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Assessing the impact of Extempore Teaching Skills in Learning Outcomes in Distance, Non-Formal and Continuing Education

Shamsa Malik[*]
Muhammad Omer Mansoor[**]
Neelam Yaqoob[***]

Abstract

The current study examined how the extempore teaching skill influences the learning outcomes in distance, non-formal, and continuing education. The setting for the current research was a program of "teaching skills" to students of masters in distance, non-formal, and continuing education comprising 20 hours of theoretical and practical teaching with submission of 40 written lesson plans and 2 practical mock lesson deliveries on the topic from any elementary-level subjects. The attendance of students undergoing the "teaching skills" course in the semester of Autumn was 32 which included both male and female and also both teaching and non-teaching individuals. The primary goal of the research was to assess how extempore teaching, characterized by verbal lesson delivery, body language, and eye contact, impacts the effectiveness of lesson delivery. Eight volunteers were selected from the participating individuals. Volunteers were divided into two groups of four i.e. one individual from each group gave an extempore topic to one individual from the other group on which he/she had to deliver an extempore lesson to the remaining class of five minutes. All the remaining individuals in the class ranked the performance of the individual delivering the lesson based on three identified elements by the researcher. A scale of 1 to 10 was used for marking each element where 1 being the highest and 10 being the lowest score. Data collected from this activity was analyzed statistically using JAMOVI software where descriptive statistics were used for summarizing

[*] Field Officer, Allama Iqbal Open University, Islamabad, Pakistan, Email: shamsamalik554@gmail.com
[**] Student, Allama Iqbal Open University, Islamabad, Pakistan. Email: muhammadomermansoor@gmail.com
[***] PhD Scholar, Allama Iqbal Open University, Islamabad, Pakistan. Email: canvassanalysis@gmail.com

the results and variations in performance. The findings of the study highlighted the potential extempore way of lesson delivery has in confidence building among individuals along with the development of better communication skills in individuals. Extempore way of lesson delivery also helps in bringing enhancement to dynamic and more interactive classroom settings for the promotion of active learning and critical thinking.

Keywords: Distance Education, Extempore, Teaching, ODL, Learning, Impact.

Introduction

In this ever-changing landscape of education, teaching methodologies are continually reassessed to enhance learning outcomes, particularly in distance, non-formal, and continuing educational DNF&CE settings. The traditional pedagogical methods often fall short of addressing the unique needs and challenges posed by DNF&CE educational contexts such as reduced face-to-face interaction and the need for greater learner autonomy (Moore & Kearsley, 2012). Extempore teaching is characterized by spontaneous delivery of the lessons without extensive previous preparation has emerged as a potential strategy for bridging this gap and fostering a more engaging learning environment (Brookfield, 2015). In external teaching skills, there is a high demand for subject mastery and the ability to communicate ideally in an effective way to be spot on and not get in any sort of a blackout due to uncertain or unprepared situations (Joughin, 2010). The extempore approach encourages educators to adapt and be responsive to learners' immediate needs, which demands a dynamic and interactive classroom atmosphere (Sawyer, 2011). Distance, non-formal, and continuing education, where there is an absence of physical presence of students, can result in low student engagement. Extempore teaching can enhance interaction and stimulate critical thinking by involving learners in real-time discussions and problem-solving activities (Garrison & Anderson, 2003). The importance of extempore teaching extends beyond student engagement. It also contributes to the professional development of teachers, instructors, and educators. Mastering extempore teaching skills can boost educators' confidence and improve their communication abilities, including their verbal lesson delivery, body language, and eye contact (Richards & Lockhart, 2007). These are critical in conveying information effectively and fostering a positive learning environment (Mehrabian, 2007). In non-formal and continuing education, where the students often come from diverse backgrounds and experiences, effective communication is the key to addressing the variations in learning needs (Merriam & Bierema, 2013). The extempore teaching method has its benefits; one of the major of which is confidence building in teachers. Still, little research has been done on the full impact of using extempore teaching skills in distance, non-formal, and continuing education. Most of the previous studies focus on traditional teaching methods and the gap

provides a view into the need for research that explores how extempore teaching can be integrated as an alternative educational content to enhance the teaching-learning outcomes (Biggs & Tang, 2011).

