

Need Assessment of Continuous Professional Development of University Teachers

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Abstract

This study investigated the existing gap between the present and the required need for continuous professional development of university teachers in Azad Jammu and Kashmir. It aims to review existing training programs and assess the training needs of university teachers to identify key areas for improvement. The study sample consisted of five hundred male and female university teachers, randomly selected from five public-sector universities in Azad Jammu and Kashmir. The questionnaire was prepared on a five-point Likert scale. The questionnaires comprised thirty-five items. Mean score, frequency, and percentage were applied as statistical tools to analyze the data. The findings of the study showed that university teachers in AJK need continuous professional development in areas of using instructional material, teaching meta-cognitive strategies, monitoring the students and providing regular appropriate feedback, Using effective ICT instruments, modifying the behavior of students, knowledge about students thinking and learning, motivational techniques and strategies for students learning. This study also provides valuable insights for policymakers and university administrators, especially when it comes to designing ongoing training programs for university teachers. The findings could inspire new approaches to continuous professional development (CPD) that ultimately enhance teaching effectiveness. The study could also pave the way for further research on continuous professional development of university teachers.

Key Words

Need Assessment, Continuous Professional Development, University Teachers

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Introduction

For shaping civilized nations we cannot deny the importance of higher education. For different spheres of life, higher education plays an important role in the training and provision of leaders in government and other professions. The higher education system is closely linked with the economic growth of any country which produces skilled and educated manpower for the national economy. For achieving the goals teachers are the foundations of any institute including the institution of higher education. The performance of teachers has a great impact on higher

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education success. For this reason, teachers need to be professionally qualified and trained to carry out their jobs effectively (Dilshad et al., [2019](#)).

Due to changing conditions, teachers must learn new skills to survive in society. Teachers are not successful and effective today if they have not learned new knowledge and skills. Teachers need to connect with modern technology and the latest information because many teachers use old teaching methods. Old and traditional methods of teaching do not work now and the methods currently used might not work in upcoming times (Saleem et al., [2014](#)).

To increase the performance of teachers and for reforms of universities, continuous professional development is essential. Professional development is a continuous process that motivates every teacher. It is helpful to find issues and their solutions in the classroom. Professional development of teachers improves the learning progress of students and has a positive impact on their results. It enables educators to set the highest standards possible in the teaching-learning process. After becoming a practitioner, continuing professional development (CPD) is a continuous process to acquire, learn, and modify skills and abilities. Enhancing talents and acquiring necessary skills is a continuous and proactive activity. There are different names for CPD, for example, Professional Education, Continuous Education, Professional Growth, and In-service training (Saleem & Ashiq, [2020](#)).

Robinson and Glosiene, ([2007](#)) stated that CPD is a method through which teachers regularly get in-service training and education to refresh their knowledge, pick up the latest abilities, maintain their professional skills, and enhance their capabilities. There is a need to extend its procedure and think about it critically and carefully. A Continuous professional development program is evaluated on factors such as instructors' topic knowledge, teaching abilities, teachers' self-efficacy, and student achievement of outcomes. It increases both the institute's effectiveness and students' academic accomplishments (Bolam and Weindling [2006](#)).

It is evident that few case studies have been made focusing on the barriers to university teachers' professional development. The Pakistanis have also highlighted the importance of CPD (Dilshad et al., [2019](#).) Therefore, CPD is recognized by other researchers in the Pakistani context (Saleem et al., [2014](#)). Nevertheless, the researchers could not find any remaining studies in the AJK context about the importance of the ongoing professional development of university teachers. The purpose of the current study is to fill this gap by reviewing available training programs and university teachers' CPD training requirements, and suggesting training programs for university teachers in Azad Jammu and Kashmir.

Literature Review

Education enables the transmission of information, abilities, and experiences from one generation to the next. It helps to change the behavior of people in society who are committed to enhancing the economic success of the country. To face challenges and to create new opportunities for the economy of the country, a trained and highly qualified teaching staff is required. Training improves teachers' practical knowledge, abilities, and confidence, according to (Saeed & Farooqi, [2014](#)), training must be made a continuous process to establish in teachers the habit of taking the initiative to grow in their domains.

Asad et al., ([2007](#)) state that teachers have a significant role in boosting the educational standards of the country. They play an important role in transferring knowledge, habits, and other attributes from one generation to the next. No system of education can be more sophisticated than its teachers, and the educational process contributes to reaching national goals. Teachers with a good education and continuous training may change society. To do this, a determined effort must be made to develop future teachers. The solution to this problem is to provide teachers with regular, formal training.

