

STA (Student Teacher App)

Aditya M Balsane¹

¹GURU GOBIND SINGH POLYTECHNIC, NASHIK

ABSTRACT

The STA (Student Teacher App) is an application platform which provides an efficient and reliable way for students and teachers to interact with each other. The STA application platform can be used for sharing study material, students and teachers can communicate with each other via text or video, Assignments can be submitted by students and graded by teachers in the same platform, etc. without any restrictions.

The STA (Student Teacher App) application gives all the services that must be provided to students for effective E-learning and to teachers for reliable evaluation of respective students. This application provides users all the tools and components required to fulfil interactive and productive education. Online education enables the teacher and the student to set their own learning pace, and there's the added flexibility of setting a schedule that fits everyone's agenda. As a result, using an online educational platform allows for a better balance of work and studies, so there's no need to give anything up.

Keywords: *Application, E-learning, Education, Data attributes, Realtime Databases, STA*

INTRODUCTION

Education institutes are an essential part of everyday life, but if these institutions get closed because of an unprecedented crisis like a pandemic or national emergency then

it may affect various aspects of the education system due to lack of alternative methods for convenient learning. Learning cannot be limited to four walls and neither can the classroom be. The virtual classroom has thrown open the doors to instructors and learners from every corner of the world to come on one platform.

1.1 Project Description

The democratization of education has been made possible in its truest form only by online learning i.e., STA (Student Teacher App) is an application platform is made for providing an efficient and reliable way for students and teachers to interact with each other online without any restrictions. STA (Student Teacher App) is an application platform which gives all the services that must be provided to students for effective E-learning and to teachers for reliable evaluation of respective students.

1.2 Problem Statement

E-learning has significant benefits over present traditional education and classroom training. In today's World, most schools provide the e-learning classroom for the students. Online Learning Accommodates Everyone's Needs. The method of online learning is the best method for students. But it has become a hassle nowadays because there are wide varieties of apps are available in market and their application differs from each other users often have to switch between multiple apps to get their work done and that's why this makes E-learning an

inconvenient option. That's where STA comes up into the spectrum because of its centralized nature it has all the major components required for E-learning

inside one package and it makes the process convenient and saves up a lot time of users.

1.1 Scope

STA (Student Teacher App) is an application platform which gives all the services that must be provided to students for effective E-learning and to teachers for reliable evaluation of respective students. The STA application platform can be used for sharing study material, students and teachers can communicate with each other via text or video, Assignments can be submitted by students and graded by teachers in the same platform, etc. without any restrictions. i.e., This application provides users all the tools and components required to fulfil interactive and productive education. Online education enables the teacher and the student to set their own learning pace, and there's the added flexibility of setting a schedule that fits everyone's agenda. As a result, using an online educational platform allows for a better balance of work and studies, so there's no need to give anything up.

1.4 Objective

STA aims to provide a robust and user-friendly application platform for students and teachers to communicate with each other more efficiently. By using STA, users can access content anywhere and anytimewithout any restrictions aims to save a lot of switching between multiple applications because it has all the necessary features of online learning inside one application. STA doesn't use a high number of resources; it can be run on any basic entry level android device.

Literature Survey

The study suggests that it is difficult to use e-learning to improve teaching performance, as participating teachers can apply several strategies to avoid substantially changing their work-related practices. Furthermore, the study shows that only using the fulfilment of pre-defined learning objectives as an effectiveness parameter does not allow developers and researchers to see unexpected and unintended changes in practice that occur as a result of the e-learning program. Finally, the research provides insight into the validity of self-assessments, suggesting that participants are able to successfully report their own practices, provided certain qualitative survey approaches are used. In this paper, a model for understanding the relationships of the key factors that influence effectiveness is developed.[1]Emerging digital technologies and increasing interest in the computerized delivery of higher education have led to e-learning through electronic mail, the Internet, the World Wide Web (WWW), and multimedia. Issues such as the confidence with which college faculty integrate technology in their teaching, plagiarism and communication remain as important unresolved questions. Considering these, the marketplace of learners is not responding to e-learning as anticipated. Understanding the importance of information systems, and of efforts to ensure that faculty use technology, as well as recognition of the marketplace, a framework has been developed for success with e-learning.[2]E-learning activities are important for the development of any country. In modern era everybody is thinking about growth and Educational development. If it is planned properly then proper results will come. In this research paper development through E-learning in India is observed. If it planned properly then proper results will be affecting positively.[3]

