learners drawn from dual-mode universities in North-Central Nigeria. The sample of the study comprised 59 undergraduate distance learners selected from the University of Ilorin and the Federal University of Technology, Minna. The study adopted a descriptive survey research design in which three research questions guided the study with one null hypothesis. The instrument for data collection was an 18-item closed-ended questionnaire. The instruments were validated by experts and subjected to a reliability test using Cronbach's alpha and the reliability coefficient of the constructs for learner's satisfaction was 0.89, and for suitability of course contents 0.84. Data collated from the administration of the research instrument were analysed using descriptive statistics of mean and standard deviation and inferential statistics of correlation coefficient analysis for the research hypothesis. A decision rule was set in which a mean score of 3.0 and above was considered agreed, while a mean score below 3.0 was considered disagreed. The finding revealed that the average mean for the suitability of course contents was 4.10 while the average mean of learners' satisfaction with the course contents was 3.76 which is above the decision mean of 3.0. The finding also revealed further that there is a high, positive association with a Pearson correlation coefficient of 0.838 between variables suitability of the course contents and satisfaction of distance education learners with the course contents in dual-mode universities in North-Central, Nigeria. The study recommended that universities should implement a regular review process for ODL course content to maintain its relevance and effectiveness.

Keywords: *Assessment, course content, distance learning, education, satisfaction, suitability.*

1. Introduction

The world is changing, and so is the field of education. Education as the process of acquiring knowledge, skills and other capabilities is a universal aspect of any culture. Although society is ubiquitous, educational systems vary according to organizational structures, pedagogical practices, and philosophical and cultural organisations. Education is a continuous process through conscious and deliberate effort to create an atmosphere of the learning process (Ilufoye, 2018). Education as an essential instrument of development and growth in our society cannot be overlooked, because of its effect on national development (Fägerlind & Saha, 2016). Investment in the education sector can be regarded as a business with the greatest profits because it can produce unquantifiable benefits such as character formation and the development of innate power for individuals, organisations, and society. Education could be accessed through formal learning with clearly intended consequences and informal learning with unintended consequences (Qayyum & Zawacki-Richter, 2019). Open and distance learning (ODL) is a rapidly evolving area of formal education delivery that has seen significant growth in recent years. With new technologies, such as online learning platforms and virtual classrooms, ODL has become increasingly accessible and sophisticated. The demand for open and distance learning has also risen due to its flexibility and convenience for learners who want to balance work and study commitments (Miller *et al.* 2017). Distance learning is a learning in which the teacher and students who are separated either by time or geographical space will bridge the separation through web-based technologies. According to Simonson *et al.* (2019), open and distance learning use various media and

technologies to provide or improve access to quality education for learners, which could be acquired from institutions offering ODL programmes.

The rationale of ODL from its earliest days has been to open opportunities for learners to study regardless of geographic, socio-economic or other constraints. In contemporary times, many countries consider open and distance learning a critical component of their strategy to increase opportunities for higher education for learners (Bubou & Job, 2021). Creating a learning environment that could motivate and stir interest in students to become actively engaged and independent, a lifelong learning is the main aim of 21st century pedagogy and a challenge for teaching and learning institutions. Given the complexity and challenges of designing an effective open educational system that considers the content, the learners, and the pedagogy and technology involved, an iterative planning cycle that supports the refinement of an assessment is needed (Ronghuai *et al.*, 2019). With the increasing acceptance of ODL as widening access to higher education in developed and developing countries like Nigeria, issues relevant to the quality assurance and effectiveness of distance learning programmes in dual-mode university education system compared to conventional educational patterns must be assessed.

Assessment is a process of collating, analysing, and interpreting outcomes to determine the extent to which institutions and learners achieve the purpose or objectives of setting up the distance education sector. Mohan (2023) defines assessment as the gathering, analysing, and interpreting of outcomes about any aspect of the educational programme or training, whether in a single or dual-mode institution, as part of a recognized process of judging its effectiveness, efficiency, and any other outcomes it may have. Assessment is one of the critical steps in the process of performance improvement. Satisfaction is an attitude that is decided based on the experience which is gained. It is an assessment of the features or distinctions of a product or service. The level of satisfaction in this study is about the suitability of the course contents to students in the implementation of online learning. Distance learners' satisfaction can be seen from several aspects, such as the content, pedagogy, resource materials, assessment, and the virtual learning environment (interface) conditions (Siregar *et al.*, 2020).