Omar, ([2014](#)) states that in-service training boosts teachers' effectiveness. The knowledge and skills of teachers improve teaching and learning, which has boosted work output. In-service training for teachers is very necessary to face challenges and changes in the field of education. The professionalism of teachers needs to be improved fundamentally as well.

Need Assessment

Unmet needs or gaps between the current and required conditions can be found and addressed using a need assessment approach. The gap between the circumstances as they are and what is needed should be assessed to determine the requirement accurately. The motivation behind the demand might be a desire to fill a gap or enhance current performance. It is a system of practices used to assist individuals in advancing their organizations, communities, occupations, and educational practices. Finding the right answers and identifying issues could be aided by it. Once the issue has been identified, limited resources might be used to develop and carry out an effective solution. The process of producing an excellent solution that will meet the batch's requirements is made easier by acquiring relevant and enough data. For achieving the goals only a goal-oriented need assessment is helpful and successful (Saleem, [2016](#)).

Experts used need assessment to learn about significant problems and concerns that our community faces to create an efficient educational program. You may see what has already been completed and where there are still knowledge gaps by doing a need assessment. This broadens the scope and impact of educational activities by empowering educators to make well-informed choices in essential areas. The objectives of a need assessment are often continuous. Finding out what our target audience already knows and thinks is the first step in determining what educational products and services are needed. A second goal is to increase our target audience's capacity to use, accept, and access our learning resources. Once the issue or need has been identified, a needs assessment establishes the objectives, content, execution, target audience, and result of the intervention (Cohen et al., [2007](#)).

Continuous Professional Development

CPD, according to Melanie Allen, ([2009](#)), is the process of evaluating and recording the abilities, know-how, and experience that educators gain throughout the course of their careers in addition to any initial formal or informal training. It acts as a log of the information individuals learn, use, and encounter. Thus, a thorough definition of CPD is "different kinds of continuous activities (formal, non-formal, and informal) that aim to enhance the teachers' intellectual capacities (cognitive domain), including self-confidence, attitude, values, and passion, (affective domain), including skills and competencies (psychomotor domain), for enhancing personality and to carry out the duties of the profession of teaching properly by the changing times and needs of the prospects" (Srinivasacharlu, [2019](#)).

Purposes of CPD

The purpose of Continuous Professional Development (CPD) is to ensure that university teachers consistently enhance their skills, knowledge, and professional capabilities to meet the evolving demands of education. CPD focuses on improving teaching effectiveness by equipping teachers with modern pedagogical techniques and ensuring they stay updated with advancements in their respective fields and educational technologies. It enables teachers to adapt to the diverse needs of students, fostering inclusivity and addressing various learning styles and challenges. It encourages teachers' creativity. It increases teachers' self-confidence and motivates them to perform their responsibilities in the classroom more effectively. Teachers gain knowledge of technical developments, educational innovations, and classroom applications. There should be applicability to a certain standard to get the

desired outcomes. It motivates teachers and makes it possible for them to fulfill their current duties more successfully (Purdon, [2003](#)).

Needs and Importance of CPD

In the twenty-first century, there has been a significant generational change in the teaching profession due to a number of factors, including the development of digital technology. Teachers must always update and outfit themselves with ever-increasing skills and competencies to always be at the top of their field to develop competent future teachers for the twenty-first century. CPD ensures the following advantages for teachers.

- ▶ CPD continually equips the teacher educator to stay up-to-date with the latest innovations.
- ▶ Continuous professional development and in-service training can strengthen their professionalism.
- ▶ It reorients teacher educators by providing them with the most recent information and advancements in the field of education.
- ▶ It gives teacher educators ever-increasing digital abilities and competencies to manage hyper-connected information settings to train teachers for the 21st Century.
- ▶ It enables teacher educators to learn how to use the newest models, tactics, and instructional methods.
- ▶ It supports the development of a scientific perspective in teacher educators, which they may use in their actions and thought processes.
- ▶ It helps classroom teachers create a scientific mentality that they can apply to their behaviors and thought processes.
- ▶ It enhances teachers' capacity to encourage and coach prospective teachers as well as to provide them with advice and guidance.
- ▶ It enables teacher educators to participate in the creation and modification of curriculum, the creation, and evaluation of textbooks, etc.
- ▶ It enhances teacher educators' capacity to carry out detailed, ongoing, norm- and criterion-referenced assessments as well as online and electronic assessments of learners' academic progress.
- ▶ It strengthens the capacities of teacher educators to take on several roles, including those of tutor, instructor, program director, counselor, facilitator, researcher, and public official, to help aspiring teachers become intellectually capable, technically proficient teachers and citizens in this fast-changing world (Srinivasacharu, [2019](#)).

