Continuous Professional Development of Teachers Through Open and Distance Learning: Perception and Concerns

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Abstract Faculty development is the key thrust area at all levels of education. "A good teacher is teacher until he is a learner." This famous saying is giving the impression that continuous development of knowledge, skills and personality are essential for a successful teacher. School of Education (SOE), Indira Gandhi National Open University (IGNOU) has made an effort to provide training for continuous professional development to Teachers of Kendriya Vidhyalaya Sangathan (KVS) and developed six-months Certificate Programme for Professional Development of Primary Teachers (CPPDPT).

The present study was carried out on learners of CPPDPT Programme i.e. teachers of KVS regarding their readiness, perception about continuous professional development through open and distance learning (ODL), who are enrolled in CPPDPT.

A self made rating scale was administered on 198 teachers (i.e. participants in CPPDPT Programme) at five (05) programme study centers under Three (03) regions i.e. Regional Center Delhi-2, Regional Center, Noida and Regional Center, Ranchi. Interview of 18 Academic Counsellors (ACs) and 05 Programme Study Center In-charges (PICs) was also conducted. Quantitative as well as Qualitative data was collected and analyzed.

Results have indicated that there is positivity in perception towards continuous professional development but there are genuine concerns about operational issues through ODL mode.

Keywords: Teacher Training, Continuous Professional Development (CPD), Open and Distance Learning (ODL)

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"The true teacher is the learner." This famous quote of Hubbard reflects the importance of learning for a teacher. Along with teaching in classroom a teacher has to update herself/himself about new things happening around. With changing educational scenario around the world, teachers have to prepare students to face new challenges. To prepare students, first teachers should develop themselves continuously. In professional terminology, such efforts are referred as Continuous Professional Development (CPD).

Teachers are facing a paradigm shift not only in teaching learning philosophy and practices but also new interventions of technology are producing a challenging scenario. Many time the teachers who are for a long time in the system, could not feel comfortable with new technology mediated teaching learning. In recent past in India, due to new initiatives like Continuous and Comprehensive Evaluation (CCE), Right to Education Act (RTE-2009), emphasis on inclusive classroom setup and adaptation of suitable teaching learning strategies for inclusive classes, have emerged as challenges for teachers. To cop up with such challenges, teachers have to adopt some strategy for CPD.

Generally teachers are so over burdened with professional obligations and also with family and social responsibilities that they hardly manage exclusive time for any study or long term training/activity for their professional development. Though there are some short term training programs being organized every year by various organizations but to attend every year by everyone is not possible. Truly speaking, in such short and infrequent training programs, individuals need to gather at a central location/training center for lectures from few experts. It is not contributing much in professional development and causing a net loss for human resource development budget, costing more in travel and absenteeism from work. Due to which, ODL programmes are being suggested as an effective option.

Fortunately, new opportunities for improving professional development through Open and Distance Learning (ODL) by blending information and communication technologies (ICTs) are becoming increasingly available, affordable and popular. ODL has enormous potential to provide opportunities for upgrading knowledge and skills significantly. Open distance learning has made major contributions in teacher education. This is the area where distance education has been used extensively to provide pre-service teacher education, upgrading of academic qualification, in-service continuing professional development in subject content areas and instructional methods (Perraton, 2003; UNESCO, 2001; 2002). ODL can provide professional development opportunities for large numbers of people

more quickly and comparatively at a lower cost than traditional ones. In 62th meeting of the Central Advisory Board of Education (CABE) in 2013, it was expected that "The open and Distance learning institutions could adopt to offer professional development programmes to the faculties of teacher education in different areas relating to curriculum, pedagogy and assessment." (p. 40). In 12th Five year Plan Document of Planning Commission, Government of India (2011), it has been retreated that "Open and distance education methods could be deployed to augment capacity optimally."

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IGNOU, in India, has offered many on demand programmes for school teachers to various states and agencies in past like Diploma in Primary Education (DPE), Certificate in Guidance (CIG), Certificate in Primary Education (CPE), Certificate in Elementary Teaching Education (CETE), Diploma in Elementary Education (D.El.Ed.), etc. In 2003, on demand of Navodaya Vidyalaya Samiti (NVS), IGNOU has also offered a Post-graduate Certificate in Professional Development of Teachers (PGCPDT) programme to cater to the specific needs of the post-graduate teachers of NVS.

Keeping this in mind, Indira Gandhi National Open University (IGNOU), the largest national open and distance learning university in India and Kendriya Vidhyalaya Sangthan (KVS), largest chain of Ministry of Human Resource Development (MHRD) funded senior secondary schools in India, came up with an Memorandum of Collaboration (MoC) to provide in-service professional development training to all primary teachers (PRTs) teaching in Kendriya Vidhyalayas across the country. Its result was development of Certificate Programme for Professional Development of Primary Teachers (CPPDPT) Programme.