The aim of the current study is to fill the gap by examining how extempore teaching skills influence the effectiveness of delivering a lesson among students enrolled in master's programs in distance non-formal and continuing education. By assessing these key elements such as verbal communication, body language, and eye contact, the current research provides a great insight into the potential of extempore teaching for the improvement of educational practices in these settings.

1.1 Literature Review

Extempore teaching involves delivering lessons without having much time to think, which relies on the experience of the educators and their ability to think critically in real time (Joughin, 2010). This method is different from the already pre-planned teaching methodology offering flexibility and responsiveness to student interaction (Sawyer, 2011). Extempore teaching is essential for creating a learning environment that is adaptable to the immediate needs of the students for the promotion of engagement and participation of the students (Brookfield, 2015). Studies have shown that extempore teaching can positively affect learning outcomes by enhancing student engagement and promotion of active learning (Prince, 2004). Freeman and colleagues (Freeman et al., 2014) found that interactive teaching methods, including extempore elements, lead to higher student performance and low failure rates compared to traditional lectures. The spontaneity of extempore teaching encourages students to think critically and engage more deeply with the material (Dall'Alba & Sandberg, 2006). Distance educational systems provide challenges such as limited face-to-face interaction and the potential for decreased student motivation due to lack of connection by incorporation of extempore teaching strategies into online platforms can remove these issues by providing a sense of emergency and presence (Garrison & Anderson, 2003). Online sessions that use extempore teaching allow for real-time interactions, giving enhancement to student engagement and satisfaction (Hrastinski, 2008). Technical limitations and variations in levels of digital literacy among students can prove to be challenging for implementing extempore teaching in distance learning (Bower et al.,

2015). Effecting teaching depends on strong communication skills including clarity of speech, appropriate body language, and eye contact (Richards & Lockhart, 2007). Mehrabian's (2007) research highlighted that nonverbal actions significantly impact how messages are received and interpreted by the learners. Extempore teaching naturally enhances these skills as educators must convey their thoughts clearly and respond to queries of the students without relying on prepared material. This immediacy can lead to a better engaging and effective learning experience (Ambady & Rosenthal, 1993). Engagement in extempore teaching can significantly boost educators' confidence (Bandura, 1997). Confidence is a critical part of effective teaching as it influences classroom presence and the ability to manage unforeseen situations (Tschannen-Moran & Hoy, 2007). By practicing extempore teaching, educators can develop self-efficacy which can contribute to improved teaching performance and student outcomes (Pajares, 1996). Interactive classrooms encourage active participation, collaboration, and critical thinking (Bonwell & Eison, 1991). Extempore teaching greatly contributes to this environment by allowing educators to adapt lessons based on student feedback and interest (Johnson, Johnson, & Smith, 1998). This adaptation leads to more meaningful learning experiences and can accommodate multiple learning styles (Kolb, 1984). Teaching contributes to this environment by allowing educators to adapt lessons based on students' feedback and interest instantly and effectively (Johnson, Johnson, & Smith, 1998). Active learning strategies such as those practiced in extempore teaching-learning methods have been shown to increase critical thinking skills (Prince, 2004). King (1995) provided the importance of asking open-ended questions and getting into discussions to develop higher-order thinking skills. By engaging students in spontaneous dialogue, extempore teaching challenges them to analyze, synthesize, and then evaluate the information critically (Paul & Elder, 2006).

