

# Continuous Professional Improvement As Quality Learning Metaphor For Teachers: A Study



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## Abstract

This research paper examines continuous professional improvement of in-service and pre-service teachers' on the basis of their gender, faculty and marital status. Continuous professional improvement is a quality learning metaphor for teachers both in-service and pre-service. 292 in-service and 293 pre-service teachers comprised the sample for the present study which were randomly drawn from 24 colleges of education situated in the state of Punjab, India. The results indicated that in-service teachers' shows significant variation in their continuous professional improvement as quality learning metaphor significantly yet influenced by gender and marital status whereas faculty is not able to create significant variation. On the other hand, pre-service teachers fail to get affected by continuous professional improvement as quality learning metaphor.

**Keywords:** Continuous Professional Improvement, In-Service & Pre-Service Teachers, Learning, Metaphor, Quality.

## Introduction

Teacher quality learning needs modification by practices like continuous professional improvement, reading and motivation to learn. It is only then he can cultivate and sustain rhythm of learning by satisfying his thirst for knowledge. This realize us the fact that teachers' translate and operate his skills and knowledge in a way which improves their quality of teaching-learning and along with it their quality of learning gets improved by their continuation of education. These views were also supported by Program for International Student Assessment (2009); who highlighted reading as a key element of motivation which support learning and social mobility as a challenge to instill desire among 'teachers' as 'learners'. Aligned to these thoughts Latour (1986); stated that learning can takes place everywhere, by everyone, because of its set practices, which gets increased by reading and networking. This attainment of learning, according to Rowan and Bigum (2003) is ought to be routinized, so that it becomes an integral part of life and irreversible does not take place. Marton, Dall'Alba and Beaty (1993); referred that changing of a person requires increase in knowledge, understanding and its application in-day-to-day life by attaining personal and professional skills. Clarifying these views Organization for Economic Cooperation and Development (2003); remarked that people must upgrade their skills in order to remain competitive and prepare themselves for frequent change in jobs. This upgradation of skills require learning and associated to it quality; to make it visible. The organization further suggested that to embrace continuous professional development one has to improve one's quality of learning. This can be possible only when engagement with learning is adopted as a best practice to learn more and more. Quality means perfection. The very same views were clarified by Watty (2006); who advocated quality learning with efficiency, enhancing excellence as fitness of focusness.

## Rationale of the Present Paper

Growing knowledge, technology explosion and new work order has posed a challenge for professionals to renew and update their knowledge in accordance to their roles as professionals. According to Goodson, Knobel, Lankshear and Mangan (2002) the logic of the new work order lies in assumption of roles and responsibilities assumed by the workers. For this, the workers have to transform themselves into committed partners by engaging themselves in a meaningful work, understanding and controlling their jobs by introspecting themselves and actively improving their knowledge and performance. Beside this, technology and explosion of

knowledge has challenged professionals to upgrade themselves in terms of; continuous professional improvement and up-gradation of knowledge, job expectations, dedication and investment in soft skills and so on. This has pressurized both in-service and pre-service teachers to restructure their learning in a way that they grasp and grasp constant transformation of knowledge and information in accordance to their personal and professional needs, so as to assume advanced challenges of teaching. Aligned to these views, Field (2000a) stressed that these days' occupations are becoming less stable and predictable; therefore the learners to assume responsibility must stretch and compliment one's knowledge by learning as much as they can to remain employable. This engagement with learning is actually continuation of learning. These views were also strengthened by Levin (1998); who supported constant engagement with learning as a necessity to help individuals to become flexible, adaptable and enriched by providing opportunities to learn new skills in accordance to the changing demands of professions. Going forth by this frame of reference, Field (2000a) asserted that specialized professionals can invest as service providers and customers both by visualizing themselves in light of competition and investment in learning; so that they become specialized. Studies on these constructs, suggest that a teacher to stay active in his teaching-learning profession become receptive to changes going in the society by learning new things on the job through observation and curiosity. These views were also supported by Gibbons et al (1994); who pointed globalization and competition as driving forces behind any marketable knowledge and information. This suggests that teachers optimize their quality of learning by being versatile, empowered and enriched with respect to their knowledge; so that they adapt and improve themselves from time to time. This continuous professional improvement of teachers must match with the trends created by global ideological and economic shifts of society, so that their quality of learning gets improved and along with it their role performance. This led us to believe that knowledge of teachers must be shaped by its quality or worth, which in turn, will help them to focus on qualitative aspect of learning. Navigating this aspect, Harvey and Green (1993) stated quality as a notion of 'exception', 'perfection', 'consistency', 'fitness for purpose' and 'transformation', whereas, Jongbloed (2002) conceived the concept of quality in 21st century as; fitness for purpose and academic excellence.

