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Teachers' Self-Efficacy in the Implementation of BS Education Curriculum in the Universities of Punjab

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ABSTRACT

The current study was designed to investigate the Teachers' Self-Efficacy in the implementation of the B.S education curriculum in the universities of Punjab. The objectives of the study were to highlight (Personal and professional) factors of university teachers' self-efficacy, to explore (Personal and Professional) factors of chairman/chairperson's self-efficacy and to find out the new pedagogical technique adopted by teachers to implement the B.S education curricula. The study was delimited to four public sector universities of Punjab province namely University of Education Dera Ghazi Khan Campus, Government College University Faisalabad, Zakaria University Multan and The Islamia University of Bahawalpur. The mixed-method approach was used to conduct this study. The research instrument was used according to the requirement of research and the nature of the topic. The population of the study consisted of the head of departments, teachers and students of BS education discipline. The sample size for the study was (4) head of a department, (40) teachers and (200) students for the data collection. Multistage sampling technique was used for the study for the collection of data questionnaire and semi structured interview were prepared. Semi-structured interviews for the head of departments have consisted of (12) questions. Whereas the questionnaire which was prepared for the students consisted of (38) close-ended statements and teachers questionnaire (35) close ended were based on (5) point Likert scale. Data were analyzed by using the Statistical Package for Social Sciences (SPSS). The research finds out that the study indicates that Participants noted that with enhanced new curricula and teaching practices, they felt that they were better teachers and more effective in enhancing student learning. conclusion of the study that Students believe that those participants who were actively involved in ongoing, embedded professional development felt that they had the necessary skills and confidence to embrace the student-based inquiry method in implementing the new curriculum. Teachers believe that professional development involvement provides clarity and direction in understanding the need for change.

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1. Introduction

A strong sense of efficacy enhances human accomplishment and personal well-being in many ways. People with high assurance in their capabilities approach difficult tasks as challenges to be mastered rather than as threats to be avoided. Such an efficacious outlook

fosters intrinsic interest and deep engrossment in activities. They set themselves challenging goals and maintain a strong commitment to them.

Self-efficacy is a personal belief in one's capability to organize and execute a course of action required to attain designed types of performance. Often described as task specific self-confidence, self-efficacy has been a key component in theories of motivation and learning in varied contexts (Albert Bandura, 2006 a) A decade later,(Albert Bandura, Freeman, & Lightsey, 1999) situated the construct within a social cognitive theory of human behaviour that diverged from the prevalent cognitivist of the day and embedded cognitive development within a socio-structural network of Influences. More recently, Albert Bandura (1997a); (A Bandura & Wessels, 1997) published Self-efficacy.

For over two decades, teacher efficacy has been defined as the extent to which a teacher believes he or she can influence students' behaviour and their academic achievement, especially of pupils with difficulties or those with particularly low learning motivation (Guskey & Passaro, 1994). The conceptualization of teacher efficacy is based on the breadth of the teacher's role. In most studies, this involves only the classroom in which the teacher engages in education and teaching. Thus, the conceptualization in the literature focused on the teacher's perception of his or her competence and on the ability of teaching as a professional discipline to shape students' knowledge, values and morality.

Tschannen-Moran, Hoy, and Hoy (1998) reviewed the vast body of literature on teacher efficacy and pointed to two main sources of the formulation of this concept. One is ascribed to researchers of the American RAND company, who based themselves on Rotter (1966) work, the second is attributed to Albert Bandura. A distinction was made between teaching-as-a-profession efficacy and teachers' sense of efficacy. Various instruments have been developed over the years for measuring teacher efficacy. Some are based on the RAND-Rotter conceptualization, others on Bandura. Of the former, we note the RAND Scale (Armor, 1976), the Teacher's Locus of Control (Rose & Medway, 1981), and Responsibility for Student Achievement (Guskey, 1981). In the second group, we note the Teacher Efficacy Scale (Gibson & Dembo, 1984); the Efficacy Beliefs in Science Teaching Scale (Enochs & Riggs, 1990); Ashton's Events Scale (Woolfolk & Hoy, 1990) and Bandura's Teacher Efficacy Scale (Albert Bandura, 1977).

