

Creation of Interactive Evaluations through Android Apps among the Primary Teachers in Krishnagiri District

N. Indira*

Abstract

The present study explores the creation of interactive evaluations through Android Apps among primary teachers in Krishnagiri District. In the digital age-especially during the pandemic-technology has become an essential medium for learning and evaluation at the primary level. This study was designed to enhance teachers' competence in using Android-based applications such as Text to Speech for Kids, Addition App, Paint App, and Quiz App. The research followed an experimental method using pre-test and post-test analysis to measure teachers' progress in digital evaluation skills. Thirty teachers from three Blocks of Krishnagiri District- Mathur, Kaveripattinam, and Kelamangalam were trained online for four days. Results revealed a substantial increase in teachers' interactive evaluation levels, with mean scores improving from 37.48% (pre-test) to 95.23% (post-test). The findings indicate that short-term digital training significantly enhances teachers' confidence, engagement, and competency in utilizing Android applications for classroom evaluation.

Keywords

Android Apps, Interactive Evaluation, Primary Education, Teacher Training, ICT Integration, Digital Pedagogy.

Background of the Study:

In the contemporary 21st-century educational landscape, digital literacy has become an essential component of effective teaching and learning. This expression, and immediate feedback through need was further intensified during the COVID-19 pandemic, which brought about unprecedented changes in educational processes worldwide and participation in the learning process (Kukulskanecessitated the rapid adoption of technology-mediated instruction and evaluation (UNESCO, 2020). Teachers were required not only to deliver curriculum content through digital platforms but also to redesign assessment practices to suit blended learning environments.

The integration of technology into evaluation practices not only enhances student engagement but also contributes to teachers' professional development. Teachers develop competencies related to digital lesson planning, assessment design, feedback mechanisms, and reflective practices, which are essential components of effective teaching in technology-rich environments (Mishra & Koehler, 2006). However, despite the availability of mobile learning tools, many primary school teachers face challenges in adopting digital evaluation methods due to limited training and confidence in using educational technology (Rao & Meena, 2019).

Mobile technology, particularly Android-based applications, has emerged as a powerful educational resource due to its affordability, accessibility, and ease of use (Traxler, 2009). At the primary education level, where learners benefit most from visual, auditory, and activity-based learning experiences, traditional evaluation methods often fail to sustain attention and motivation. Consequently, interactive and technology-enabled evaluation strategies have gained prominence as effective alternatives to conventional assessment practices (Hwang & Chang, 2011). Recognizing this need, teacher education institutions such as District Institutes of Education and Training (DIETs) play a crucial role in strengthening teachers' digital capabilities through structured professional development programmes (NCERT, 2023). In this context, the present study focuses on empowering primary school teachers in Krishnagiri District by providing hands-on training in the use of Android applications for interactive evaluation. The study seeks to enhance teachers' awareness, skills, and confidence in integrating

Children today are increasingly exposed to digital media such as videos, rhymes, cartoons, and educational applications from an early age. This shift in learners' experiences has encouraged educators to integrate similar digital tools into instructional and evaluative processes (Prensky, 2001). Android applications such as Text to Speech, Addition, Paint, and Quiz Apps provide innovative opportunities for

*Lecturer, DIET, Dharmapuri, Area-4. ICT & Educational Technology.

How to cite this article:

Indira, N. (2025). Creation of Interactive Evaluations through Android Apps among the Primary Teachers in Krishnagiri District. *DIET - Multidisciplinary Research Journal (DIET-MRJ)*, 1(2), 31-35.

mobile applications into classroom assessment practices.

This background provides the foundation for the discussion of the study, where the effectiveness of short-term, targeted Android-based training is examined. The significant improvement in teachers' interactive evaluation skills, irrespective of age and gender, highlights the potential of technology-assisted professional development to bridge the digital divide and promote inclusive, learner-centred evaluation practices (OECD, 2015). Thus, the study bridges the gap between traditional evaluation approaches and modern technology-enabled assessment methods, supporting the development of a digitally competent teaching community capable of adapting to evolving educational paradigms.