1. ABOUT THE CPPDPT PROGRAMME

The CPPDPT programme is a demand based tailor-made programme to suit the specific needs and requirements of primary teachers of KVS. It is based on the outcomes of training needs assessment survey done with KVS teachers. This programme is having a judicious mix of self learning print materials, assignments, practical activities in classroom situation, interactive academic counseling and ICT support including audio and video programmes, web support through youtube.com, etc. The main objective of the programme is to orient and upgrade the teachers professionally by developing their capacity on emerging issues and concerns of elementary education, enriching their content knowledge and sharpening their pedagogical skills to situate the teaching-learning process on the experiences and needs of learners, ensure learner-centered transactional approaches, and facilitate child-friendly assessment process.

All the materials developed for the programme are self-instructional and interactive in nature which includes examples from classroom situation, narratives, case studies and illustrations, etc. Web links for additional studies are also being provided wherever possible.

The whole course outline is a mix of six (06) compulsory theory courses and one 15 days compulsory contact programme known as workshop at programme study centers. This workshop has been designed to provide hands on experience to teachers on various aspects of training. The Workshop is an innovative mix of technology supported teaching learning strategy.

The Workshop carries 3 credits weight. It was held in face-to-face mode at the Programme Study Centers (PSCs). Major objectives of the Workshop are to sensitize the learners to acknowledge and appreciate diversity among children and their different learning styles; help teachers acquire the ability to reflect and examine their own strengths and beliefs and initiate action for improvement; and share information, knowledge and best practices, based on individual experiences of participating teachers among themselves. Medium of instruction for the programme is English. The minimum duration of the programme is six months. However, the maximum period allowed for completion of the programme is 18 months. Teachers undergoing the certificate programme are being evaluated by the IGNOU based of 5 point grading.

This programme has started in July, 2014 and has completed two of its cycles. 7928 students (3793 students in July 2014 session and 4135 students in January 2015 session) have been enrolled so far in this programme.

2. NEED AND IMPORTANCE OF THE STUDY

There are studies worldwide which have established the importance of various components on ODL based teacher training. Bof (2004) has reported the design and implementation structure of 'Proformcao' in service training programme that has been developed to upgrade 27,000 teachers working in Brazil, which has proven to be a successful model for the delivery of education at a distance. In another study, Jung (2005) has found that online teacher training was more cost-effective than face-to-face teacher training. Fung (2005) has also reported the teachers' views on use of printed materials in a distance learning teacher education course. Fung also reported that despite the heavy emphasis on online learning in recent years, print is still an important medium for course delivery in distance education. Gultekin (2006) and Usun (2003) have described the applications and problems of the distance teacher training programmes in

Turkey. Many such reviews ignited the researcher to carry out a perception survey among the teachers, who have enrolled in the CPPDPT programme and experienced its various components including face-to-face workshop. As it is first of its kind professional development programme, in which all teachers of KVS Sangthan are compulsorily participating regardless of their age, sex, teaching experience. IGNOU has also adopted a different approach, which was not in normal practice with other programmes. Following are the few key features of the programme, which have motivated researcher to carry out the study:

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- It is need based on-demand professional development programme.
- All the teachers of an organization are participating compulsorily.
- Study centers are the Kendriya Vidhyalaya itself and no specialized teacher training institution is involved as study center.
- Kendriya Vidhyalaya Principals are working as programme study center in-charges.
- Senior-teachers of KVS i.e. Trained Graduate Teachers (TGTs) and Post Graduate Teachers (PGTs) are facilitating learning as academic counsellors, which is a kind of peer-tutoring model.
- For maintain quality and ensuring implementation, KVS officials are equal partner with IGNOU.

Keeping all these features in mind, researcher has decided to carry out a survey with following research questions:

3. RESEARCH QUESTION

- 1. Are teachers ready to accept ODL as a mode of delivery for their continuous professional development?
- 2. Is ODL system fit as a mode of delivery for continuous professional development programmes?
- 3. What may be the areas of concern and improvement while using ODL system for continuous professional development programmes?

4. OBJECTIVES

• To study the perception of teachers enrolled in CPPDPT programme towards usability of programme.

- To compare the perception of teachers enrolled in CPPDPT programme towards various components of CPPDPT programme in different regions.
- To find out the issues and concerns of teachers about CPPDPT Programme.
- To find out the perception of academic counsellors and programme study center in-charges about operational dimensions of CPPDPT Programme.
- To study the effectiveness of ODL system in providing in-service professional training to teacher.
- To suggest the improved implementation strategy for ODL In-service professional development programmes.

5. HYPOTHESES

Following null hypotheses have been framed to analyze the quantitative data in order to get answers for the research questions framed.