With the outbreak of the Coronavirus (COVID-19) pandemic in the year 2019/2020 which caused the global lockdown of conventional learning centres for some time, there was massive enrollment in distance learning programmes because distance learning appears to meet the needs and aspirations of citizens future education. As people continue to crave knowledge but may not have the opportunity to go beyond their immediate environment, this scenario has called for a paradigm shift from the conventional method of teaching and learning to open and distance learning mode as a complementary avenue for providing access to education for the fast-growing numbers of learners (Yusuf, 2020). The NUC is increasingly granting universities access to operate as dual-mode institutions (NUC, 2021). This implies that such universities now offer both conventional and distance learning programmes. Thus, the accessibility of the programme to citizens can be ensured through open and distance learning. Many Open and Distance Learning Centres and Universities are being set up (Ukaoha *et al.*, 2018), in quantity there are many, but the quality measures of such programmes are a serious issue that cannot be overlooked. Quality issues are more important, calling for meaningful assessment of the course contents and learners' satisfaction with the open and distance learning programmes.

The expansion of open and distance learning (ODL) in dual-mode universities in North-Central Nigeria highlights the importance of suitable course content in influencing learners' satisfaction. Effective ODL content should be comprehensive, adaptable, and engaging to cater to diverse learners needs. However, studies highlight that course materials in some Nigerian universities often lack interactive elements and real-world applications, adversely impacting the learning experience (Egielewa *et al.*, 2022). Quality of course content, coupled with instructor support and technological access, significantly affects learners' satisfaction. For instance, findings show that up-to-date and engaging content enhances learners' satisfaction (Atolagbe *et al.*, 2021). Nonetheless, there are persisting gaps regarding the direct influence of content suitability on student satisfaction in dual-mode universities in North-Central Nigeria, which need further exploration (Itasanmi *et al.*, 2020). Previous studies often highlight enrolment growth and general implementation of distance learning but overlooks assessing the educational effectiveness of the suitability of course contents and its impact on learners' satisfaction, especially in dual-mode institutions in Nigeria (Yusuf, 2020; Ukaoha *et al.*, 2018). This research addresses these gaps by evaluating course content suitability, gathering direct learner feedback, and exploring the relationship between content quality and learners' satisfaction to enhance understanding of distance learning quality (NUC, 2021). This study aims to assess the suitability of the course contents and satisfaction of undergraduate learners undergoing distance learning programmes in Dual-Mode Universities in North-Central, Nigeria. Specifically, the study will: 1. Ascertain the suitability of the course contents used for distance learning programmes in dual-mode universities in North-Central Nigeria. 2. Determine the satisfaction of learners undergoing distance learning programmes in dual-mode universities in North-Central, Nigeria. 3. Check whether the suitability of the course content influences the satisfaction of learners undergoing distance learning programmes in dual-mode universities in North-Central

Nigeria. There is no significant relationship between the suitability of the course content and the satisfaction of learners undergoing distance learning programmes in dual-mode universities in North-Central Nigeria.

2. Methodology

This study adopted quantitative research methods using descriptive survey research design with online questionnaires to gather essential information from distance learners regarding the suitability of the course contents and their satisfaction with the Open and Distance Learning (ODL) programmes. The population of the comprised of 193 learners who are undergoing ODL programmes in dual-mode universities in North-Central Nigeria. The sample size consists of 59 undergraduate distance learners enrolled on a full distance learning programme from University of Ilorin and Federal University of Technology Minna Distance Learning Centre. Purposive sampling was used to select distance learners across the selected institutions since the research is on ODL programmes. This study applied purposive sampling among the different sampling methods because purposive sampling is a method well-suited for targeting individuals with specific characteristics relevant to the research objectives. Purposive sampling was chosen to ensure that the sample included only undergraduate distance learners enrolled in Open and Distance Learning (ODL) programs at dual-mode universities in North-Central Nigeria. The validity of the research instrument was ensured through expert reviews, where content experts examined the questionnaire for clarity, relevance, and comprehensiveness. This validation process helped refine the questions, aligning them closely with the study objectives to ensure they accurately captured the constructs of course content suitability and learner satisfaction. Reliability was tested using Cronbach's alpha, yielding coefficients of 0.89 for learner satisfaction and 0.84 for course content suitability. These values, being above the generally accepted threshold of 0.7, indicate high internal consistency, confirming the questionnaire's reliability for data collection. The research instrument used for this study was a structured closed-ended questionnaire to assess whether students are satisfied with their distance learning experience and the suitability of the course contents. To ensure consistency during data collection, a standardized process was adopted. The questionnaire was distributed electronically through a secure link sent to a designated faculty member (gatekeeper) at each selected university, who then forwarded it to participating students. This method helped maintain control over how the questionnaire was disseminated and who received it, minimizing bias and ensuring that only eligible respondents participated. Clear instructions were provided with the survey to guide participants in completing it accurately, contributing to the consistency of responses. Data were subsequently analysed using IBM SPSS Statistics (version 27), employing descriptive statistics and correlation analysis to answer research questions and test the hypothesis at a 0.05 significance level.

3. Results

3.1 Research question one

To what extent are the suitability of course contents being used for distance learning programmes in dual-mode universities in North-Central, Nigeria?