Previous research found that efficacy is a more formal way to say effectiveness, both of which stem from the Latin verb efficere "to work out, accomplish." The effectiveness, or efficacy of something is how well it works or brings the results you hoped for. A scientist researches to determine the efficacy of a vaccine or medicine under development. If it is efficacious, it will cure or prevent disease (Margolis & McCabe, 2006).

Observational proof gathered that (Albert Bandura, 1977), widely known for his extensive research on the complex and multidimensional constructs of teacher efficacy and its effects on behaviour, noted that efficacy develops over time through an individual's 1sense 1of 1competence 1to complete1a task or attain a goal. The outcome1expectancy1of the individual predicts his or her behaviour based on the interpretation of information received from four major sources: (a) mastery of experience, (b) vicarious experiences, (c) verbal persuasion, and (d) physiological states. Mastery of experience, the most powerful source to impact behaviour, is grounded in previous results and accomplishments. With each additional success or failure, the individual either raises or lowers his or her perceived level of competency. Through vicarious experience, an individual determines his or her competency based on observations of a colleague's success. An individual filters verbal persuasion, positive or negative feedback, to determine his or her level of competence. Physiological states, emotional stimulations experienced in specific situations, become embedded in the memory of the individual which he or she later uses to determine perceived competence. With the use of these four sources of information, (i.e. mastery of experience, vicarious experiences, verbal persuasion, and physiological state), the individual formulates his or her own beliefs and motivational systems which influence the amount of effort the individual is willing to put forth.

2. Literature Review

2.1. Teacher Efficacy

It has been discovered that Teacher efficacy is a simple idea with significant implications. A teacher's efficacy belief is a judgment of his or her capabilities to bring about the desired outcome of student engagement and learning, even among those students who may be difficult or unmotivated. This judgment has powerful effects (Armor, 1976). Teachers' sense of efficacy has been related to student's outcomes such as achievement and students own sense of efficacy. In addition, teachers' efficacy beliefs also relate to their behaviour in the classroom. Efficacy affects the effort they invest in teaching, the goals they set, and their levels of aspiration. Teachers with a strong sense of efficacy tend to exhibit greater levels of planning and organization (Allinder, 1994).

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2.2. Sources of Teachers' Efficacy

According to (Albert Bandura, 1997b) theory, the expectation of personal mastery, or efficacy expectation, is based on four sources of information: enactive mastery experiences, learning through vicarious experiences, verbal persuasion from significant others and physiological and affective states. The most important of these is enactive mastery experiences or performance accomplishments. As individuals experience success in particular situations, expectations are raised concerning future success in similar situations. Enactive mastery experiences provide the individual with the evidence that he or she "can do whatever it takes to succeed". Repeated failures, on the other hand, lower these efficacy expectations. Individuals create self-knowledge structures about their efficacy beliefs. These beliefs are tested each time the individual experiences a situation relating to that efficacy belief. Task difficulty also plays a part in the development of efficacy beliefs. Sometimes, if an individual is faced with a very challenging task, they may be successful, but the effort expenditure and difficulty of undertaking the task may lower efficacy beliefs and leave the individual "shaken rather than emboldened".

The difficulty level of a task is also measured comparatively. If an individual is successful at a task while expending less effort than others completing the same task, self-efficacy is raised. Conversely, if the individual must expend far more energy to complete the task than others, self-efficacy beliefs are weakened. Additionally, self-efficacy can be raised if individuals attend to successes more than failure, and maybe lowered if individuals attend m0re to poor performance (Albert Bandura, 1997b).

2.3. Self-Efficacy

In this section, the definition and components of self-efficacy are presented. The social cognitive theory (Albert Bandura, 1986) is used to explain self-efficacy in depth. Self-efficacy is also discussed concerning gender and generational groups.

The term used to describe a person's belief in his or her own ability to perform necessary tasks to achieve goals is self-efficacy (Albert Bandura, 1997b). Self-efficacy tends to be assessed for narrow (e.g., this course) as opposed to general tasks e.g., general learning; (Albert Bandura, 1997b). This study focused on student's self-efficacy, instructors' self-efficacy, and the students' outcomes in terms of student engagement, grades, and satisfaction.

Self-efficacy needs to be distinguished from self-concept. Self-efficacy refers to an evaluation of the self while self-concept refers to comparisons of one's self with others (Choi, 2005). In research on students' confidence, comparisons have been made in terms of how students feel about themselves with others i.e. peers and the instructor (Weaver & Qi, 2005). Student confidence in that sense dealt with the student's self-concept. The focus of this study was on students self-efficacy (i.e., evaluations made of the students own abilities).

