Post-Graduation Certificate Course in Contemporary Education Perspectives and Research

PGC-CEPR 2018-2019

REPORT

NOVEMBER 2020

Tata Institute of Social Sciences, Mumbai, India

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Executive Summary

The Post Graduate Certificate in Contemporary Education Perspectives and Research (PGC-CEPR) developed by the Centre for Education, Innovation and Action Research, Tata Institute of Social Sciences, is a unique research-focused professional learning approach for the professional development of faculties of teacher education. This is the first such programme in India. It aims to develop among teacher educators perspectives relevant to current education reform in India and to enhance their capabilities for research in teacher education, through an extended engagement in a blended mode. The pedagogy courses and the Research Project course of the programme was offered to faculties of DIETs in Karnataka in 2018-19. Each participant was required to complete 8 credits that included, any one pedagogy course (4 credits) - Pedagogy of Language / Pedagogy of Science/Pedagogy of Mathematics. As part of the certification requirement, participants were required to complete a Research Project (4 credits) related to their subject pedagogy. The blended modality, spread over eight months includes four weeks of face-to-face contact classes and workshops, online learning, weekly classes through WebEx platform during the distance period, and research methodology workshops which offered teacher educators in Karnataka a unique experience of professional development. The programme, results, feedback, observations and implications are summarised below.

Forty four (44) teacher educators participated in the 2018-19 PGC-CEPR programme. 100% of the participants completed the pedagogy courses and earned a certificate and over 70% of the participants' level of performance was *Good* or above in the pedagogy courses. 88% participants successfully completed the research project and over 75% of the participants' level of performance was *Good* or above in the research project.

The detailed results are shown in the table below.

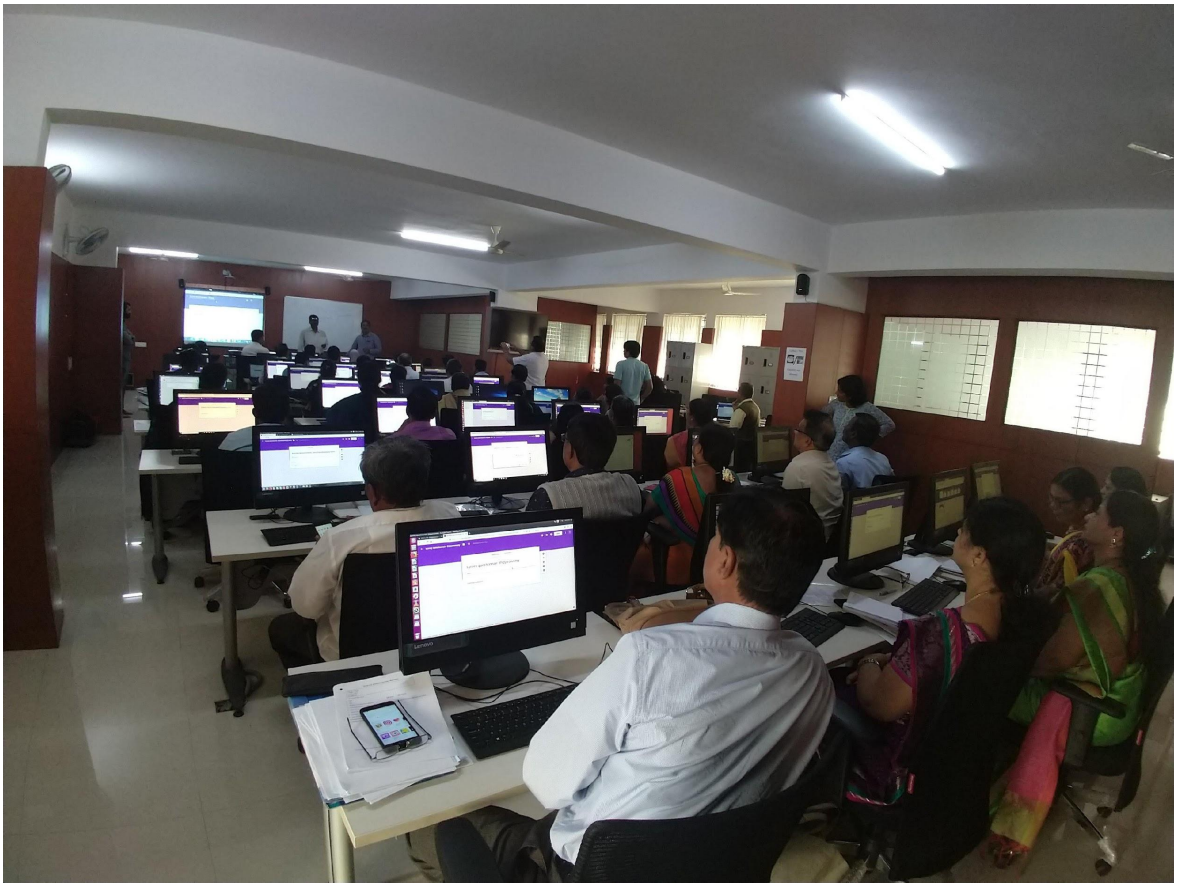
Letter Grade	**Level of Competence**	**POM**	**POS**	**POL**	**RP**	**Overall**
O	Outstanding	0	0	2	9	11
A+	Excellent	1	0	10	12	23
A-	Very Good	0	0	6	7	13
B+	Good	2	6	0	6	14
B-	Moderate	7	6	0	4	17
C+	Average	1	3	0	1	5
	No submission *				5	5
Total	Certificates	**11**	**15**	**18**	**44**	**88**

POM –Pedagogy of Mathematics| **POS** –Pedagogy of Science| **POL** –Pedagogy of Language| **RP**-Research Project

***** These participants did not submit their research proposal and report.

The sandwich blended mode of delivery, where participants and faculty met face-to-face in a workshop mode for three days every month combined with synchronous WebEx sessions enabled teacher educators to gradually engage in continuous and online learning. Participants were required to complete an assessment task during the distance mode related to their practice and submit it before they came to the workshops. Faculty provided feedback and discussed the assignments during the workshop periods. The blended format enabled participants to be on track for assignment submissions as well. The concerned section officer at DSERT took considerable interest in co-ordinating among the participating DIET faculties, their principals, and along with TISS programme staff, ensured timely issue of notifications and letters to meet the requirements of the programme.

As requested by faculty, additional workshops were held to build teacher educators research skills in a hands-on mode in the DSERT computer lab. Teacher educators found these workshops very useful and had an opportunity to use the skills they had developed in their research project. The pedagogy courses enabled participants to engage deeply in their subject pedagogy and understand pedagogical content knowledge (PCK), reflecting on the nature of the school subject especially relating it to their district contexts. The D.Ed. curriculum reforms focus on developing teacher's subject specific PCK, the course and research project enabled teacher educators to align with the new curricular reforms and latest research and ideas of teacher professional development.



