



Knowledge hub
-
Collection of best practices

Summary of the best practice

1. Title of the best practice (e.g. name of policy, programme, project, etc.) *

Rajasthan Online Teacher Professional Development Programme

2. Country or countries where the practice is implemented *

INDIA

3. Please select the **most relevant** Action Track(s) the best practice applies to *

- Action Track 1. Inclusive, equitable, safe, and healthy schools
- Action Track 2. Learning and skills for life, work, and sustainable development
- Action Track 3. Teachers, teaching and the teaching profession
- Action Track 4. Digital learning and transformation
- Action Track 5. Financing of education

4. Implementation lead/partner organization(s) *

Rajasthan State Council of Education Research and Training (RSCERT), apex academic authority of state was leading agency, UNICEF in technical partnership with IGNOU pahal was supporting and UNiLearn (LMS portal administered by UNOICT India)

5. Key words (5-15 words): Please add key descriptive words around aims, modalities, target groups etc. *

Online TPD, middle school teachers, school closure,
Blended approach – mentors, peer groups
Interactive platform

6. What makes it a best practice? *

- Was able to cover 120,000 teachers in a highly interactive blended learning course, with high completion rates - Analysis of effective in-person Professional Development practices to find their online counterpart approach - Understanding teacher context, including their online practices; use of mentors and helpline to enable successful transition to online learning - Using a 'learning flow' that follows sequence in which teachers learn, use of principle from andragogy - Use of 'learning pulse' as interactive unit of learning - Exposure to experience, generation of reflection, scope for application in own situation - 'off line' tasks with each segment, involving peer interaction, textbook analysis, lesson planning, material development and creation of 'my own manual' by each teacher - Ongoing self-assessment as a pedagogical tool - Interactive platform - High degree of completion rates, teacher feedback, evidence from on-ground in-person qualitative research – all show how well it was received. Also, recent anecdotal evidence of teachers wanting to implement in class, and continue their learning.

Description of the best practice

7. Introduction (350-400 words)

This section should ideally provide the context of, and justification for, the practice and address the following issues:

- i) Which population was affected?
- ii) What was the problem that needed to be addressed?
- iii) Which approach was taken and what objectives were achieved? *

As schools closed with the lockdown in early 2020, tens of thousands of teachers in the state of Rajasthan were unable to reach their students (as there is very low mobile phone availability). At the same time, the state had decided to introduce new textbooks in middle school (Classes 6-8) in 4 major subjects: Hindi, Mathematics, Science and Social Science. It was felt that this period should be utilized to prepare teachers to handle the new textbooks whenever the schools reopened.

An online TPD course was therefore conceptualized, with a focus on:

- pedagogy for different age groups/levels of children
- subject-specific pedagogy
- the curriculum, syllabus, textbooks (including NCERT ones) they will teach

A blended approach was planned – involving an LMS (hosted on UNICEF’s UNiLearn platform/LMS) along with state/district mentors and peer groups for every teacher.

A ‘theory of online learning’ was developed based on an analysis of what worked in in-person CPD over the decades. It showed that a recurrent, spiral ‘learning flow’ along with a mix of methods and materials worked better. A focus on the classroom, presentation of experience and the scope for teachers to identify ‘gaps’ and fill them helped teachers derive ‘theory’ better. Use of performance indicators, roll out in sequence of complexity, rigorous inputs to mentors, providing teachers with data on their own performance and clear alignment with state priorities were other factors that helped.

An analysis of teachers’ online context showed issues in access, low time-on-task and persistence, and difficulties in processing online content.

The online TPD therefore used a ‘learning parcel’ as a unit of learning – a 3-5 min mini-session that engaged and also required action on the teacher’s part before they could move to the next learning parcel.

Engagement was initiated by teachers examining a pair of case studies to identify what they would do (and justify their choices), with reflective exercises that helped them identify key principles involved. A longer section followed on identifying and adapting the classroom practices they could use, with the entire session then being consolidated, again through exercises. Thus, the process followed a learning cycle of: Experience – Reflection – Application – Consolidation (ERAC).