- H_01 : There is no significant difference in perception of teachers about CPPDPT programme with respect to their region.
- $H_0 1_a$: There is no significant difference in perception of teachers about nature of CPPDPT programme with respect to their region.
- $H_0 1_b$: There is no significant difference in perception of teachers about quality of learning material of CPPDPT programme with respect to their region.
- $H_0 1_c$: There is no significant difference in perception of teachers about student support services being provided with respect to their region.
- $H_0 1_d$: There is no significant difference in perception of teachers about academic counselling with respect to their region.
- $H_0 1_e$: There is no significant difference in perception of teachers about workshop activities with respect to their region.
- $\rm H_0 1_f$: There is no significant difference in perception of teachers about assessment and evaluation process of CPPDPT programme with respect to their region.
- $\rm H_01_g$: There is no significant difference in perception of teachers about usability of CPPDPT programme for their professional development with respect to their region.
- $H_0 1_h$: There is no significant difference in perception of teachers about various courses of CPPDPT programme with respect to their region.
- $\rm H_{o}2$: There is no significant difference in perception of male and female teachers about CPPDPT programme.

H₀3: There is no significant difference in perception of teachers about CPPDPT programme with respect to their teaching experience.

 H_04 : There is no significant difference in perception of teachers about CPPDPT programme with respect to desired medium of Instruction.

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6. DELIMITATIONS

- 1. The study was conducted at 5 study centers under the jurisdiction of three regional centers only.
- 2. Data was collected on a self-made tool and semi-structured interview schedule without standardization.
- 3. Study was conducted during compulsory component of the programme i.e. workshop organized at study centers.
- 4. Study was conducted on teachers enrolled in one cycle only, i.e. in January, 2015 admission cycle of IGNOU.

7. RESEARCH DESIGN

In order to find out the answers of research questions and fulfill the objectives of the research, researcher has decided to go with a mix method, which has included quantitative data collection through survey and qualitative data collection through semi-structured interview.

8. POPULATION

Population for the study is the primary teachers working with Kendriya Vidhyalaya Sangthan, (KVS). All the primary teachers are being sponsored by KVS for enrollment in CPPDPT Programme as per MoU signed between IGNOU and KVS. About 7928 teachers enrolled in CPPDPT in two cycles, constitute the population for the study.

9. SAMPLING TECHNIQUE

For the study, randomly 05 Study Centers under 03 RCs i.e. RC Delhi-2, RC Noida and RC, Ranchi were selected. All the teacher attending workshop (total 198), All academic counsellors (ACs) present on the day of visit and all programme study center in-charges (PICs) at these 5 study centers are part of sample.

10. SAMPLE

Sample distribution under three RCs and at 05 Programme Study Centers (PSCs) was as per following table 1.

Singh, G Table 1:

S. No.	Name of Regional Center (RC)	Name of Programme Study Centers (PSC)	Number of Teachers (finally taken in account)*	Number of Academic Counsellors	Number of Programme Study Center In- charge
1	R C Delhi-2 (Delhi)	KV, Vigyan Vihar, New Delhi	38	04	01
2	RC Noida (Uttarpradesh)	KV, Kamla Nehru Nagar, Ghaziabad	43	04	01
3	RC Ranchi (Jharkhand)	KV-1, Bokaro Steel City	28	05	01
4		KV, Tatanagar	24	02	01
5		KV, Hinno, Ranchi	48	03	01
	Total		181	18	05

^{*}Out of 198 teachers, only 181 returned the dully filled tools, rest of the tools were discarded due to incompleteness or carelessness in responding.

11. TOOLS FOR THE STUDY

Researcher has developed following tools for the study:

- 1. **Semi-structured Interview Schedule:** A Semi-structured interview schedule was prepared with issues to be asked or raised during interview with academic counsellors and programme study center in-charges. Following issues were kept in focus during interview:
 - Dissemination of information from SOE
 - Support from RC
 - Coordination of RC and KV RC with PSC
 - Issues related to administration at PSC
 - Issues related to implementation of programme at PSC
 - AC's view about SLM and Audio-Video support
- 2. Rating Scale for Teacher's Perception: For teachers participating in workshop and enrolled at PSC in CPPDPT programme, a tool with 42 items was prepared. In the tool, there were statements to study the perception of teachers about programme, courses and various other operational dimensions. Dimension wise distribution of items in the tool was as follows:

Table 2:

Dimension	Item Number	Total Number of Items
Nature of Programme	1-2	2
Learning Material	3-8	6
Student support services	9-12	4
Academic Counseling	13-17	5
Workshops	18-24	7
Assessment and evaluation	25-30	6
Usability of the Programme	31-35	5
Usability of the courses	36-42	7

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12. METHOD OF DATA COLLECTION

Researcher visited 05 study centers during the 15-days compulsory workshop of CPPDPT Programme held in the month of May, 2015. During visit, the tool was distributed among participants of workshop and their responses were collected. For Interview, Researcher interacted with Programme Study Center In-charges (PICs) and academic counsellors (ACs) and their responses were recorded on response sheet. The responses were analyzed and common points were identified.

13. ANALYSIS AND INTERPRETATION

The quantitative scores on tools were tabulated and analyzed as per hypotheses framed. Data analysis has been done in the light of objectives and hypotheses framed for the study.

14. PERCEPTION ABOUT THE PROGRAMME

In order to test the first hypothesis $\rm H_01$ "There is no significant difference in perception of teachers about CPPDPT Programme with respect to their region", One-Way ANOVA was used as statistical technique.

