Self-Efficacy Beliefs and Identity Construction of Beginning Student Teachers: An Insight into the Making of Teachers

Dechen Tshomo[1], Khandu Dorji[2] and Amina Gurung[3]

Abstract

This paper reports the results from the self-efficacy scale, highlighting the similarities and more notable contrasts in individual perceived ratings of teacher self-efficacy beliefs centered on student engagement in the class; classroom management; and use of various teaching strategies. The study involving only quantitative method was administered on pre-service teachers enrolled in first year B.Ed Primary, B.Ed Secondary, B.Ed Dzongkha, Masters, PGDE and Diploma Studies of Paro College of Education (102) and Samtse College of Education (133). The findings from this study is quite hopeful for the learning of students as the self-efficacy beliefs of the pre-service teachers irrespective of the programme they have enrolled in and their gender are high for all three pertinent areas of teaching: student engagement in class; classroom management and use of various teaching strategies.

Key words: pre-service, self-efficacy beliefs, student engagement, classroom management, teaching learning strategies

Context of Study

When the first year student teachers enter the college in the beginning of the first year, they often arrive with pre-conceived notions of what they think teaching is. Often these preconceived notions are combined with a sense of highly perceived self-abilities. Informal classroom personal communications reveal that most student-teachers think of the teaching profession flippantly and see it as a piece of cake and are enrolled not out of choice but, as a last option. Their self–efficaciousness is at its highest at the initial stage when they set foot into the college with a feeling of seemingly high self-competence coupled with moderate levels of motivation. But so far no research has been carried out about the self-efficacy beliefs and identity construction of beginning student-teachers and the impact of educational programmes on the development of these attributes.

Teacher's self-efficacy beliefs are critical to the learning of children as it has direct influence on student engagement in the class; classroom management; and use of various teaching

strategies. Therefore, it is pertinent to find out the self-efficacy beliefs in the making of teachers so that the results from the study could inform the programme structure.

This article focuses on the findings of the survey results derived from using the self-efficacy scale with the first year student-teachers from all six programmes at the beginning of the first semester. The participating student teachers are taken from those enrolled in first year Bachelors in Primary Education (B.Ed Pry), Bachelors in Secondary Education (B.Ed Secondary), Bachelors in Dzongkha (B.Ed Dzongkha), Post Graduate Degree in Education (PGDE), Masters and Diploma in Physical Education and Sports Coaching (DPESC).

[1]

Literature Review

Self-efficacy beliefs operate as a key factor in a generative system of human competence (Bandura, 1997). Teacher self-efficacy relates to the beliefs teachers hold about their own perceived capability in undertaking certain teaching tasks. Bandura (1997, p.3) defines self-efficacy as "beliefs in one's capabilities to organise and execute the course of action required to produce given attainments". Self-efficacy, therefore, influences thought patterns and emotions that enable classroom actions. In the context of education, teacher self-efficacy is considered a powerful influence on teachers' overall effectiveness with students. Moran and Hoy (2001) suggest that supporting the development of teachers' self-efficacy is essential for producing effective, committed and enthusiastic teachers. Teacher self-efficacy is a motivational construct that directly influences outcomes in the classroom. It has been related to student achievement (Moore & Esselman, 1992; Ross, 1992); increased job satisfaction (Caprara, Barbarnelli, Borgogni & Steca, 2003); commitment to teaching (Coladarci, 1992); greater levels of planning and organisation (Allinder, 1994); and working longer with students who are struggling (Gibson & Dembo, 1984). Moran and Hoy (2001, p. 783) also defined "teacher efficacy as judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated".

1. Assistant Professor, Paro College of Education, dechentshomo.pce@rub.edu.bt
2. Lecturer, Paro College of Education, khandudorji.pce@rub.edu.bt
3. Former Lecturer, Paro College of Education, aminagurung.pce@rub.edu.bt

Many studies have pointed out that there is a strong link between teacher's self-efficacy beliefs and children's cognitive achievement and success in the school (Moore & Esselman, 1992, 1994; Muijs & Rejnolds, 2001; Ross, 1992, 1998). Cousins and Walker (1995) stated that teachers with high self-efficacy beliefs are more likely than teachers with low self-efficacy beliefs to implement didactic innovations in the classroom, use classroom management approaches and teaching methods that encourage students' autonomy and reduce custodial control.

Ashton and Webb (1986) mentioned that high self-efficacy beliefs empower teachers to be more willing to explain than criticize when students make errors. Gibson and Dembo (1984) stated teacher's high self-efficacy beliefs offer diverse ways to help students who are struggling with study. Teachers with a higher sense of teaching self-efficacy display greater zeal for teaching (Allinder, 1994; Gusckey, 1984; Henson, 2001b; Woolfolk Hoy, 2001), stronger passion for teaching (Tschannen-Moran & Woolfolk Hoy, 2001), and are identified as more persistent in teaching (Burley, Hall, Willeme, & Brockmeier,1991).

The productivity and motivation is enhanced through teachers' self-efficacy beliefs during the teaching and learning process. It is also a requirement of teaching profession. A strong sense of self-efficacy enriches human accomplishment and personal well-being (Bandura,1997). Self-efficacy is what a person believes can be accomplished using his or her skills under certain circumstances. Based on social cognitive theory, teacher self-efficacy may be conceptualised as individual teachers' beliefs in their own plan, organise, and carry out activities that are required to attain given educational goals (Flores,2015). Self-efficacy in teacher education has been associated with constructs such as student achievement, and motivation, teachers' willingness to adopt innovative teaching strategies, time spent on teaching certain subjects and classroom management (Berg, & Smith, 2014). Consequently teacher education programmes have great responsibility for shaping the self-efficacy beliefs of pre-service teachers. Teachers' beliefs in their self-efficacy affect their general orientation towards the educational process as well as their specific instructional activities (Bandura, 1997).