Need and Significance of the study:

The rapid digital transformation brought about by the pandemic required teachers to quickly adapt to online teaching and evaluation methods. Particularly at the primary level, where attention spans are shorter, interactive digital tools serve as powerful aids for motivation and learning; his study emphasizes the importance of Android Apps such as *Text to Speech for Kids* (for pronunciation and language skills), *Addition App* (for arithmetic practice), *Paint App* (for creativity and fine motor development), and *Quiz App* (for formative assessment). These tools help teachers design enjoyable and educational tasks aligned with the learners' pace and interest.

By integrating such technology, teachers develop not only technical proficiency but also innovative evaluation strategies that encourage active learning and student-centered pedagogy. Hence, the study is both timely and necessary to transform traditional classroom evaluation into dynamic, interactive, and technology-driven practice.

Methodology:

Objectives

- To create the awareness of interactive evaluations through Android Apps.
- To understand the different Apps already available like 'text to speech for kids' 'addition' 'paint application' 'quiz apps'.
- To improve blocks settings in Interactive Evaluation.

Hypotheses of the study

- There is no significant difference between text to speech for kids, addition, paint application, quiz apps.
- There is no significant difference between male and female teachers in awareness of interactive evaluations through android apps.
- There is no significant difference between Upto-35 year's and Above-35 year's teachers in developing a creation of new apps.

- There is no significant difference between the blocks of krishnagiri district in interactive evaluation through android apps.

Sample and Tools:

A total of 30 primary teachers from three blocks (Mathur, Kaveripattinam, Kelamangalam) were selected randomly. Questionnaire tool was prepared by the researcher. Data were collected using a researcher-developed questionnaire and Google Forms.

Procedure

A four-day online training was organized using *Zoom*. Teachers were trained by resource persons through demonstration, practice, and feedback. Each session included assignments, which were reviewed daily. Tools used included *Text to Speech App*, *Addition App*, *Paint App*, and *Quiz App*.

An Experimental Method was adopted for this study. The 'text to speech for kids', 'addition', 'paint application' 'quiz apps' were demonstrated through online mode for understanding the Android Apps.

Hands on activity were conducted through online mode. Doubts were clarified through whatsapp for better understanding of android apps using post-test in Google form for teachers.

Table 1: Showing Details of Research Training Module uploaded Link

S.No	Website Address	Website Link
1.	dietkrishnagiri@gmail.com	https://drive.google.com/file/d/1AgGgOTV_PY51ns80DepqRm1BbqlrCYT/view?usp=sharing

Table 2: Showing Details of Research Online Training Videos Uploaded in YouTube Link

S.No	Website	YouTube Link
1.	Learn Anything	https://www.youtube.com/watch?v=inN_Q5B4FnM&t=40s
2.	Learn Anything	https://www.youtube.com/watch?v=3sGoxMW5G9Y&t=21s
3.	Learn Anything	https://youtu.be/O1NHKmvbF4
4.	Learn Anything	https://youtu.be/9FRXy4o5-pQ

Statistical Techniques:

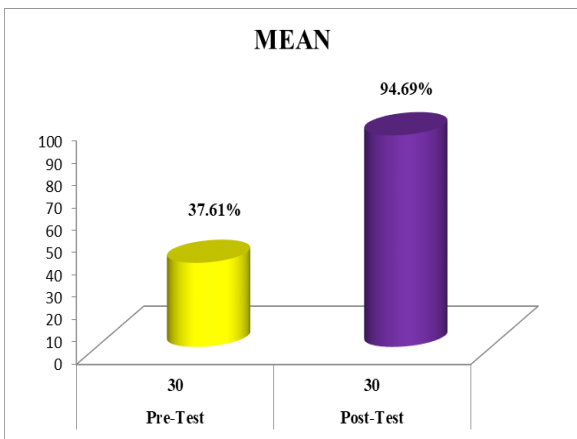
Data were analyzed using descriptive and inferential statistics to compare pre-test and post-test results.

