Covid-19 compelled RASE Model curriculum transaction for teacher education - A study

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Abstract

The unprecedented shut down of educational institutions owing to the Covid pandemic had prompted many institutions to shift to an Online mode of instruction. The investigator, a teacher educator by profession found the abrupt shift from face-to-face instruction to an online only pedagogy for teacher education a major challenge. This necessitated the exploration of appropriate instructional strategies to substitute the existing time-tested pedagogical practices followed in teacher training colleges.

The target audience specific data collected through surveys and interviews revealed that the needs, resources available and internet connectivity of main stakeholders namely teachers and learners vary in several ways. This posed several challenges and the investigator found a solution in the RASE Model which is increasingly being perceived as a practical, evidence based design model with applications of technology to improve student learning outcomes and student satisfaction (Churchill, King, & Fox, 2013).

When a batch of English optional teacher trainees of the Bachelor of Education (BEd) programme, was assigned to the investigator-cum-teacher educator, the RASE model which basically addresses Resources, Activity, Support and Evaluation was utilized for curriculum transaction. This paper lists down the strategy employed to transact the BEd curriculum using the RASE model. It is hoped that the report of the study will help colleges of teacher education and English language teacher educators to gain a sense of direction to commence delivery of instruction which has already been delayed owing to the pandemic.

Key words: Activity, Evaluation, Teacher Education, Resources, Support
The Covid situation

The Covid pandemic and the unprecedented shutdown has affected academic activities. Students are stranded at homes and educators and students alike are confused as to the steps to be taken with respect to educational objectives. The disruption of academic activities have placed institutional leaders, teachers and students in a quandary and roused the anxiety of parents prompting many to explore alternatives to regular teaching and learning.

Teacher trainees on whom the study was conducted:

The study was conducted on teacher trainees numbering 13, undergoing the Two Year Bachelor of Education (BEd) course offered by the University of Kerala. Following the Covid pandemic, the teacher trainees were not attending college but were attending theory classes based on papers prescribed for the BEd course. The locale of residence of most trainees were ones with poor internet connectivity, making it rather difficult to engage sessions through Google Meet or Zoom.

Brief review of studies related to the shift to Online pedagogy

In the review of literature of online teaching and learning practices in teacher education following Covid-19, Carrillo and Flores (2020) pointed out the need for a pedagogical approach that relies heavily on the social and collaborative component of learning as a starting point for the development of online teaching and learning practices. Several studies acknowledged the different pedagogical approaches required for an effective online learning experience. The need to focus on clear goal setting, use of explicit tasks, coherent and flexible designs, clear monitoring and evaluation and different levels of interaction and engagement were also identified in the literature reviewed.
Lee (2020) a faculty of Lancaster University expressed a note of concern with the current trend. Several academics have begun to record their lectures, incorporated slides used previously in face-to-face lectures and commenced teaching online. But Lee affirms that such “onlinification” of face-to-face lectures is not likely to result in any positive experiences for students or academics.

Mathes (2020) the CEO of Online Learning Consortium, pointed out the effect of shutdown of campuses. Many institutions immediately commenced offering their courses remotely which is in no way a true online experience. Instead a mix of methods that allow instruction to continue would be appropriate.

Both Lee and Mathes indirectly affirm the need for adopting a proper method in implementing Online pedagogy. This is because, methods are often regarded as a theory about actions to perform in order to reach a goal. Schluchter (1981) for instance is of the opinion that methods can be viewed as reason based statements regarding target states, and as such they represent rationality.

The RASE model

Discussing English teaching and learning during Covid crisis, Harrison (2020) observed that though previously tech-shy teachers have commenced learning how to use online resources it is unsure whether they have a method or road map. Studies have shown that proper student engagement with technology requires an evidence-based course design model. The RASE model (University of New South Wales, Sydney) with its four components Resources, Activity, Support and Evaluation fulfils a much needed requirement for proper student engagement. (Churchill, King, & Fox, 2013).
*The ‘resources’ which have been identified include among others, digital media, lectures, and tools in laboratories. While trying to integrate technology resources with teaching, the primary focus is to be in leading students to learn with, rather than from these resources.