The data collected from three RCs was analyzed and outcome of analysis are shown in table 3.

Table 3:

Groups	N	Sum	Average	Variance
RC Ranchi	100	15409	154.09	884.63

Singh, G

RC Delhi-2	38	6227	163.87	684.28
RC Noida	43	7035	163.60	321.67
ANOVA				
Source of Variation	SS	df	MS	F
Between Groups	4158.74	2	2079.37	2.93
Within Groups	126406.80	178	710.15	N.S.
Total	130565.60	180		

The F-value '2.93', which is less than the critical value at 0.05 level of significance, reflects that there is no significant difference in overall perception of teachers about CPPDT programme and null hypothesis $\mathbf{H_0}\mathbf{1}$ is accepted. It has been observed during interaction that issues raised by enrolled teachers and their concerns are almost similar at all the study centers, due to which there is no significant difference.

In order to study the perception of teacher about its various components, 08 sub hypotheses were framed. These sub-hypotheses were meant to compare the perception of teachers region wise on various components of programme design, delivery and evaluation.

15. PERCEPTION ABOUT NATURE OF PROGRAMME

In this regard the first sub hypothesis $H_0 1_a$ was framed. The hypothesis 'There is no significant difference in perception of teachers about nature of CPPDPT Programme with respect to their region' was tested on the basis of scores obtained by teachers on the items related to nature of the programme. One-way ANOVA was used as there were three groups i.e. teachers from PSCs under RC Ranchi, RC Noida and RC Delhi-2. The analysis is shown in following table 4.

Table 4:

Groups	Count	Sum	Average	Variance
RC Ranchi	100	756	7.56	4.55
RC Delhi-2	38	293	7.71	5.08
RC Noida	43	389	9.05	21.38
ANOVA				
Source of Variation	SS	df	MS	F
Between Groups	69.08	2	34.54	4.00*

Within Groups	1536.36	178	8.63	0.05
Total	1605.45	180		

The F-value 4.00 is higher than the F critical at 0.05 level of significance. This suggests that sub-hypothesis $\mathbf{H_01_a}$ should be rejected. As the hypothesis is rejected, it confirms that perception of teachers is not same in all RCs about nature of programme. In order to find out the difference in perception RC wise, t-test was applied in pairs. t-scores are shows in table 4.1, 4.2 and 4.3.

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RC	N	Mean	Variance	t-value
RC Ranchi	100	7.56	4.55	0.35
RC Delhi-2	38	7.71	5.08	N.S.

Table 4.1

RC	N	Mean	Variance	t-value
RC Delhi-2	38	7.71	5.08	1.69
RC Noida	43	9.05	21.38	N. S.

Table 4.2

RC	N	Mean	Variance	t-value
RC Ranchi	100	7.56	4.55	2.02
RC Noida	43	9.05	21.38	0.05

Table 4.3

It is clear from above three t-tables that there is no significant difference between perception of teachers about nature of programme between RC Noida and RC Delhi-2, but interestingly, the perception of teachers from RC Ranchi differs significantly from RC Noida. This outcome reflects that there are some factors, which are associated with RC Ranchi participants. On interaction with participants it was found that they have neither received programme guide nor any study material before the workshop, hence they were not aware of the programme, its objectives and nature. Most of them have perceived CPPDPT as only 15 days workshop. When they were told that they have to study 6 theory courses, which included continuous assessment in terms of assignments and term end examination, they were not ready to accept it. This indicates that neither PSC/RC nor their organization have inducted them about the programme.

Singh, G 16. PERCEPTION ABOUT LEARNING MATERIAL

To study the perception of teachers about various types of learning material including print self learning material (SLM), Audio programmes, Video programmes, Power Point Presentations embedded in workshop, a sub hypothesis $H_0 1_b$ 'There is no significant difference in perception of teachers about Quality of Learning Material of CPPDPT Programme with respect to their region', was framed. ANOVA was used to compare the scores obtained by teachers on six items related to study material.

Table 5:

Groups	Count	Sum	Average	Variance
RC Ranchi	100	2283	22.83	21.27
RC Delhi-2	38	819	21.55	24.25
RC Noida	43	929	21.60	12.05
ANOVA				
Source of Variation	SS	df	MS	F
Between Groups	69.95	2	34.98	1.77*
Within Groups	3509.78	178	19.72	N.S.
Total	3579.74	180		

Table 5 is showing the outcomes of ANOVA. Non-significant F value $^{\circ}1.77^{\circ}$, at 0.05 level of significance is suggesting that sub hypothesis $\mathbf{H_{0}1_{b}}$ should be accepted. Acceptance of the hypothesis indicates that perception about study material is same everywhere. On further interaction it was found that teachers were happy with content selection and its presentation in the material. They have enjoyed video programmes much as compared to audio programme. Their suggestion was that programme should be of lesser duration. They have also reported that Audio Video Programmes were used by Academic Counselors during the workshop but they were not discussed as required. Uploading on YouTube and sending links to all PSCs through e-mail has helped PSCs to ensure the availability of Audio-video material on time.