Table 3: Comparison of Teachers Interactive Evaluations through Android Apps Scores between Pre-Test and Post-Test

Category	N	Mean	Sd	't' Value	Remarks
Pre-Test	30	37.48	4.49	9.84*	*SD
Post-Test	30	95.23	29.45		

*SD- Significant Difference

't' ratio at 0.01 level of confidence for the degree of freedom (df) at 58=2.390



Graph No1. A 3D bar graph to compare the mean scores of two groups: Pre-Test and Post-Test

Table 4: Comparison of Teachers Interactive Evaluations through Android Apps Scores between Male Pre-Test and Post-Test

Category	N	Mean	Sd	't' Value	Remarks
Pre-Test	13	37.61	4.89	7.40*	*SD
Post-Test	13	94.69	29.43		

*SD- Significant Difference
't' ratio at 0.01 level of confidence for the degree of freedom (df) at 24=2.457

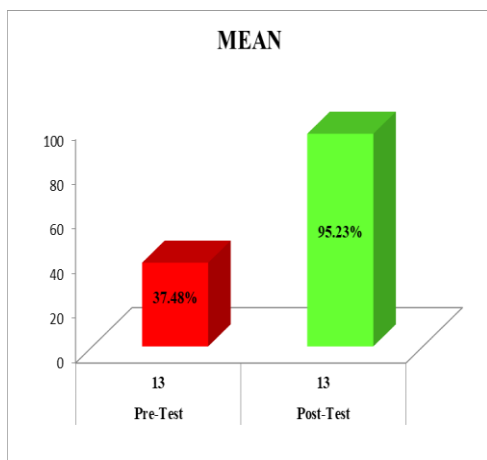


Table 5: Comparison of Teachers Interactive Evaluations through Android Apps Scores between Female Pre-Test and Post-Test

Category	N	Mean	Sd	't' Value	Remarks
Pre-Test	17	37.11	4.31	3.00*	*SD
Post-Test	17	95.56	29.91		

*SD- Significant Difference
't' ratio at 0.01 level of confidence for the degree of freedom (df) at 32=2.423

The graph shows a comparison of mean scores between a Pre-Test and a Post-Test for the same group of 17 participants

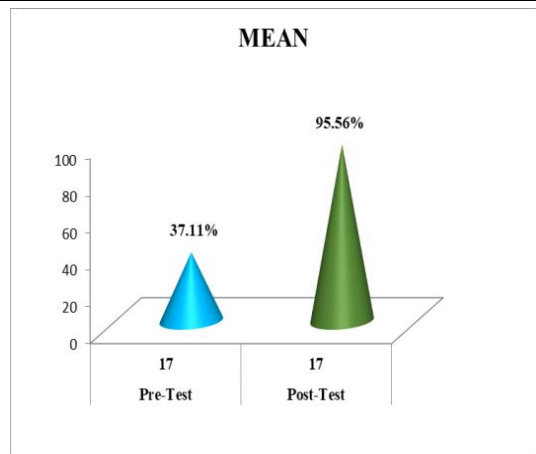
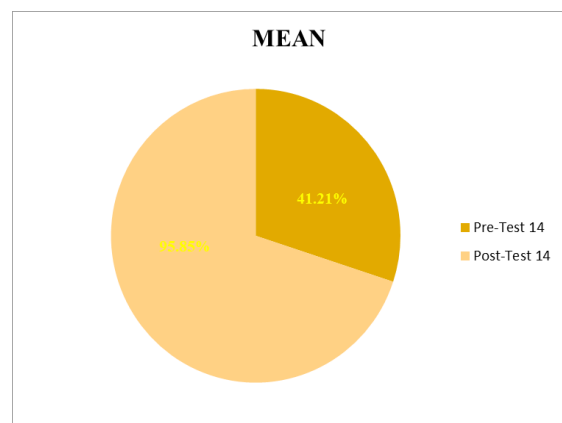


Table 6: Comparing Teachers Interactive Evaluations Through Android Apps Scores between upto-35 Years Pre-Test and Post-Test

Category	No	Mean	Sd	't' Value	Remarks
Pre-Test	14	41.21	10.04	4.03*	*SD
Post-Test	14	95.85	29.65		

*SD- Significant Difference
't' ratio at 0.01 level of confidence for the degree of freedom (df) at 26=2.479



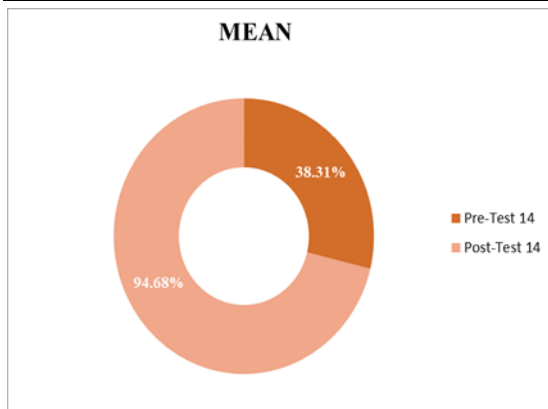
The pie chart displays a comparison of mean scores between the Pre-Test and Post-Test for a group of 14 participants.

