

# FACULTY COMPETENCE AND DEVELOPMENT METHODS IN HIGHER EDUCATION: A CRITICAL ANALYSIS

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**Abstract** Education is the backbone of any economy and educators are the biggest actors of the education system. Their competence development is very important. The previous literature showed that faculty development is possible through various development techniques and there are a lot of techniques that are adopted from traditional time and some are developed recently after recognizing their need. The authors in this article have made a critical analysis of these traditional and modern faculty development techniques and their appropriateness for the development of different competencies among educators of higher education. This study has been carried out through literature review. The study concludes that 'learning by teaching community' is the most important technique for competence development of teachers followed by 'learning from students' feedback', and 'mentoring programmes'.

**Keywords:** Faculty Development, Faculty Competences, Faculty Development Techniques, Higher Education, Learning by Teaching Community, Learning by Peers and Students' Feedback

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## INTRODUCTION

Education is a process that encourages frequent progress through the development of one's abilities, and the growth of one's interests (Bonstingl, 1992). Improvement in the education system of the nation leads to reinforcing the skills of its natives and ultimately leads to maximising their potential. Building up skills and capacities in all domains is indispensable for techno-economic development (Capili, 2003). The education system is striving for competency-based transformation (Holmboe et al., 2011; Seezink & Poell, 2010; and Foot & Megginson, 1996). Educational reforms around the world are setting ambitious goals for students' learning. This vision of educational reform can be achieved through changes in classroom practices, which largely depend on teachers (Fullan & Miles, 1992; Spillane, 1999). Multiple and complex social changes and challenges in education system require well-educated, flexible, and highly competent teachers to affect those changes and meet the challenges (Geldenhuis & Oosthuizen, 2015). The quality of teachers influences the reforms of an institute, teachers' motivation to participate, and implementation of innovative approaches to teaching and learning (Gorozidis & Papaioannou, 2014). Ongoing

changes in vocations, increasing students' diversity, economic development, business development through applied research by educational institutions, changes in educational approaches, and performing leadership roles are compelling changes in the educational system (Hoekstra & Crocker, 2015). It is not possible without support and guidance (Ball & Cohen, 1999; Putnam & Borko, 1997; Wilson & Berne, 1999). It must be institution's broad mission to professionalize the educational activities of teachers, enhancing educational infrastructure, and increasing educational capacity for the future, so that novice as well as experienced teachers get opportunities for their ongoing professional development and support (Swanwick, 2008).

However, professional development activities are sadly inadequate (Borko, 2004). Various educational experts in their reports stress on limitations of faculty development programmes. So, there is a need to take international initiatives for the development of the faculty in the educational enterprise. More emphasis should be laid on how faculty development can be accomplished (Holmboe et al., 2011). In this review paper, we are trying to find out a relationship between development activities and teachers' competence from literature.

## LITERATURE REVIEW

### Employee Development

The activity, which leads to the acquisition of new knowledge or skills towards growth is known as development (Nda & Fard, 2013). It is a lifelong process, which includes both gradual, incremental improvements and revolutionary steps. Meaningful development involves change, innovation, and learning rather than a sole quantitative increase in skills and knowledge (Antonacopoulou, 2000). Development is basically an act or the result of developing; whereas the term “developing” is a process of natural growth or advancement by consecutive changes. Formal education, capabilities, experience, relationships, and personality features, all help in the development of the employees (Noe & Kodwani, 2012). Development motivates employees to engage in more growth-related activities. Thus, employee development is defined as the process that motivates the employees to plan for and act on such activities. The development process works on a recurring basis and it is continuous in nature (Garofano & Salas, 2005). It enhances overall performance and effectiveness of employees by developing their attitude, knowledge, skills, experience, and abilities (Rahman & Nas, 2013). The roots of the employee development reside in the vision, mission, and values of the organisations. So, employee development is far more comprehensive than any training programme (Berfield, 2007).

### Faculty Development

Faculty development is an utmost important factor in accessing the quality in education institution (Gupta, Gollakota, & Sreekumar, 2003). Academic vivacity depends on the interest and expertise of the faculty. Faculty development plays a critical role in promoting academic excellence and innovation. It is a vital tool for improving the educational liveliness of any institution by paying attention to the faculty competencies and to the policies of the institutions required for educational excellence (Wilkerson & Irby, 1998; Mndebele, 1997). Development activities provide a platform for educators to become effective teachers and know more about the institute’s culture and gain knowledge (Barksdale, Woodley, Page, Bernhardt, Kowlowitz, & Oermann, 2011).