Table 4.1 presents the mean and standard deviations of respondents' opinions regarding the suitability of the course contents being used for distance learning programmes in dual-mode universities in North-Central, Nigeria. The table provides insight into the suitability of the course contents being used for distance learning programmes to impact knowledge to learners in open and distance learning environments. The table consists of eight statements rated by the respondents on a Likert scale. The respondents' mean scores (\bar{X}) and standard deviations (SD) are provided, indicating the average level of agreement or disagreement among the respondents for each statement.

Table 4.1: Mean and Standard Deviation of Learners' Response on Suitability of the Course Contents Being Used for Distance Learning Programme in Dual-Mode Universities in North-Central, Nigeria.

S/No	Statement	N	\bar{X}	SD	Decision
1	The course content is relevant and aligned with the learning objectives of ODL in the 21st century	59	4.22	0.618	Agree
2	The course content is comprehensive and covers all the necessary topics.	59	4.07	0.785	Agree
3	The course content is presented clearly and understandably.	59	4.00	0.809	Agree
4	The course content is engaging and promotes active learning.	59	4.00	0.983	Agree

5	The course content is up-to-date and reflects current knowledge and practices.	59	4.02	0.861	Agree
6	The course contents provided are in line with the goals of the programme of study	59	4.24	0.727	Agree
7	The course materials provided are accessible and easy to use	59	4.17	0.746	Agree
8	The course content includes appropriate multimedia and interactive elements (e.g., videos, quizzes, simulations).	59	4.08	0.836	Agree
Average mean			4.10		

Source: Author Fieldwork, 2024

Table 4.1 illustrates the mean and standard deviation of respondents' opinions on the suitability of course contents used in distance learning programmes at dual-mode universities in North-Central Nigeria. The table reveals that all mean scores ranged from 4.00 to 4.24, well above the decision threshold of 3.0, suggesting strong agreement among respondents about the suitability of the course contents. The grand mean of 4.10 supports the conclusion that the course content is generally considered suitable, indicating it effectively meets the learners' needs and contributes to their academic experience.

3.2 Research question two

What is the satisfaction level of learners undergoing distance learning programmes in dual-mode universities in North-Central, Nigeria?

Table 4.2 presents the mean and standard deviations of respondents' opinions regarding the satisfaction level of learners undergoing distance learning programmes in dual-mode universities in North-Central, Nigeria. The table provides insight into the satisfaction level of learners to acquire knowledge in open and distance learning environments. The table consists of 10 statements rated by the respondents on a Likert scale. The respondents' mean scores (\bar{X}) and standard deviations (SD) are provided, indicating the average level of agreement or disagreement among the respondents for each statement.

Table 4.2: Mean and Standard Deviation of Learners' Response on the Satisfaction Level of Distance Learning Programmes in Dual-Mode Universities in North-Central, Nigeria.

S/No	Statement	N	\bar{X}	SD	Decision
I am satisfied with the:					
1	quality of course content and materials provided for the courses	59	4.07	0.868	Agree
2	clarity and organization of course structure	59	3.90	0.941	Agree
3	assessment methods and feedback provided	59	3.56	1.178	Agree
4	technical support and assistance by the instructor	59	3.53	0.989	Agree
5	mode of communication (audio, video, audio-visual, images, and text) with the instructors and/or tutors in the courses	59	3.53	1.120	Agree
6	level of support and guidance provided by the instructors and/or tutors	59	3.68	1.074	Agree
7	tools and resources provided for online learning (e.g. course platforms, multimedia resources, and discussion forums) for supporting the learning	59	3.80	0.906	Agree
8	level of engagement and interaction with other students in my courses through the student chatting platforms to share ideas and solve problems.	59	3.83	1.162	Agree
9	level of flexibility and convenience provided by open and distance learning	59	3.85	1.157	Agree
10	the overall quality of education, I am receiving through the open and distance learning programme of the school.	59	3.81	1.058	Agree
Average mean			3.76		

Source: Author Fieldwork, 2024

Table 4.2 presents data on the satisfaction levels of learners participating in distance learning programmes. The mean scores for all 10 items range from 3.53 to 4.07, exceeding the decision mean of 3.0. The grand mean score of 3.76 indicates that learners are satisfied with their distance learning experiences in dual-mode universities. The standard deviations, varying between 0.868 and 1.178, indicate moderate variability but confirm a consistent positive sentiment toward the programmes.

3.3 Research question three

The relationship between the suitability of the course contents and the satisfaction of learners undergoing distance learning programmes in dual-mode universities in North-Central, Nigeria? Table 4.3 presents the mean and standard deviations of respondents' opinions regarding the relationship between the suitability of the course contents and the satisfaction of learners undergoing distance learning programmes in dual-mode universities in North-Central, Nigeria. The respondents' mean scores (\bar{X}), standard deviations (SD) and standard error mean were provided, indicating the association level of agreement or disagreement between the suitability of the course contents and the satisfaction of learners.