Professional Development of University Teachers

A range of approaches is used to study and analyze teachers' professional development in the related literature. However, the main focus of these trainings is always on the knowledge, understanding, and practice of teachers and the method through which they teach their students (Avalos, [2011](#)). The development of university teachers' careers has become one of the most current topics of discussion about certain concepts and educational programs. Reflections on a variety of training-related topics, such as institutional academic responsibilities and teaching in higher education, have emerged over time. This work helped us comprehend what the word "change" meant and create expert ways to ease the transition from first training to continuous training. According to the literature, professional development is seen as a critical evaluation process that provides for training practice, contract reviews, discovering the issues that teachers face, looking for solutions, and increasing one's understanding of the educational process (Duta & Rafaila [2014](#)).

CPD in AJK

The Higher Education Commission's (HEC) Academic Division held a workshop titled "Examination Policy and Assessment of Specific Learning Outcomes in Higher Education Institutions of Pakistan" to train university faculty

and examination staff members in order to support the implementation of HEC-approved policy guidelines on semester and examination systems. Teacher-made exams or open examinations were used to determine the student's level of achievement. MS Team was established for online classes, and The training's goals were to create classes in MS Teams, create class schedules in MS Teams, and Class rescheduling in MS Team, How to run an online course in Microsoft Teams, How to record classes in Microsoft Teams, The design, submission, and marking of quizzes in Microsoft Teams, as well as assignments, Students' attendance in MS Teams, form creation and use, and Microsoft One Drive use. It was decided to hold a one-day workshop on the FM Knowledge Case 2014 Methodology to mentor graduates. Another one-day training event was scheduled. Its goals included online course creation and a flower taxonomy assessment overview. Despite of these workshops and tranings university teachers still need improvements in many areas **they have insufficient** knowledge of advanced research methodologies, tools. And effective use of technology to enhance classroom engagement.

Research Methodology

For conducting the current research, the descriptive research design was adopted and a survey method was used to collect the data.

Population and Sample of the Survey

All teachers (1074) from five public universities of Azad Jammu were the study population. From all the five public sector universities of AJK, 50% of teachers (both male and female) were selected as a sample of the study, and a Stratified sampling technique was adopted to select the study sample.

Measures

To assess the need for ongoing professional development among University teachers in AJK, a questionnaire was developed for the teachers. Following a careful review of the relevant literature and professional advice, the questionnaire was developed. The questionnaire consists of 35 statements using a five-point Likert scale. Factors like lesson planning approaches, teaching, use of ICT, classroom management strategies, and psychological aspects were included in the questionnaire.

Data Collection and Analysis

The researcher collected data from university teachers after obtaining their consent for participation in the study. All clear instructions were given before data collection. All the respondents were assured about the confidentiality and anonymity of the data. Frequency, percentage, and mean score were used as statistical tools for the analysis of data.

Results

Table 1

Lesson Planning Strategies

Statement		SA	A	UD	DA	SDA	Mean
I create a realistic timeline	f	3	8	3	430	21	2.02
	%	1	2	1	92	4	
I am proficient in using teaching aids.	f	9	18	25	201	212	1.73
	%	2	4	5	43	46	
In lesson planning, I outline the learning objectives.	f	152	231	27	39	16	4
	%	33	50	6	8	3	

Table No.1, shows that Ninety-two percent of the teachers were disagreed with the statement that they developed a realistic timeframe while four percent strongly disagreed, two percent agreed and one percent strongly agreed. Four percent of teachers agreed and two percent strongly agreed with the statement that they are skilled in using instructional resources, while 46 percent strongly disagreed and 43 percent disagreed. However, only 3% of teachers agreed and 8% disagreed that they stated the learning objectives in lesson preparation, compared to 50% who agreed and 33% who strongly agreed. This is supported by a mean score of 4.