The literature reveals that faculty development is the cultivation of professional skills of the academicians (Bhatnagar, Srivastava, & Singh, 2010). In literature, the term ‘faculty development’ has also been referred as ‘staff development’ or ‘professional development’ (Guskey, 2003; Steinert, 2005). There is a tremendous revolution in the ways of teachers’ development (Avalos, 2011; Bleicher, 2014). The terminology of ‘professional development’ and ‘professional learning’ has changed with ‘in-service

training’ and ‘staff development’ (Bleicher, 2014; Jaipal & Figg, 2011). Continuing Professional Development (CPD) is the main strategy for the advancement of teaching and learning quality through enhancing teachers’ professional learning (Huffman, 2011; De Vries, Jansen, & van de Grift, 2013). CPD helps in updating and enhancing educational practices. This is synonymous with “in-service training”, “continuing education”, or “professional training” (OECD, 2012). Nowadays, CPD adopts a more professional learning approach rather than merely transferring of knowledge about teaching and developing the skills of teaching (Maxfield, Ricks-Dooneen, Klocko, & Sturges, 2011; Schwartz, Lawson, Masters, & Milillo, 2009).

Previously, the main objective of faculty development was to prepare the faculty for teaching only and primarily dealt with instructional skills (Eash & Lane, 1985; Barksdale *et al.*, 2011; McLean, Cilliers, & Van Wyk, 2008). But, now it extends to research and academic leadership (McLean *et al.*, 2008). Steinert *et al.*, (2006) defined faculty development as “a planned programme, or set of programmes, designed to prepare institutions and faculty members for their various roles, with the goal of improving instructor’s knowledge and skills in the areas of teaching, research and administration”. Faculty development is the improvement of required knowledge, skills, or performance (Bligh, 2005; Gaff & Simpson, 1994; Hubbard & Atkins, 1995). Sheets and Schwenk (1990) defined faculty development as “any planned activity to improve an individual’s knowledge and skills in areas considered essential to the performance of a faculty member in a department or a residency programme (e.g. teaching skills, administrative skills, research skills, clinical skills)”. Another definition is “the process by which teachers acquire the knowledge, skills, and values that will improve the service they provide to the clients” (Hoyle & John, 1995). However, some researchers emphasize that achievements of students, faculty, and institutions are the ultimate goals of the faculty development (Bland, Schmitz, Stritter, Henry, & Aluise, 1990 and Steinert *et al.*, 2006). Faculty development is a continuous process in which growth and development opportunities are made available to the faculty through experience in the context of the teaching practices (Villegas-Reimers, 2003). Teachers’ professional development is about learning, how to learn, and experimenting new knowledge for students’ growth. Professional development needs of a teacher must be analyzed because it is not necessary that all forms of development opportunity work same for all teachers. A lot of things like their interactive links and influence of groups of teachers, educational needs of students, education system expectations, working conditions, and available opportunities for the development of teachers must be considered (Avalos, 2011).

Eash and Lane (1985) defined four faculty development activities; faculty exchange, faculty retraining, faculty updating, and individual professional growth. Faculty

exchange is moving of faculty members from one institution to another to augment the shortage of faculty or sharing of resources. Faculty retraining refers to the activity of training of faculty members from one academic area into other needful areas. Faculty updating is developing an advanced level of knowledge about teaching and research in a particular field by studying in other institutions. The individual professional growth of faculty is achieved by observing sabbaticals and taking part in seminars, doing research, studying literature, and attending tutorial sessions with faculty members of another institution. However, faculty of the professional institution has highly rated the activities of updating and professional growth for their personal development. Professional development activities based on priority are categorised into the three categories viz., teacher-priority activities, institution-priority activities, and professional-priority activities. The activities like study in a subject area or classroom-based action research selected by faculty for their own development and professional growth refer to teacher-priority activities. However, the activities selected by institutional leadership and staff collectively for the improvement and development of the institution or building learning environment are known as institutional-priority activities. The third types of activities are directly linked to the enhancement of professional status, commitment, and practices of the teachers and are known as profession-priority activities (SACE, 2008).