17. PERCEPTION ABOUT STUDENT SUPPORT SERVICES

Teachers were also asked about their perception towards student support services being provided by IGNOU. A sub hypothesis H_01_c was framed to study this dimension. To test the hypothesis 'There is no significant difference in

perception of teachers about student support services being provided with respect to their region', data was collected on 4 items. Data analysis is shown in table 6.

Table 6:

Groups	Count	Sum	Average	Variance
RC Ranchi	100	1491	14.91	20.06
RC Delhi-2	38	784	20.63	16.73
RC Noida	43	905	21.05	5.38
ANOVA				
Source of Variation	SS	df	MS	F
Between Groups	1583.45	2	791.72	49.78*
Within Groups	2830.94	178	15.90	0.05
Total	4414.39	180		

Table 6 is reflecting that there is huge difference in perception of teachers about student support services. F calculated value '49.78' is quite high as compared to the F-critical at 0.05 level of significance. This **rejects the hypothesis H**₀1_c In order to analyze further, t-test has been used in pairs. Table 6.1, 6.2 and 6.3 are showing the outcome of t-test analysis.

 RC
 N
 Mean
 Variance
 t-value

 RC Ranchi
 100
 14.91
 20.06
 7.15

 RC Delhi-2
 38
 20.63
 16.73
 0.05

Table 6.1

RC	N	Mean	Variance	t-value
RC Delhi-2	38	20.63	16.73	0.56
RC Noida	43	21.05	5.38	N. S.

Table 6.2:

RC	N	Mean	Variance	t-value
RC Ranchi	100	14.91	20.06	10.76
RC Noida	43	21.05	5.38	0.05

Table 6.3:

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It is clearly visible from above three t-tables that their perception about student support services is not varying significantly between RC Delhi-2 and RC Noida but perception of teachers at PSCs under RC Ranchi is significantly different from both the RCs i.e. PSC under RC Noida and PSC under RC Delhi-2.

On further interaction with teachers, it was observed that participant teachers at PSCs under RC Ranchi were never induced about the programme. They have received their programme guide, workshop handbook and study material in the month of May during workshop. They have not received any communication or support from PSCs. In contrast, teachers at PSCs under RC Delhi-2 and RC Noida were well informed about the programme. They have received their study material and programme guide on time in the month of March and few have visited PSCs for submitting assignments or filling the forms.

18. PERCEPTION ABOUT ACADEMIC COUNSELLING

When teacher were asked to give their response about their perception towards academic counselling on the 05 items given in the rating scale, A sub hypothesis H_01_d : There is no significant difference in perception of teachers about academic counselling with respect to their region, was framed. ANOVA was used to analyze the data and outcomes are tabulated in the following table 7.

Table 7:

Groups	Count	Sum	Average	Variance
RC Ranchi	100	1531	15.31	8.98
RC Delhi-2	38	659	17.34	5.53
RC Noida	43	721	16.77	5.94
ANOVA				
Source of Variation	SS	df	MS	F
Between Groups	140.14	2	70.07	9.28*
Within Groups	1343.62	178	7.55	0.05
Total	1483.77	180		

In Table 7, the F-value '9.28' is higher than the F-critical at 0.05 level of significance. Higher F-calculated value tends towards the **rejection of sub hypothesis** $\mathbf{H}_0 \mathbf{1}_d$. Rejecting the hypothesis drove the researcher to further analyze the data. To compare scores obtained by teachers under two RCs at a time, t-test was used. Table 7.1, 7.2 and 7.3 are showing the outcome of t-analysis.

It is quite evident from above three tables that there is no significant difference between perception of teachers about academic counseling between

RC	N	Mean	Variance	t-value
RC Ranchi	100	15.31	8.98	4.18
RC Delhi-2	38	17.34	5.53	0.05

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RC	N	Mean	Variance	t-value
RC Delhi-2	38	17.34	5.53	1.07
RC Noida	43	16.77	5.94	N.S.

Table 7.2

RC	N	Mean	Variance	t-value
RC Ranchi	100	15.31	8.98	3.06
RC Noida	43	16.77	5.94	0.05

Table 7.3

RC Noida and RC Delhi-2 but there is significant difference between the perceptions of teachers of RC Ranchi with other two RCs.

On further interaction with participant teachers and ACs, it was found that at PSCs under RC Ranchi, no academic counseling was held. At One PSC, the PIC was not aware about any dimension of the programme as she was new in the system and had not attended any orientation programme organized by SOE/IGNOU. It was also observed that teachers were not aware of any such provision of academic counseling at PSC on weekends.

19. PERCEPTION ABOUT WORKSHOP BASED ACTIVITIES

In order to study the perception of teachers about workshop based activities with respect to their region, a sub hypothesis $H_0 1_e$ 'There is no significant difference in perception of teachers about workshop activities with respect to their region' was framed. Table 8 is showing the outcome of applying ANOVA on the scores obtained on this dimension.