Table 7: Comparing Teachers Interactive Evaluations Through Android Apps Scores between above-35 Years Pre-Test and Post-Test

Category	No	Mean	Sd	't' Value	Remarks
Pre-Test	14	38.31	8.09	7.24*	*SD
Post-Test	14	94.68	9.92		

*SD- Significant Difference
't' ratio at 0.01 level of confidence for the degree of freedom (df) at 26=2.479

The chart compares the mean Pre-Test and Post-Test scores for a group of 14 participants.



Findings:

- Teachers Interactive Evaluations level was tested through a questionnaire in Android Apps concepts in which differences were resulted in both pre-test and post-test.
- Teachers' mean score of pre-test was 37.48%, which rose to 95.23% in the post-test.
- Both male (94.69%) and female (95.56%) teachers improved significantly.
- Teachers below 35 years (95.85%) and above 35 years (94.68%) performed comparably.
- Participants demonstrated increased enthusiasm, curiosity, and digital confidence.
- Teachers began using Android Apps creatively in their daily evaluation activities.
- The post-test outcomes revealed that gender and age did not influence digital learning performance.
- Teachers' felt that their Interactive Evaluations level increased through online training for 'text to speech for kids' 'addition' 'paint application' 'quiz apps'.
- The teachers' practiced Android Apps with complete involvement, interest and joyfulness.
- After online training four stages of 'text to speech for kids' 'addition' 'paint application' 'quiz apps' for four days, teachers' focus, knowledge, and sharpness were developed.
- Finally, after 4 days of Android Apps online training, teachers were able to realize a good change in their Interactive Evaluations.

Discussion of the Study:

The present study examined the effectiveness of Android-based applications in enhancing interactive evaluation skills among primary school teachers in Krishnagiri District, particularly during the pandemic-driven transition toward digital learning. As emphasized in the background of the study, the sudden shift to online and blended instructional modes necessitated the adoption of technology-enabled assessment practices (UNESCO, 2020). The findings of the study strongly support this need, demonstrating that structured training in Android applications can significantly improve teachers' digital competence and evaluation practices.

The substantial improvement observed in post-test scores compared to pre-test scores indicates that teachers were able to effectively acquire and apply interactive evaluation skills using Android applications. This finding highlights the instructional value of mobile-based tools such as Text to Speech, Addition, Paint, and Quiz Apps, which align with the developmental characteristics of primary school learners by incorporating visual, auditory, and activity-oriented elements (Hwang & Chang, 2011). These results validate the background argument that traditional evaluation methods are often inadequate for sustaining learner engagement at the primary level.

One of the key findings of the study is that gender did not significantly influence teachers' acquisition of Android-based evaluation skills. Both male and female teachers demonstrated comparable improvement following the training programme. This result supports earlier research suggesting that gender-based differences in technology adoption can be minimized through appropriate training and access to digital resources (OECD, 2015). The finding reinforces the background assertion that digital literacy development is more closely related to training opportunities than to demographic variables.

Similarly, the study revealed that age was not a limiting factor in adopting Android applications for interactive evaluation. Teachers below and above 35 years of age achieved similar post-test performance levels, indicating that effective professional development can enable teachers of all age groups to integrate technology into their assessment practices. This outcome aligns with previous studies that emphasize the role of confidence-building and hands-on experience in promoting technology adoption among in-service teachers (Kukulka-Hulme & Shield, 2008).

The high post-test mean scores also reflect teachers' increased motivation, confidence, and self-efficacy in using Android applications for evaluative purposes. The online mode of training, combined with practical demonstrations and continuous support through WhatsApp, created a collaborative and supportive learning environment. This approach aligns with the professional development principles outlined by Mishra and Koehler's (2006) TPACK framework, which emphasizes the integration of technological, pedagogical, and content knowledge for effective teaching and assessment.