All activities both individual and in-group settings pursued by teachers that enhance their teaching skills are related to faculty development (Gupta *et al.*, 2003). Faculty development programmes are defined as all such activities like seminars, conferences, and individual counseling by the institution to perform in the instructional, personal, and institutional field for the faculty to perform its various responsibilities (Brawer, 1990; Odabaşı, 2003; Steinert, 2000; Moeini, 2003). There are many forms of professional development activities such as consultations, peer and expert coaching, and courses that enhance the existing professional qualification. Besides these, others include demonstrations and peer observation, mentoring, induction for novice teachers, job rotation, team and group work, clustering of institution and institution visits, designing and executing institution improvement projects, communities of practice, lesson studies, reflective supervision, and technical assistance (Gulston, 2010; Ramnarain, 2008; SACE, 2008).

Teacher education programmes have five orientations viz., academic, technological, personal, critical, and practical (Feiman-Nemser, 1990). Traditionally, these programmes have an emphasis on technological and practical orientations. But now-a-days, the terms like teaching technique, mastery of standards, skill development, master-apprentice, experienced educator as experts are used in teachers' education programmes. This signifies that there is

a great dominance of technical-practical thinking in these programmes and are more rational (Marlowe & Page, 2005). Faculty development programmes facilitate a platform for educators to gain knowledge and skills for more effective teaching, create a network of trustworthy colleagues for support, and learn about the culture of the institutions (Penn, Wilson, & Rosseter, 2008).

These programmes help in building and enhancing teaching abilities, research abilities, connectivity, contribution as a researcher, access to research resources, and professional growth of teachers (Palm, 2007). The faculty is engaged both in formal and informal manner. Faculty must select the development programmes that fulfill their needs and goals (Steinert, 2010). The holistic view of faculty development includes the development of both individual and organisations. In individual development, teachers' attitude and belief about teaching and learning are addressed. However, rewards and recognition create opportunities for learning and address the issues that impede the effective educational practices (Steinert, 2010b). Organisational change and development are utmost important to implement new knowledge and skills (Steinert, 2010). Other effective learning approaches like collaborative, inquiry-based, and practice focused are prevalent for learning and development of the organisation (Opfer, Pedder, & Lavicza, 2011; Priestley, Miller, Barrett, & Wallace, 2011; McGarr & McCormack, 2014). The major benefit of these development programmes is to pool the expertise and strengths of teachers. It would enhance the professional development of educators through co-learning. The experienced teachers critically reflect on their teaching practices and share the practices (Lai, Li, & Gong, 2016). A faculty development programme must have following contents: learning need analysis, objective setting, teaching skills, supervision, career advice, working with portfolio, management of poor performance, diversity and equal opportunities, educational theory, small group facilitation, lecturing, team development, management and leadership of educational change, workplace based assessment, appraisal, and feedback to improve individual teaching abilities (Swanwick, 2008).

## RESEARCH METHOD

The literature review carried out to identify different faculty development techniques that build and enhance different competencies among college and university teachers. Then these techniques have been rated in the descending order of their importance in terms of their contribution towards building and enhancing different competencies. The technique that contributes to the maximum number of competencies has been rated as the most important.

## COMPETENCES OF THE FACULTY

The different competencies that are required in the faculty of higher education have been summarised in Table 1.