A critical review of literature is provided with a view to developing a more practical framework for achieving success in e-learning. Also, some reported case experiences are briefly discussed. Suggestions for future research are presented.

Proposed System

The proposed system covers all the flaws which are present in existing system of E-learning in educational system. The current system works but it's not reliable for efficient distant e-learning.

STA application provides users all the tools and components required to fulfil interactive and productive education. Online education enables the teacher and the student to set their own learning pace, and there's the added flexibility of setting a schedule that making learning more convenient for everyone. With the help of STA teachers and students can interact like never before and it makes evaluating skills of person easier than before. STA consist pretty much consist of all the necessary things required for effective E-learning.

Features of proposed system

STA application platform is divided into 2 modules:

- Teacher
- Student

Module Description:

Teacher:

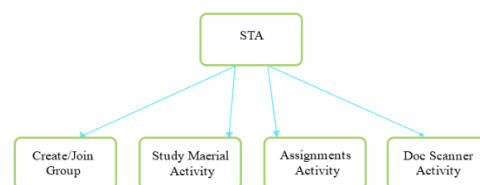
- Teacher can create groups, add students and send messages to students which is part of the group (only teachers can send messages filter available).

- Teacher can also send messages to students individually and reply to messages sent by students.
- Teacher can send study materials to students via study material activity.
- Teacher can assign work to students and can assess assignments submitted by students.

Student:

- Students can receive institute updates from through STA home tab.
- Students can join the groups created by respective teachers and receive messages and updates sent in the group by the teacher or other group members.
- Students can individually send messages to any teachers or students from same institute via individual chats tab.
- Students can receive study materials from teachers.
- Students can attach assignments given by teachers in submit activity.

Major components of systems feature are described in diagram below:



System architecture of STA is shown in figure down below:



ADVANTAGES

In STA teachers can create groups and a unique key will be generated without this unique key student can't join the group which can prevent unnecessary spamming and malicious activity.

The unique group key can be only used by students which are from same institute as their respective teacher, otherwise the unique key won't work.

Teachers can share study material and students can receive it without any restrictions. Teachers and students can also communicate individually through separate chat section.

We often have to switch between a lot of different apps for learning online but STA tries to minimize this effort and it makes online learning more effective because it has all the features needed for online learning under one hood.

CONCLUSION

Online learning has become a necessary supplement today. Learning cannot be limited to four walls and neither can the classroom be. The

democratization of education has been made possible in its truest form only by online learning. Online learning is certainly the more effective option for students and has significant benefits over the traditional education and classroom and STA makes everything just much easier, convenient and very efficient because of its robust nature and user-friendly user interface.

REFERENCES

- [1] Signe Schack Noesgaard and Rikke Ørngreen Research Lab: IT and Learning Design, Dep. of Learning and Philosophy, Aalborg University, Copenhagen, Denmark The Effectiveness of E-learning (2013): An Explorative and Integrative Review of the Definitions, Methodologies and Factors that Promote e- Learning Effectiveness
- [2] A. Gunasekaran, Ronald D. McNeil and Dennis Shaul, University of Massachusetts, North Dartmouth, Massachusetts, USA (2002): E-learning: research and applications
- [3] Arun Gaikwad, Vrishali Surndra, Randhir S.N. Arts, DJM Commerce, BNS College Sangamner, Pune, Maharashtra, India. 2 Ness Wadia College of Commerce, Pune, Maharashtra, India. (2015): E-Learning in India: Wheel of Change