

EFFECT OF TEACHERS' TRAINING ON STUDENTS' ACADEMIC PERFORMANCE AT SECONDARY SCHOOLS

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ABSTRACT

The study entitled, "Effect of Teachers' Training on Students' Academic Performance at Secondary Schools". Research objectives of the study were; to investigate the effect of teachers' training on teachers' competencies, to examine the effect of teachers' training on students' academic performance at secondary schools. The study was survey and descriptive in nature. The quantitative as well as qualitative (QUAN-qual) method was adopted. The explanatory sequential approach was used. The questionnaire as a quantitative and an interview protocol was used as a qualitative research tool. Population of study comprised; school managers, secondary school teachers and students of EMO public sector secondary schools managed by Sukkur IBA University in Sukkur region. The stratified sampling was adopted. The sample of study consisted; four (04) school managers, 32 secondary school teachers and 240 secondary school students of EMO schools managed by Sukkur IBA University at Sukkur region. Findings of study were; 81% (43%+38%) of school managers and teachers agreed that teachers attend professional trainings, 12% (10%+2%) of school managers and teachers were disagreed whereas 7% of school managers and teachers were undecided. Mean score 4.04 and SD 0.766 supported. Further, 79% (45%+34%) of school managers, teachers and students agreed that students' academic performance is good, 8% (6%+2%) of school managers, teachers and students were disagreed, whereas 13% of school managers, teachers and students were unsure. Mean score 4.26 and SD 0.898 supported. The study concluded that teachers' training has significant effect on teachers' competencies as well as it influences students' academic performance. The study recommended that the secondary school teachers need to attend professional training programs routinely to enhance their teaching approaches and effective teaching in the classroom for the improvement of students' academic performance.

KEYWORDS: Teachers' training, Sukkur IBA University, EMO public sector secondary schools

INTRODUCTION

The setting in which teachers' training programs are performed is more dynamic and demanding than ever before. Because of improving technology, globalization of education, increasing specialization,

burgeoning laws, and the complex structure of the educational process, the profession is characterized by an explosion of relevant knowledge and skills. These situations and developments necessitate a

greater emphasis on professional training among educators both within and outside the classroom. Teachers' training is practiced in almost every country across the world. The teachers' training Standards Office accreditation services serve all types of professional trainings globally, and they are gaining an international reputation as the most valuable currency in professional development. The development of internationalization and globalization in education has resulted in the need for professionals to constantly enhance their skill through professional training activities. After initial registration and admittance to the profession, professional training is defined as education of professionals on specialized knowledge, skills, attitude, and ethical and moral principles. Raising and improving the professional's technical abilities and competency is anticipated, as both the profession and stakeholders demand it. The main goal of teachers' training is to help professionals progress in terms of personal capabilities, professional networks, career development, and financial income. Effective training programs should improve instruction, which should increase learning. Teachers who employ more diversified teaching approaches and who actively participate in professional trainings, report greater satisfaction levels, according to the Organization for Economic Co-operation and Development OECDs' Teaching and Learning International Survey (TALIS). A commitment to learning and professional development, teachers' training aims to improve teaching abilities and stay up to date with the ever-evolving demands of the educational landscape. For teachers, professional training is crucial because it allows them to stay current on research and educational trends, adjust to new teaching approaches, and enhance their instructional practices over time. Through training, educators can get a deeper understanding of the subjects they teach, ensuring they have the knowledge and skills needed to give students thorough and correct education. Active participation in training programs and career advancement yields benefits for educators and learners alike. Teachers can create a more engaging and dynamic learning environment that increases student engagement and improves learning outcomes by implementing creative teaching techniques. Teachers' training gives them the skills and information they need to address difficulties in the

classroom, which eventually increases their confidence and sense of fulfillment in their work.