Furthermore, the study demonstrated that effective digital evaluation can be achieved using low-cost, user-friendly Android applications without the need for advanced infrastructure. Teachers reported integrating these applications into their regular classroom practices, transforming evaluation into a more interactive and learner-centred process. This finding supports the background discussion on the potential of mobile learning to bridge the gap

between traditional assessment methods and modern, programs and teacher education curricula can technology-enabled evaluation practices, particularly promote sustainable digital empowerment. in rural and semi-urban contexts (Traxler, 2009).

Overall, the findings confirm that short-term, targeted training interventions focusing on Android-based applications can lead to significant professional growth among primary school teachers. The success of this intervention underscores the role of teacher education institutions such as DIETs in promoting digital literacy and innovative assessment practices (NCERT, 2023). The study contributes empirical evidence supporting the scalability of mobile-based training models for large-scale teacher development initiatives, aligning with national and international perspectives on technology-integrated education (UNESCO, 2020).

Educational Implications:

As per the results of the present study primary teachers interactive evaluations level increased through android apps regularly. It seems to be more effective for both male and female in their learning process. Further it can be given to all level of teachers as well as to the students in an effective way.

- The findings of the present study focused in major towards the teacher's creation of interactive evaluations level increased through practicing android apps regularly.
- The findings of the present study focused majorly towards the teachers' level of interactive evaluations through 'Text to speech' 'Addition app' 'Paint app' 'Quiz app' activity in an online mode tasks. These types of activities are appropriate to all age groups.

Limitations of the Study:

- The sample size (30 teachers) was small and limited to three blocks.
- The training duration was short (four days), so long-term retention wasn't evaluated.
- The online mode restricted face-to-face observation.
- Only four Android Apps were studied; other tools may provide broader insights.
- Data relied on self-reported feedback, which may include bias.
- Some teachers faced technical issues such as unstable internet connectivity.

Conclusion:

This study demonstrates that Android-based teacher training can effectively build digital competence and interactive evaluation skills among primary school educators. Integrating such training into DIET

Regular workshops on mobile learning and app development should be institutionalized for teachers at all levels. By adopting such initiatives, educational institutions can ensure that technology is not merely an add-on but a transformative teaching resource that enhances learning outcomes.

The study concludes that with proper training and motivation, teachers can become active creators of digital content and evaluators of interactive learning, leading to a more engaging and inclusive education system.

References:

- Abd Rahim, B. & Shamsiah, M. (2008). Teaching Using Information Communication Technology: Do trainee teachers have the confidence? *International Journal of Education and Development using ICT*.
- Agrawal, A. K., & Mittal, G. K. (2018). The role of ICT in higher education for the 21st century: ICT as a change agent for education. *Multidisciplinary higher education, research, dynamics & concepts: opportunities & challenges for sustainable development, 1*(1), 76-83.
- Amhag, L., Hellström, L., & Stigmar, M. (2019). Teacher educators' use of digital tools and needs for digital competence in higher education. *Journal of Digital Learning in Teacher Education, 35*(4), 203-220.
- Begel, A., & Klopfer, E. (2007). Starlogo TNG: An introduction to game development. *Journal of E-Learning*.
- Brennan, K., & Resnick, M. (2012, April). New frameworks for studying and assessing the development of computational thinking. In *Proceedings of the 2012 annual meeting of the American educational research association, Vancouver, Canada* (Vol. 1, p. 25).
- Hwang, G. J., & Chang, H. F. (2011). A formative assessment-based mobile learning approach to improving the learning attitudes and achievements of students. *Computers & Education, 56*(4), 1023-1031.
- Kukulka-Hulme, A., & Shield, L. (2008). An overview of mobile assisted language learning: From content delivery to supported collaboration and interaction. *ReCALL, 20*(3), 271-289.
- Kumar, S., & Kumar, R. Mobile learning applications and teacher readiness during COVID-19 pandemic in India. *Journal of Educational Technology Systems, 50*(1), 3-19.
- Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers college record, 108*(6), 1017-1054.
- Rao, S., & Meena, K. ICT integration in teacher education: Challenges and opportunities. *Indian Journal of Teacher Education, 5*(2), 45-52.
- Traxler, J. (2009). Learning in a Mobile Age. *International Journal of Mobile and Blended Learning, 1*, 1-12.
<https://doi.org/10.4018/jmbL.2009010101>