*Student-centred and authentic resources are made use. The students are expected to engage in using the resources and work on tasks and ‘activities’ leading through experience for achieving the expected learning outcomes.

* Students are provided with necessary scaffolding to enable them to develop learning skills and independence. Such ‘support’ could be pedagogical, administrative and technical in nature.

* ‘Evaluation’ is expected to serve as a tool to understand what needs to be done to ensure that learning outcomes are achieved. The structured information from the evaluation undertaken should be utilized to guide students’ progress.

A visual summary of the RASE pedagogical model is given below:

Figure source: UNSW
A review of stakeholder types for teacher education during pandemic

The investigator made use of surveys and interviews to collect target audience specific data for incorporating the RASE model. The survey revealed that the main stakeholders namely teachers and learners vary in several ways. From an analysis of the data collected vis a vis the components of the RASE model-Resources, Activity, Support and Evaluation, it became evident that the expected role and performance of the different stakeholders will vary widely. This posed certain challenges and an attempt was made to consciously address the challenges likely to arise.

Resources

Select review of studies on use of resources:

Simon (2015) discussing the use of web-based resources suggested that by leveraging the instructional potential of web-based resources, it is possible to increase student engagement, expose them to authentic content, and engage them in collaborative activities. Daniels (2019) observed that teachers who use visual methods with their students, consistently report better student scores on quizzes and tests as well as stronger essays projects, and papers.

Challenges related to resources among teachers identified from the data:

* Ignorance in using effectively the plethora of tools available.

* Unfamiliarity with ways of meeting diverse instructional needs of students.

* Lack of experience in adapting existing course materials for online delivery.

* The knowledge and expertise individual teachers have to utilize resources vary widely.
The strategies identified to overcome the challenges faced by teachers:

* Teachers should explore the possibility of using digital content such as videos, podcasts, animation, music etc. after matching it with learning outcome and learner interest.

* They should ensure that students have sufficient and relevant prior knowledge.

* Teachers should develop the ability to effectively use digital tools.

Challenges related to resources among learners identified from the data:

* Several students have poor internet connectivity.

* Many students lack high-density monitors which is essential for teachers to share videos.

The strategies identified to overcome the challenges faced by learners:

* Learners must be encouraged to utilize the internet-based resources suggested by their teachers besides learning from MOOS’s and Open sources.

Specific steps taken by the investigator while adapting resources for teacher education:

* An attempt was made to identify the BEd syllabus related content which could be transacted effectively online. For this, thither to unexplored open source resources were mined, downloaded and adapted focusing on ease in comprehension.

* The content identified were discreetly matched with the expected learning outcome of teacher education. They were then broken down into small chunks.
Activity

Select review of studies on activities:

There is a flurry of confusion and anxiety among institutional leaders, teachers, learners and parents who have been forced to depend on online instruction. Wilberg (1987) had found that “A teacher’s greatest responsibility is response-ability”.

Sara in Cambridge Assessment reported that it requires approximately 200 learning hours for a learner to progress from one level of the Common European Framework for Reference (CEFR) to the next. Further, factors that can affect how long it will take to increase level of English, includes the language learning background, intensity of study, age and amount of study /exposure outside of lesson times.

Challenges related to activities among teachers identified from the data:

* Many are unfamiliar with activities suitable for a blended mode of instruction.

* Teachers are largely unaware of strategies for consciously nurturing all the four language skills online.

The strategies identified to overcome the challenges faced by teachers:

* Teachers must attempt a slow replacement to full time online learning with focus on the individual learner.
* Regular feedback should be collected to identify the effect of online learning. Following continuous monitoring of the activities vis a vis the learning outcome, necessary changes should be incorporated.

**Challenges related to activities among learners identified from the data:**

* There is no clear answer regarding the screen time students are willing to utilize per day.