Pre-service teacher preparation programmes may significantly influence the pre-service teachers' self-efficacy, for example self-efficacy of the pre-service teachers' are supposedly higher from a well-crafted field experiences as well as prior experiences (Flores, 2015., Berg, & Smith, 2014). Furthermore, the possibility of pre-service teachers' high self-efficacy could be

influenced by their own schooling leading to a belief that they were already capable teachers (Pendergast, garvis & Keogh, 2011).

Methodology

The study employed a questionnaire. Bandura's Self-efficacy scale mainly composed of Likert scale with a provision of space for extra information. The questionnaire was used for collecting data from the first year student-teachers from all six programmes at the beginning of the first semester. The participating pre-service teachers were taken from those enrolled in first year B.Ed Primary, B.Ed Secondary, B.Ed Dzongkha, Masters, PGDE and Diploma Studies from Paro College of Education and Samtse College of Education.

Participants

Total of two hundred and thirty five first year student teachers of Paro College of Education (102) and Samtse College of Education (133) participated in the survey. All hundred and thirty five student teachers were enrolled in first year of different programmes, B.Ed. Primary, B.Ed Secondary. B.Ed Dzongkha, PGDE, Masters and DPESC. Since the goal of the study was to find out the self - efficacy beliefs of student teachers, it was important to choose the participants from first year as they were newly enrolled into the programmes and were yet to be exposed to many new skills, strategies and knowledge in the colleges of education.

Data Analysis and findings

The data generated was analysed using SPSS. Factor Analysis and Principle Components analysis was carried out for further analysis. Where needed Anova Analysis was done.

i. Pre-service teachers' self-efficacy beliefs

The analysis of the data revealed student teachers of both the colleges (Samtse College of Education and Paro College of Education) have high self-efficacy beliefs for all three constructs. This is evident through the mean and standard as presented in table 1 and table 3.

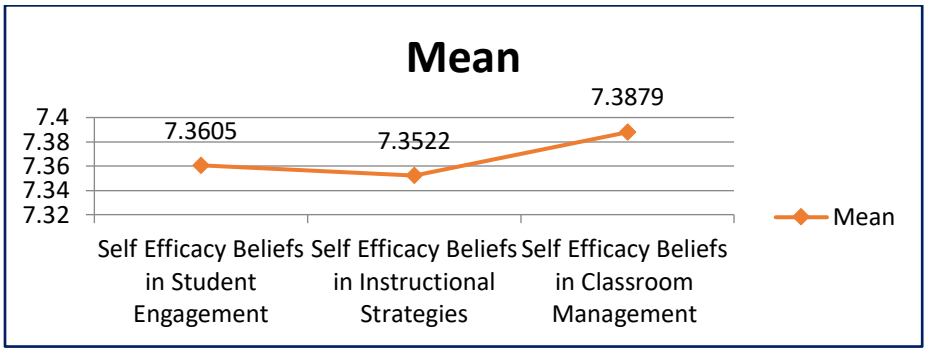
Table 1 reveals self-efficacy beliefs in student engagement (7.36), self-efficacy beliefs in instructional strategies (7.35) and self-efficacy beliefs in classroom management (7.38) of student teachers of Paro College of Education.

Table 1.Differences among the three constructs of student teachers of PCE

	N	Mean	SD
Self Efficacy Beliefs in Student Engagement	102	7.3605	0.92245
Self Efficacy Beliefs in Instructional Strategies	102	7.3522	1.05655
Self Efficacy Beliefs in Classroom Management	102	7.3879	0.98274

While examining the mean for the three constructs there is no significant difference. However, mean for the self-efficacy in classroom management is the highest, followed by student engagement and the lowest is for the instructional strategies. The slight difference in the three constructs is presented in table 2.

Table 2. Mean difference in the three constructs of student teachers of PCE



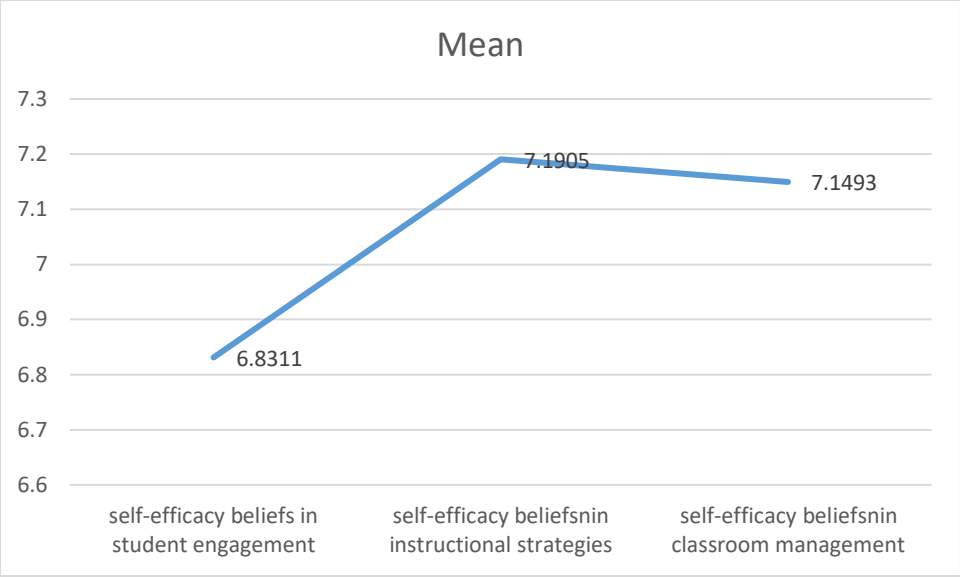
The analysis of data revealed a slight difference in the self-efficacy beliefs of student teachers of Samtse College of Education in relation to student engagement, instructional strategies and classroom management. The self-efficacy beliefs of student-teachers in student engagement (6.8311) seems to be lower than the self-efficacy beliefs in instructional strategies (7.1905) and self-efficacy beliefs in classroom engagement (7.1493). This is evident through the mean and standard deviation as presented in table 3 and table 4.