With DSERT Deputy Director at DSERT Bangalore

1.0 Contemporary Education Perspectives and Research (PGC-CEPR)

1.1 Introduction

The Post Graduate Certificate in Contemporary Education Perspectives and Research (PGC-CEPR) has been designed to address a felt need expressed by several DIETs, SCERTs and State Departments of Education, to provide opportunities for continued professional development. The programme aims to enable the professional development of Teacher-Educators by bringing them abreast of new ideas in contemporary Indian education and upgrading their skills. Also, the teachers-educators are equipped with the relevant research skills and methodologies. The need for this course emerged from the learnings of various field-level research studies that were conducted by the faculties of CEIAR and through interactions with various government officials. The PGC-CEPR programme has been designed by the faculty of Centre for Education, Innovation and Action Research[1] (CEIAR), Tata Institute of Social Sciences, TISS, Mumbai, with inputs from the faculty of the School of Education, TISS, Mumbai. The PGC-CEPR provides faculties of teacher education institutions, and professionals working in various Government Departments of Education (DOE) an opportunity to develop perspectives relevant to current education reforms in India as envisioned in the 12th plan, and to develop specific capabilities for conducting research, monitoring policies and doing evidence-based practice. The programme structure facilitates easy access by working professionals. It is pitched at an advanced level of understanding and practical skills and encourages practitioners to build on their existing positional knowledge. Towards this end, the programme employs blended learning methodologies, which involves the use of technology-enabled learning management systems and platforms and multimedia resources.

1.2 Rationale for the Programme

There is broad recognition that teaching is an involved process where teacher and school play a central role in providing quality education, especially to underserved communities and groups. The benefit of using research-based knowledge to improve practitioners' work is widely acknowledged. However, there are limited options in certified programs with sound research grounding that are available for practitioners and professionals in education for their continuing education and professional development. Thus, a research-oriented professional development programme has the potential to enhance practical, technical and theoretical knowledge of practitioners and officials. It can enable them to critically evaluate existing research and adopt methodologies and innovations in the context of their practice which is mostly missing in the present situation. It would increase the capacities of teacher-educators to base their work on evidence and incorporate various research methodologies. The program would also help build the research capabilities of practitioners and equip teacher educators to research their practice and reflect upon it and in turn, can enrich academic research by incorporating the complexities of field realities and allow it to inform the discourse in education.

1.3 Programme Objectives

The programme aims at providing an opportunity to faculty and officials working in various Government Departments of Education and Civil Society Organisations for developing perspectives relevant to current education reforms in India, and to expand their research capabilities which are pertinent to their professional work. Programme curriculum includes:

- A course on perspectives on relevant themes in education through special lectures by faculty of national reputation. Case studies will help course participants to study recent developments in India and the developing world.

- Courses in Teacher Education that will promote rigorous engagement with the current perspectives and practices from across the world with a focus on Indian contexts.

- Research methods and relevant research skills to enable practitioners to engage with research and help forge connections between research findings and practical knowledge.

- Access to a computer lab shall be provided during the contact-period for hands-on training of various research tools.

1.4 Programme Structure

A blended approach has been adopted to address the needs of working professionals. This year's offering focussed on developing teacher educator's subject specific pedagogies. The complete course duration is usually 8 months, consisting of four modules of 8 weeks each translating into total hours of 120 of contact classes or 240 hours of distance teaching. Each module will involve one week of face-to-face interaction and 3-4 weeks in the distance mode. All the participants are provided with study materials and E-resources.

As part of the certificate programme, participants need to submit one assignment during contact class and another during distance mode. Contact class assignments are task based or written and distance mode assignments are written submissions.

At the end of the course program, submission of a research report is mandatory to be eligible for the programme certificate. Participants are always given a chance to write supplementary assignments if they don't complete the requirements in the first attempt. (Refer Annexure 1 for details)

2.0 PGC-CEPR 2018-19

The programme emerged from CEIAR faculties experience of working with DIETs, including extensive engagement at Karnataka. The need for a robust professional development programme was expressed both by faculties and concerned officials.

This was the second year such a programme was launched in Karnataka, at the behest of Department of State Educational Research and Training (DSERT). Once the programme curriculum was developed, consultations were held with Department officials to fine-tune the programme to the faculties needs. From the previous year experience of PGC course DSERT Director suggested a four-cycle model will best suit DIETs calendar of activities.

This year, instead of running the complete programme, the focus was to develop teacher educator's subject-based pedagogies. Two courses , totalling 8 credits were offered to each participant in a modular mode and certificates were awarded for each course. Each participant was required to complete 8 credits that included, any one pedagogy course (4 credits) - Pedagogy of Language / Pedagogy of Science/Pedagogy of Mathematics. As part of the certification requirement, participants were required to complete a Research Project (4 credits) related to their subject pedagogy. The blended modality, spread over eight months includes four weeks of face-to-face contact classes and workshops, online learning, weekly classes through WebEx platform during the distance period, and research methodology workshops which offered teacher educators in Karnataka a unique experience of professional development.

2.1 Student Profile

The Government of Karnataka sponsored 43 faculties of teacher education from DIETs from 24 districts in Karnataka. One was from Army School-Jharkhand (Refer Annexure 2 for Student Profile)

2.2 Program Details 2018-2019

Four courses of 4-credits each were offered, Teacher educators completed 2 courses, total 8 credits.

Table 2.1: Course Offering				
Subject	**Pedagogy of Mathematics (4 Credits)**	**Pedagogy of Science (4 Credits)**	**Pedagogy of Language (4 Credits)**	**Duration**
First Cycle	15th to 17th November-2018	15th to 17th November-2018	15th to 17th November-2018	3 days
Second Cycle	18th to 20th December-2018	20 to 22 December-2018	13th-15th December 2018	3 days
Third Cycle	21st, 22nd & 24th January-2019			3days
Fourth Cycle	14th to 16th February-2019	21st to 23rd February-2019	21st – 23rd February- 2019	3 days
Research Work (4 Credits)	1st March 2019 to 30th August 2019			6 months

2.2.1 First Cycle – (15th to 17th November-2018)

Table 2.2: Cycle 1 Course Structure			
Pedagogy of Mathematics			
Day 1	Introduction to the Course, objectives, course structure, mutual expectations and ground rules	**Teaching of Mathematics** Position paper National Focus Group on Teaching of Mathematics and other activities	**Resource person-** Dr. S.N. Gananath, Ms. Bindu Thirumalai
Day 2	**Mathematics and Computations:** Cube root in a second, Computation and math, Multiplication Puzzle, Calculator	**Mathematization:** Sitas solitaire, Ramaganitha, Maths learning by Pamela Liebeck	
Day 3	**Problem solving in Mathematics** Mathematical Proof, Puzzles and problems ; create and extend problems; language used in problem solving	Demo WebEx Call, Reflective Journal Submission, Feedback	
Pedagogy of Science			
Day 1	Introduction to the Course, Pre-Assessment worksheet	What is Science, What is Scientific Method	**Resource person-** Dr. Mythili Ramchand Dr. Indira Vijaysimha, Dr.Sushama
Day 2	What is Scientific Methods-Continuation	History and Philosophy of science-Sushama	