* Some tools do not have scope for introducing pair and group work during online instruction.

**The strategies identified to overcome the challenges faced by learners:**

* Learners should be provided short breaks in between classes of say two hour duration making it possible for learners to connect with their peers during the break.

* Teachers must make use of tools like Zoom which have breakout rooms that lend scope for collaborative work.

**Specific steps taken by the investigator while identifying activities for teacher education:**

* While employing online tools the first priority was on familiarizing the learners on ways of using it before moving on to skilful use.

* The possibility of applying Bloom’s taxonomy in designing learning activities online was explored.

* An attempt was made to utilize mini lecture followed by individual and pair work for which answers could be provided utilizing the polling feature or immediate feedback by clicking and posting response.

* Identification and utilization of online activities appropriate for different levels of learners.
*Identification of tasks for group activity which can be performed using breakout rooms or offline during weekends.

*Identification of activities to be performed offline, in a flipped learning format.

**Support**

**Select review of studies on aspects related to support:**

All over the world, there is an attempt to revamp teaching by introducing the distance mode at a hectic pace. In such a scenario, it is important to ensure that both students and their families have correct information about Covid-19 and related issues. The UNICEF quite thoughtfully came out with guidelines for teachers. One such which deserve special mention includes the suggestion to encourage learners to express and communicate their feelings, without fear and stigma (UNICEF, 2020).

The American Psychological Association published a timely post on building resilience as “we all face trauma, adversity and other stresses”. The post provides a roadmap for adapting to life-changing situations. To help learners develop resilience, things which we could do include:

*Make them realize that change is part of living.

*Do everything possible to help learners nurture a positive self-view.

*See that learners maintain an outlook that is hopeful. They should be made to realize that even the current hopeless situation will pass.
Challenges related to support among teachers identified from the data:

* Many are unfamiliar with differentiated online instructional strategy.

The strategies identified to overcome the challenges faced by teachers:

* Should identify free and user friendly tools compatible with the learners’ devices.

* Should focus on creating learning opportunities for learners with disability.

* May explore the possibility of integrating non-school learning resources such as museums and virtual tours.

* Must call up students and try to find solutions to problems related to online pedagogy faced by individual learners.

Challenges related to support among learners identified from the data:

* Inability to cope with the insistence on online teaching and learning.

* Some do not have access to internet or devices-laptops and monitors needed for virtual learning.

* Learners with disability are more or less in the dark and are ignorant of strategies for learning online.

* Many learners are experiencing a feeling of loneliness and isolation.

* In several cases there is a complete absence of human connection making it difficult to see anyone.

* With illiterate parents there are students who fail to get any assistance from homes.
* Though self-discipline and self-motivation are key factors in a flipped mode classroom, many are unaccustomed to such a mode of learning.

The strategies identified to overcome the challenges faced by learners:

* To address learners with disability, the teachers need to familiarize themselves with available assistive technology tools and commence using appropriate tools for online teaching.

* Teachers should show a strong preference for using platforms that offer collaborative solutions combining communication such as messaging, file sharing and polling.

* Learners should be invited to seek the assistance of their teacher/counselor of the institution whenever they face problems of a technical or psychological nature.

Specific steps taken by the investigator for providing support in teacher education:

The data revealed that the support that the key stakeholders, teachers and learners need, differs in degree. The trainees undergoing the teacher education programme are adult learners and a majority of them are ones who can handle minor mental health related issues. To ensure nurturing of a positive climate for wellbeing of the teacher trainees, the following was attempted:

* Online instruction invariably began with the creation of a rapport.

* An attempt was made to get into the shoes of the trainees to get a feel of isolation if any experienced.

* A willingness was shown to listen to the concerns of the trainees even as they tried to overcome the tough situation.
Periodic messaging and telephonic conversation with trainees was meticulously undertaken to drive out the sense of isolation and help trainees develop the feel that they are being supported and cared for.