Table 3. Differences in three constructs of student teachers of SCE

	N	Mean	Std. Deviation
Efficacy_studentengagement	133	6.8311	.91739
Efficacy_instructionalstrategies	133	7.1905	1.12061

Efficacy_classroommanagement	133	7.1493	.98638
Valid N (listwise)	133		

Table 4. Mean difference in three constructs of student teachers of SCE



Detailed examination of all eight items under each construct also reveals high self-efficacy beliefs of the student teachers. The rating for each item starts at 1-2 (nothing), 3-4 (very little), 5-6 (some influence), 7-8 (quite a bit) and the maximum is 9 (a great deal). Maximum of the student-teachers have rated 7-8 (quite a bit) followed by 9 () a great deal. This pattern is repeated for all three constructs as shown below in table 5, table 6 and table 7.

Table 5. Rating of Self-efficacy beliefs in student engagement

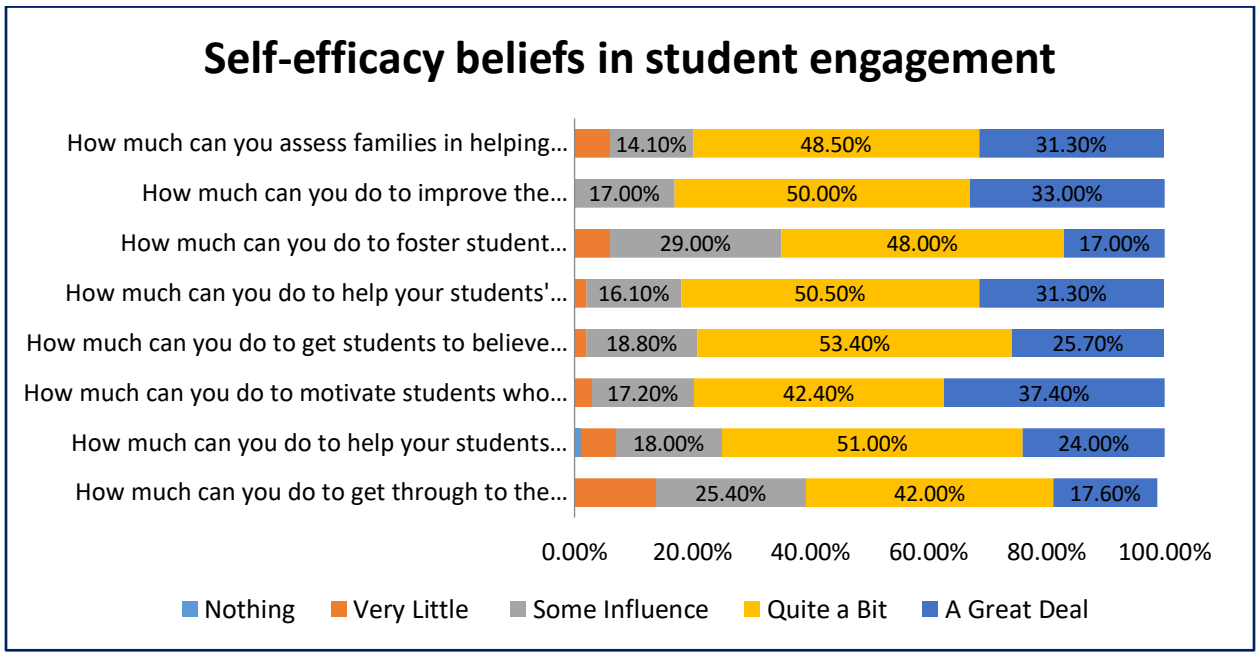


Table 6. Rating of Self-efficacy beliefs in instructional strategies

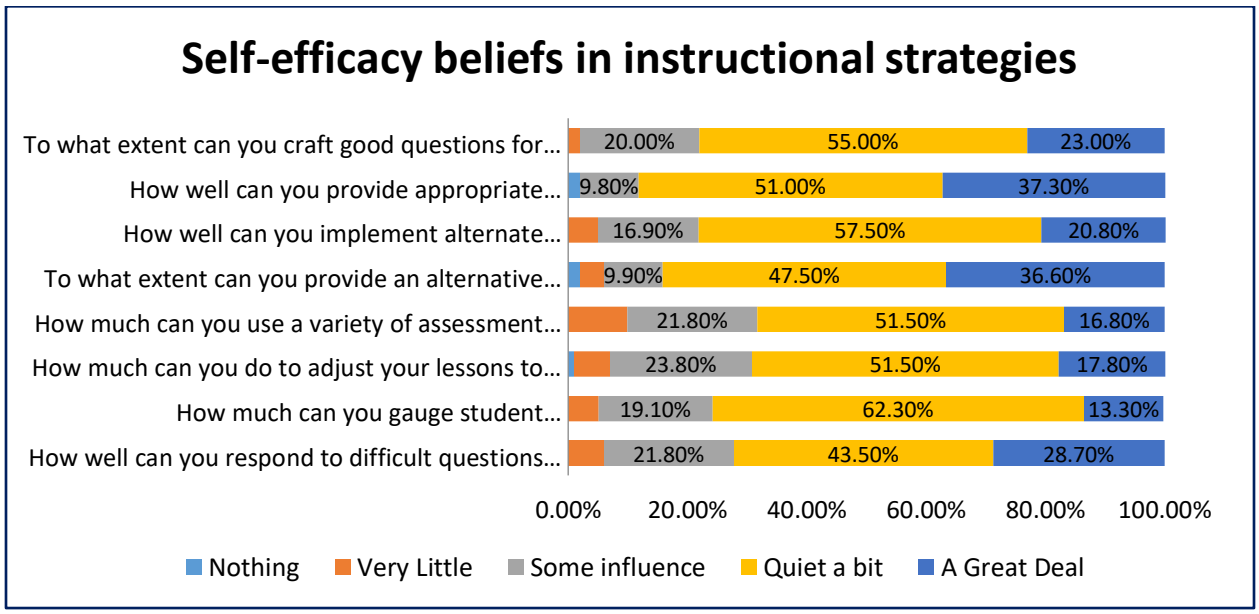
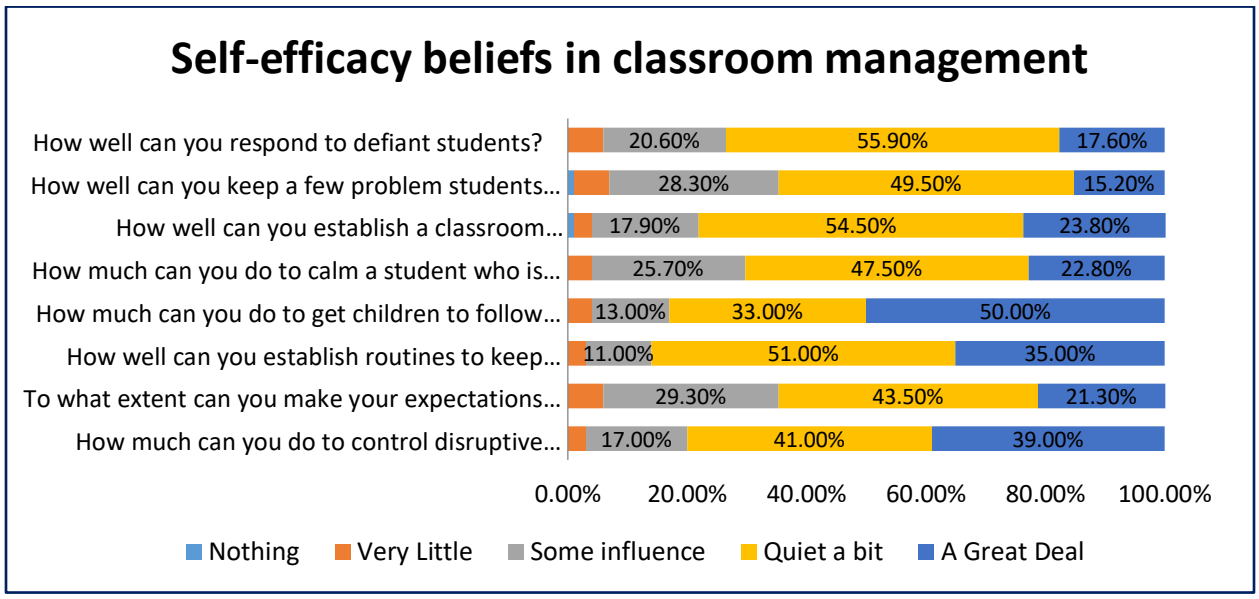


Table 7. Rating of Self-efficacy beliefs in classroom management



ii. Did gender determine the self-efficacy beliefs of student-teachers?

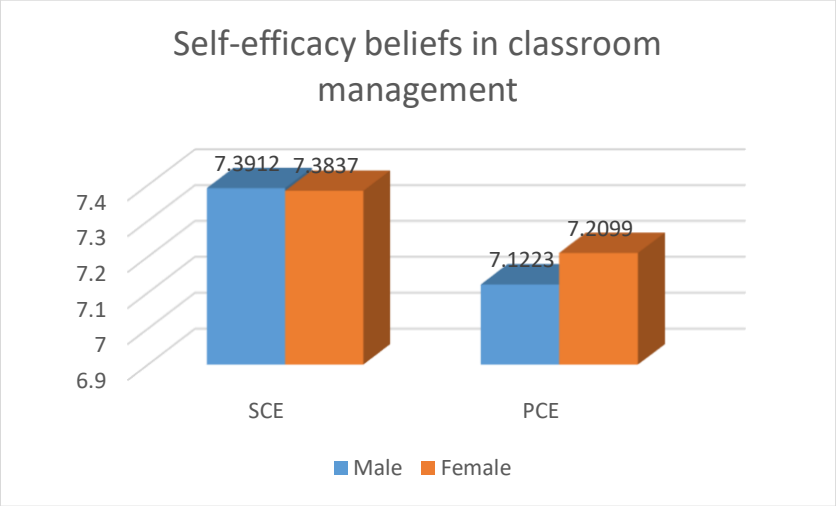
Gender and classroom management:

A one-way between subjects ANOVA was conducted to compare the self-efficacy beliefs in classroom management between male and female student-teachers of Paro College of Education. The results of this test indicated that there was no significant difference in self-efficacy belief of students in classroom management between male and female [F (1, 100) = .001, p = .970]. The post hoc comparison using the Tukey HSD Test also indicated that there was no significant difference between the gender; Male (M= 7.3912, SD=.85209, N=57), Female (M= 7.3837, SD=1.13702, N=45). The finding indicated that the student-teachers gender did not make any difference in the self-efficacy- beliefs in the classroom management.

Similarly, a one-way between subjects ANOVA was conducted to compare the self-efficacy beliefs in classroom management between male and female student-teachers of Samtse College of Education. The results of this test indicated that there was no significant difference in self-efficacy belief of students in classroom management between male and female [F (1, 131) =

.222, p = .638]. The post hoc comparison using the Tukey HSD Test also indicated that there was no significant difference between the gender; Male (M= 7.1223, SD=1.00662, N=92), Female (M= 7.2099, SD=.94872, N=41). The finding indicated that the student teachers gender did not make any difference in the self-efficacy- beliefs in the classroom management.

Table 8. Gender and Self-efficacy beliefs in classroom management



Though gender did not make difference in determining the self-efficacy beliefs of student teachers in classroom management, table 8 clearly indicates the difference in self-efficacy beliefs of student teachers (both male and female) of Samtse College of Education and Paro College of Education.

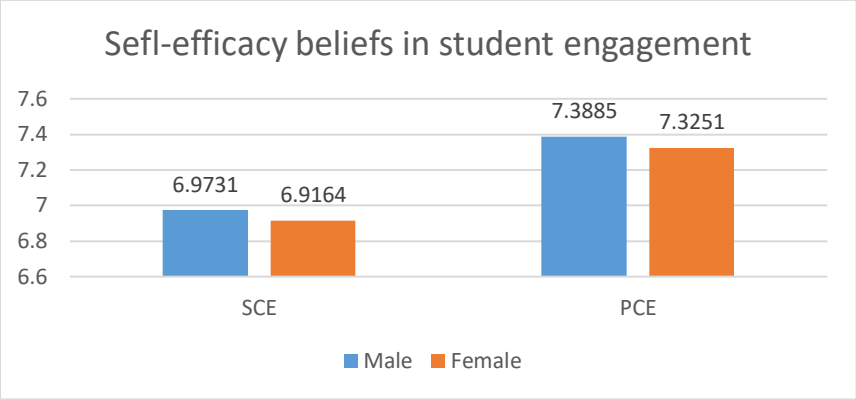
Gender and student engagement:

A one-way between subjects ANOVA was also conducted to compare the self-efficacy beliefs in student engagement between male and female student-teachers of Paro College of Education. The results of this test indicated that there was no significant difference in self-efficacy belief of students in student engagement between male and female [F (1, 100) = .118, p = .732]. The post hoc comparison using the Tukey HSD Test also indicated that there was no significant difference between the gender; male (M= 7.3885, SD=.89528, N=57), Female (M= 7.3251, SD=.96478, N=45). The finding indicated that gender did not make any difference in the self-efficacy- beliefs in the student engagement.

Similarly, a one-way between subjects ANOVA was also conducted to compare the self-efficacy beliefs in student engagement between male and female student teachers of Samtse College of Education. The results of this test indicated that there was no significant difference in self-efficacy belief of students in student engagement between male and female [F (1, 131) = .510,

p = .476]. The post hoc comparison using the Tukey HSD Test also indicated that there was no significant difference between the gender; male (M= 6.7931, SD=.95403, N=92), Female (M= 6.9164, SD=.83418, N=41). The finding indicated that gender did not make any difference in the self-efficacy- beliefs in the student engagement.

Table 9. Gender and self-efficacy beliefs in student engagement



Gender did not make any difference in determining the self-efficacy beliefs of student-teachers in student engagement as seen in table 9. However, there is a significant difference in the two colleges with regard to self-efficacy beliefs in student engagement with both male and female student-teachers.

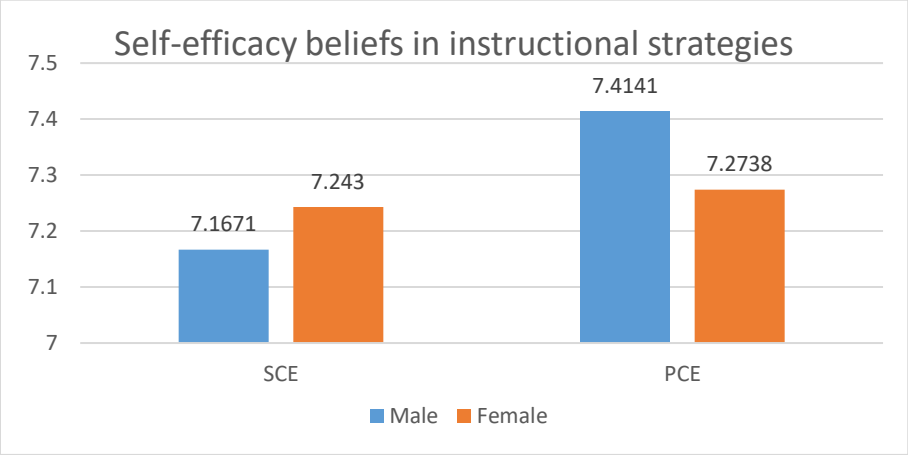
Gender and Instructional strategies:

Enrolment in different programmes did not impact the students' self-efficacy beliefs in instructional strategies as well. This was evident when a one-way between subjects ANOVA was conducted to compare the self-efficacy beliefs in instructional strategies between male and female student-teachers of PCE. The results of this test indicated that there was no significant difference in self-efficacy belief of students in instructional strategies between male and female [F (1, 100) = .441, p = .508]. The post hoc comparison using the Tukey HSD Test also indicated that there was no significant difference between the gender; Male (M= 7.4141, SD=1.03258, N=57), Female (M= 7.2738, SD=1.09278, N=45).

Similarly, a one-way between subjects ANOVA was conducted to compare the self-efficacy beliefs in instructional strategies between male and female student-teachers of SCE. The results of this test indicated that there was no significant difference in self-efficacy belief of

students in instructional strategies between male and female [F (1, 131) = .129, p = .720]. The post hoc comparison using the Tukey HSD Test also indicated that there was no significant difference between the gender; Male (M= 7.1671, SD=1.02598, N=92), Female (M= 7.2430, SD=1.32105, N=41).

Table 10. Gender and self-efficacy beliefs in instructional strategies



Comparison between the two colleges reveal as indicated in table 10 that the student teachers of PCE has higher self-efficacy beliefs in instructional strategies.

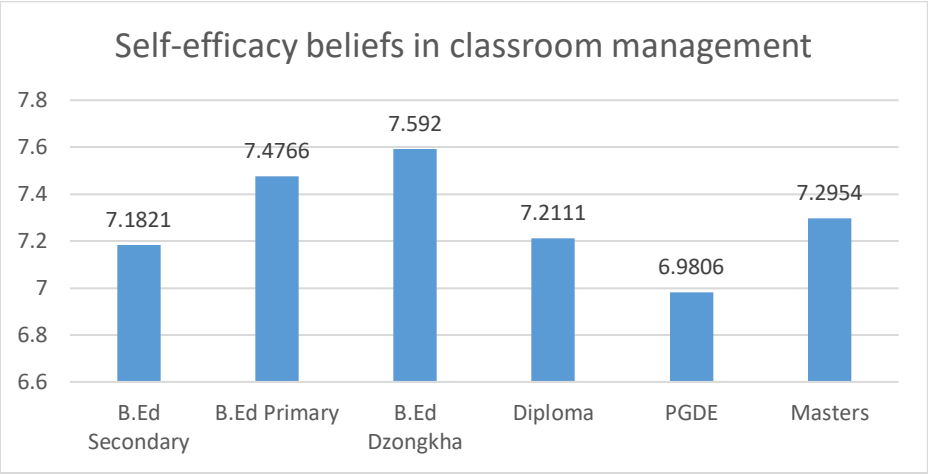
iii. Did programme impact the self-efficacy beliefs of student teachers?

Programme and classroom management:

A one-way between subjects ANOVA was conducted to compare the self-efficacy beliefs in classroom management among four different programmes; B.Ed Secondary, B.Ed Primary, B.Ed Dzongkha and Diploma in Physical Education and Sports Coaching. The results of this test indicated that there was no significant difference in self-efficacy belief of students in classroom management among the programmes [F (3, 98) = 1.070, p = .366]. The post hoc comparison using the Tukey HSD Test also indicated that there was no significant difference among the programmes; B.Ed Secondary (M= 7.1821, SD=1.326, N=25), B.Ed Primary (M= 7.4766, SD=.755, N=29), B.Ed Dzongkha (M= 7.592, SD=.9160, N= 29), Diploma in Physical Education and Sports Coaching (M=7.2111, SD=.8416, N=19), PGDE (M= 6.9806, SD=.99942, N=46), Masters (M=

7.2954, SD=1.0306, N= 45). The finding indicated that the student teachers enrolment in different programmes did not make any difference in the self-efficacy beliefs in the classroom management.

Table 11. Programme and self-efficacy beliefs in classroom management



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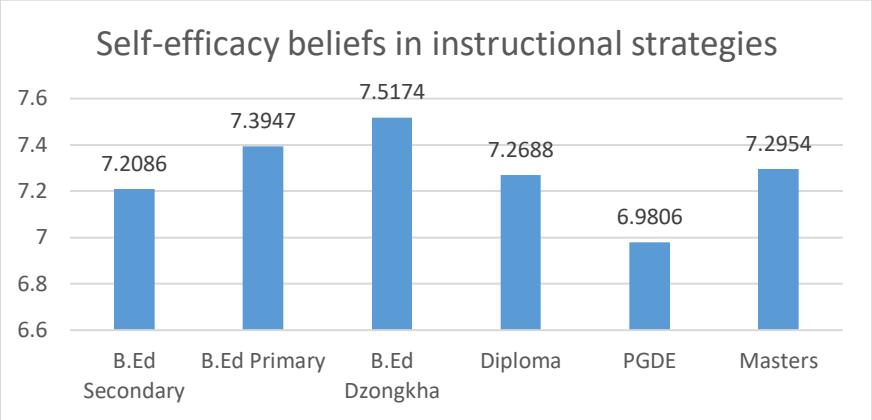
Programme and student engagement:

A one-way between subjects ANOVA was also conducted to compare the self-efficacy beliefs in student engagement among four different programmes; B.Ed Secondary, B.Ed Primary, B.Ed Dzongkha and Diploma in Physical Education and Sports Coaching. The results of this test indicated that there was no significant difference in self-efficacy belief of students in student engagement among the programmes [F (3, 98) = .574, p = .633]. The post hoc comparison using the Tukey HSD Test also indicated that there was no significant difference among the programmes; B.Ed Secondary (M= 7.2086, SD=1.045, N=25), B.Ed Primary (M= 7.3947, SD=.822, N=29), B.Ed Dzongkha (M= 7.5174, SD=1.007, N= 29), Diploma in Physical Education and Sports Coaching (M=7.2688, SD=.777, N=19), PGDE (M= 6.9806, SD=.99942, N=46), Masters (M= 7.2954, SD=1.0306, N= 45). The finding indicated that the student teachers enrolment in different programmes did not make any difference in the self-efficacy beliefs in the student engagement. However, student teachers enrolled in PGDE has lower self-efficacy beliefs comparing to other student teachers.

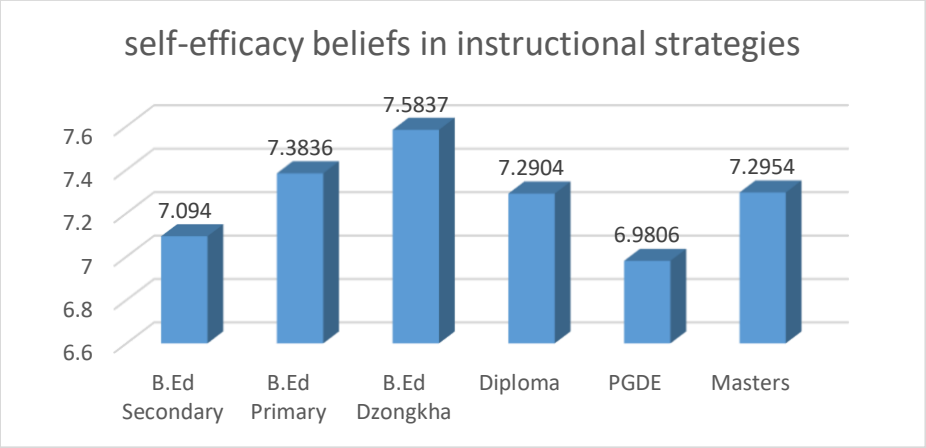
Table 12. Programme and self-efficacy beliefs in instructional strategies



Programme and Instructional strategies:

Enrolment in different programmes did not impact the students' self-efficacy beliefs in instructional strategies as well. This was evident when a one-way between subjects ANOVA was conducted to compare the self-efficacy beliefs in instructional strategies among four different programmes; B.Ed Secondary, B.Ed Primary, B.Ed Dzongkha and Diploma in Physical Education and Sports Coaching. The results of this test indicated that there was no significant difference in self-efficacy belief of students in instructional strategies among the programmes [F (3, 98) = .992, p = .400]. The post hoc comparison using the Tukey HSD Test also indicated that there was no significant difference among the programmes; B.Ed Secondary (M= 7.0940, SD=1.3322, N=25), B.Ed Primary (M= 7.3836, SD=.745, N=29), B.Ed Dzongkha (M= 7.5837, SD=1.195, N= 29), Diploma in Physical Education and Sports Coaching (M=7.2904, SD=.790, N=19), PGDE (M= 6.9806, SD=.99942, N=46), Masters (M= 7.2954, SD=1.0306, N= 45). However, even for the instructional strategies, the PGDE student teachers have rated lower than the other student teachers.

Table 13. Programme and self-efficacy beliefs in instructional strategies



iv. Did previous teaching experience impact self-efficacy beliefs of student teachers?

Teaching experience and classroom management:

A one-way between subjects ANOVA was conducted to compare the self-efficacy beliefs in classroom management between student-teachers with teaching experience and student-teachers without teaching experience from SCE. The results of this test indicated that there was no significant difference in self-efficacy belief of students in classroom management between participants with previous teaching experience and participants without previous teaching experience [F (1, 131) = 1.840, p = .177]. The post hoc comparison using the Tukey HSD Test also indicated that there was no significant difference made by the experience; with previous experience in teaching (M= 7.2750, SD=1.05495, N=61), without experience in teaching (M= 7.0429, SD=.91832, N=72). The finding indicated that the student teachers with previous experience in teaching and without any experience did not make any difference in the self-efficacy beliefs in the classroom management.

Teaching experience and student engagement:

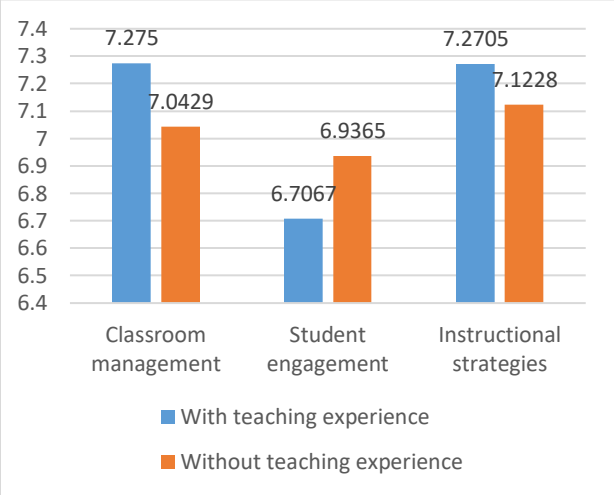
A one-way between subjects ANOVA was conducted to compare the self-efficacy beliefs in classroom management between participants with teaching experience and participants without teaching experience. The results of this test indicated that there was no significant difference in self-efficacy belief of students in classroom management between participants with previous

teaching experience and participants without previous teaching experience [F (1, 131) = 2.090, p = .151]. The post hoc comparison using the Tukey HSD Test also indicated that there was no significant difference made by the experience; with previous experience in teaching (M= 6.7067, SD=.98156, N=61), without experience in teaching (M= 6.9365, SD=.85200, N=72). The finding indicated that the student teachers with previous experience in teaching and without any experience did not make any difference in the self-efficacy beliefs in the student engagement.