(Barry & Finney, 2009) highlight three categories of self-efficacy, namely social, roommate, and academic self-efficacy. Social efficacy refers to an individual's relations and social adjustment (Hutchinson, Jenkins-Guarnieri, Murdock, & Wright, 2012). Social efficacy at university refers to a student's competence and capability to develop and maintain social interactions with fellow students, as well as with the university staff members (Zajacova, Lynch, & Espenshade, 2005). Being able to have interpersonal relations with fellow students and the university staff members shows good social adjustment (Barry & Finney, 2009). Roommate self-efficacy refers to interactions with roommates or people with whom one resides (Zajacova et al., 2005). Maintaining good relations with people with whom one lives during the course of one's studies indicates effective interpersonal skills and enhances social adjustment (Barry & Finney, 2009).

2.4. Statement of the problem

Self-efficacy theory has been used to examine and enhance classroom teaching and learning, it has not been systematically applied to the process of learning to teach. Some work has been done on the relationships between self-efficacy and teacher behaviours moreover, Teachers' Self-Efficacy and student achievement. Further research is necessary to study the Teachers' Self-Efficacy in the implementation of the B.S education curriculum in the universities of Punjab.

2.5. Objectives of the study

The objectives of the study were

1. To highlight (Personal and professional) factors of university teachers self-efficacy.
2. To explore (Personal and Professional) factors of chairman/chairperson's self-efficacy.
3. To find out the new pedagogical technique adopted by teachers to implement the B.S education curricula.

2.6. The rationale of the Study

Educational program implementation helps understudy for their learning. Teachers Self-Efficacy is positively correlated to instruction, adjusting education to singular studies needs, motivating understudies, keeping discipline, cooperating with guardians and colleagues, and coping with changes and difficulties. study recognize the factors (Personal and professional) which motivate the instructor to actualize the B.S education educational programs and feature the factors (Personal and Professional) which motivate the Head of office/institution to execute the B.S educational plans.

2.7. Delimitation of the Study

Due to the specific time and resources, the study was delimited to the four (4) Public-sector universities of Punjab. Both male and female teachers and students were addressed in the study.

3. Research Method

The mixed method was used to conduct this study. The research instrument was developed according to the requirement of research and the nature of the topic.

3.1. Population

The population of the study consisted of (4) heads of departments, (45) teachers and (800) students of BS education discipline, of the University of Education Dera Ghazi Khan Campus, Government College University Faisalabad, Zakaria University Multan and The Islamia University of Bahawalpur.

3.2. Sample

A multistage sampling technique was used for data collection. Four public universities were selected randomly, while data was collected convincingly from a sample. The sample of the study were4 heads of department, 40 teachers and 200 students for the data collection from Education University Lahore (DG. Khan campus), Government College University Faisalabad, Zakaria University Multan and The Islamia University of Bahawalpur.

3.3. Research Tool

For the collection of data questionnaire and semi structured interviews were prepared. Semi structured interviews for the head of a department, questionnaire for students and teachers. Semi structured interviews for the head of departments consisted of 12 questions. Whereas the questionnaire which was prepared for the students have consisted of 38 close ended statements and teachers questionnaire 35 close ended were based on 5 points Likert scale.

4. Data Analysis

A Statistical Package of Social Sciences (SPSS-20) was used to analyze the quantitative data. The responses were weighted according to the position in which they occur. Independent sample t-test, One Way ANOVA, mean and percentage were applied to find out the impact of the demographic variables on teachers self-efficacy in the implementation of BS education curriculum factors. The data collected through semi structure interviews of heads were analyzed qualitatively.