Thus, the undertaken study takes into account teachers both; in-service and pre-service who acquires learning in a way that can be improved and enhanced by increasing their potential in terms of; capacities, capabilities and competencies. It is pre-assumed that, in a factorial frame of reference when gender, faculty and marital status are taken together, their conjoint effect will present an entirely different picture from the previous studies.

Therefore, the present study attempts to find the extent to which gender, faculty and marital status

affect continuous professional improvement of in-service and pre-service teachers.

#### **Statement of the Research Paper**

The problem under research paper has been stated as; Continuous Professional Improvement as Quality Learning Metaphor for Teachers: A Study  
**Operational Meaning and Definitions of Terms Used For Paper**

#### **In-Service Teachers**

Teachers working in the colleges of education. Actually, they were the providers of education.

#### **Pre-Service Teachers**

Teachers as students studying in colleges of education in order to become professionals. They were actually recipients of education.

#### **Gender**

It is a characteristic associated to males or females.

#### **Faculty**

It is conceived as a division or comprehensive branch of learning available at colleges of education. Three faculties are available in colleges of education viz; Humanities (social studies, history, political science, economics, commerce, physical education, home science, public administration, music and fine arts); Languages (Punjabi, Hindi and English) and Sciences (science, life science, physical science, mathematics and computer science).

#### **Marital Status**

It is considered whether the person is married or single/unmarried.

#### **Continuous Professional Improvement**

It is an aspect related to updation of one's knowledge that takes place as a progression and is affected by work related achievements and work experience.

National Policy on Education (1986) endorsed the need for continuous professional development for in-service and pre-service teachers both. For implementation and strengthening the State Council of Educational Research and Training (SCERTs) and District Institutes of Education and Training (DIETs); colleges of teacher education are providing courses and training programs meant for both in-service and pre-service teachers. Taylor (1995) observed continuation as enrichment, which means a challenge towards desired changes and enjoyment while learning.

Stark (1998) conceived continuous improvement as heart of quality improvement and as a basis of satisfaction and development.

Day (1999) advocated continuous professional development as a necessity for all teachers to keep pace with changes and renew their knowledge and vision in accordance to new teaching.

Hanushek (1999) regarded teachers' quality as hailed component of quality of learning because of its relation with student achievement and their cognitive, affective and behavioral outcomes.

Burke, Long and Wurzburg (2000) regarded continuous professional improvement as an event which helps professionals to become an aging

workforce by adapting changes created by globalization, techno- scientific forces, network patterns, supply and demand of the skilled work force and so on.

United Nations International Children's Emergency Fund (2000) perceived continuous improvement of teachers as their professional development which keeps teachers abreast of new knowledge and practices in the field of education.

Anderson (2001) conceived continuous professional improvement as activities which are properly planned to support teachers in application the knowledge and teaching methodically, creatively and confidently.

Beare (2001) conceived that continuous change and improvement has profound implications on education system and personal life of teachers particularly at the 'chalk-face'. To cope up with this change, society requires teachers to be knowledgeable, experienced which possess capacity to develop, disperse and apply new knowledge.