Table 8:

Groups	Count	Sum	Average	Variance
RC Ranchi	100	2642	26.42	25.60
RC Delhi-2	38	1029	27.08	29.05

RC Noida	43	1079	25.09	24.37
ANOVA				
Source of Variation	SS	df	MS	F
Between Groups	86.55	2	43.28	1.66
Within Groups	4632.75	178	26.03	N.S.
Total	4719.30	180		

In Table 8, the F-value '1.66', which is not significant at 0.05 level of significance is confirming that there is no significant difference in perception of teachers of various regions about workshop based activities. It confirms the **acceptance of sub hypothesis** $\mathbf{H}_0 \mathbf{1}_e$ Most of the teachers were satisfied with the nature of content and sessions designed in the workshop. They appreciated the quality of content and support material provided for the workshop, though they have reported that there was not enough availability of expert resource persons. It was also suggested by teachers that duration of the workshop may be less or it can be organized in two slots of one week each.

20. PERCEPTION ABOUT ASSESSMENT AND EVALUATION

Teachers were also asked to give their perception about assessment and evaluation system adopted for various courses as well as workshop based activities. To observe their perception on this dimension, a sub hypothesis $H_0 1_f$ 'There is no significant difference in perception of teachers about assessment and evaluation process of CPPDPT Programme with respect to their region', was framed. ANOVA was used to compare the scores obtained on 6 items related to assessment and evaluation. Table 9 is showing the outcomes of ANOVA.

Table 9:

Groups	Count	Sum	Average	Variance
RC Ranchi	100	2042	20.42	31.40
RC Delhi-2	38	868	22.84	24.68
RC Noida	43	944	21.95	19.38
ANOVA				
Source of Variation	SS	df	MS	F
Between Groups	186.16	2	93.08	3.43*
Within Groups	4835.32	178	27.16	0.05
Total	5021.48	180		

The significantly high F value i.e. '3.43' in table 9 is confirming the **rejection** of sub hypothesis $\mathbf{H}_0 \mathbf{1}_t$ it means that perception of teacher about assessment and evaluation, vary RC to RC. To analyze further on this dimension, t-test was used. Table 9.1, 9.2 and 9.3 are showing outcomes of t-analysis.

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RC	N	Mean	Variance	t-value
RC Ranchi	100	20.42	31.40	2.47
RC Delhi-2	38	22.84	24.68	0.05

Table 9.1

RC	N	Mean	Variance	t-value
RC Delhi-2	38	22.84	24.68	0.85
RC Noida	43	21.95	19.38	N. S.

Table 9.2

RC	N	Mean	Variance	t-value
RC Ranchi	100	20.42	31.40	1.74
RC Noida	43	21.95	19.38	N. S.

Table 9.3

The significant difference in perception of teacher about assessment and evaluation was found only in between RC Delhi-2 and RC Ranchi. On further interaction with participants, it was observed that this difference was due to assessments grades obtained on assignments. PSC under RC delhi-2 has returned assignment after evaluation to participants where as at RC Noida, assignments were not returned and at RC Ranchi, none of them has submitted any assignment.

It was also observed that PSCs under RC Ranchi have not informed to teachers to download, write and submit the assignments before filling the examination forms. Most of them have not filled examination form for June-2015 as they have not received study material.

21. PERCEPTION ABOUT USABILITY IN PROFESSIONAL DEVELOPMENT

To study the usefulness of the CPPDPT programme for the professional development of teachers, a sub hypothesis $H_0 1_g$ was framed. This hypothesis 'There is no significant difference in perception of teachers about usability of CPPDPT Programme for their professional development with respect

to their region', was tested by applying ANOVA on scores obtained by teachers from all three regions.

Table 10:

Groups	Count	Sum	Average	Variance
RC Ranchi	100	1842	18.42	29.62
RC Delhi-2	38	720	18.95	18.05
RC Noida	43	798	18.56	14.82
ANOVA				
Source of Variation	SS	df	MS	F
Between Groups	7.66	2	3.83	0.16
Within Groups	4222.86	178	23.72	N.S.
Total	4230.52	180		

As shown in table 10, the calculated F value '0.16' is very low as compared to the F critical at 0.05, level of Significance. The data analysis **accepts the null hypothesis**. Acceptance of null hypothesis is suggesting that perception of teachers about the usefulness of CPPDPT programme in their professional development is almost similar in all regions.

22. PERCEPTION ABOUT VARIOUS COURSES

To study about perception of teachers towards various courses of CPPDPT programme, a sub null hypothesis $H_0 1_h$ was framed. To test this hypothesis 'There is no significant difference in perception of teachers about various courses of CPPDPT Programme with respect to their region', ANOVA was used to compare the score obtained by teachers from all three regions.