Table 4.3: Mean and Standard Deviation on Association Between the suitability of the course contents and the satisfaction of learners in Distance Learning in Dual-Mode Universities in North-Central, Nigeria

Classification	N	\bar{X}	Std. Deviation	Std. Error Mean
Suitability	59	28.58	4.234	0.552
Satisfaction	59	37.54	8.169	1.064

Source: Author Fieldwork, 2024

Table 4.3 details the relationship between course content suitability and learner satisfaction. The findings reveal a substantial difference in mean scores between groups, with scores showing consistency in the relationship between course content and satisfaction. This analysis is supported by Table 4.4, which presents the Pearson correlation coefficient analysis.

3.4 Testing of Hypothesis

There is no significant relationship between the suitability of the course contents and the satisfaction of learners undergoing distance learning programmes in dual-mode universities in North-Central, Nigeria.

To test this hypothesis, Pearson correlation coefficient analysis was conducted on the responses of the suitability of the course contents and the satisfaction of learners undergoing distance learning programmes in dual-mode universities in North-Central, Nigeria as presented in Table 4.4

Table 4.4: Pearson product-moment correlation analysis on the responses of the suitability of the course contents and the satisfaction of learners undergoing distance learning programmes in dual-mode universities in North-Central, Nigeria.

		Suitability of course content	Satisfaction
Suitability of course content	Pearson Correlation	1	0.838
	Sig. (2-tailed)		0.000
	N	59	59
Satisfaction	Pearson Correlation	0.838	1
	Sig. (2-tailed)	0.000	
	N	59	59

Significant Level = 0.05

Table 4.4 presents the result of the Pearson correlation coefficient analysis of the responses on the suitability of the course contents and the satisfaction of learners undergoing distance learning programmes in dual-mode universities in North-Central, Nigeria. The correlation coefficient of 0.838, with a significance value of 0.000 (less than the 0.05 threshold), indicates a high, positive relationship between course content suitability and learner satisfaction. This result confirms that when course content is well-suited to distance learning, learner satisfaction significantly increases. These findings align with the hypothesis testing, which rejects the null hypothesis and demonstrates that the suitability of course content positively correlates with and enhances learner satisfaction in dual-mode universities in North-Central Nigeria.

The study establishes a significant positive relationship between the suitability of course content and learner satisfaction in open and distance learning (ODL), demonstrated by a strong Pearson correlation of 0.838. This indicates that learners' satisfaction is greatly influenced by the relevance and value of course materials, which is in line with prior findings by Palmer and Holt (2009) and Dziuban *et al.* (2015). The study aligns with existing literature, including research by Rajabalee and Santally (2021) and Chen and Yao (2016), emphasizing that high-quality, well-structured content enhances learner engagement and satisfaction. The findings suggest that dual-mode universities in North-Central Nigeria should focus on continuous content review and modernization to boost learner satisfaction. This involves using student feedback and integrating interactive multimedia, as supported by Simonson *et al.* (2019). However, the study's small sample size (59 participants) limits its generalizability. Future research should include larger samples, employ mixed-methods approaches for deeper insights, study the impact of technology on content suitability, and conduct comparative analyses across different educational models. These steps would enhance curriculum development and promote learner satisfaction in ODL programmes. Additionally, Li *et al.* (2016) support this study's conclusions by emphasizing that content quality, assessment strategies, and appropriate workloads directly impact learner satisfaction in online and blended settings. Similar trends were reported by Rajabalee and Santally (2021), who noted that course engagement and satisfaction are positively associated, suggesting that suitable course design contributes to higher engagement, leading to increased satisfaction.

4. Conclusions and Recommendation

The study assessed the suitability of the course contents and satisfaction of undergraduate learners undergoing distance learning programmes in Dual-Mode Universities in North-Central, Nigeria. It was concluded that the course contents being used for distance learning programmes in dual-mode universities in North-Central, Nigeria are suitable for the learners and the learners undergoing distance learning programmes are satisfied with the programme. Dual-mode universities in Nigeria should implement structured and regular review processes for ODL course materials to ensure they remain relevant, current, and aligned with industry standards and student expectations. This process should include feedback from learners and subject matter experts to incorporate recent developments in various fields. Course content should be adaptable to cater to diverse learning needs. Allowing learners to choose certain modules based on their interests or career goals can improve satisfaction and retention rates and implementing robust feedback channels that allow students to share their experiences and suggestions for course content improvement is crucial.

Future research could focus on longitudinal studies to observe the long-term impacts of improved course content and learner satisfaction on academic performance and career outcomes. Further research can also investigate the role of instructor involvement in learner satisfaction and outcomes, focusing on how different teaching strategies affect student experience in ODL settings.

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