LITERATURE REVIEW

"Review of the literature summarize and evaluate the text of writing of the definite theme, and provide frame work to think about the possible consequence of innovative study" (Ahmad, Rao & Rao, 2023). It clearly presents the indication of the used source in organized way Ahmad, Cheema & Farhat, 2023). Literature review is important in every research (Farhat, 2019). The capacity to plan, implement, and assess learning is one of a teacher's professional competencies. A teacher must possess a variety of personal, scientific, technological, social, and spiritual competencies in order to fully meet the requirements of their professional competency standards, which include material mastery, student comprehension, educated learning, personal growth, and professionalism. Teachers' professional training tailored to meet their needs in order to raise their competence beyond the requirements of their current job. Through training, educators can gain new skills that they can utilize in the classroom to help students learn in a more engaging and enjoyable way (Prihidayanti, Florentinus et al. 2019).

As long as teachers continue in their chosen field, professional growth is still expected and required. Throughout a teacher's career, their professional training interacts with various elements to impact their level of dedication to the field. A teacher's readiness to differentiate instruction might increase and their positive teaching behaviors can alter as a result of participating in professional trainings. Additionally, it has been demonstrated that professional training improves instructors' commitment levels and their interactions with students (Sum, Wallhead et al. 2022).

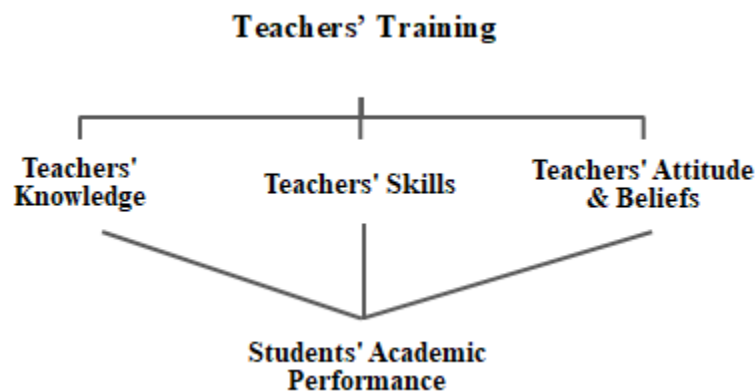
Teachers must have access to chances for high-quality professional trainings from the beginning of their careers. Research demonstrates its influence on a number of important aspects of education, including the standard of instruction, the retention rate of instructors, and the academic performance of students. Such effective training programs are available in a variety of settings (formal or informal, group or individual), and it can be tailored to a particular domain or concentrate on broader pedagogical areas like overall instructional techniques. Research indicates that in order to

guarantee high-quality education, professional training for teachers is necessary. Professional training can be viewed as a learning process in which educators are encouraged to evaluate their professional practices and continue to further their own professionalization in order to enhance their own competencies and, consequently, those of their students (Vansteelandt, Mol et al. 2020).

It is commonly acknowledged that raising the standard of teachers is a prerequisite for raising the

standard of teaching. More opportunities for his students can be given by a teacher who has the opportunity to training. For this reason, giving educators opportunities for professional training is crucial to raising the quality of instruction. Teachers' training programs are methodical attempts to modify instructors' methods in the classroom, their attitudes and convictions, and the students' learning outcomes (Qablan, Mansour et al. 2015).

CONCEPTUAL FRAMEWORK



Teachers' training improves their knowledge, abilities, attitudes, and beliefs, which influences students' academic achievement.

RESEARCH OBJECTIVES

Research objectives of the study were:

1. To investigate the effect of teachers' training on teachers' competencies.
2. To examine the effect of teachers' training on students' academic performance at secondary schools.

RESEARCH QUESTIONS

The study's research questions were as follows:

1. Is there any effect of teachers' training on teachers' competencies?
2. What is the effect of teachers' training on student's academic performance at secondary schools?