**Table 1: Main Competences of the Faculty**

Competency	Proficiency
Information-communication	Ability to explore, analyse and communicate the information to learners (Maltseva, Kolomiets, Glizerina, Kurochkina, Andreeva, & Shestakova, 2015) through the common way of communicating (Hollins, 1993). Communication competence enables teachers to demonstrate excellence in cooperation with others in the educational process (Maltseva <i>et al.</i> , 2015).
Social working	The ability of a teacher to combine personal interests with the interest of society by making independent professional decisions (Marinković, Bjekić, & Zlatić, 2012). This is only possible when teachers bring changes in others, though <i>consequence-based competence</i> (Saeed and Mahmood, 2002).
Reflective teaching	Reflective teaching competence enables the faculty to understand and recognize new approaches to teaching by performing in culturally diverse population. This competence is achieved by maintaining written records while working with diverse populations and using them as a reference in developing more effective approaches to challenging situations (Hollins, 1993). It includes <i>cultural competence</i> , which is an understanding of national and international culture (Marinković <i>et al.</i> , 2012) and ability to use the knowledge of social and cultural environment laws (Maltseva <i>et al.</i> , 2015). It improves <i>competency in cosmopolitan perception, transcultural understanding, and cooperation</i> (Barth, Godemann, Rieckmann, & Stoltenberg, 2007).
Planning and organising teaching learning	The ability of teachers to promote learners knowledge or performance to a more advanced and complex level. It is essential to plan and supervise the instruction to ensure advancement in students' competence level (Hollins, 1993). This cannot be accomplished without <i>organisational competence</i> , which is the ability to arranging and managing the educational activities of students (Marinković <i>et al.</i> , 2012) and the capability to perform in a team (Maltseva <i>et al.</i> , 2015). It is extended with competences like <i>designing curricula, implementing</i> in line with educational policies (Kagaari & Munene, 2007), programme planning, development and evaluation, instructional planning, execution, evaluation, and management (Manley & Zinser, 2012).
Pedagogical	<i>Pedagogical competence</i> deals with deep knowledge of practices, methods, and processes of teaching and learning. It must be deeply embedded into the educational endeavor, values, and purposes. This competence gives a general idea regarding classroom management, student learning, lesson plan development and implementation, and assessment of students. This competence cannot be achieved without understanding the theories of cognitive, social, and learning and how these theories are applied in the classroom (Geldenhuis & Oosthuizen, 2015). It encompasses <i>didactic competence</i> that is related to transferring of knowledge to students in an interesting manner (Marinković <i>et al.</i> , 2012). <i>Pedagogical competence</i> helps in identifying the technologies for analyzing and generalizing the educational experiences (Maltseva <i>et al.</i> , 2015). <i>Motivation competence</i> of teachers creates a conducive environment for learning along with support, assistance, and encouragement to the students in their development (Geldenhuis & Oosthuizen, 2015).
Innovative	<i>Cognitive creative competence</i> is the comprehensive organisation of the learning process to harmonize the cognitive skills of students with the goals of teaching (Marinković <i>et al.</i> , 2012; Saeed & Mahmood, 2002; Nandan, Samaddar, & Nandan, 2010).
Psychological	<i>Psychological competence</i> is the ability to admire everyone's unique personality (Marinković <i>et al.</i> , 2012). It works well with the competence like serving students with special needs and assisting them in improving their basic skills (Manley & Zinser, 2012).
Leadership	<i>Leadership competence</i> builds confidence and provides directions in teachers' work. It fulfills the purpose of performance and accountability and informs the teachers what they are in their job for (Muzis, 2008). It is further composed of four more competencies and skills; <i>management of attention</i> (inspires others who accept the leader's ideas as theirs); <i>management of tasks</i> (prioritizing according to their importance); <i>management of trust</i> (emotional); and <i>self-management</i> (self-education, self-development, self-improvement, self-understanding, enrichment, willpower and commitment (Smilga & Žogla, 2008; Maltseva <i>et al.</i> , 2015). It also includes other competencies such as <i>evaluating and foresight thinking</i> . <i>Evaluative competence</i> is the ability to observe the students' achievements and the learning process, the performance of self and of colleagues, and critical analysis of the education system as a whole (Marinković <i>et al.</i> , 2012).
Guidance	Providing information to the students on educational and career opportunities (Manley & Zinser, 2012). Guiding students on working and communicating with others at all levels, presenting ideas and plan effectively, and building teams and negotiating (Kagaari & Munene, 2007; Marinković <i>et al.</i> , 2012).

Competency	Proficiency
Knowledge	<i>Knowledge competence</i> is a proficiency of teacher for the content of their own subject and research on their own practices for learning new approaches to teaching and better achievements of students (Marinković <i>et al.</i> , 2012). It is composed of two kinds of knowledge viz., practical knowledge and syntactic knowledge. Practical knowledge refers to knowing of key facts, principles, concepts, and explanatory framework in that particular subject. However, syntactic knowledge is the ability to inquire in the field and introduce new knowledge in a well-accepted manner (Geldenhuys & Oosthuizen, 2015). It also includes <i>exploratory competence</i> (Saeed & Mahmood, 2002).
Interdisciplinary	<i>Interdisciplinary competence</i> in the context of teaching and research requires new forms of communication and cooperation among different disciplines. Heterogeneous teams work together in solving complex problems and understanding various perspectives to extract proficiency (Barth <i>et al.</i> , 2007).
Interpersonal	<i>Interpersonal competence</i> is the ability of teachers' to be sensitive towards the needs and responses of their students. This competence creates a supportive and comfortable environment for personal and academic growth and development of students (Hollins, 1993; Nandan <i>et al.</i> , 2010; Barth <i>et al.</i> , 2007; Manley & Zinser, 2012).