Darling-Hammond and Branford (2005) referred high quality teachers as those teachers who improve their quality on the basis of content that address their quality of learning. This in turn, promotes their higher level of performance and learning attached to it.

National Council of Educational Research and Training (2005) under National Curriculum Framework advocated continuous professional improvement as vision of education for teachers' to renew their knowledge and skills.

Mungekar (2008) opined continuation of learning as a driving force to upgrade skills and knowledge by keeping oneself abreast with fast changing frontiers of knowledge.

Taylor (2009) conceptualized continuous professional improvement, a process to transform teachers by making significant and profound changes related to individual's sense of self, reconstruction of knowledge and experiences.

Verna (2014) revealed that level of teacher quality depends on his wealth of experiences and competencies and these can only be achieved through continuous improvement and innovation.

#### **Review of Literature**

Galbraith (1990) conducted research on pre-service teachers and found that they must learn to suspend their own beliefs and change their notions according to the educational reforms and changes that are taking place. The study further reveals that they must be flexible enough in their way of thinking, attitudes so that they are able to adjust and adapt any of the institutional environments.

Cochran-Smith (1991) conducted research on pre-service teachers and found that pre-service teachers struggle with experienced teachers to generate and sustain critical perspective on teaching which help them to become better teachers.

Grossman (1991) undertook research on pre-service teachers and found that they learn and become aware from their social and material context, so as to learn professionalism which empowers them

to become professional, principled and effective teachers.

Chen (2003) investigated Taiwanese in-service teachers and found that teachers change their beliefs, ways of thinking and classroom actions during development of professional knowledge and expertise.

Murphy, Delli and Edwards (2004) compared pre-service teachers (n=61) with in-service teacher (n=21). His study revealed that pre-service teachers focus more on themselves and their capabilities where as in-service teachers view their role differently and recognize it as part of their teaching-learning process.

Braimoh (2010) conducted research on open and distance learning students and found that senior and mature academics are more compensate learners to embrace continuous professional development as a way to improve quality of their academic performance.

Ferret and Smith (2010) conducted research on pre-service teachers and found that with increased awareness and understanding pre-service teachers become more confident in their practice and this encourage them to improve their level of performance and along with it their qualitative aspect of learning.

Saat and Othman (2010) investigated pre-service teachers residing in Malaysia and found that pre-service teachers' have a greater exposure and practice in responsive teaching when compared to students of other linguistic areas. The study further highlighted that student of arts/ linguistic are more competent in teaching the subject matter and integrating English with science. This way they make learning more meaningful by improving their qualitative aspect of lifelong learning.

Arsal (2011) conducted a research on prospective teachers in faculty of education. The findings of the study revealed that learning tendencies and quality of prospective teachers was found to be positive and high. The study further demonstrated that the effect of gender and faculty of prospective teachers on learning was not significant.

Saricoban (2013) conducted research on pre-service teachers and noted that language teachers' quality of learning depends on their attitude, beliefs and their knowledge to use technology in their classrooms.

Steadman and Evans (2014) conducted research at East Carolina University in-service and pre-service teachers' knowledge. The findings of the study highlighted that teachers' learning has a great impact on students and they should opt for quality learning.

#### **Objective of the Study**

1. To work out gender-wise, faculty-wise and marital status wise differences among in-service teachers working in colleges of education of Punjab on continuous professional improvement.
2. To investigate gender-wise, faculty-wise and marital status wise differences among pre-service teachers studying in colleges of education of Punjab on continuous professional improvement.

**Hypotheses**

The study has been carried out in light of the following hypotheses:

1. There exists no significant difference among in-service teachers on the variables of gender, faculty and marital status on continuous professional improvement.
2. There exists no significant difference among pre-service teachers on the variables of gender, faculty and marital status on continuous professional improvement.