RESEARCH METHODOLOGY

"The methodical study of the procedure is called the research method" Ahmad., Shahid & Farhat, (2023). Moreover, "the research methodology is the procedure which is used by the researchers to gather data for resolving problems of investigation" Ahmad, Farhat & Choudhary, (2022). The study was survey and descriptive in nature. The quantitative as well as qualitative (QUAN-qual) method was adopted. The explanatory sequential approach was used. The questionnaire as a quantitative and an interview protocol was used as a qualitative research tool. "The population is defined as a set of individuals, data, or items from which a statistical sample is taken" (Younus et al, 2023). Population of the study comprised; school managers, secondary school teachers and students of EMO public sector secondary schools managed by Sukkur IBA University at Sukkur region. The stratified sampling was adopted. Population was divided into four strata. Each stratum was randomly selected. The sample of study consisted; four (04) school managers, thirty-two (32) secondary school teachers and two hundred

and forty (240) secondary school students of EMO schools managed by Sukkur IBA University at Sukkur region. Content validity was checked based on experts' responses. The reliability of questionnaire was calculated through Statistical Package for Social Sciences SPSS-24 software using

Cronbach's Alpha similar method was employed by (Rao et al, 2023).

DATA ANALYSIS

The collected data was analyzed through SPSS-24 using percentage, frequency, mean score and standard deviation as follows:

Table 1: Factor 1: Professional Trainings:

RPS	Stat.	SDA	DA	UD	A	SA	Total	SD	Mean
ICT trainings	F	2	7	6	12	11	38	1.14	3.56
	%	5	18	16	32	29	100%		
Pedagogical trainings	F	0	2	5	17	14	38	.837	4.075
	%	0	5	13	45	37	100%		
Leadership and management trainings	F	2	3	7	13	13	38	.855	3.8
	%	5	8	19	34	34	100%		
Proper mechanism of teachers' training	F	1	3	5	16	13	38	1	4.095
	%	3	8	13	42	34	100%		
Trainings on content knowledge	F	0	2	4	19	13	38	.818	4.08
	%	0	5	11	50	34	100%		
trainings on classroom management	F	1	2	4	19	12	38	.893	4.02
	%	2	5	11	50	32	100%		
Opportunities for training	F	2	4	2	15	15	38	.896	4.21
	%	5	12	5	39	39	100%		
Teachers' training enhances performance	F	1	0	2	16	19	38	.429	4.21
	%	3	0	5	42	50	100%		
Teachers' training keeps up-to-date	F	0	2	1	16	19	38	.411	4.21
	%	0	5	3	42	50	100%		
Teachers' training into practice	F	0	1	3	19	15	38	.38	4.15
	%	0	3	8	50	39	100%		
Total	F	9	26	39	162	144	380	.766	4.04
	%	2	7	10	43	38	100%		

Table 1 represents the factor 1: Professional Trainings: Data analysis represents that 43% of

school managers and teachers agreed that teachers attend professional trainings and practice it in their

classrooms, while 38% were strongly agreed, 10% were unsure, 7% of were disagreed whereas 2% of school managers and teachers were strongly disagreed with the presented statement. In general,

majority of school managers and teachers agreed that teachers attend professional trainings and practice it in their classrooms. Mean score 4.04 and SD 0.766 supported.

Table 2: Factor 2: Students’ Academic Performance:

RPS	Stat.	SDA	DA	UD	A	SA	Total	SD	Mean
Students use ICT	F	16	34	38	76	114	278	.940	3.96
	%	6	12	14	27	41	100%		
Participation in discussion	F	10	17	32	122	97	278	.715	4.17
	%	3	6	12	44	35	100%		
Encouragement for presentation	F	6	6	36	95	135	278	.689	4.30
	%	2	2	13	34	49	100%		
Participation in Science exhibition	F	2	4	26	96	150	278	.678	4.46
	%	0	1	9	35	54	100%		
Ability of group work	F	1	32	29	97	119	278	.855	4.17
	%	0	12	10	35	43	100%		
Participation in activities	F	2	13	48	83	132	278	1.510	4.47
	%	1	5	16	31	47	100%		
Total	F	37	106	209	569	747	1668	.898	4.26
	%	2	6	13	34	45	100%		

Table.2 represents the factor.2: Students’ Academic Performance: Data analysis represents that 45% of school managers, teachers and students strongly agreed that students’ academic performance is good, while 34% were agreed, 13% were unsure, 6% were disagreed whereas 2% of school managers, teachers and students were strongly disagreed with the presented statement. In general, majority of school managers, teachers and students strongly agreed that