## FACULTY DEVELOPMENT APPROACHES

Steinert (2010) suggested three approaches for faculty development. First, individual approaches to faculty development that includes learning from experience, peers, and students. Second, group approaches to faculty development that encompasses structured faculty development activities such as workshops, seminars, short courses, longitudinal programmes, fellowships, and degree programmes. Third, work based learning by becoming a member of a teaching community. The individual approach of faculty development enables the teacher to learn through role modeling or critically thinking about their self-actions. In other words, the individual approach is based upon the concept of 'reflection'. This concept has three notions: reflection in action, reflection on action, and reflection for

action. The concept is widely used by faculty for critical analysis and their self-assessment for development purpose. Reflection in action means faculty to analyze themselves while performing any action or task. Reflection on action defines the impact on faculty and on students after performing any task or role by the faculty. Reflection for actions shows the learning for the future that learns from the past actions. Learning from peers and students may be done through peer and students feedback.

The details of traditional and new faculty development techniques have been summarised in Tables 2 & 3.

**Table 2: Traditional Techniques**

Technique	Technique Definition	Merits	Demerits
1 Individual teaching consultation	It may be on request or programmed. In the programmed consultation, the teacher may approach consultant only in case of specific needs or issues. In the programmed consultation, the organisation may depute senior and experienced faculty members who approach new faculty members at regular intervals (Wilkerson & Irby, 1998; Elliot, Skeff, & Stratos, 1999).	Considers the context within which teachers work. On request or periodic consultation. Provides solutions related to a specific problem. Guidance on the factors that promote students learning and factors that does not.	Reluctance on the part of teachers to consult. Lack of competent consultant in the institution. Programmed consultation is highly time-consuming. Lack of continuous development.
2 Seminar	It includes lecture and demonstration on particular subjects by making use of visual materials and equipment (Skeff, Stratos, Campbell, Cooke, & Jones III, 1986).	Highly learning experience due to demonstrations, visuals, and interactive tools. Covers large class size. The advantage of collective knowledge through discussion with attendees, questions.	No hands-on-experience. Poor results if attendees do not come prepared to the seminars.

Technique	Technique Definition	Merits	Demerits
3 Workshop	This technique is just similar to seminars, except lecture demonstrations and hands-on-work experience on a particular subject (Wilkerson & Irby, 1998; Barnes, Berendt, B., Csirik, J., Hares, Haar, Jones, Kashoki, Kearney, Mary-Louise., Maamouri, McDonald, Ratanachai, Silvio, Donckt, Rinsum, & Vessuri, 1994).	Have greater impact due to hands-on-work experience and small group sizes.	Time-consuming. It is possible only for fewer people at one time. Constraints such as adequate lab facility and their availability.
4 Conference	It is a gathering of several people to discuss a particular topic. In an academic conference, academicians and scientists come together and present their views of findings (Barnes <i>et al.</i> , 1994).	Knowledge updates with latest contemporary trends on the theme subject. A platform for discussion in which expert panel members give their expert inputs on the theme subject.	Time constraint and a large number of speakers. Do not provide complete clarity on the theme subject. Clutter due to a large number of individual speakers who speak in a segregated manner.
5 Short-term or refresher course	The course is offered to serve teachers to enhance their already acquired knowledge through lecturing or peer interactions. Their duration varies from three days to three weeks (Raudenbush, Eamsukawat, Di-Ibor, Kamali, & Taklam, 1993).	The opportunity for better learning due to peer interaction. More effective than one to two-day conference. Helps in building community with experts and attendees from outside the institute. Advanced learning.	A lot of dependence upon resource person. Difficult to arrange resource persons. The reluctance of faculty to move out from their native place at farther distances for a longer period.
6 Charismatic speaker	A charismatic person through his personal actions and characteristics give individual influence on the audience that demands more from the speaker (Towler, 2003; Rosenberg, & Hirschberg, 2009).	Helps in envisioning i.e. creating the picture of the future. Energizes i. e. generate a lot of motivation, or energy, excitement. Makes people enablers through emotional assistance.	Sometimes over depending on the speaker. Reluctance to disagree with the speakers. Limitation of the range of the individual speaker.