Table 2*Teaching*

Statement		SA	A	UD	DA	SDA	Mean
I provide students with the opportunity to learn and practice metacognitive techniques.	f	2	10	7	316	130	1.79
	%	0	2	2	68	28	
I can address higher-as-well as lower-level cognitive objectives.	f	3	7	4	247	204	1.62
	%	1	1	1	53	44	
I monitor students and provide regular appropriate feedback.	f	2	6	5	307	145	1.74
	%	1	1	1	66	31	
I know curriculum content and can use strategies for teaching it.	f	181	217	23	26	18	4.11
	%	39	47	5	5	4	

According to Table No. 2, two present of the teachers agreed with the statement that they teach the students metacognitive skills and give them the opportunity to master them; 68% disagreed and 28% strongly disagreed. The table shows that 53% of the teachers disagreed that they can get up to both higher and lower-level cognitive objectives, and 44% strongly disagreed with that. The table indicates that thirty-one percent disagreed strongly and sixty-six percent disagreed with the statement that teachers often monitor the student and give pertinent comments. As shown in the table, forty-nine percent of teachers agreed, while forty-one percent strongly agreed with the statement that “I know the curriculum and can utilize teaching strategies for it”, 5% disagreed and 4% strongly disagreed. This is further supported by a mean score of 4.11.

Table 3*Use of ICT at the University level*

Statement		SA	A	UD	DA	SDA	Mean
I am familiar with modern, efficient ICT tools and equipment	f	3	8	5	347	102	1.85
	%	1	2	1	74	22	
Universities provide well-designed websites or even classrooms that are furnished with computers, projectors, and other essential instruments.	f	2	7	4	416	36	1.97
	%	0	2	1	89	8	
I know how to use computer programs that support educational activities.	f	142	213	30	54	26	3.84
	%	30	46	6	12	6	

Table No. 3, illustrate that ninety-two percent 92% of the teachers felt that they were not familiar with effective classroom management techniques, and six percent strongly disagreed. Table showed that a majority seventy-four percent (72%) disagreed that they were well-versed in using innovative and efficient ICT equipment and tools while twenty-two percent (22%) very disagreed. Eighty-nine percent responded disagreeing, 8% strongly disagreeing, that well-designed websites or classrooms with the necessary technology such as PCs and video

projectors are available. Forty-six percent of teachers strongly agreed and thirty percent agreed that they know of computer programs that can improve teaching and learning activities, while six percent disagreed and another twelve percent disagreed with the statement. This is also supported by a mean score of 3.84.

Table 4*Classroom Management Techniques*

Statement		SA	A	UD	DA	SDA	Mean
I am aware of effective classroom management strategies.	f	2	4	6	426	27	1.98
	%	0	1	1	92	6	
In order to make the classroom atmosphere better, I change the way students behave.	f	2	3	5	421	34	1.96
	%	0	1	1	91	7	
During class, I formally control my time.	f	176	197	19	48	25	3.97
	%	38	42	4	10	6	

Only one percent of the teachers were agreed with the statement 'I am familiar with classroom management techniques' while 92% disagreed with the statement. Ninety-one percent of the teachers disagreed with the statement "they changed student behavior to improve classroom environment", while only 1 % of the teachers were agreed with the statement. Moreover, thirty-eight percent of teachers strongly agreed and forty-two percent agreed about their formal control on class time while six percent strongly disagreed and ten percent disagreed, with a mean score of 3.97.

Table 5*Psychological Factors*

Statement		SA	A	UD	DA	SDA	Mean
I understand how students think and learn.	f	3	5	6	409	42	1.96
	%	1	1	1	88	9	
I am able to employ learning methodologies and motivating techniques for my students.	f	2	5	5	421	32	1.98
	%	0	1	1	91	7	
I am aware of the social environment, interpersonal connections, and elements affecting students' emotional health.	f	1	2	4	440	18	1.98
	%	0	0	1	95	4	
I motivate students to participate in class activities.	f	185	185	29	41	25	4
	%	40	40	6	9	5	

In Table No.5: eighty-eight percent of teachers disagree and nine percent strongly disagree that they understand students thinking and learning processes. Ninety one percent of teachers disagreed that they could effectively use motivational techniques to help students learn, while 7% strongly disagreeing. Furthermore, 95% of teachers disagreed and 4 percent strongly disagreed about knowing the conditions of students, such as their social contexts, relationships, and emotional well-being. However, forty percent of teachers agreed, and another forty percent strongly agreed, that they encourage students to participate in classroom activities, whereas nine percent disagreed and five percent strongly disagreed..

Discussion

Continuous Professional Development (CPD) is essential for university teachers to meet the demands of evolving educational landscapes. University teachers must keep up with the latest developments in their fields to provide students with relevant and current information. CPD ensures that educators can integrate new knowledge, methodologies, and technologies into their teaching, fostering innovation and critical thinking among students. CPD equips teachers with strategies to engage students effectively, address their individual needs, and enhance overall learning outcomes. Need assessment of continuous professional development (CPD) for university teachers is the focus of our discussion in this paper. A need assessment for CPD aims to identify gaps in knowledge, skills, and practices among university teachers. There are different areas where these teachers require improvement to meet institutional and educational goals.