Non-formal and continuing education often involves adult learners with a variety of experiences and motivations (Merriam & Bierema, 2013). Adult learning theories suggest that adults are self-directed and bring prior knowledge to the learning process (Knowles, 1980). Extempore teaching is in alignment with those principles that allow educators to draw upon learners' experience and adapt content accordingly and efficiently (Brookfield, 2015). This approach brings relevance and

application which are key factors in adult learning (Lindeman, 1926). Extempore teaching has its benefits. Implementation of extempore teaching presents greater challenges. Educators may feel unprepared or get stressed while delivering without extensive content preparation (Sawyer, 2011). Institutions and trains such as standardized curricular and assessment methods may limit the opportunities for extempore teaching (Biggs & Tang, 2011). In distance, non-formal, and continuing education, technical issues and a lack of physical presence can further complicate the process of extempore teaching efforts (Bower et al., 2015). with the technological advancements, a new avenue has evolved for extempore teaching in the online environment (Johnson et al., 2016). The new technological tools such as video conferences, interactive whiteboards, and real-time polling enable educators to get the students engaged instantly (Hrastinski, 2008). Successful implementation of extempore teaching requires adequate training and support for educators to use these technologies effectively and efficiently (Koehler & Mishra, 2009). The instant behavior of a teacher including verbal and non-verbal communication has been linked to increased student learning and satisfaction in the teaching-learning environment (Witt, Wheeless, & Allen, 2004). Extempore teaching enhances immediacy by bringing a sense of closeness and accessibility between educators and students (Gorham, 1988). This connection is particularly important in distance education where physical separation can prove to be an issue in relationship building (Swan, 2002).

The current study acknowledges the potential of extempore teaching, but there is still a limitation as the studies related to extempore teaching in relation to teaching learning are limited. There is a great need for research that explores how extempore teaching skills affect learning outcomes in this context and how educators get relevant support in the development of these skills (Biggs & Tang, 2011). This study aimed to address this gap by providing evidence on the effectiveness of extempore teaching in alternative educational settings.

1.2 Research Objective

The objective of the current research was to assess the impact of extempore teaching skills on the effectiveness of lesson delivery and

learning outcomes among students in distance non-formal and continuing educational programs.

1.3 Research Question

The following research question was articulated for the study that is how does the incorporation of extempore teaching skill influence lesson delivery effectiveness and learning outcomes in distance non-formal and continuing educational settings?

1.4 Hypothesis

H_0: The integration of extempore teaching skills significantly enhanced lesson delivery effectiveness leading to improved learning outcomes in distance, non-formal, and continuing educational contexts.

H_1: The integration of extempore teaching skills doesn't enhance lesson delivery effectiveness leading to improved learning outcomes in distance, non-formal, and continuing educational contexts.

1.5 Significance of the Study

The significance of the current study lies in its exploration of extempore teaching skills within the domain of distance, non-formal, and continuing education which is increasingly important in adequately involving the educational landscape, especially with the technological advancements. As education moves beyond traditional classrooms to more flexible and accessible formats, understanding effective communication and teaching methodologies is becoming crucial. The findings suggest that incorporating the current study's implications extended to policymaking and curriculum development. Educational institutions and training programs can leverage these insights to design professional development initiatives that prepare educators with essential extempore teaching skills. This research contributes to the advancement of pedagogical practices that support effective learning and address the challenges that are present in distance and non-traditional educational systems.

2. Methodology

The current section provides the research design, participants, instruments, data collection procedures, and data analysis method used in this study to assess the impact of extempore teaching skills on learning outcomes in distance, non-formal, and continuing educational settings.

2.1 Research Design

The current study adopted quantitative, quasi-experimental research designed to explore the effectiveness of extempore teaching skills, enhancing learning outcomes within distance, non-formal, and containing educational settings. The research integrates an experimental activity within an existing teaching skills course framework to ensure authentic and contextual application. Participants were engaged in an extempore teaching activity where they were evaluated on three critical teaching performance elements, i.e., verbal, lesson delivery, body language, and eye contact. A structured evaluation rubric using a 10-point scale was employed for peer assessment. Data collected from these evaluations were analyzed using descriptive statistics to summarize performance variations and inferential statistics to explore relationships among the teaching elements. The design ensures the natural assessment of teaching effectiveness while leveraging reliable statistical methods to provide robust insight into the potential of extempore teaching methodologies.