Day 3	Science and Social Justice Issues	Science technology and Society, Wrap up and Plan for Distance Period, Reflective Journal and Feedback.	
Pedagogy of Language			
Day 1	Introduction to the course, The beginnings of language	What is Language, Nature of Language The Word and the World	**Resource person**- Ms. Jane Sahi, Ms. Brinda Rao, Mr. Shivananda Hombal
Day 2	Reflections, Functions of Language	Language Discourse:Communication in the Classroom, Lab session-TISSx and Web Ex, Language and Power	
Day 3	Reflections, Key Learnings	Project Planning, Assignment	

2.2.2 Second Cycle (December 13th to 22nd - 2018)

Table 2.3: Cycle 2 Course Structure			
Pedagogy of Mathematics			
Day 1	Introduction to Math Education, Group assessment Intro Expectations Reporting Textbook analysis	Teaching of Mathematics – session continued Square triangle puzzle, Kings Horses : Pedagogical implications	**Resource person-** Dr. S.N. Gananath, Ms. Bindu Thirumalai
Day 2	Proofs in Mathematics, Syracuse Algorithm, Vanishing Numbers, Ganita Kutoohala, Goldbach conjecture	Origami video, Group Activity, Reflect on TET Question papers	
Day 3	Classroom management and enhancing learning outcomes, Cooperative learning and Maths talk	Designing a learning experience: Low floor, High ceiling act	
Pedagogy of Science			
Day 1	Recap of previous session + Reflections and feedback on reflective journal. Light & Shadows 1&2	Sharing the criteria for pair work assessment. Pair work - Lesson plan and assessment rubrics	**Resource person-** Dr. Mythili Ramchand Dr. Madhusudhan, Dr.Sushama
Day 2	Visit to Nehru planetarium	Reflection -1&2	

Day 3	Refraction -1 & 2	Pair work - Lesson plan and assessment rubrics, Reflective Journal and Feedback on TISSx	
Pedagogy of Language			
Day 1	Sharing of poems, Sensorial Experience and Language,Aspects of representation	Learning to listen and see is learning to read, TISSx –Lab Session	**Resource person**- Ms. Jane Sahi, Ms. Brinda Rao, Mr. Shivananda Hombal
Day 2	Reading the environment, Awakening to Literacy,Interacting with displays	Conclude discussion about display,Discussion about projects	
Day 3	Writers about Writing, Dimensions of learning to read and write, Similarities and distinctive features of teaching Kannada and English	Reflections and assignment, TISSx –Lab Session	

2.2.3 Third Cycle (21st, 22nd & 24th January-2019)

Table 2.4: Cycle 3 Course Structure			
Pedagogy of Mathematics			
Day 1	Recap from Cycle 2 and Web Ex, Introduction to Mathematics, Educational Resources, How to use and create activities and worksheets, Mathematic Educational Resources - continued.	Digital resources and their applications, Introduction to Geogebra, Hands on experience with available interactive, Creation of resource.	**Resource person-** Dr. S.N. Gananath, Ms. Bindu Thirumalai
Day 2	Resources in Arithmetic, Validation criteria, Resources in Arithmetic - continued.	Resources for Algebra & Algebra kit, Video – Jo Boaler	
Day 3	Resources relating to geometry, Resources relating to geometry - continued	Research Project discussions, Feedback and planning	
Pedagogy of Science			
Day 1	Recap and introduction to cycle 3. Setting up a hydrotropism experiment. Biodiversity and ecological balance, biodiversity and organic evolution	Activity to illustrate mutations, evolution etc. Take away from the activity, origin of biological variation.	**Resource person-** Dr.Sushama

Day 2	Variation and heredity, Natural selection	Activity related to classification, Learning to set up a taxonomical treasure hunt.	
Day 3	Observing hydrotropism, Adaptation and evolution	Reflective journal, Summary	
Pedagogy of Language			
Day 1	Role of literature in language learning, Shared Understanding through a collaborative process	Shared Understanding through a collaborative process, Growing in literacy	**Resource person-** Ms. Jane Sahi, Ms. Brinda Rao, Mr. Shivananda Hombal
Day 2	What is a story, Dangers of a single story, Teaching of poetry	Teaching of poetry, Understanding poetry through dialoguing	
Day 3	How do we look at a story? How do we look at a story? Reading Aloud	Project Proposal, Assignment	

Table 2.5: Cycle 3 Course Structure

Research Methodology (*23rd & 25th January-2019)*		
Purposes of education research- Description, Exploration, Intervention, Evaluation Types of research- Survey, Case study, Experiments, Program evaluations, Teacher research	Check J and Schutt R (2019) *Research Methods in Education:* (Chapter 1: Science Schooling and Educational Research)	**Resource Person-** Mr. Sharad Suri, Ms. Bindu Thirumalai
Survey questionnaires- Design, Questions	Check J and Schutt R (2019) *Research Methods in Education* (Chapter 8 Survey research)	
Observation- What to observe? How to observe? How to record? Observation protocol/schedule	Delamont S(2002) Field work in educational setting, pp.130-139) Handout 1	
Interview- Types, Semi-structured interview, Interview protocol	Mathews B and Ross L (2010) *Research Methods* (Chapter C4 semi structured Interviews) Hand out 2	
Understanding data- Types of data, Quantitative data, Organizing data - using spreadsheet	Hands on	
Exploring data- Preliminary data analysis, Exploring univariate and bivariate analysis - using spreadsheet	Hands on	

2.2.4 Fourth Cycle (14th - 23rd February 2019)

Table 2.6: Cycle 4 Course Structure			
Pedagogy of Mathematics (14th to 16th February-2019)			
Day 1	Introduction : Assessment in Mathematics, Looking back, Share workshop plan, Insights and real issues in assessment : NCF 2005	Degrading or degrading? – Alfie Kohn, Video : Noam Chomsky, Bloom's taxonomy, Application in maths, Related exercises	**Resource person-** Dr. S.N. Gananath, Ms. Bindu Thirumalai
Day 2	Assessment in numeracy, Perspectives and applications, Activity : Drawing simple geometrical shapes	General instructions and remarks, Examination	
Day 3	Create assessment tools like quiz , q. papers, games etc. Why open book examinations? Practical issues with ODE	Computer Lab : Complete uploading all assignments on TISSx, Group discussion : Feedback on all four cycles	
Pedagogy of Science(21st to 23rd February-2019)			
Day 1	Focus Group Discussion + Reading, Recap and introduction to cycle 4	Chemical and Physical Changes and associated concepts, Activity: How do we know a reaction has occurred	**Resource person-** Dr. Mythili Ramchand Dr. Madhusudhan, Dr.Sushama
Day 2	How can we check for conceptual understanding/change, Purification techniques- new and old	Why are chemists concerned about purity of substances? How did the idea of atoms and molecules arise?	
Day 3	Children's ideas and how to work with them	Test	
Pedagogy of Language (21st to 23rd February-2019)			
Day 1	Sharing Reading/ Reflection,Understanding Multilingual Classrooms	Language and Dialect, Language Development – What does it mean?	**Resource person-** Ms. Jane Sahi, Ms. Brinda Rao, Mr. Mr. Shivananda Hombal
Day 2	Theatre in Education Role of play/dialogue in language learning	Role of play/dialogue in language learning, Literature in Textbooks	
Day 3	Analysing Text Book Content Ideal text Book, Test	Revisiting Big Ideas, Questions/Feedback	