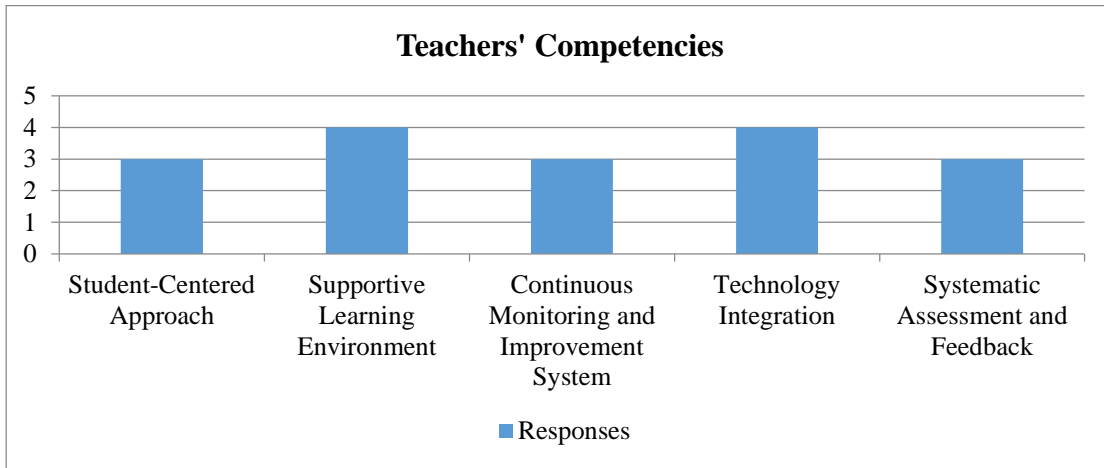
students’ academic performance is good. Mean score 4.26 and SD 0.898 supported.

QUALITATIVE DATA ANALYSIS

Interview Protocol

The qualitative data analysis based on interview protocol. For interview protocol data was collected from School Managers.

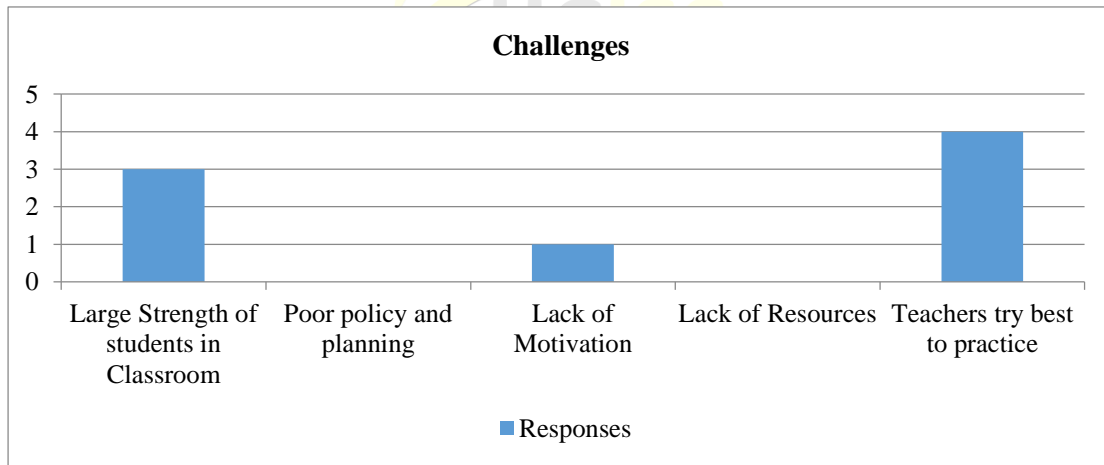
Graph 1: What difference you feel in competencies of teachers after attending professional training?



Graph 1 represents the view of School Managers about the difference they feel in competencies of teachers after attending professional training. Data analysis represents that majority of teachers provide a supportive learning environment to the students,

while some teachers also employ student centered approach and assessment strategies, and continuously monitor and improve their teaching approaches.