The result of the study showed that majority of the teachers were unable to develop a realistic timeframe for lesson planning because they did not possess expertise in designing a lesson with instructional resources. Instructors fail to provide regular feedback, do not cover higher-level and lower-level cognitive goals, and cannot train students in how to use metacognitive methods. This findings is consistent with the findings of Jeannin & Hallinger (2018), as their study showed that teachers wanted to get more familiar with instructional technology and improve their ability to evaluate evidence and eliminate an evaluation process. Like in the present research, a study conducted by Aslam, (2011) reported the incompetencies of teachers in using the latest methods of teaching, modern technologies, and techniques of classroom management also verifies the present study findings.

The study findings showed that Most of the teachers have little knowledge of efficient classroom management techniques; ICT tools and technology. Majority of them are not well trained in lesson planning, classroom management, students' active class participation, and the use of motivational techniques. They have less knowledge about the student's social settings, interpersonal relationships, emotional well-being, and communication skills. These findings are in line with the findings of Dilshad et al., (2019) and Saleem, (2016) who found that teachers needs communication and management skills training because they face classroom management problems. They do not know how to manage a classroom. The study of Yildirim & Ozen, (2019), also indicates the need of teachers' professional development in knowledge of classroom management skills.

However, teachers with more recent experiences struggle more in managing the classroom than that with experience teachers, like the finding of Karaduman & Gultekin, (2007) study. Yet the study also found that new teachers are more engaged and excited about lesson planning than experienced teachers. Having many training institutions in AJK the university teachers still needs training in many areas, including the effective use of educational technologies; online learning platforms and multimedia resources to enhance teaching and learning experience; inclusive classrooms that accommodate diverse student backgrounds, experiences, and learning styles; training techniques for providing feedbacks; developing communication skills; and strategies for effectively managing time and priorities.

Conclusions of the Study

Due to lack of proper tranings many universities' teachers are unable to prepare a realistic timeline for executing different activities of an academic semester and thus face a lot of problems. They can't teach meta-cognitive strategies and lower-level cognitive objectives. The teachers don't frequently assess the students and less frequently give feedback on how students' progress is going. They have less knowledge about classroom management practices and modern ICT tecnologies and equipments. Teachers generally have little ability to manage student behavior and do not have a solid ground for shaping students behavior. In addition, they have little knowledge about the use of motivational techniques or strategies that foster student learning and know students' social contexts,

interpersonal relationships, or emotional well-being. Therefore there is a need of continuous professional development specially they need trainings in the use of instructional materials, teaching of meta-cognitive strategies, monitoring of students, regular appropriate feedback, use of efficient ICT instruments, modification of student behavior, knowledge of the student's thinking and learning, motivational techniques and strategies for the student's learning.

Recommendations

The University teachers in AJK have insufficient knowledge of advanced teaching methodologies and technologies, lack of communication, leadership, and time management skills, motivational strategies, interpersonal relationships, and well-being. Therefore it is recommended that different seminars, conferences, and workshops may be arranged to stay them updated on the latest teaching strategies, technologies, and educational research. Through continuous professional development they should be updated on emerging technologies, and identify areas for improvement. University administration may conduct training on classroom management, inclusivity, and cultural competency. They may conduct periodic assessments to adapt to changing educational trends and needs.

Implication of Study

This paper acknowledges the findings that these could be useful for creating effective continuous professional development programs for teachers. This study's results can be used to identify gaps, faculty can enhance their competencies, which may lead to better career advancement and increased job satisfaction. Institutions can use the findings to prioritize investments in CPD programs that yield the highest impact, avoiding unnecessary expenditures on generic or irrelevant training. Policymakers can ensure that CPD opportunities are accessible to all educators, including those in underserved or rural areas, by addressing specific challenges highlighted in the study. The study's findings may be useful for upcoming researchers. This study also provides information to other Universities for planning and designing CPD programs. This study will thus contribute to the existing and proposed CPD literature for university teachers in Azad Jammu and Kashmir.