Table 3: Latest Techniques

Technique	Technique Definition	Merits	Demerits
<b>I. Individual Approaches</b>			
1 Reflection	An individual approach is based on reflection. It involves investigation of one's own teaching practices (Schön, 1996). This requires a continuous cycle of self-observation and self-evaluation (Ahmad, Said, Zeb, Rehman, Ahmad, & Khan, 2013).	1. Help in the analysis of development need. 2. More realistic. 3. Make faculty self-propelled for development. 4. Continuous professional development.	1. Can't progress without the right attitude and mindset. 2. Though individual, but still collaborations of others required for providing feedback, challenges, and creating enthusiasm. 3. Complacency may restrict development.
2 Learning from peer coaching or peer mentoring	It is a collegial process with two faculty members working together to develop their teaching approach. It can be reciprocal or one way (Brancato, 2003; Skinner & Welch, 1996).	1. Intense discussions. 2. Effective peer learning 3. Teachers find themselves more comfortable. 4. In one way peer coaching, junior faculty members have a role model. 5. Can express their personal problems.	1. Nonproductive if both faculty members have similar inadequacies.

Technique	Technique Definition	Merits	Demerits
3. Learning from peers and student feedback	The faculty member takes into account the feedback of peers and students based upon their critical analysis (Steinert, 2010).	1. Involvement of students makes development exercise more pertinent. 2. Critical analysis.	Inhibition of students and peers to give adverse remark. Only good remarks due to personal bias of peers and students may lead personal complacency.
4. Online workshop	A technology enabled individual workshop (Yang & Liu, 2002).	1. One can discuss with the expert without restriction at time and place. 2. Continuous development.	Technical snags. The individual should be tech savvy.
<b>II. Group Approaches</b>			
5. Workshop	New workshops differ from traditional workshops in terms of interactive lectures, new creative projects or case studies, role play and simulations (Steinert, 2011).	1. Enhance the cognitive level at high benchmark. 2. Enhance application abilities.	Restricts participation. May conflict with the teaching schedule. Cognitive overloaded.
6. Seminar	Same as traditional approaches.		
7. Conference	Same as traditional approaches.		
8. Short course	Same as traditional approaches.		
9. Longitudinal Programmes	The select faculty member undergoes development programme in a series of one to two years (Steinert <i>et al.</i> , 2003; Elliot <i>et al.</i> , 1999).	1. Relatively maintains the greater continuity in the development programme. 2. Enhances academic leadership.	May conflict with teaching schedule of the faculty. Requires high level of integration with participatory institutions. Mortality.
10. Workplace Learning	It is an interdisciplinary learning at the workplace in which two or more professionals from diverse disciplines collaborate (Avalos, 2011; Swanwick, 2008).	1. Promotes interdisciplinary learning. 2. Enriches organisational culture. 3. Promotes organisational renewal.	Limited readiness on the part of faculty members. Can't work on the bureaucratic structure.
11. Learning by teaching community	It is a collegial and collaborative learning (Sachs, 2003) in which teachers share and critically interrogate their practice (Stoll & Louis, 2007). There are two components of learning by teaching community. 1) Teachers' professional community 2) Organisational learning Teachers' professional learning has three independent features. Shared responsibility creates structural and cultural interdependence between teachers. De-privatisation practice refers to formal and informal sharing about classroom management, pedagogical approaches, and lecturing practices. Reflective dialog refers to the exchange of ideas between multiple colleagues through deeper discussions about what works and what does not work. Organisational learning is a professional learning between a cohesive group through searching new information, generating and evaluating new ideas, which may be cross-pollinated. Teachers' professional community can be developed within the institute, across different institutes (Jackson and Temperley, 2007) through collaboration or partnerships between institutes (Lieberman, 1995).	Social learning. Reflective inquiry-based learning. Critical colleagueship. Develops academic leadership.	Difficulty in the formation of community due to lack of common interest among a large number of teachers. Requires strong leadership.

Technique	Technique Definition	Merits	Demerits
12. Faculty Development Educational Programme	Longitudinal educational experience with financial support that generally spreads over one to three years with a cohort of peers for development as educational leaders and improving research skills (Wilkinson & Irby, 1998; Skeff, Stratos, Mygdal, DeWitt, Manfred, Quirk, Robert, Greenberg, & Bland, 1997; Gruppen, Simpson, Searle, Robins, Irby, & Mullan, 2006; Searle, 2006).	Fairly long period. Enthuse faculty due to financial support. Advancement in academic career.	Financial constraints. Shortage of faculty in the institutes.