2.2.5 Research work

Participants were asked to select a research problem related to their subject pedagogy to work individually. Each participant was assigned a mentor. The mentors were all experienced researchers and had a good understanding of the Karnataka context. Participants were expected to follow-up with their mentors at each stage of the research project. The TISS team also followed up with the participants on their progress at regular intervals.

Participants had to work on the research proposal during the contact period. Mentors provided one round of inputs and feedback by organizing two days contact classes. The rest of the mentoring was planned with agreement between the mentor and the participants. Participants were given a list of suggested topics to select from based on their interest. The research work was designed as a research project and not a full-fledged research. Participants were encouraged to prepare their research questions around data already available with them or related to their practice.

The research project has two parts for grading that included (1) Process (30%) - Graded by Mentors and (2) Final Report (70%) - Graded by external faculty.

The rubrics and distribution of marks for assessing research project process is given below:

Table 2.7: Research work Components

Internal Assessment	**Marks**
Formulating the question	4
Literature review	4
Study design	4
Data usage/collecting	4
Analysis	4
Findings and conclusions	5
Reflections	5
Sub-Total	**30**
External Assessment	
Abstract (One paragraph (abstract) of about 100 words describing the objectives and key work undertaken/reflections/findings.)	5
Chapter-1 : Introduction ● Research Question and Sub Questions ● Purpose of the study	5
Chapter-2 : Review of Related Literature ● Key findings of related research papers	10
Chapter-3: Research Methodology Rationale for selection of research methodology ● Type of Research(Qualitative , Quantitative or mixed) ● Data Sample ● Tools and Procedure for Data Collection	10

Chapter-4: Results and Discussion Summary: ▪ Description of Data collected ▪ Analysis and significant events/responses. ▪ Key findings	15
Chapter-5 : Conclusion and Recommendations – (select what is relevant to your topic and research methods.) ● What are the implications of key findings? ● What have I learnt about my/teacher's practice? ● What have I learnt about student/teacher's learning? ● What have I learnt about school and school context? ● What changes do I want to make in my practice? ● What have I learnt about using alternate resources? ● What changes do I want to make in the resources used?	20
Chapter 6 : References The report must have a proper bibliography at the end containing all references included in the report. Appendix: ● Tools of research ● Data collated can include samples of video clips and recording.	5
Sub-Total	**70**
Total	**100**

2.3 Course Material and Learning Platform

2.3.1 Course Material

A compendia was provided for both teacher education and research methods courses. The compendia consisted of relevant book chapters, journal papers, Indian education policy documents and reports, videos and handouts. In addition, a compilation of research reports were provided as exemplar for different research methodologies that participants were exposed to, during the Research Methods course. Where possible, an attempt was made to provide Kannada translations. For the Perspectives session, most guest faculties provided handouts for their talks.

2.3.2 TISSx Platform

TISSx was offered to access unique resources and courses, and support learners through mobile-based communities of practice, has been shaped and developed through this innovative effort. Through TISSx we aim to reach learners in a wider range of settings and offer them unique, relevant, high-quality opportunities for continuous learning and professional development. TISSx can be accessed through a range of devices: desktops, laptops, tablets, and mobile phones. The TISSx Android app can be downloaded from the Google Play Store.

Students exploring E-resources

3.0 Participation and Results

3.1 Attendance and Participation

The overall attendance was good, and the majority of the students participated enthusiastically. All participants attended Research Project & Mathematics contact classes, 2-4 participants couldn't attend Cycle 2 & 3 in Science due to departmental programmes clashing with our schedule, 2-3 participants could not attend Cycle 1 & 2 Language contact classes. Attendance and participation was also marked for grading. The participant's grades and percentage based on the attendance and participation and submission of group assignments during the contact period are appended.

Table 3.1: Attendance and Participation

Cycle	Pedagogy of Mathematics	Pedagogy of Science	Pedagogy of Language	Research Project
Cycle 1	100%	100%	94%	100%
Cycle 2	100%	82%	94%	
Cycle 3	100%	97%	100%	
Cycle 4	100%	100%	100%	

3.2 Results

The cycle-wise grading and overall performance summary are shown in the table below.

Table 3.2: Results

Letter Grade	Level of Competence	POM	POS	POL	RP	Overall
O	Outstanding	0	0	2	9	11
A+	Excellent	1	0	10	12	23
A-	Very Good	0	0	6	7	13
B+	Good	2	6	0	6	14
B-	Moderate	7	6	0	4	17
C+	Average	1	3	0	1	5
	No submission *				5	5
Total	Certificates	**11**	**15**	**18**	**44**	**88**

POM –Pedagogy of Mathematics| **POS** –Pedagogy of Science| **POL** –Pedagogy of Language| **RP**-Research Project

***** These participants did not submit their research proposal and report .

3.3 Inputs for Policy and Practice

The table below summarises the key findings from the research carried out by the participants.

Themes	Trends in key findings
CPD (PSTE, NQT, TPD)	-Scaffolding for writing reflective reports - Teacher educators need support in action research -Teachers need support to work with SDMC and the larger community - *Guruchetana* programme has been effective in offering a variety of good quality content and pedagogy
PCK	-Questions by teachers mostly focus on recapitulation of content - Error analyses imply poor conceptual understanding -Teachers tend to overlook chapters of importance (like number patterns) if they are not familiar/do not find value in them - Learning through activities support students' learning better - Teachers need orientation on taking into account children's socio-economic background - Designing unit plans must become a part of TPD
Assessment	-Formative assessment strategies and tools to be provided to teachers - Teachers need support in designing questions and task-based assessments for conceptual understanding - Teachers to be introduced to analysing children's errors and identifying alternate conceptions in science
ICT Integration	- TALP programme has increased teacher's knowledge and use of digital technology - Textbooks need to include ways of using technology for learning - Passive use (such as watching videos) is not good , for effective learning, technology must be used interactively and promote active learning. - There is increase in SSLC results in rural schools as a result of TALP implementation - Good infrastructure and maintenance is required in schools to increase use of ICT

4.0 Participants Feedback

4.1 Feedback during contact classes

Participants were given an opportunity to provide anonymous feedback at different levels including session-wise, contact-period wise and distance-period engagement during their contact classes. The feedback of all participants for three cycles has been summarised below.