Evaluation

Select review of studies on Evaluation:


On a positive note, Norman (2016), proposes that online learning can harness the power of technology to help students interact with course materials in new and creative ways. So when designing assessments, the teacher should incorporate audio, video, social media, collaborative wikis and creative research techniques to help students build valuable skills. For this, the teacher should capitalize on digital resources, aim for authenticity, use student’s environment and experiences, incorporate collaboration and make use of both formative and summative assessment.

Challenges related to evaluation among teachers identified from the data:

*Lack of familiarity with using online tools for evaluation.

*No prior training on how to effectively evaluate knowledge attained by each learner.
The strategies identified to overcome the challenges faced by teachers:

* Teachers should attend short term courses on teaching and assessing online.
* While utilizing resources, there should be a conscious attempt to match both learning outcomes and assessment.

Challenges related to evaluation among learners identified from the data:

* Many learners are completely unaccustomed with online assessment.
* The insistence on submission of digital assignments create stress among learners.
* Many are unfamiliar with ways of tackling technical glitches likely to arise while submitting products/assignments online.

The strategies identified to overcome the challenges faced by learners:

* Students can be given alternatives for pen and paper tests by adapting authentic materials or creating collage, infographics, albums, pamphlets etc. Photographs of the same may be taken using a mobile phone and emailed or sent by WhatsApp to the teacher.

Specific steps taken by the investigator for evaluation in teacher education:

The data revealed that online evaluation is relatively new and unexplored terrain. So it became imperative to not only familiarize the teacher trainees with the tool being used for evaluation, but also match the tools with the content and learning outcome before using it for evaluation. To ensure effectiveness of the online tools for evaluation, the following was attempted:
Running Head: COVID-19 COMPELLED RASE MODEL CURRICULUM

*Given the fact that trainees are new to submitting assignments online, no attempt was made to deduct marks for late submission.

* Close scrutiny of trainee response was undertaken to ensure that the submitted response actually showcases learner understanding vis a vis the content being tested.

* In using tools, the ones readily available, accessible and inclusive for learners was the prime consideration.

* A special channel of communication was set up to ensure that trainees know what is the expected performance and how they are being assessed.

* The trainees were encouraged to keep a record of their own progress to enable them to monitor own learning.

* Regular feedback on the work submitted was undertaken to help trainees identify where they are in their learning.

* To address equity and inclusive learning issues, flexibility in marking was undertaken.

* Rubrics available online for self-evaluation was made use of after familiarizing trainees with the different levels of expected performance.

* Trainees were encouraged to submit products which reflect their understanding of the content prescribed for study in the BEd syllabus using visuals, PPT, short videos and podcasts.
*Possibilities of alternative assessment such as demonstration of a skill was explored. Trainees had the option to submit a video of the demonstration of the skill or a photograph of self prepared posters or concept maps demonstrating the understanding of newly learned concepts.

**Summing up**

Many institutions are trying to cope with the sudden shift to online pedagogy. An attempt has been made to list down the resources, activities, support and evaluation strategies employed to transact the BEd curriculum. Through hindsight the investigator realized that success of the model of online instruction is heavily dependent on digital accessibility. It is hoped that the use of the RASE model would open the eyes of teachers who erroneously assume that talking to the camera equals quality teaching. It may however be noted that the application of the RASE model for teacher education presented here is in no way exhaustive and has limitations. The application of the model only addressed the transaction of the BEd course work for the third semester excluding the major course work viz; Practice Teaching which has been postponed owing to the Covid pandemic.

While concluding it would be worth recalling the words of a columnist in *Edsurge* who reviewed digital education and effect of the arrival of digital authoring software: Now it is possible for instructional designers to maneuver students through a mix type of digital content which include videos, graphs, PDFs, Power Points quizzes, survey tools, drag-and-drop activities, PowerPoint slides etc. Ubell (2020) Quoting a colleague Ubell adds what is required is “imagination”. Perhaps instead of reinventing the wheel it would be better to give more structure to the lesson and make learners feel comfortable and relaxed.
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