## DISCUSSIONS

The literature on faculty development has elucidated the traditional and latest techniques of faculty development that are adopted by various higher education institutions. So, here by doing a critical analysis of various faculty

development techniques and competences they require, we have evaluated the development techniques required to develop the competences of teachers.

Appropriate development techniques for different competences have been summarised in Table 4.

**Table 4: Appropriate Development Techniques for Different Competences**

Competency	Appropriate Development Technique
Information-Communication	Charismatic speakers, Learning from students' feedback
Social Working	Learning by teaching community, Mentoring programmes
Reflective teaching	Learning by teaching community
Planning and organizing teaching learning	Reflection, Individual teaching consultations, Learning from peer coaching or peer mentoring, Learning from students' feedback
Pedagogical	Mentoring programmes, Seminars, Workshops, Charismatic speakers, Learning from peers and students' feedback
Innovative	Reflection, Learning by teaching community, Mentoring programmes
Psychological	Learning from students' feedback
Leadership	Reflection, Learning by teaching community, Mentoring programmes, Learning from students' feedback, Learning from peer coaching
Guidance	Students' feedback, Conferences
Knowledge	Longitudinal programmes, Reflection, Online workshops, Workshops, Seminars, Conferences, Short term courses, Workplace learning, FDPs, Learning by teaching community
Interdisciplinary	Workplace learning, Learning by teaching community, FDP, Longitudinal programmes, Peer coaching
Interpersonal	Peer coaching, Workshops, Seminars, Conferences, Short term courses, Learning by teaching community

'Learning by teaching community' has been found the most important faculty development technique. This is so because it is a collegial and collaborative learning. The critical investigation of their practices helps in developing relevant and contemporary ideas and practices. At the same time, they are able to identify redundant and other such practices that seem to be important but actually adverse to the larger interest of educations. The cross-pollination of ideas results into experimenting new things that they had not thought of earlier.

The biggest stakeholders in the education system are students. Their feedback is very important. In marketing, the consumer's feedback is given utmost importance to craft and execute marketing policies. Similarly, a student

is a consumer of education services. Therefore, 'students' feedback' is significantly important for building pertinent competencies among faculty and teaching them.

Similarly, 'mentoring programmes', 'reflection', and 'peer coaching' contribute significantly because in these techniques the teacher either individually, or with the help of mentor or peer introspect his/ her practices and modify according to the professional requirements.

## CONCLUSIONS

The study concludes that 'learning by teaching community' is the most important technique for competence development of teachers. This technique helps in developing

the competences like social working, reflective teaching, innovative, leadership, knowledge, interdisciplinary, and interpersonal. Second most important development technique is 'learning from students' feedback', which increases competences like information-communication, planning and organizing teaching learning, pedagogical, psychological, leadership, and guidance. Third most important development techniques are 'mentoring programmes', 'reflection', and 'learning from peer coaching'. These techniques together build up competences such as social working, pedagogical, innovative, leadership, planning and organizing teaching learning, knowledge, interdisciplinary, and interpersonal.

### LIMITATIONS OF THE STUDY

This is a theoretic review without any empirical investigation. However, the study gives leads and future scope to carry out empirical research for testing different hypotheses.

The study also does not classify the categories of teachers either serving at different levels or in different sectors of education.

### RECOMMENDATIONS

The faculty of different institutes should come together on a common platform to form communities in which they should frequently discuss deeper issues of education such as new knowledge generation and dissemination of knowledge.

In the global environment, the students with different socio-cultural background study at a common place. Faculty should interact with the students more closely to understand their issues, interests, and inherent strengths and weaknesses.

The institutions should develop a mechanism of co-creation by students into institute's affairs.

The institutes should provide an environment in which the faculty members should work in a cohesive manner instead of serving as office silos.

The seminars, workshops, and short-term courses should be objectively designed and their outcome must be measured objectively.

The faculty members should consistently introspect themselves through self-observation and self-evaluation. They need to be self-propelled for self-improvement and self-education.

The recruitment and selection procedure should be capable of identifying acumen of self-introspection and self-development among the aspirants of the teaching profession.

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