Along with scope for contextualisation and personalisation (each teacher created a ‘My Own Teaching Manual’ the learning flow used interleaving, and ‘active retrieval practice’ through strategically placed self-assessment exercises. Finally, even though it was only through phone calls, local mentors and peer groups empowered and supported teachers.

8. Implementation (350-450 words)

Please describe the implementation modalities or processes, where possible in relation to:

- i) What are the main activities carried out?
- ii) When and where the activities were carried out (including the start date and whether it is ongoing)?
- iii) Who were the key implementation actors and collaborators? (civil society organizations, private sector, foundations, coalitions, networks etc.)?
- iv) What were the resources needed (budget and sources) for the implementation?

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The main activities included:

- Initial stakeholder consultations, analysis of past experience and present online context of teachers, examination of the NCERT curriculum and textbooks (that were to be the basis of the course), development of the 'online pedagogy/andragogy' to be used, creating the learning flow and structure, developing a sample session and sharing with stakeholders, agreeing the nature of LMS and platform as well as the onboarding process.
- Development of the modules and sessions, uploading, setting up of a helpline, identifying and orienting mentors through a series of meetings, orientation of district and block level officials
- Piloting the programme in a control area, with the feedback then being used to modify and improve the inputs. Creating a research design to be followed.
- Roll out across the state to onboard 1,20,000 teachers, uploading the entire course, follow up support to teachers and mentors, tracking usage and assessment related data, qualitative (on-site, in-person) research and large-scale data based quantitative research.
- Online course was launched in July 2020 and final module was launched in Nov 2020. Teachers were given two months to complete 6 modules of approx. 66 hours' duration.
- Regular capacity building and handholding support to district level mentors under the supervision of RSCERT with District Institute of Education and Training (DIET) at district level to help teachers take up online course as per the schedule.
- Throughout the process, engagement with decision makers and educational administrators was required in order to ensure continuity and quality of implementation. Implementation was regularly reviewed under the leadership of highest administrative authority of department of education as part of comprehensive review of programmes initiated during closure of schools due to COVID 10 pandemic to ensure continuity of learning of both teachers and children.
- The management of the platform (Unilearn) along with the huge demands placed on it was another important activity.
- Budgetary resource was used for:
 - o development of course content,
 - o orientation of state and district level officials,
 - o onsite & online support to mentors
 - o Management of UNiLearn portal
 - o And data analysis to support review and monitoring of implementation of course.

9. Results – outputs and outcomes (250-350 words)

To the extent possible, please reply to the questions below:

- i) How was the practice identified as transformative? (e.g., impact on policies, impact on management processes, impact on delivery arrangements or education monitoring, impact on teachers, learners and beneficiary communities etc.);
- ii) What were the concrete results achieved with regard to outputs and outcomes?
- iii) Has an assessment of the practice been carried out? If yes, what were the results? *

The practice was transformative because:

- It generated an enormous amount of participation and completion. Around 60,000 teachers completed over 90 hours of online engagement. Compared to much lower rates in other online programmes that are of much shorter durations.
- ROTPD utilised an interactive, contextualised form on online CPD very different from the existing form commonly used in India
- It catalysed the establishment of an online mentoring system that did not exist. Research established a causal link between the participation of mentors and completion/learning rates among teachers.

The assessment carried out showed the following:

Participation and completion

1. Though 121119 participants, were registered, the final number of participants (after sorting out administrative categories) was 86179. Of these, over 90% completed the Basic Level (3 of 6 modules) and over 45% completed the Advanced Level (6 of 6 modules).
2. There is a significant difference between scores of districts where the mentors completed the module compared to those where the mentors did not.
3. Due to weak and unstable internet connectivity in many parts of the state (56% reported this), the asynchronous nature of the course helped participants overcome this.
4. Participants reported that their technical ability to navigate the course improved over the duration of the course.