References

- Allen, M. (2009). What is continuing professional development (CPD)? *Jobs. ac. uk*.
- Asad, N., Faiza, A., Fareed A, M., Sajjad, R., Sema, G., & Burcu, T. (2007). Mental health education intervention for training teachers in areas affected by earthquakes. *JPPS-Journal of Pakistan Psychiatric Society*, 4(1), 60-62. <https://pesquisa.bvsalud.org/portal/resource/pt/emr-104548>
- Aslam, H. D. (2011). Analyzing professional development practices for teachers in public universities of Pakistan. *Mediterranean Journal of Social Sciences*, 2(4), 97-106. <https://www.richtmann.org/journal/index.php/mjss/article/view/10887>
- Avalos, B. (2011). Teacher professional development in teaching and teacher education over ten years. *Teaching and Teacher Education*, 27(1), 10-20. <https://doi.org/10.1016/j.tate.2010.08.007>
- Bolam, R., & Weindling, D. (2006). Synthesis of Research and Evaluation Projects Concerned with Capacity-Building through Teachers' Professional Development. General Teaching Council for England.
- Cohen, L., Manion, L., & Morrison, K. (2002). *Research Methods in Education*. Routledge. <https://doi.org/10.4324/9780203224342>
- Dilshad, M., Hussain, B., & Batool, H. (2019). Continuous professional development of teachers: A case of public universities in Pakistan. *Bulletin of Education and Research*, 41(3), 119-130. <https://files.eric.ed.gov/fulltext/EJ1244673.pdf>
- Duta, N., & Rafaila, E. (2014). Importance of the lifelong learning for professional development of university teachers—needs and practical implications. *Procedia-Social and Behavioral Sciences*, 127, 801-806. <https://doi.org/10.1016/j.sbspro.2014.03.358>
- Jeannin, L., & Hallinger, P. (2018). Exploring the need to contextualize professional development programs for university lecturers: A case study in Thailand. *The Independent Journal of Teaching and Learning*, 13(2), 98-112. <https://hdl.handle.net/10520/EJC-1222586e9e>
- Karaduman, H., & Gultekin, M. (2007). The Effect of Constructivist Learning Principles Based Learning Materials to Students' Attitudes, Success and Retention in Social Studies. *Online Submission*, 6(3), 221-223. <https://files.eric.ed.gov/fulltext/ED500062.pdf>
- Omar, C. M. Z. C. (2014). The need for in-service training for teachers and its effectiveness in school. *International Journal for Innovation Education and Research*, 2(11), 1-9. <https://doi.org/10.31686/ijervol2.iss11.261>
- Purdon, A. (2003). A national framework of CPD: continuing professional development or continuing policy dominance? *Journal of Education Policy*, 18(4), 423-437. <https://doi.org/10.1080/0268093032000106866>
- Robinson, L., & Glosiene, A. (2007). Continuing professional development for library and information science: A case study of a network of training centers. In *Aslib Proceedings*. Emerald Group Publishing Limited.
- Saeed, K., & Farooqi, Y. A. (2014). Examining the relationship between work-life balance, job stress, and job satisfaction among university teachers (A case of the University of Gujarat). *International Journal of multidisciplinary sciences and engineering*, 5(6), 9-15. <https://www.ijmse.org/Volume5/Issue6/paper2.pdf>
- Saleem, A. (2016). *Effectiveness of professional development programs on enhancing the knowledge level and changing the professional mindset of university teachers* [Doctoral dissertation]. Allama Iqbal Open University, Islamabad.
- Saleem, A., Masrur, R., & Afzal, M. T. (2014). Effect of Professional Development on Enhancing the Knowledge Level of University Teachers in Pakistan. *Journal of Research & Reflections in Education (JRRE)*, 8(2). <https://www.ue.edu.pk/jrre/articles/82009.pdf>
- Saleem, Q. U. A., & Ashiq, M. (2020). The facts of continuing professional development for LIS professionals in Pakistan: a literature review. *The Bottom Line*, 33(3), 263-271. <https://www.emerald.com/insight/content/doi/10.1108/bl-02-2020-0013/full/html>

- Srinivasacharlu, A. (2019). Continuing Professional Development (CPD) of Teacher Educators in the 21st Century. *Shanlax International Journal of Education*, 7(4), 29-33. <http://dx.doi.org/10.34293/education.v7i4.624>
- Yildirim, R., & Özen, H. (2019). Evaluation of Academic Self-Efficacy Perceptions and Instructional Dissent Attitudes of Teacher Candidates in Terms of Classroom Management. *Asian Journal of Education and Training*, 5(2), 299-308. <http://dx.doi.org/10.20448/journal.522.2019.52.299.308>