Table 1
Students' opinions about self-efficacy

Item No.	Statement	A	%	DA	%	U	%
1	Teachers in the class can get through to the most difficult students.	03	7.5	9	3.0	7	.5
23	Curriculum prepares the students for their practical life.	15	4.2	0	6.8	4	9.0
24	BS program duration sometimes bother the students.	21	7.6	6	4.5	2	7.9
26	BS program brings out the personality traits and skills of students for their future needs.	13	3.1	0	2.3	6	4.5
2	If a child doesn't want to learn teachers give up.	4	5.8	9	9.7	6	4.5
34	BS program is a bright step for students' future.	17	5.4	6	.9	6	5.7
37	University environment polish the students' capabilities.	35	5.4	6	4.5	8	0.1
14	Drugs and alcohol abuse in the community make learning difficult for students.	24	9.3	1	7.3	4	3.4
3	Teachers don't have the motivation power to produce meaningful students' learning.	4	5.8	7	8.6	8	5.6
28	BS program develops stress in the students.	6	2.5	0	9.1	3	8.4
10	Teachers don't have the skills to deal with students' disciplinary problems.	4	1.3	7	8.6	8	0.1
36	BS program is for enhancement of	33	4.3	7	5.1	9	0.6

	students' learning experiences.						
18	Teachers truly believe every child can learn.	29	2.1	1	7.3	9	0.6
30	Teachers of BS program have more potential to teach.	22	8.2	9	6.2	8	5.6
8	Teachers have what students want to learn.	9	5.3	0	2.3	0	2.3
11	Teachers think there are some students to whom noone can teach.	00	5.9	4	0.2	5	4.0
	Variance explained	24.534%					
	Cronbach's alpha	0.779					
	Total Average	1689	9.0	742	5.9	433	**5.1**

Table 1 shows that Exploratory Factor Analysis (EFA) with Principal Component Method (PCM) and Varimax rotation was conducted for students' questionnaires to extract the uncorrelated items of the research instrument. The results of EFA depict that the first-factor "Self-Efficacy" has an Eigen-value of more than one and accounted for a 24.534% variance in a data set. It includes 16 items (1, 23, 24, 26, 2, 34, 37, 14, 3, 28, 10, 36, 18, 30, 8 and 11) and Cronbach's Alpha reliability of this factor was 0.779. Moreover, the frequency analysis of this factor demonstrates that 57.5% students agreed that teachers in the class are able to get through to the most difficult students, 64.2% students agreed that curriculum prepares the students for their practical life, 67.6% students agreed that BS program duration sometimes bother the students, 63.1% students agreed that BS program bring out the personality traits and skills of students for their future needs, 49.7% students disagreed that if a child doesn't want to learn teachers give up, 65.4% students agreed that BS program is a bright step for students' future, 75.4% students agreed that university environment polish the students capabilities, 69.3% students agreed that drugs and alcohol abuse in the community make learning difficult for students, 48.6% students disagreed that teachers don't have the motivation power to produce meaningful students' learning, 42.5% students agreed that BS program develop stress in the students, 48.6% students disagreed that teachers don't have the skills to deal with students disciplinary problems, 74.3% students agreed that BS program is for enhancement of students learning experiences, 72.1% students agreed that teachers truly believe every child can learn, 68.2% students agreed that teachers of BS program have more potential to teach, 55.3% students agreed that teachers have what students want to learn and 55.9% students agreed that teachers think there are some students to whom noone can teach. As a whole, 59% of students are satisfied and agreed with self-efficacy.

Table 2
Gender-wise comparison of self-efficacy

Gender	N	Mean	Std. Deviation	t-value	p-value
Male	72	37.53	5.915	.427	.670
Female	107	37.13	6.213		

Table 2 reveals that there is no significant difference between the mean score of male (M = 37.53, SD = 5.915) and female (M = 37.13, SD = 6.213) respondents. The significant value is greater than .05 which demonstrates that the difference is not significant and both genders have almost same views regarding self-efficacy $t(178) = .427$, Sig = .670.

Table 3
One way ANOVA the effect of fathers education on self-efficacy

Factors		Sum of Squares	df	Mean Square	F	Sig.
Self-Efficacy	Between Groups	422.596	5	84.519	2.374	.041
	Within Groups	6160.298	173	35.609		
	Total	6582.894	178			

Table 3 shows the effect of fathers' education on self-efficacy. The self-efficacy is significantly different $F(5, 178) = 2.374$, $p < 0.041$) with fathers' education among students. The degree of freedom is between 5 and 178, and the significance value pointed towards strong variances within groups and between groups.

Table no 4
One way ANOVA the effect of mothers' education on self-efficacy

Factor		Sum of Squares	df	Mean Square	F	Sig.
Self-Efficacy	Between Groups	814.014	5	162.803	4.882	.000
	Within Groups	5768.880	173	33.346		
	Total	6582.894	178			

Table 4 shows the effect of mothers' education on self-efficacy. The self-efficacy is significantly different $F(5, 178) = 4.882$, $p < 0.000$) with mothers' education among students. The degree of freedom is between 5 and 178, and the sig. the value pointed towards strong variances within groups and between groups.