Teaching experience and Instructional strategies:

A one-way between subjects ANOVA was conducted to compare the self-efficacy beliefs in classroom management between participants with teaching experience and participants without teaching experience. The results of this test indicated that there was no significant difference in self-efficacy belief of students in classroom management between participants with previous teaching experience and participants without previous teaching experience [F (1, 131) = .572, p = .451]. The post hoc comparison using the Tukey HSD Test also indicated that there was no significant difference made by the experience; with previous experience in teaching (M= 7.2705, SD=.95666, N=61), without experience in teaching (M= 7.1228, SD=1.24543, N=72). The finding indicated that the student teachers with previous experience in teaching and without any experience did not make any difference in the self-efficacy beliefs in instructional strategies.

Table 14. Teaching experience and three constructs



As indicated in table 14, previous teaching experience of student-teachers does not impact the self-efficacy beliefs of student-teachers. The difference noted is not consistent. Self-efficacy beliefs in classroom management and instructional strategies seem to be higher for those with teaching experience. Whereas self-efficacy belief in student engagement is lower in those with teaching experience.

Discussion and Recommendations

In examining the self- efficacy beliefs of the first year student-teachers prior to micro-teaching and teaching practicum, turned out to be high for all three constructs, self-efficacy beliefs in student engagement, self-efficacy beliefs in instructional strategies and self-efficacy beliefs in classroom management. This could be because of their experiences as students. As students, one tend to think that engaging students, providing instructional strategies and classroom management are simple as that is got to do with teacher having the authority and students having to submit. The high self-efficacy could also be because of their positive relationship with their teachers in the schools as suggested by Oh (2010) that high teacher self-efficacy has consistently been found to relate to positive student and teacher behaviours. Bhutanese culture also demands students to be respectful to elders and teachers. This culture is imposed from the home as a child only. Hence, when students, irrespective of the teachers' effort turn out to be obedient, makes them believe that the job of a teacher is a piece of cake, hence high self-efficacy beliefs in all three constructs. For many student-teachers, choosing teaching as a profession is not out of choice but lack of choice. Therefore, students who have opted for teaching as a profession are not the brightest lot. The pressing demand for teachers in the country has led to the system to accept any candidates fulfilling the minimum criteria set for the selection of teacher trainees. This is a concern in terms of bringing out learning in children in the classroom because it is believed that teacher self-efficacy is a motivational construct that directly influences outcomes in the classroom. According to Moore and Esselman (1992), Ross (1992), teacher's self- efficacy belief is related to student achievement; greater levels of planning and organisation (Allinder,1994); and working longer with students who are struggling (Gibson & Dembo, 1984).

The concern here is, would students who have opted teaching as a last option be able to bring out the desired needs in children. However, the findings are comforting, as the teachers have high self-efficacy beliefs in all three constructs: self-efficacy belief in student engagement; self-

efficacy beliefs in classroom management; and self-efficacy beliefs in instructional strategies. According to Weinstein, (1988) novice teachers often enter the profession with high hopes about the kind of impact that they will be able to have on students' lives, but encounter a painful reality shock because they are often faced with all the role demands and expectations encountered by experienced teachers. Student-teachers in their first year haven't undergone, teaching practicum, hence they lack the actual experience of teaching in a real classroom and therefore their self-efficacy belief is not hampered. Hoy and Spero (2005) found that teaching efficacy rose during teacher preparation programmes and student teaching, but fell with actual experience as a teacher because novice teachers often underestimate the complexity of the teaching task and their ability to manage many agendas at the same time. This explains the high self-efficacy beliefs of all student teachers irrespective of gender and programme. However, research suggests that teacher self-efficacy tends to increase during teacher education enrolment (Hoy & Woolfolk, 1990; Wenner, 2001) but decrease after graduation to the end of the first year of teaching (Moseley, Reinke & Bookour, 2003; Woolfolk Hoy, 2000). However, the findings from this study indicate a slightly different story, the student-teachers pursuing Master degree who have previous teaching experience also have high self-efficacy beliefs and have rated higher than the student-teachers without previous teaching experience on classroom management and instructional strategies and have rated lower than the student-teachers without previous teaching experience on student engagement. This could be because of their experiences encountered in real classroom situations. Whereas the student teachers without previous teaching experience could have purely based their rating on the content they are learning from the programme they are enrolled in.

Another finding from this study that needs discussion is the self-efficacy beliefs of PGDE student-teachers having rated lower than the student-teachers enrolled in other five programmes. The low rating is consistent irrespective of gender or the programme for all three constructs, self-efficacy beliefs in classroom management, student engagement and instructional strategies. This calls for an in-depth research to look at the programme structure and content offered for different programmes to find out the gap and address it.

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