**Design of The Study**

For the present study gender, faculty and marital status were taken as independent variables whereas as continuous professional improvement as dependent variable. The in-service and pre-service teachers were compared with respect to; gender, faculty and marital status which varied at 2 (S1-female and S2-male); 3 (F1-humanities, F2-languages and F3-sciences) and 2 (M-married and U-unmarried) levels respectively.

**Sample**

Punjab State has 185 colleges of education affiliated to Panjab University, Chandigarh; Panjabi University, Patiala and Guru Nanak Dev University, Amritsar. Out of which, 24 colleges of education were randomly selected to conduct the study. From these colleges, 300 in-service and 300 pre-service teachers were randomly selected as sample for the study. After going through the returned filled questionnaires from the respondents, it was found that eight in-service and seven pre-service teachers fail to mention their faculty to which they belong and other did not mention their marital status. These incomplete questionnaires were rejected as they did not form the actual sample of the study. Thus, the final size of sample was restricted to 292 in-service and 293 pre-service, making an actual sample of 585 teachers. Further, the sample was random with respect to gender, faculty and marital status of in-service and pre-service teachers. Sample description is given as;

**Table-1**  
**Sample Description for In-Service and Pre-service Teachers Belonging to Various Colleges of Education (Punjab)**

| S. No. | Name of The Colleges of Education  | No. of In-service Teachers | No. of Pre-service Teachers |
|--------|--|----------------------------|-----------------------------|
| 1      | Rayat and Bahra College of Education, Sahoran, Distt. Kharar                 | 15                         | 19                          |
| 2      | Rayat College of Education, Railmajra, SBS Nagar                             | 13                         | 11                          |
| 3      | D.A.V. College of Education, Hoshiarpur                                      | 14                         | 19                          |
| 4      | Chandigarh College of Education, Landran, Mohali                             | 12                         | 05                          |
| 5      | Doaba College of Education, Kharar   | 08                         | 07                          |
| 6      | B.C.M. College of Education, Ludhiana  | 13                         | 18                          |
| 7      | Guru Nanak Dev College of Education, Majatri, Tehsil Kharar, Distt. Mohali   | 12                         | 10                          |
| 8      | Indo Global College of Education, Abhipur, Ropar                             | 09                         | 12                          |
| 9      | Guru Gobind Singh College of Education, Kamalpura, Jagraon                   | 14                         | 14                          |
| 10     | Mehar Chand College of Education, Bhanupali, Nangal, Ropar                   | 13                         | 11                          |
| 11     | Shivalik Institute of Education and Research, Mohali                         | 08                         | 06                          |
| 12     | Govt. College of Education, Jalandhar  | 14                         | 15                          |
| 13     | RIMT College of Education, MandiGobindgarh                                   | 09                         | 07                          |
| 14     | Malwa Central College of Education for Women, Ludhiana                       | 15                         | 13                          |
| 15     | Shivalik Hills College of Education, Patti (Nangal)                          | 16                         | 20                          |
| 16     | M.B.B.G.D.R.G.C. College of Education for Girls, Mansowal, Distt. Hoshiarpur | 10                         | 14                          |
| 17     | D.A.N College of Education, Nawanshahar                                      | 11                         | 06                          |
| 18     | M.G.N College of Education, Jalandhar  | 16                         | 13                          |
| 19     | Khalsa College of Education, Mahilpur  | 16                         | 11                          |
| 20     | Pine Grove College of Education, Fatehgarh Sahib, BassiPathana               | 09                         | 08                          |
| 21     | C.T. College of Education, Jalandhar   | 14                         | 13                          |
| 22     | Maharishi Dayanand College of Education, Hanumangarh, AboharDistt. Ferozepur | 09                         | 14                          |
| 23     | Partap college of Education, Ludhiana  | 13                         | 16                          |
| 24     | Sai College of Education, Jadla, Nawanshahar                                 | 09                         | 11                          |
|        | <b>TOTAL</b>   | <b>292</b>                 | <b>293</b>                  |

**Tool and Its Description**

As no appropriate tool was available to conduct the study so, a self prepared questionnaire

was developed by the investigators to measure continuous professional improvement of in-service and pre-service teachers.