2.2. Participants

The participants of the study were 32 individuals enrolled in the teaching skills course during the autumn 2023 semester of the master's program in distance non-formal and continuing education at Allama Iqbal Open University. This group comprised both male and female students including individuals with and without prior teaching experience reflecting a diverse mix representative of the program's demographic. From the group, 8 volunteers were selected for the extempore teaching activity. This selection criteria were based on willingness to participate and representation of a broad group of the student population. These volunteers were then divided into two groups of four, Group A and Group B to facilitate the experimental procedure.

2.3. Instrument

The primary instrument used for data collection was a group evaluation rubric designed specifically for this study. The rubric focused on three critical elements of teaching performance identified as essential components of effective extempore teaching. These elements are listed below.

- **Verbal Lesson Delivery**: Clarity, coherence, and articulation of the subject matter.

- **Body Language**: Use of gestures, posture, and movements to enhance communication.
- **Eye Contact**: Ability to engage the audience by maintaining appropriate eye contact.

Each of the above elements was rated on a liquid scale varying from 1 to 10, where 1 represented the highest level of performance and 10 meant the lowest level of performance. The inverted scale was intended to encourage evaluators to be mindful and deliberate in their assessment.

2.4. Data Collection Procedure

The data collection procedure was integrated into the course activities for the master's program on teaching skills and consisted of various stages. The first stage was the preparation phase in which the teaching skill course consisting of 20 hours of theoretical instruction and practical activities including the development of 40 written lesson plans and 2 mock lesson deliveries were done. Students were invited to volunteer for the extempore teaching activity, 8 students agreed to participate and were evenly divided into 2 groups. Each student in group A selected an elementary-level subject topic suitable for extempore teaching. The topic was randomly assigned to students in group B without prior disclosure ensuring spontaneity in lesson delivery. Group B student was informed of the topic immediately before their presentation with no preparation time allotted. Each group B student delivered a 5-minute extempore lesson to the entire class. All the non-represented students received the group evaluation rubric for assessing the presenters on the 3 identified elements. Evaluators observed each participant and recorded their rating immediately after the delivery of the lesson to capture their initial impressions. The evaluation was then conducted with anonymity for reduction in any bias and encourage honest feedback. Completed evaluation rubrics were collected after each presentation, and scores of each element were recorded in a data spreadsheet.

3. Findings

3.1 Descriptive Statistics

The data analysis of the collected data during the extempore teaching activity was aimed at exploring how participants performed during their teaching across three major elements of teaching i.e. verbal, lesson delivery, body language, and eye contact. By examination of these ratings

given by the evaluators sitting in the class, the current section provided insights into the overall effectiveness of the participant's extempore teaching skills as well as variations in performance across different platforms. The data was then analyzed using descriptive statistics offering a summary of the mean standard deviation and range of scores for each element. The table below provides the statistical descriptive analysis.

Table 1
Descriptive Statistics

	Verbal	Body Language	Eye Contact
Mean	2.734375	2.523438	2.882813
Median	2	1.5	2.25
Standard Deviation	1.119338	1.185384	1.140546
Minimum	1	1	1
Maximum	10	1	10

The descriptive statistics revealed key insights into the performance of participants across the three evaluated teaching elements. The mean score of verbal delivery (2.73), body language (2.52) and eye contact (2.88) suggested that participants generally performed well with scores grouping towards higher ratings. Body language emerged as the strongest area reflected in its low mean scores, indicating participants demonstrated more consistent proficiency in non-verbal communication. On the other hand, eye contact had the highest mean score, suggesting that this aspect was relatively more challenging for the participants. The median scores (verbal 2, body language 1.5, and eye contact 2.25) further, showed that most participants were rated favorably, particularly in body language, where other participants were rated closer to 1, reflecting the best performance. The standard deviation for eye contact (1.14) indicates a greater variability in performance as compared to the other elements. This suggests that some participants found it difficult to maintain consistent eye contact during their lesson delivery. The minimum score of 1 across all elements signifies that certain participant performed exceptionally well in all areas, whereas the maximum score of 10 points to a wider range of abilities across the group. This indicates that while some participants excelled, others failed and considered it challenging.