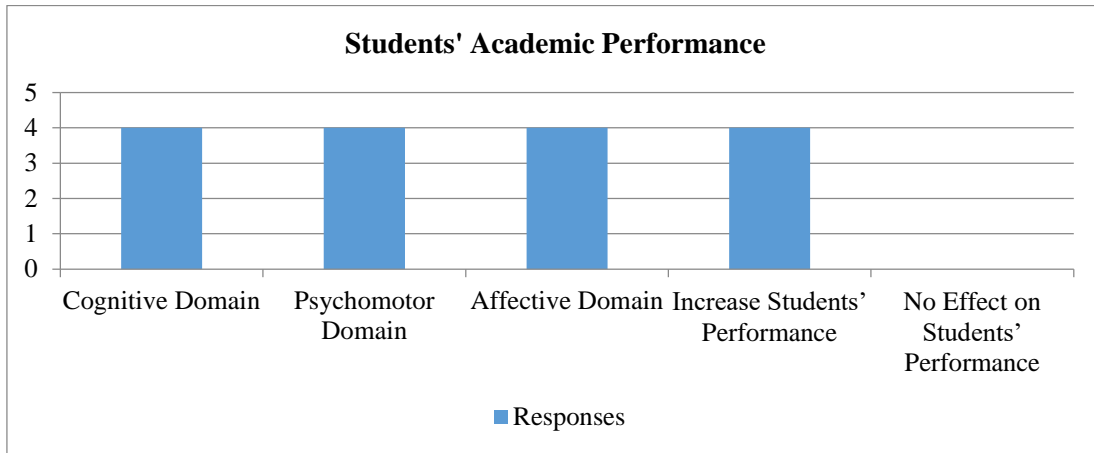
Graph 2: What are the difficulties that your teachers experience when attempting to put their new knowledge/skills after attending professional training?



Graph 2 represents the view of School Managers about difficulties that teachers' experience when attempting to put new knowledge/skills after attending professional training. Data analysis represents that majority of teachers try their best to practice their knowledge/skills they learn from training. Some teachers feel difficult in practicing

new educational reforms due to large strength of students in a classroom affects, while few teachers' motivation is major problem, while all schools have a proper policy and planning and enough resources for teachers to practice the knowledge/ skills that they learn in training.

Graph 3: What is the effect of teachers’ training on students’ academic performance?



Graph 3 represents the effect of teachers’ training of teachers on students’ academic performance. Data analysis represents that teachers’ training enhances cognitive, psychomotor and affective domain of teachers which raises students’ performance in terms of improving their cognitive, psychomotor, and affective domains.

FINDINGS

Findings of the study were as follows;

FACTOR.1: PROFESSIONAL TRAININGS

The study school managers and teachers found that 32% of school managers and teachers agreed that teachers attend ICT trainings, while 29% were strongly agreed, 18% were disagreed, and 5% were strongly disagreed whereas 16% were unsure with the presented statement. In general, majority of school managers and teachers that agreed that teachers attend ICT trainings. Mean score 3.56 and SD 1.14 supported.

The study found that 45% of school managers and teachers agreed that teachers attend pedagogical trainings frequently, while 37% were strongly agreed, 5% were disagreed, whereas 13% were unsure with the presented statement. In general, majority of school managers and teachers that agreed that teachers attend pedagogical trainings frequently. Mean score 4.075 and SD 0.837 supported.

The study found that 34% of school managers and teachers agreed that teachers attend trainings on leadership and management, while 34% were strongly agreed, 8% were disagreed, and 5% were strongly disagreed whereas 19% were unsure. In general, majority of School Managers and Teachers agreed that teachers attend leadership and management trainings. Mean score 3.8 and SD 0.855 supported.

The study found that 42% of school managers and teachers agreed that teachers have proper mechanism of professional training at their institute, while 34% were strongly agreed, 8% were disagreed, and 3% were strongly disagreed whereas 13% of school managers and teachers were unsure with the presented statement. In general, majority of school managers and teachers agreed that they have proper mechanism of teachers’ training at their institute. Mean score 4.095 and SD 1 supported.