The responses of the participants were collected on a 5-point Likert scale ranging from 5-strongly agree, 4-agree, 3-undecided, 2-strongly disagree to 1-disagree. The final questionnaire consisted of two parts viz; **Background Variables-** It includes name, gender, marital status (married or unmarried), present status (in-service or pre-service), present status, faculty to which one belongs [Humanities (history, economics, political science, social studies, commerce, physical education, home science, public administration, music and fine arts); Languages (Punjabi, Hindi and English) and Sciences (science, life science, physical science, mathematics and computer science)], designation, name of the college/institution to which one belongs and educational qualifications.

**Second Part**

This part of the questionnaire was sub-divided under four dimensions of continuous

professional improvement viz; adaptation, flexibility, empowerment and creativity. It comprises of 20 statements; 5 under each dimension.

**Analysis of The Data**

The data was analyzed with the help of following statistical techniques;

1. Analysis of Variance (ANOVA) to determine the main and interaction effects of three independent variables viz; gender, faculty and marital status on the dependent variable of continuous professional improvement.
2. Calculations of t-ratios where F-ratios were found to be significant.

**Methodology, Results and Discussion**

The statistical analysis pertaining to main effects of S, F and M.S with respect to continuous professional improvement are given vide table-2 where (N=292)

**Table-2  
Summary Table of ANOVA for Main Effects of S,F and M S  
On Continuous Professional Improvement**

| Symbol | Sum of Squares | df | Mean Square | F-value | Level of Sig |
|--------|----------------|----|-------------|---------|--------------|
| S      | 466.253        | 1  | 466.253     | 17.985  | 0.01         |
| F      | 37.040         | 2  | 18.520      | 0.714   | -            |
| M.S.   | 18.253         | 1  | 18.253      | 4.704   | 0.05         |

The perusal of table-2 reveals that the main effects of gender and marital status are significant at 0.01 and 0.05 level whereas for faculty, it is not significant even at 0.05 level. This confirms that there are differences among male and female; married and

unmarried in-service teachers regarding their perceptions on continuous professional improvement. Since, F-values for S and M.S are significant, it is considered necessary to analyze them further by finding out their t-ratios.

**Table-3  
t- ratio for Variable of Gender(S)**

| Symbol | N   | M     | SD    | SE <sub>M</sub> | Treatment Level | t-ratio | Level of Sig. |
|--------|-----|-------|-------|-----------------|-----------------|---------|---------------|
| S1     | 152 | 15.55 | 5.094 | 0.416           | S1-S2           | 4.227** | 0.01          |
| S2     | 140 | 18.08 | 5.122 | 0.418           |                 |         |               |

**\*\* Significant at 0.01 Level of Confidence**

The observation of means for the two levels of gender shows that mean of S2 (18.08) is higher than mean of S1 (15.55). This is further confirmed by the significant t-ratio (4.227) for the differences between the means of S1-S2 level, significant at 0.01 level

which shows that male teachers have scored significantly higher on continuous professional improvement than female in-service teachers.

**Table-4  
t- ratio for Variable of Marital Status (M.S)**

| Symbol | N   | M     | SD    | SE <sub>M</sub> | Treatment Level | t-ratio | Level of Sig. |
|--------|-----|-------|-------|-----------------|-----------------|---------|---------------|
| M      | 147 | 17.05 | 5.375 | 0.641           | M-U             | 4.813** | 0.01          |
| U      | 145 | 16.55 | 5.129 | 0.318           |                 |         |               |

**\*\* Significant at 0.01 Level of Confidence**

The significant t-ratio for the differences between the means of treatment levels M-U reveals that married teachers have scored significantly higher on continuous professional improvement than unmarried in-service teachers.

engage in literacy activities as compared to teachers serving in different educational institutions.