3.2. Inferential Statistics

3.2.1. One-Way Repeated Measures ANOVA

Table 2

One-Way Repeated Measures ANOVA

Source	F-value	p-value	Alpha
Between Groups (Verbal, Body Language, Eye Contact)	0.074037	0.929197	0.05

On the one-way repeated measures ANOVA results, it is shown that the p-value 0.929 is much higher than the alpha value of 0.05, indicating that there are no statistically significant differences in the mean rating across the three elements. In other words, participants' performance across three elements was relatively similar and we cannot reject the null hypothesis that the means are equal.

3.2.2. Inter-Rater Reliability Analysis

Table 3

One-Way Repeated Measures ANOVA

Element	Cronbach's Alpha	Alpha Threshold
Verbal	0.942732	0.05
Body Language	0.924119	0.05
Eye Contact	0.935442	0.05

The inter-rater reliability analysis using Cronbach's alpha provided excellent consistency among the evaluators for all three teaching elements. For verbal lesson delivery, the Cronbach alpha was 0.943 indicating a very high level of agreement among the raters. This provides the insight that evaluators had a shared understanding of what constitutes effective verbal communication leading to consistent ratings. Similarly, body language had a Cronbach alpha of 0.924 reflecting excellent reliability as well. Raters consistently evaluated participants' use of gesture, posture, and movement in the same way showing little variation in how body language was scored. Eye contact with the Cronbach alpha of 0.934 also displayed excellent reliability meaning the evaluators were largely in agreement about how well participants-maintained eye contact during their lessons. The

Cronbach alpha values of all three elements are above 0.9 indicating excellent inter-rater reliability across the elements. This level of consistency ensures that the ratings are dependable and minimizes concerns about random or biased scoring. Strong reliability also suggests that the evaluation rubric was clearly understood and applied effectively by the raters.

3.2.2. Correlation

Table 4
One-Way Repeated Measures ANOVA

	Verbal	Body Language	Eye Contact
Verbal	1	0.993993	0.991153
Body Language	0.993993	1	0.97841
Eye Contact	0.991153	0.97841	1

The correlation between verbal delivery and eye contact r = 0.991 highlights that participants who maintained good eye contact also performed well in verbal communication. The interconnection emphasizes the importance of eye contact in enhancing verbal engagement, making lessons more persuasive and impactful. The correlation analysis revealed that a strong positive relationship between the three teaching elements was present. The correlation between verbal delivery and body language r=0.994 indicates a near-perfect relationship, meaning participants who performed well in verbal communication were also good in using body language. This suggested that effective verbal delivery was often complemented by expressive gestures and movements reinforcing the overall clarity and impact of teaching. The correlation between verbal delivery and eye contact r = 0.991 provided that participants who maintain good eye contact also perform well in verbal communication. This relationship provides a deep insight that the importance of eye contact is more in enhancing verbal engagement, making lessons more persuasive and impactful. The correlation between body language and eye contact r=0.972, may be significantly lower but remains very strong. This shows that participants who are comfortable using body language also maintain strong eye contact reflecting the confidence and engagement during the extempore teaching activities. The high correlation across all these three

elements suggested that the components of teaching practices are tightly interrelated. Participants who perform well in one area also do well in another area. This indicates that effective extempore teaching requires a balanced combination of verbal, nonverbal, and eye contact. Findings provide that training programs should focus on the development of all three aspects simultaneously as improvement in one area is likely to have a positive effect on the other resulting in more effective teaching.