The study found that 50% of school managers and teachers agreed that teachers attend training on content knowledge of subject they teach, while 34% were strongly agreed, 5% were disagreed whereas 11% were unsure with the presented statement. In general, majority of school managers and teachers agreed that teachers attend training on content knowledge of subject they teach. Mean score 4.08 and SD 0.818 supported.

The study found that 50% of school managers and teachers agreed that teachers attend trainings on classroom management, while 32% were strongly agreed, 5% were disagreed, and 2% were strongly disagreed whereas 11% were unsure with the

presented statement. In general, majority of school managers and teachers agreed that teachers attend trainings on classroom management. Mean score 4.02 and SD 0.893 supported.

The study found that 39% of school managers and teachers agreed that school manager provide opportunities for teachers' training frequently, while 39% were strongly agreed, 12% were disagreed, and 5% were strongly disagreed whereas 5% were unsure with the presented statement. In general, majority of school managers and teachers agreed that school manager provide opportunities for teachers' training frequently. Mean score 4.21 and SD 0.896 supported. The study found that 50% of school managers and teachers strongly agreed that CPD enhances teachers work performance, while 42% were agreed, 3% were strongly disagreed, whereas 5% were unsure with the presented statement. In general, majority of school managers and teachers strongly agreed that teachers' training enhances teachers' work performance. Mean score 4.21 and SD 0.429 supported.

The study found that 50% of school managers and teachers strongly agreed that professional training keep teachers up-to-date with the new knowledge and teaching approaches, while 42% were agreed, 5% were disagreed, and whereas 3% were unsure with the presented statement. In general, majority of school managers and teachers agreed that professional training keeps teachers up-to-date with the new knowledge and teaching approaches. Mean score 4.21 and SD 0.411 supported.

The study found that 50% of school managers and teachers agreed that teachers put their professional development knowledge and skills into practice, while 39% were strongly agreed, 3% were disagreed whereas 8% of school managers and teachers were unsure with the presented statement. In general, majority of School Managers and Teachers agreed that teachers put their professional development knowledge and skills into practice. Mean score 4.15 and SD 0.38 supported.

FACTOR.2: STUDENTS' ACADEMIC PERFORMANCE

The study found that 41% of school managers, teachers and students strongly agreed that students are facilitated to use ICT for project or classwork, while 27% were agreed, 12% were disagreed, and 6% were strongly disagreed whereas 14% were unsure with the presented statement. In general,

majority of school managers, teachers and students strongly agreed that students are facilitated to use ICT for project or classwork. Mean score 3.96 and SD 0.940 supported.

The study found that 44% of school managers, teachers and students agreed that students participate in discussion during the lecture, while 35% were strongly agreed, 6% were disagreed, and 3% were strongly disagreed whereas 12% were unsure with the presented statement. In general, majority of school managers, teachers and students agreed that students participate in discussion during the lecture. Mean score 4.17 and SD 0.715 supported.

The study found that 49% of school managers, teachers and students strongly agreed that students are encouraged for class presentation, while 34% were agreed, 2% were disagreed, and 2% were strongly disagreed whereas 13% were unsure. In general, majority of school managers, teachers and students agreed that students are encouraged for class presentation. Mean score 4.30 and SD 0.689 supported.

The study found that 54% of school managers, teachers and students strongly agreed that students have opportunities to participate in science exhibitions to practice problem solving and critical thinking, while 35% were agreed, 1% were disagreed, whereas 9% were unsure with the presented statement. In general, majority of school managers, teachers and students strongly agreed that students have opportunities to participate in science exhibitions to practice problem solving and critical thinking. Mean score 4.46 and SD 0.678 supported.

The study found that 43% of school managers, teachers and students strongly agreed that students' work individually as well as in groups, while 35% were agreed, 12% were disagreed, whereas 10% were unsure with the presented statement. In general, majority of school managers, teachers and students strongly agreed that students' work individually as well as in groups. Mean score 4.17 and SD 0.855 supported.

The study found that 47% of school managers, teachers and students strongly agreed that students are encouraged to actively participate in various classroom activities, while 31% were agreed, 5% were disagreed, and 1% was strongly disagreed whereas 9% were unsure with the presented statement. In general, majority of school managers,

teachers and students that strongly agreed that students are encouraged to actively participate in various classroom activities. Mean score 4.47 and SD 1.510 supported.