Participant perceptions of the course

1. The following percentages show what the participants strongly agree/agree with -
 - a. 95.07% - that the course is connected to the NCERT textbooks.
 - b. 91.48% - that the instructions within the course are clear.
 - c. 89.36% - that the examples given are contextual.
 - d. 88.5% - that the answers to questions included can be given with reference to own context.
 - e. 81.96% - that the assignments can be applied to their context.
 - f. 79.37% - recognise WhatsApp group discussion points.
 - g. 75.37% - can recognise DLM discussion points.
2. Approximately 90% teachers strongly agree and agree that they benefitted from the course by,
 - a. Learning teaching methods for multi-level classrooms.
 - b. Having interesting experiences while doing the course.
 - c. Making the personal improvement plan called 'my own teaching manual (MOTM)'.
 - d. Finding the course relevant to teach NCERT textbooks.

- e. Improving their classroom processes.
- f. Including children's context in classroom teaching.
- g. Gaining new learnings.

3. The participants also found additional suggestions and links to materials very helpful. The self-assessment tests and quiz-based interaction also helped them in deepening and tracking their understanding.

10. Lessons learnt (300 words)

To the extent possible, please reply to the following questions:

- i) What were the key triggers for transformation?
- ii) What worked really well – what facilitated this?
- iii) What did not work – why did it not work? *

- i) What were the key triggers for transformation?

While state backing was needed to get teachers onboard, the onus then was on the Online TPD programme to engage teachers on an ongoing basis where they were also being flooded with many other online inputs. The use of 'caselets' to capture and reflect on experience, the interactive design, the focus on classroom implementability, the scope for contextualisation of the inputs provided, the involvement of mentors along with peer groups, and ongoing follow-up and support activities were the key triggers to transformation.

- ii) What worked really well – what facilitated this?

Participation and learning were the aspects that worked the best (and these have been detailed elsewhere). This was facilitated by a deep understanding of teachers' contexts and classroom requirements, the long experience of what worked in in-person CPD, the efforts made to listen to teachers (as in initial consultations and piloting), and the responsive nature of the effort where teachers' and mentors' issues were addressed as quickly as possible. The availability of a platform (UNiLearn) that could house such a programme made a difference too.

- iii) What did not work – why did it not work?

- Despite best efforts there were areas and teachers whose participation could not be ensured. Remoteness, lack of net connectivity and insufficient administrative support were among the reasons.
- Teachers were also barraged by other online inputs, which affected their ability to participate.
- Though the original design included 'assignments' were teachers would try out what they were learning in their classrooms, due to continued school closure this was not possible.

11. Conclusions (250 words)

Please describe why may this intervention be considered a “best practice”. What recommendations can be made for those intending to adopt the documented “best practice” or how can it help people working on the same issue(s)? *

The transformative nature of the intervention (described earlier) and the fact that it was implemented within existing state structures to deliver an exceptional result, while keeping costs limited, show that this can be considered a best practice. Another sign of this is that the state has asked the team behind the intervention to now train their institutions and resource persons in developing similar online TPD programmes. It has also led to discussions to modify the national platform DIGITAL INFRASTRUCTURE FOR KNOWLEDGE SHARING (DIKSHA) to overcome the limitations that prevent it from being interactive the way ROTPD was.

For those intending to adopt this practice or to implement something similar, it will help to:

- Examine the key principles involved (e.g. drawing lessons from experience of in-person TPD, developing a ‘theory of learning’ (EARC), engaging with teachers to understand their context, etc.) and apply in one’s own work. Adopting the practice ‘as is’ will not help.
- An exploration of some of the modules and segments will provide examples of what is possible within the severe limitations of patch net connectivity and low-cost mobile phones
- Work out the nature of the ‘blend’ between human and screen-based interaction appropriate for the programme area, and investing time and resources in the mentors (as a long term asset)
- Establishment of coordination mechanisms among administrative and resource agencies is critical in efficient and sustained roll out.

12. Further reading

Please provide a list and URLs of key reference documents for additional information on the “best practice” for those who may be interested in knowing how the results benefited the beneficiary group/s. *

1. <https://unicef.sharepoint.com/sites/IND-COVID19/SitePages/Archives-Corner---Cover-Stories,-Daily-Updates,-and-Media-Articles.aspx>
2. Research Study (not published) conducted by technical agency hired to developed the content for online course.
3. Data with UNOICT (Administrator for UNiLearn LMS)
4. Several presentations and reports shared with state government for review, monitoring