Discussion and Conclusion

The findings of the current study provided a great insight into understanding the role of extempore teaching skills enhancement for learning outcomes within distance, non-formal and continuing education. By examining participants' performance across three different essential teaching elements, the current research emphasized the strong interrelationship between these components for effective teaching-learning. The correlation analysis provided that participants who perform well in one element also tend to perform well in the other. This highlights that successful extempore teaching is not only dependent on one skill but is a result of a well-developed combination of verbal and nonverbal abilities. Participants who could clearly manage their ideas during the sessions were also able to use physical gestures and maintain eye contact. This shows how these skills are interrelated with each other in the creation of a dynamic and engaging teaching experience. The results of one-way repeated major ANOVA indicated no significant differences in performance across the three elements. This means participants showed similar proficiency in verbal lesson delivery body language and eye contact. This also suggests that participants were generally skillful in their teaching capabilities which may reflect the effectiveness of the teaching skill course. Although the expectations were high that certain elements might present more challenges such as eye contact, the results of a significant lack of variation show that participants were able to integrate verbal, physical, and visual engagement in their extempore teaching fairly equally. This also highlights that there is an opportunity for further training programs to refine these skills as no single area is measured as a distinct strength or weakness that requires more focused improvement.

The inter-rater reliability analysis provided Cronbach alphas value above 0.9 for all three elements. This confirms a high consistency in evaluation by the group this strong agreement among the group ensured that the data collected was reliable and trustworthy, and provided a solid foundation for interpreting the study results. As there was clarity in the evaluation rubric this may also likely contributed to the consistency which suggests that the criteria for assessing external teaching skills were well understood and applied in uniformity across participants. The correlation analysis revealed that the three teaching elements were highly correlated with one another. The participants who communicated effectively through verbal communication also showed strong body language and eye contact. The nearly perfect correlation indicates that these elements are not only independent of each other but also work in groups to enhance the overall teaching experience. The findings in this course show the importance of developing a well-rounded teaching skill set where verbal and non-verbal communication are equally emphasized for the creation of an engaging and effective classroom presence.

Conclusion

The results of the study provide an important understanding of how extemporal teaching skills are interrelated and collectively contribute to successful teaching performances in distance non-formal and interviewing educational settings. The high correlation between these elements provides insights into the need for educators to develop a balanced set of communication skills to enhance their ability to engage in an effective learner environment. The study found no significant differences in performance across these teaching elements. The consistency of participants' performance highlights the effectiveness of the training received in the teaching skill scores. The results also suggest that more specialized training could further enhance specific aspects of extemporal teaching to push participants from good to excellent performance levels in each area. The strong reliability of peer evaluations as evidenced by the high Cronbach alpha values strengthened the validity of the study's findings and suggested that the assessment of extemporal teaching skills was conducted fairly and consistently across participants. This study reinforces the value of extemporal teaching in building confidence,

improving communication, and bringing engagement to the educational environment. The further educational programs are focused on further refining these skills while ensuring they are integrated deeply could lead to even more effective teaching outcomes. The results of this study serve as a call to educators and trainers to prioritize both verbal and non-verbal communication in teacher preparation programs to equip teachers and educators with the tools they need to create a dynamic and interactive learning environment.

Suggestions for Future Research

While the current study provides valuable insights into the role of extempore teaching skills in distance non-formal and continuing educational settings further research could explore several key areas to further enrich the understanding of this instructional approach. One potential direction is to examine the long-term impact of extempore teaching on student learning retention and academic performance. Conducting longitudinal studies that track students' progress over multiple semesters could reveal whether extempore teaching leads to sustained improvements in communication skills, critical thinking, and engagement. Additionally, further research could compare extempore teaching with other active learning strategies such as problem-based learning or flipped classrooms; for the identification of methods that yield the most effective outcomes in non-traditional educational settings.

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