Table 4.1: Feedback during contact classes

Contact Period Feedback		**Average of three cycles - Percentage of participants who selected Strongly Agree or Agree**		
Focus Areas	**Questions**	**Pedagogy of Language (%)**	**Pedagogy of Mathematics (%)**	**Pedagogy of Science (%)**
Structure	The objectives of the course were clear	95	91	94
	Pace of the schedule for the course was manageable	89	91	94
	Readings/Resources were available before the course started	90	88	83
Methodology	Classroom communication /language were clear	96	100	90
	Resource persons were enthusiastic	99	100	94
	Readings / resource materials were relevant	97	88	92
	Classroom discussions were relevant and useful	91	97	96
	Group work was useful	95	94	88
	Resource persons were available for any communication /clarification	97	94	89
Assignments	Expectations on assignments/tasks were clearly spelt out	92	98	87
	Assignment / tasks were meaningful	93	91	90
	Tasks establish a connection between theoretical perspectives and field	92	94	90
	Timely feedback was given	93	88	92
	Feedback given was useful	95	100	92

4.2 Feedback during distance classes

During the distance mode, participants had online class with respective faculties through WebEx sessions. All the participants enjoyed the WebEx session as it was easily accessed through a smartphone. Few participants reported poor audio due to network issues when they took calls from their home on second and fourth Saturdays(State government holidays). However, a few of them had difficulty in getting their Principal to give them time to attend the two hour class on Saturday mornings. To circumvent this problem, many opted to forego their personal time and requested for sessions to be held on second Saturdays and holidays.

4.3 Participant Responses through Focus Group Discussion(FGD)

At the end of the course a focused group discussion was organised for each course to understand participants' engagement, issues and provide opportunities for further feedback to faculty. The FGD from the three courses are summarised below.

4.3.1 Pedagogy of Mathematics

Sample feedback from 10 participants was collected through FGD. Some participants were engaged in teaching (in-service and pre-service) and others are engaged in administration.

Liked about the course-The participants particularly enjoyed the activity based teaching, Bloom's taxonomy session on change in perspective on mathematics, mathematical proficiency-enabled them to understand how to motivate students while teaching. Learning activities integrating language and mathematics and making the 2019 mathematical calendar were very interesting.

Learned new things from this course This course enhanced interest and curiosity of mathematics by using different activities, brought changes in perspective on mathematics, learnt to teach mathematics through activities using the 5E model for constructivist pedagogies, framing questions by using Bloom's taxonomy and got the opportunity to explore many new resources.

When they go back to their practices-Participants have mentioned that they will use more and more activities when they go back to their practice. Participants requested updates and other support through email and WhatsApp, they requested faculty to share research, books and other material on mathematics teaching.

Usefulness of writing reflective journals-Many of the participants quoted that Reflective Journal is not feedback to others, it is feedback to themselves to correct mistakes, gain knowledge, also a type of recalling of the whole workshop/session. Reflective Journals also gave them more inputs towards professional growth of student teachers and teachers.

4.3.2 Pedagogy of Science

Sample feedback from 14 participants was collected through FGD.

Liked about the course- The participants particularly enjoyed teaching science in different ways by using novel activities on topics such as photosynthesis, light, different perception on light, misconception on VIBGYOR rays, VIBGYOR rays works differently with different objects, image formation. Activities on shadows and formation of shadow, creation of low cost no cost resource on light, naval experiments on light were highlighted. In biology diversity of life, variation & mutation, adaptation activities and usage of locally available resources and teaching biodiversity using games were highlighted. Usage and importance of concept map, philosophical view of science, sessions on lady scientists of India and Lab Session were topics that the participants appreciated.

Some participants also shared that this course had recalled their student life and addressed misconception, falsification, converting failure experiments during class as challenges for students.

New things learnt in this course- Learnt different approach (Integrated approach) to teaching science in a systematic manner, connecting activities to the concepts, developing questioning skills among students, involving students in activities while teaching, solving student's doubts, changed perspective on experiments.

Usefulness of writing reflective journals- Participants said that when they started writing reflective journals in this course, they really came to know its effects. Initially participants wrote brief notes during Cycle-1 but as they reached Cycle-4 they treated the reflective journal with much more interest and wrote in more detail. Quoting one participant, "Reflective journal is like recalling everything that we learnt in the whole cycle/Unit. This is very useful to us while conducting workshops and we will ask our teachers and students to write in future."

4.3.3 Pedagogy of Language

Sample feedback from 17 participants was collected through FGD. Most of the participants were engaged in both teaching and administration.

Liked about the course- Visit to Sita school-liked school, enjoyed the atmosphere and resources, learnt new activities on grammar at school, open discussion on resources, activities like learning language through cricket, language games, poem reading, story writing, translation, opportunity for self-learning, reading and writing. Self-awareness that "learning not only happens through books but also happens with different mediums', participants cited that 'this course is based on inclusive education and can be called as Inclusive training'.

Concepts learnt from this course Pedagogy, Language, Inclusive Education-inputs to train teachers, eradication of misconception on Inclusive Education's: what it include, 'we are aware

of Inclusive Education which includes different types of students and we teach them but we had problem while teaching Kannada language we had difficulties because we will see students speaking different Kannada in different region'. Here students learnt how to include this and what are the materials to use.

New things learnt in this course Translation and transaction of any story or scripts on stage, awareness and importance of model textbook, 'we usually encourage our teachers to buy ready-made audio-visual aids, but here we learnt creating resources by using simply available materials. Ex: Creating collage by using newspaper', learnt analyzing textbook, Webex discussion, scientific approach of analyzing textbook.

Concepts useful in practice Hospital concept is one thing which is new and could be implemented, it created interest in the reading skills of children and it would enhance their interest towards the book and it could be implemented anywhere in rural schools, urban schools and semi urban schools. Story narration, finding grammatical differences in story, word cricket game to D.El.Ed student teachers, listen and do game was adopted personally for herself by one of the participant, puzzle word(Padabanda) was developed, solved and used by D.Eld student teachers(during internship), activities related to Preposition and Adjective.

Usefulness of writing reflective journals 'Writing reflective journals was opportunity to express our ideas and also our childhood experience', concluding opinion, 'reflective journal was a new concept to us, we read many reflective journals written by others but we really came to know the depth of reflective journal when we started to write'. Participants came to know the difference between report and reflective journals.

4.4 Participants Suggestions for Improvement

The participants main feedback was to include new NCERT textbook activities in the course curriculum, additional workshops to develop research skills and mentoring / support for completing the research project. Participants did not like the sandwich mode of delivery with breaks between cycles and wanted the course to be offered continuously for one or two months. Some participants were due to retire within a few years from the department and suggested that younger faculty be selected for the programme in future run. Faculty also requested more time during their work schedule for assignment completion and research work.