CONCLUSION

The study concluded that majority of teachers attend ICT trainings; while, some teachers don't attend ICT trainings, whereas, few teachers were uncertain. The study concluded that majority of teachers attend pedagogical trainings frequently, while some teachers were uncertain, whereas, few teachers don't attend pedagogical trainings frequently. The study concluded that majority of teachers attend trainings on leadership and management, while, some teachers were uncertain, whereas, few teachers don't attend trainings on leadership and management. The study concluded that majority of institutes have proper mechanism of teachers' training, while some were uncertain, whereas, few teachers don't have proper mechanism of training at their institute. The study concluded that majority of teachers attend training on content knowledge of subject they teach, while few teachers don't attend training on content knowledge of subject they teach, whereas, few teachers were uncertain. The study concluded that majority of teachers attend trainings on classroom management; while teachers don't attend trainings on classroom management, whereas, few of the teachers were uncertain. The study concluded that majority of school manager provide opportunities to teachers for their continuous professional development frequently, while few school manager don't provide opportunities to teachers for their continuous professional development frequently, whereas, few were unsure. The study concluded that teachers' training enhances teachers' work performance, keeps teachers up-to-date with the new knowledge and teaching approaches. The study concluded that majority of teachers put their professional training knowledge and skills into practice, while few teachers don't put their professional training knowledge and skills into practice, whereas few teachers were uncertain.

The study concluded that majority of students are facilitated to use ICT for project or classwork, while few students are not facilitated to use ICT for project or classwork, whereas, few students were uncertain. The study concluded that majority of students

participate in discussion during the lecture, while few students don't participate in discussion during the lecture, whereas few students were uncertain. The study concluded that majority of students are encouraged for class presentation, while few students are not encouraged for class presentation, whereas few students were uncertain. The study concluded that majority of students have opportunities to participate in science exhibitions to practice problem solving and critical thinking, while few students have no opportunities to participate in science exhibitions to practice problem solving and critical thinking, whereas few students were uncertain. The study concluded that majority of students work individually as well as in groups, while few students don't work individually as well as in groups, whereas few students were uncertain. The study concluded that majority of students are encouraged to actively participate in various classroom activities, while some students are not encouraged to actively participate in various classroom activities, whereas few students were uncertain.

The study concluded that majority of teachers try their best to practice their knowledge/skills they learn from training and have a proper policy and planning and enough resources for teachers to practice the knowledge/ skills, while large strength of student in a classroom affects some teachers in practicing new educational reforms, whereas, few teachers' motivation is a big problem. The study concluded that majority of teachers provide a supportive learning environment to the students, while some teachers also use student centered approach and assessment strategies, and continuously monitor and improve their teaching approaches. The study concluded that teachers' training enhances cognitive, psychomotor and affective domain of teachers which raises students' performance in terms of improving their cognitive, psychomotor, and affective domains.

DISCUSSION

The study highlighted that majority of teachers attend professional trainings while some teachers don't attend professional trainings, whereas few teachers were uncertain. Similarly, (Eun 2019), teachers today must engage pupils who are fundamentally different from their predecessors in terms of the cultural perspectives, languages, familial

situations, values, and mores they bring to the classroom. These circumstances place enormous expectations on teachers to acquire the information and abilities necessary to handle the new problems in their classrooms.

The study affirmed that teachers' training has significant effect on students' academic performance. Similarly, according to (McMillan, McConnell et al. 2016), the purpose of teachers' training is to enhance the professional knowledge, abilities, and mindsets of teachers so that they may, in consequently, enhance student learning.

RECOMMENDATIONS

The study recommended that:

- Secondary school teachers need to attend professional training programs to enhance their teaching approaches as well as for effective teaching in the classroom.
- Secondary school teachers need to facilitate students in using ICT, participation in classroom discussion and activities to enhance their academic performance.
- Secondary school teachers need to participate in ICT training programs to enhance their ICT skills for their students' high academic achievements.
- Secondary school teachers must apply what they learn in training to their classroom instruction.

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