Table 11:

Groups	Count	Sum	Average	Variance
RC Ranchi	100	2822	28.22	38.94
RC Delhi-2	38	1055	27.76	24.56
RC Noida	43	1270	29.53	14.97
ANOVA				
Source of Variation	SS	df	MS	F

Between Groups	73.79	2	36.90	1.22
Within Groups	5392.73	178	30.30	N.S.
Total	5466.52	180		

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The F value '1.22', which is not significant at 0.05 level of significance, is confirming the **acceptance of sub hypothesis** $\mathbf{H}_0 \mathbf{1}_h$ it means that perception of teachers about various courses in CPPDPT programme is similar in all three reasons. During interview, it was found that that most of the teachers were happy with the type and nature of various courses. They appreciated the selection of courses and content in the courses. It was also observed during interaction that there was an apprehension among teachers on number of courses. They were suggesting that number of theory course in a six month duration programme for fully working teachers should be less.

23. PERCEPTION WITH RESPECT TO SEX

In order to test the perception of teachers with respect to be male or female, null hypothesis H_02 'There is no significant difference in perception of male and female teachers about CPPDPT programme', was framed. Data was analyzed and tabulated as below.

Table 12:

Sex	N	Mean	SD	t-value
Female	119	159.29	24.67	0.57
Male	62	156.69	30.96	N.S.

The non significant t-value '0.57' at 0.05 level of significance is confirming that null hypothesis H_0^2 should be accepted. It means that perception of teacher with respect to their sex, i.e. being male or female is not varying.

24. PERCEPTION WITH RESPECT TO TEACHING EXPERIENCE

In CPPDPT programme, teachers with a wide range of teaching experience are enrolled. It has been observed that the teachers, who have joined KVS with in a year and teachers who have joined KVS 30 years ago, all are enrolled in CPPDPT programme. During discussion, the apprehensions of senior teachers were quite visible, hence it was decided that the hypothesis H₀3 "There is no significant difference in perception of teachers about CPPDPT programme with respect to their teaching experience" is required to be tested. The data collected in this regard is tabulated below in table 13.

Singh, G Table 13:

Experience (yrs.)	Count	Sum	Average	Variance
0-10	37	5666	153.14	842.18
11-20	30	4648	154.93	754.82
21 and above	114	18357	161.03	674.20
ANOVA				
Source of Variation	SS	df	MS	F
Between Groups	2172.45	2	1086.22	1.51
Within Groups	128393.10	178	721.31	N. S.
Total	130565.60	180		

The F value '1.51' is less than the F critical at 0.05 level of significance. It shows that hypothesis H_03 is accepted. It implies that teaching experience of teachers is not an affecting factor in development of perception of teachers towards the CPPDPT programme.

25. PERCEPTION WITH RESPECT TO MEDIUM OF INSTRUCTION

To see the role of medium of instruction in developing perception towards the course, the hypothesis H₀4 "There is no significant difference in perception of teachers about CPPDPT programme with respect to desired medium of Instruction" was framed.

Table 14:

Preferred Medium	N	Mean	SD	t-value
Hindi	94	149.06	21.85	4.69*
Medium	87	166.98	28.79	0.05

The analysis of perception scores in relation to their preferred medium of instruction is reflecting that there is significant difference in perception of teachers about the programme hence **hypothesis H**₀**4** is **rejected** at 0.05 level of significance. Comparatively lower mean score of Hindi medium learners is also confirming the same. During interaction, it was found that many teachers were not able to comprehend well the programme guide and objectives of the programme. Reading and comprehension difficulties for study material and term end examination question papers, as they are in English medium is also a significant contributing factor in this finding. At many PSCs, learners have

asked about study material in Hindi, which was not available due to bindings of the MoC signed between IGNOU and KVS. It was clearly mentioned in MoC that medium of instruction will be English Only.

26. FINDINGS OF THE INTERVIEW WITH ACADEMIC COUNSELLORS AND PROGRAMME STUDY CENTER INCHARGES

During semi structured interview with academic counsellors and programme in-charges, following points have been emerged.

- 1. **Academic counsellors were not apporved** by SOE/IGNOU at 3 out of 5 PSCs, They have not filled any biodata but all of them have attanded the orinetation programme held at ZIETs.
- 2. Learners have received the study material, programme guide and workshop hand book on 16/05/2015 as 03 PSCs under RC Ranchi. None of them was aware about structure of workshop, things/activities to be perform before workshop i.e. preworkshop activities, etc., where as PSCs under RC Delhi-2 and RC Noida have received study material in the month of March.
- 3. For the second batch enrolled in January, 2015, **no induction programme** was organised at any of the PSC.
- 4. No academic counselling was organised for second batch, i.e. January, 2015 batch. 03 PIC informed that due to non-avalibility of material, no aproval of Academic counsellors, it was not possible to organise academic counselling sessions. Participants were not aware that there will be any academic counselling. Many of them were confused and have an idea that atending the workshop is the only activity in CPPDPT Programme. Where as at PSCs under RC Noida and RC Delhi -2 have not organised academic counselling properly and prefer that everything will be clarified durring workshop only.
- 5. No assignment have been submitted to 03 PSCs under RC Ranchi by the learners of January, 2015 batch. ACs and PICs were not ware of the formet of marks, bills for assignment evaluation as well as they have not received any coomunication from RC. One PSC has not returned evaluated assignments to participant teachers wheras one has returned on time.
- 6. Learners of January, 2015 batch have not filled any examination form at 03 PSCs.
- 7. It was hard to arrange suitable resource persons from outside so most of PSCs were managing whole workshop with 4-5 academic counsellors.