4.5 Role of DSERT

DSERT was proactive in ensuring timely notifications and relieving orders to permit DIET participants to attend the contact classes, webex class during distance mode and to visit TISS, Bangalore office for workshops. Despite this some participants had difficulty in attending on-line webex classes which were held on Saturdays and especially in completing their research project which required considerable engagement.

5.0 Course Team Observations

5.1 Assignment Submission

There were two types of assignments group and individual assignments each from Cycle 2 and Cycle 3. Cycle 4 had only one written test. Assignment submission was 100%. The course team had to extend assignment submission dates frequently to accommodate participants' work schedules such as examination duties, election duties and other DIET works.

5.2 Research Project

Participants did their research project individually. A mentor was assigned to each participant to support and guide their research project work. Most of the participants followed mentors guidance and submitted research proposals, related literature, tools for data collection, discussed datas collected and key findings from the study, initially submitted draft reports and finalised the report and submitted the final one. 89% of participants had submitted their final report others had not submitted due their personal reason. The participants quoted that this research project had motivated them to take up some more research study and some are planning to pursue their Phd. Some participants had difficulty writing their reports in English. 7 out of 9 from Mathematics, 7 out of 14 from Science and 12 out of 16 from language submitted the report in Kannada. Research presentation was planned in Bangalore in the form of seminar by inviting state education minister along with departmental officials and all DIET faculties of Karnataka but due COVID19 plan was changed to virtual presentation.

6.0 Conclusion and Way Forward

DSERT, Karnataka's continuous support to provide opportunities for the professional development of teacher educators has enabled TISS, Mumbai to improve the PGC-CEPR offering for teacher educators professional development. The blended mode of delivery prepared teacher educators to face the unexpected situation brought on by the COVID-19. Many teacher educators felt confident using digital tools for online teaching and learning.

The activity based pedagogy and use of resources in the teaching-learning process were highlighted by all the pedagogy course participantsThe research project also enabled deeper engagement with subject PCK. The current situation has forced educators to move towards an online mode of learning. The need for developing contextual Open Educational Resources (OER) has become even more evident. Going forward faculty who have completed the pedagogy course can engage in curating and creating quality OER relevant for their local contexts. These OER may be designed using a design-based research approach to further strengthen teacher educators subject based-pedagogy and provide pedagogic support for teachers in schools.

Going forward faculty may set up the local District Resource Centres (DRC) and run weekly activities in the DERC to keep the centre live and vibrant. These DERCs could also become centres that co-create OER with teachers and enable the use of OERs in classroom practice by supporting teachers to transform teacher's pedagogies for creating active learning environments.

Overall, the opportunity that DSERT has provided TISS and the active participation of teacher educators has enabled TISS to develop the PGC-CEPR programme into a robust and unique professional development opportunity for teacher educators that may be scaled to different state contexts as well as offered to all the teacher educator communities across the country. At the same time, TISS is committed to further strengthen and develop teacher educators in Karnataka through the DERC project.

7.0 Annexures

Table 7.1: Programme Credits		
Category	**Course Title**	**Credits**
1	Pedagogy of Mathematics	4
2	Pedagogy of Science	4
3	Pedagogy of Language	4
4	Research Project	4

Table7. 2: Student Profile					
Sl. No.	**Name of DIET/Institution**	**Participants Name**			**Total Participants**
		Pedagogy of Language	**Pedagogy of Science**	**Pedagogy of Mathematics**	
1	Bellary	-	Prabha V. Haskoti	Sunanda Sindigeri	2
2	Bangalore Urban		Vanishree Koppad		1
3	DIET, Belagavi		Murigeppa Yellappa	Ajit Appasaheb Jadhav	2
4	DIET, Bhagalkot	Vijayalaxmi Wadeyar			1
5	DIET, Bidar		Devendra Manikappa Khandolkar	Dhanraj Baburao Gudme	2
6	DIET, Chamarajanagar	Annapurna			1
7	DIET, Chickballapur		Ananda. A	Kamakshamma. R	2
8	DIET, Chikkamagalur	Murthy M K	Geetha CS	Kantharaju K.G	3
9	DIET, Chitradurga	Nagaraja. G. S.			1
10	DIET, Davanagere	Manjunathachari B	Poornima SR	Thippeswamy G	3
11	DIET, Dharwad	Balappa Chandrappa Bhajantri	Lalita Basavaraddi Harlapur	Adrashappa Veerappa Naganur	3
12	DIET, Gadag	Shivakumar S Kuriyavar			1
13	DIET, Kalaburgi	Vijayalaxmi Katke	Hudge Gundappa Kolhar		2
14	DIET, Karjagi, Haveri	Channaveeraiah P Moolimani			1
15	DIET, Kodagu	Nalinakshi K S		Kumar A.P.	2
16	DIET, Kolar		Sreedevi N		1
17	DIET, Koppal		Basavantayya Amarayya Hiremath	Panchaksharyya	2
18	DIET, Manguluru	Vidya Shetty	Shrinivasa Adiga P	Veena I	3
19	DIET, Mysore	Tharamani L	J.N. Usha	Shantha C.S.	3

20	DIET, Bangalore North	Nasreen Taj			1
21	DIET, Bangalore Rural	Chandrakala KL			1
22	DIET, Raichur	Arifa Tabassum			1
23	DIET, Ramanagara		Radha Kumari M.K		1
24	DIET, Shimoga	Manjunath N	Asuntha Sequeria		2
25	DIET, Tumkur	Rupa G.S.			1
26	Army Public school Ramgarh Cantt	Sandhya Rani Marella, Principal.			1
Total					44

Table 7.3: Course Faculty	
	Faculty/Invited Speaker
Pedagogy of Mathematics	Dr.S.N Gananath
	Ms. Bindu Thirumalai
Pedagogy of Science	Prof. Mythili Ramchand
	Dr. Indira Vijaysimha,
	Dr. Sushama Yermal
Pedagogy of Language	Ms. Jane Sahi
	Ms. Brinda Rao
	Mr. Shivananda Hombal
Research Methodology	Prof. Mythili Ramchand
	Ms. Bindu Rirumalai
	Mr. Sharad Sure
	Dr. Indira Vijaysimha
	Dr. Sushama Yermal
	Ms. Jane Sahi
	Ms. Brinda Rao
	Mr. Shivananda Hombal

Table 7.4: Research Project Topics			
Pedagogy of Science			
Sl No.	**Name**	**District**	**Topic**
1	Asuntha Sequeria	Shivamogga	A study of effective implementation of TALP training in the facilitation of Science in selected TALP schools of Shimoga
2	Vanishree Koppad	Bangalore Urban	“Investigating the Success of Technology Assisted Learning Programme of Ninth Grade Students in Science of IT@ Schools in Bangalore Urban District.”
3	Devendra	Bidar	ಬೀದರ ಜಿಲ್ಲೆಯ ಐಟಿ @ ಶಾಲೆಗಾಲ ವಿಜ್ಞಾನ ಶಿಕ್ಷಕರ ಸ್ಥಿತಿ ಗತಿ ಕುರಿತು ಒಂದು ಅಧ್ಯಯನ