4.1. Findings

- 57.5% of students agreed that teachers in the class can get through to the most difficult students.
- 49.7% of students disagreed that if a child doesn't want to learn teachers give up.
- 48.6% of students disagreed that teachers don't have the motivation power to produce meaningful students' learning.
- 64.2% of students agreed that the curriculum prepares the students for their practical life.
- 67.6% of students agreed that BS program duration sometimes bothers the students.
- 69.3% of students agreed that drugs and alcohol abuse in the community make learning difficult for students.
- 55.3% of students agreed that teachers have what students want to learn
- As a whole, 59% of students are satisfied and agreed with self-efficacy.
- 48.6% of students disagreed that teachers don't have the skills to deal with students disciplinary problems.
- 63.1% of students agreed that the BS program brings out the personality traits and skills of students for their future needs.
- 65.4% of students agreed that the BS program is a bright step for students' future.
- 42.5% of students agreed that the BS program develops stress in the students.
- 74.3% of students agreed that the BS program is for the enhancement of students learning experiences.
- 72.1% of students agreed that teachers truly believe every child can learn.
- 68.2% of students agreed that teachers of the BS program have more potential to teach.
- 55.9% of students agreed that teachers think there are some students to whom no one can teach.
- 63.1% of students agreed that teachers are properly involved in curriculum designing procedure

5. Conclusion and Discussion

Although teacher participants indicated that there is a definite need to change teaching practices during the course of their careers, my experiences with them and principal participants through the interview process lead me to believe that there is a disconnect, to some degree, between what was stated and the actual change in teaching practices necessitated by the implementation of a new curriculum. While some participants spoke passionately about their changes in teaching methodology and practices to successfully implement a new curriculum, others spoke of the difficulty they were experiencing in utilizing a student-based inquiry method in the classroom. (Barry & Finney, 2009) highlight three categories of self-efficacy, namely social, roommate, and academic self-efficacy. Social efficacy refers to an individual's relations and social adjustment (Hutchinson et al., 2012).

Students believe that those participants who were actively involved in ongoing, embedded professional development felt that they had the necessary skills and confidence

to embrace the student-based inquiry method in implementing the new social studies curriculum. Those participants who expressed concern or discomfort did not take advantage of a strong desire to meet students' needs. Teachers believe that professional development involvement provides clarity and direction in understanding the need for change. When teachers seek constructive feedback on their classroom performance from peers, students and administrators, they will more likely engage in professional development activities. Meaningful change is brought about as professional development involvement increases teachers' knowledge and skills.

Students believe that new curricula are implemented to address the educational needs of students and to improve student learning. The new social studies curriculum is an example of how current literature and research influence the decision to utilize a student-based inquiry method and to promote critical thinking. Teachers must realize that lack of participation in professional development limits their ability to successfully implement a new curriculum if they do not know what student-based inquiry is, or what it l00ks like in the classroom. Teacher discomfort in changing teaching methodology and practices must be balanced against what is best for the students. The understanding of students' needs should always drive changes in teaching practices. Self-efficacy refers to an evaluation of the self while self-concept refers to comparisons of one's self with others (Choi, 2005).

5.1. Recommendations

The sharing of "lived experiences" of the participants in this study, the analysis of the data, and constant reflection on my part have all shaped recommendations for future research:

1. During the course of this study, it became evident that there is a disparity between the implementation of, and involvement in professional learning communities in universities. Further research is merited in exploring the relationship between learning communities and changing the university culture, the relationship between learning communities and improving teaching practices, and the relationship between learning communities and improving student achievement and enhancing student learning.
2. Since distance acts as a barrier to jurisdictional learning communities in rural jurisdictions, further research would be recommended on the relationship between video conferencing as a form of learning communities and improved teaching practices.
3. Further research should be conducted with the six teacher participants who expressed discomfort with changing teaching methodologies in implementing a new curriculum. The following questions would add to the body of knowledge: Has the time for self-reflection prompted them to engage in further professional learning opportunities? Have they been involved in professional readings, and do they consider these readings part of professional learning? What is their definition of professional learning?

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