The research findings of Umbach and Wawrzynski (2005) shows that faculty play an important role to create a unique learning environment for students and is significantly and positively related to academic challenges, student -faculty interactions and collaborative learning. The study further suggests that faculty members of colleges are more likely to

These results do not get support from research findings of Moen, Kelly and Magennis (2009); Wu (2010); who studied women in comparison to men and found that women have long duration of learning engagement, but there is variation in opportunities to access lifelong learning for both the genders. They further highlighted that but as women are entering job market, they have to shoulder their responsibilities with men to raise children and maintain their households. This gradually has

changed their social environment by making them more aware in terms of their; capacities, capabilities and life skills.

The findings are in line with research work of Arsal (2011); who conducted a research on prospective teachers in faculty of education and revealed that learning tendencies and quality of prospective teachers was found to be positive and high. The study further demonstrated that the effect of gender and faculty of prospective teachers on learning was not significant.

#### **Analysis of Variance for The Main Effects of Gender, Faculty And Marital Status With Respect To Continuous Professional Improvement For Pre-Service Teachers (N=293)**

F-values for the main effects of gender, faculty and marital status pertaining to continuous professional improvement are given vide table-5

**Table- 5**

#### **Summary Table of ANOVA for Main Effects of S, F and M. S on Continuous Professional Improvement**

| Symbol | Sum of squares | df | Mean square | F-value | Level of Sig. |
|--------|----------------|----|-------------|---------|---------------|
| S      | 37.427         | 1  | 37.427      | 1.693   | -             |
| F      | 13.027         | 2  | 6.513       | 0.295   | -             |
| M.S    | 12.906         | 1  | 12.906      | 0.584   | -             |

The above table reveals that the main effects of S, F and M.S are statistically insignificant for continuous professional improvement for pre-service teachers. It further indicates that these variables have come from the sample means which do not differ from one another. The findings of the study at hand are not in agreement with those of Ferret and Smith (2010); who found that with increased awareness and understanding, pre-service teachers become more confident in their practices and this encourage them to improve their level of performance and learning.

The significant t-values and analysis leads to draw the following conclusions;

Male and female in-service teachers differ significantly from each other on continuous professional improvement indicating that male teachers have scored significantly higher than female in-service teachers on continuous professional improvement. On the basis of computation of t-values, married in-service teachers are significantly scored higher on continuous professional improvement when compared to unmarried teachers. Male and female pre-service teachers do not differ significantly from each other on continuous professional improvement. On the other hand, perusal of the F-ratios for main effect of faculty reveals that F-ratios are insignificant for continuous professional improvement for pre-service teachers. The research findings are in agreement with the research work of Korthagen (2005); who stressed that personal empowerment of teachers' is an attitude towards lifelong learning and this fosters relevant self-development for continuous development among teachers by which they employ devices like enquiry, reflection and so on.

#### **Educational Implications of The Study**

The present study varied at two levels of gender, three levels of faculty and two levels of marital status which will led the way to gain insight, how teachers' gets affected. Further, this will help teachers to position their knowledge coming from literature and revise it accordingly, so as to accommodate change and growth of knowledge.

1. The results of the present study suggest that faculty for a teacher is of great utilitarian value because it enables him to improve his skills and abilities related to the subject he teach and learn. This in-turn enable him to work and plan their learning and continuous professional improvement in a way that matches with his subject knowledge.
2. The results of the present study can be used by teachers both in-service and pre-service; to become experts if they take into account the extent to which continuous professional improvement can make them 'student' and 'teacher' wise better as knowledge and cultural transmitters.
3. The findings of the present study can provide necessary feedback and insight to in-service and pre-service teachers' to understand and enact continuous professional improvement in a way, that they can make initiatives for their continuous professional development.

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