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- Though it has been instructed to them about requirment minimum 12 resource persons for conduction of workshop. At one PSC, only two ACs were managing whole 15 days workshop.
- 8. It was suggested by ACs as well as PICs that dates for the exams should be fixed in consultation with KVS as from June 22, term end examinations were scheduled for CPPDPt and same was the date for opening of schools.
- 9. PICs have expressed a concern that as many ACs are available in other nearby KVs and there is no clear guidelines to releave them for academic counselling on from their working place.
- On PIC reported that RC officials were not curtious and supportive and KV principal felt embressed as he was asked to sit for hours before meeting with officials at RC.

27. OUTCOME OF THE STUDY

The data analysis of quantitative data, interaction and semi structured interview with ACs and PICs have suggested that there was an acceptance of the concept of continuous professional development among teachers and they were also accepting ODL as an effective medium.

They were satisfied with the nature of content and format of workshop but there were apprehension about examination in such programme. Number of courses in the programme should be less as per their suggestion. This finding is tune with finding of Fozdar, et. al. (2007) who reported that in their study also, most of the teachers were satisfied with course materials and the Personal Contact Programme (PCP) conducted during the teacher training programme.

Major problems were due to poor communication and poor student support services from IGNOU i.e. on the part of RCs like delay in delivery of material, no organization of induction, almost negligible communication between RCs and PICs.

28. SUGGESTIONS

CPPDPT programme is not the first programme of professional development, which was started by IGNOU but this programme had a lot of potential to attract many such initiatives from various other education organizations. Professional development is a need in education sector and especially at colleges and school level. There is no specific institution which can provide CPD to teachers of schools and colleges in bulk. ODL has the capacity, strength and competencies but it is not possible without proper coordination between

all bodies involved in the execution of such programmes. University, SOE and RC should work together and support each other to fulfill the requirement of participants and PSCs otherwise it may bring bad name for the university in academic community. Not only IGNOU, but other institutions can also develop many such programme of professional development as per their needs and train teachers. Periodic In-service teacher training is still a missing link at secondary/senior secondary level education system and outcomes of this study can benefit the new initiatives in this direction. New avenues and strategies are needed not only at policy level but also at institutional lvel. Organized school sector can take initiatives and other can follow.

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REFERENCES

- [1] Bof, A.M. (2004). Distance learning for teacher training in Brazil. The International Review of Research in Open and Distance Learning, 5(1). Available online at: http://www.irrodl.org/index.php/irrodl/article/view/Article/172/387 https://doi.org/10.19173/irrodl.v5i1.172
- [2] CABE (2013). Agenda Item for 62th meeting of the Central Advisory Board of Education, MHRD
- [3] Fozdar, B. I., Kumar, L. S., Saxena, A. (2007). In-Service Teacher Training Programme: An Analysis of Learner Opinion on the Effectiveness of the Programme, Malaysian Journal of Distance Education **9(2)**, pp. 65–87
- [4] Fung, Y.Y.H (2005). Teachers' views on and use of printed materials in a distance learning teacher education course. Open Learning, **20(2)**, pp. 175–183. https://doi.org/10.1080/02680510500094231
- [5] IGNOU (2014). Programme Guide, Certificate Programme for Professional Development of Primary Teachers, School of Education, Indira Gandhi National Open University, New Delhi
- [6] Perraton, H. (2003). Models for Open and Distance Learning 1: Teacher Education and Training. International Research Foundation for Open Learning and The Commonwealth of Learning.
- [7] Planning Commission (2011). Faster, Sustainable and More Inclusive Growth (An Approach to the twelfth five year plan). Retrieved on August, 23, 2015 from planningcommission.gov.in/plans/planrel/12appdrft/appraoch_12plan.pdf
- [8] UNESCO (2001). Teacher Education Through Distance Learning Technology-Curriculum Evaluation Cost. Paris: UNESCO.
- [9] UNESCO (2002). Teacher Education Guidelines: Using Open and Distance Learning, Paris: UNESCO.
- [10] Gultekin, M. (2006). The attitudes of pre school teacher candidates studying through distance education approach towards teaching profession and their

- perception levels of teaching competency. Turkish Online Journal of Distance Education, **7(3)**, pp. 184–197.
- [11] Jung I. (2005). Cost-effectiveness of online teaching training. Open Learning, **20(2)**, pp. 131–146 https://doi.org/10.1080/02680510500094140
- [12] Usun, S. (2003). The applications and problems on the distance teaching training in Turkey. Turkish Online Journal of Distance Education (TOJDE), 4(4). Available online at: http://toJde.anadolu.edu.tr/tojde12/articles/usun3.htm