4	Lalitha B Huralapur	Dharwad	Does INSPIRE AWARDS (Manak) increase student's motivation towards basic science?
5	Geetha C.S	Chikkamagalur	THE STUDY OF PROBLEMS FACED BY SCIENCE TEACHERS IN USING LABORATORY
6	Basavantayya . H	Koppal	The Teacher Facing the Problems while Teaching the 6th revised N.C.E.R.T Science text Book
7	Poornima S. L.	Davanagere	THE IMPACT OF 10TH STD NCERT TEXT BOOK TRAINING ON SCIENCE TEACHERS' CLASSROOM PRACTICE
8	Shrinivasa Adiga	Mangalore	STUDY OF OPTICS CONCEPTS IN 8TH STANDARD STUDENTS
9	Ananda. A	Chikkaballapur	Study Of Food & Its Constituents Concept In 7th Standard Students
10	Usha J.N	Mysore	A STUDY ON DIFFICULTIES FACED BY PRE SERVICE SCIENCE TEACHERS DURING TEACHING LEARNING
11	Sreedevi N	Kolar	A study on science classroom teaching learning process in Malur Taluk Government Higher primary schools.
12	Prabha V. Hoskoti	Bellary	ಬಳ್ಳಾರಿ ತಾಲ್ಲೂಕಿನ ಆಯ್ದ ಸರ್ಕಾರಿ ಪ್ರೌಢಶಾಲೆಗಳಲ್ಲಿ ವಿಜ್ಞಾನ ಉಪಕರಣಗಳು/ಪ್ರಯೋಗಾಲಯದ ಸಮರ್ಪಕ ಬಳಕೆ ಮತ್ತು ನಿರ್ವಹಣೆ – ಕುರಿತು ಒಂದು ಅಧ್ಯಯನ
13	Hudge G K	Gulbarga (Kamalapur)	"ಕಲಬುರಗಿ ಜಿಲ್ಲೆಯ ಆಯ್ದ ಸರ್ಕಾರಿ ಶಾಲೆಗಳ ಮಕ್ಕಳ ನಿತ್ಯ ಜೀವನದಲ್ಲಿ ವಿಜ್ಞಾನದ ಉಪಯುಕ್ತತೆ"
14	Murageppa Rawool	Belagavi	ಬೆಳಗಾವಿ ಗ್ರಾಮೀಣ ವಲಯದ ಎಸ್.ಎಸ್.ಎಲ್.ಸಿ 2017 ಮತ್ತು 2018ರ ಫಲಿತಾಂಶದ ತುಲನಾತ್ಮಕ ಅಧ್ಯಯನ.
15	Radha Kumari M.K	Ramanagar	A study on Comparative Analysis of children's scores in science subject in Census based state achievement survey in Ramanagara District 2018-19
Mathematics			
Sl No.	**Name**	**District**	**Topic**
1	Kantharaju K G	Chikkamagalur	"ಪ್ರೌಢಶಾಲಾ ವಿದ್ಯಾರ್ಥಿಗಳಲ್ಲಿ ನಿಗಮನ ತಾರ್ಕಿಕತೆ ಸಾಮಥ್ರ್ಯವನ್ನು ವೃದ್ಧಿಸುವುದು"
2	Thippeswamy G	Davanagere	Multidigit Number Multiplication Dealing with Students Mistakes
3	Panchaksharayya	Koppal	Understanding MULTIPLICATION ERROR made by class CLASS- IV students
4	Sunanda S	Bellary	ಬಳ್ಳಾರಿ ಜಿಲ್ಲೆಯ ಸರ್ಕಾರಿ ಹಿರಿಯ ಪ್ರಾಥಮಿಕ ಶಾಲೆ 8ನೇ ತರಗತಿಯ ಗಣಿತ ಪಠ್ಯ ಪುಸ್ತಕದಲ್ಲಿರುವ ಘಟಕವಾದ 'ಸ0ಖ್ಯೆಗಳೊ0ದಿಗಿನ ಆಟ' ದಲ್ಲಿರುವ ಉಪ ಘಟಕವಾದ 'ಮಾಯಾ ಚೌಕಗಳ' ಬಗ್ಗೆ ಶಿಕ್ಷಕರು & ವಿದ್ಯಾರ್ಥಿಗಳು ಎದುರಿಸುತ್ತಿರುವ ಸಮಸ್ಯೆಗಳು & ಪರಿಹಾರ
5	Naganur A V	Dharwad	"A study of errors committed by the students of 7th standard, while measuring the area and perimeter of the rectangle and the square"

6	Shantha C S	Mysore	ಹಿರಿಯ ಪ್ರಾಥಮಿಕ ಶಾಲಾ ವಿದ್ಯಾರ್ಥಿಗಳಲ್ಲಿ ವ್ಯಾನ್ ಹೈಲಿಯವರ ಮಾದರಿ ಹಂತಗಳ ಆಧಾರಿತ ಚತು¨ sರ್Àಿಜಗಳ ತಿಳುವಳಿಕೆ: ಒಂದು ಅಧ್ಯಯ
7	Jadhav A A	Belagavi	Impact of practical work in learning of addition of fractions
8	Veena L	DK	ದಕ್ಷಿಣ ಕನ್ನಡ ಜಿಲ್ಲೆಯ ಆಯದ ಸರ್ಕಾರಿ ಪ್ಯಾಥಮಿಕ ಶಕಲ್ಲಗಳಲ್ಲೆ 5 ನಲೇ ತರಗತಿಯ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ರೇಖಾಗಣಿತದಲ್ಲಿ ಕೋನವನ್ನು ಗನರನತಿಸನವಾಗ ಮತ್ತು ಕೋನಗಳನ್ನು ಅಳತೆಮಾಡುವಾಗ ಇರುವ ಸಮಸ್ಯೆಯನ್ನು ಕುರಿತು ಒಂದು ಅಧ್ಯಯ
9	Kamakshamma	Chikkaballapur	ಚಿಕ್ಕಬಳ್ಳಾಪುರ ಜಿಲ್ಲೆಯ ಗೌರಿಬಿದನೂರು ತಾಲ್ಲೂಕಿನ ಕೋಟೆ ಸರ್ಕಾರಿ ಹಿರಿಯ ಪ್ರಾಥಮಿಕ ಶಾಲೆಯ 8ನೇ ತರಗತಿಯ ವಿದ್ಯಾರ್ಥಿಗಳು ವಿವಿಧ ತ್ರಿಭುಜಗಳ ರಚನೆ ಮಾಡುವಲ್ಲಿ ಎದುರಿಸುತ್ತಿರುವ ಸಮಸ್ಯೆಗಳು ಮತ್ತು ಪರಿಹಾರ

Pedagogy of Language

Sl No.	Name	District	Topic
1	B.C Bhajanthri	Dharwad	ಕನ್ನಡ ಭಾಷಾ ಕಲಿಕೆಯಲ್ಲಿ ಜನಪದ ಸಾಹಿತ್ಯ ಸಂಗ್ರಹ ಮತ್ತು ಅದರ ಬಳಕೆ: ಒಂದು ಅಧ್ಯಯನ
2	Channaveeraih P. Moolimane	Haveri	"ಉರ್ದು ಮಾಧ್ಯಮ ಪ್ರಾಥಮಿಕ ಶಾಲೆಯ 7ನೇ ತರಗತಿ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ದ್ವಿತೀಯ ಭಾಷೆಯಾಗಿ ಕನ್ನಡವನ್ನು ಕಲಿಸುವಾಗ ಶಿಕ್ಷಕರು ಎದುರಿಸುವ ಸವಾಲುಗಳು ಕುರಿತು"
3	Nalinakshi K S	Kodagu	"ಕೊಡಗು ಜಿಲ್ಲೆಯ ಹಿರಿಯ ಪ್ರಾಥಮಿಕ ಶಾಲೆಯ 7ನೇ ತರಗತಿ ವಿದ್ಯಾರ್ಥಿಗಳ ಸೃಜನಶೀಲ ಬರವಣಿಗೆಗೆ ವೈವಿದ್ಯಮಯ ಅವಕಾಶಗಳು"
4	Vidya Shetty	DK	ದಕ್ಷಿಣಕನ್ನಡಜಿಲ್ಲೆಯ ಆಯ್ದ ಸರ್ಕಾರಿ ಪ್ರಾಥಮಿಕ ಶಾಲೆಗಳಲ್ಲಿತರಗತಿ ವಾಚನಾಲಯದ ಬಳಕೆ ಹಾಗೂ ಇನ್ನೂಉತ್ತಮ ಪಡಿಸಬಹುದಾ ವಿಧಾನಗಳ ಕುರಿತುಒಂದುಅಧ್ಯಯನ
5	Vijayalaxmi Katke	Gulbarga (Kamalapur)	"6ನೇ ಮತ್ತು 7ನೇ ತರಗತಿಯಲ್ಲಿ ಪದ್ಯ ಬೋಧನೆಕುರಿತು ಕನ್ನಡ ಭಾಷಾ ಶಿಕ್ಷಕರು ಹೊಂದಿರುವ ದೃಷ್ಟಿಕೋನ ಮತ್ತು ಸವಾಲುಗಳು"
6	Annapoorna	Chamarajanagar	ವ್ಯಾಕರಣ ಕಲಿಕೆಯಲ್ಲಿ ಪರ್ಯಾಯ ದೃಷ್ಟಿಕೋನ - ಸಂಧಿಗಳ ಒಂದು ನೋಟ
7	G S Nagaraj	Chitraduga	ಭಾಷಾ ಕಲಿಕೆ ಮಾತು ಭೋದನೆಗೆ ಸಹಾಯಕವಾಗಬಲ್ಲ ಕನ್ನಡ ನಾಟಕಗಳು
8	K.L. Chandrakala	Bangalore Rural	ಭಾಷಾ ಕಲಿಕೆಯಲ್ಲಿ ಮಕ್ಕಳ ನಾಟಕಗಳ ಅನುಕೂಲತೆಗಳ ಬಗ್ಗೆ ಒಂದು ಅಧ್ಯಯನ
9	M.K. Murthy	Chikkamagalur	ಪ್ರಾಥಮಿಕ ಶಾಲೆಗಳಲ್ಲಿ ಕನ್ನಡ ಧ್ವನ್ಯಂಗಗಳ ಪರಿಚಯ
10	Manjunath N	Shimogga	"ಸರ್ಕಾರಿ ಕನ್ನಡ ಮಧ್ಯಮ ಹಿರಿಯ ಪ್ರಾಥಮಿಕ ಶಾಲೆಗಳ 6ನೇ ತರಗತಿಯ ಮಕ್ಕಳ ಸೃಜನಶೀಲ ಬರವಣಿಗೆಯಲ್ಲಿನ ಸವಾಲುಗಳು ಮತ್ತು ಪರಿಹಾರಗಳು"
11	Manjunathachari B	Davanagere	"ಭಾಷಾಬೋಧನೆಯಲಿ ಸಮಾಸಪ್ರಕ್ರಿಯೆ ಅರ್ಥ ಮಾಡಿಸುವ ಹೊಸದಾರಿಗಳು"
12	Vijayalakshmi S. Wadeyar	Koppal	Development Opportunities & Challanges of suplimentary literary reading of Kannada language teachers in government Higher Primary School

13	Arifa Tabassum	Raichur	TEACHING SPEAKING THROUGH ROLE PLAY
14	Nasreen Taj	Bangalore North	Impact of English Language Empowerment Programme Training
15	Rupa G.S.	Tumkur	TEACHING OF POETRY for 8th standard second language English
16	Tharamani L	Mysore	A STUDY ON THE IMPACT OF STORY TELLING IN THE LEARNING PROCESS OF LANGUAGE IN THE LPS CLASSES OF ASHOKAPURAM CLUSTER, MYSORE SOUTH

Table 7.5 :Focus Group Discussion and Personal/ telephonic Interview Tool

FGD questions-Pedagogy Course

1. No of participants engaged only in Administrative work?
2. No of Participants engaged in Teaching?
3. What did you like about the course ? Mention one or two highlights.
4. What aspects of the course require improvement ? Please elaborate.
5. What did you learn that was new from this course? Please elaborate
6. What concepts do you think you understand better now ? Please elaborate.
7. Were some concepts / aspects useful in your practice ? How did it feed into your classroom context ?
8. Do you think some aspects of the course could be further strengthened, added or removed ? In what way and why?
9. How can the programme provide more support ?
10. What was your experience of writing reflective journal.

Table 7.6: Feedback Form

Contact Period Feedback

Feedback form for contact period. (For Cycle 1, Cycle 2, Cycle 3 and Research Methodology)		**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
Structure	The objectives of the course were clear					
	Pace of the schedule for the course was manageable					
	Readings/Resources were available before the course started					
Methodology	Classroom communication /language were clear					
	Resource persons were enthusiastic					
	Readings / resource materials were relevant					
	Classroom discussions were relevant and useful					

	Group work was useful					
	Resource persons were available for any communication /clarification					
Assignments	Expectations on assignments/tasks were clearly spelt out					
	Assignment / tasks were meaningful					
	Tasks establish a connection between theoretical perspectives and field					
	Timely feedback was given					
	Feedback given was useful					
	Assignments were done with the help of	Internet	colleague	TISSx	Reference materials (Books, journal papers etc)	Course materials