

TEACHER SELF-EFFICACY FOR PROMOTING STUDENT MOTIVATION

Wut Yee Phy¹, Khin Mar Ni²

Abstract

The purposes of this study are to study the levels of teacher self-efficacy in Basic Education High Schools, Sanchaung Township, Yangon Region and to study the variations of the levels of teacher self-efficacy in terms of demographic data. Quantitative and qualitative methods were used in this study. 165 teachers were applied as participants from four Basic Education High Schools by using census method. One set of questionnaire for teachers' perception on their self-efficacy for promoting student motivation was applied for this study. The reliability coefficient (Cronbach's alpha) of the whole scale of teacher self-efficacy was 0.78. The teachers perceived that the level of overall dimension of teacher self-efficacy was moderately high for student motivation in Basic Education High Schools, Sanchaung Township. Descriptive statistics was applied in exploring the levels of teacher self-efficacy in schools. The total mean values of teacher self-efficacy according to respective schools, School B had the highest mean value and School D had the lowest mean value among these schools. Concerning the ANOVA result of teacher self-efficacy grouped by service, there were significant differences on the dimensions of teachers' motivation belief and teachers' perceived level of power. Regarding the ANOVA result of teacher self-efficacy grouped by position, there were significant differences on the dimensions of teachers' motivation belief, teachers' perceived level of power and teacher morale. A qualitative follow up study was conducted by open-ended questions. In their responses, some teachers said that they want opportunities that can assist to make decision making.

Keywords: Self-Efficacy, Motivation

Introduction

Education is the crucial instrument that is used in the contemporary world to succeed. It is importance because it is used to ease most of the challenges faced in life. For education system to be changed, the teacher is one of the variables that must be changed. Moreover, teachers are a key element for quality education because they orchestrate instructional interactions influence student learning. This study observes teacher self-efficacy for promoting student motivation by looking at a number of external factors that influence a teacher's belief in their ability to motivate children to perform. Efficacy is one of the most popular research terms used in educational studies to show a teacher's beliefs in his/her abilities and how those beliefs can ultimately modify the level of success students may practice within the classroom.

Bandura (1997) defines self-efficacy as the organization of social, technical, and behavioral skills to achieve targets. Self-efficacy in the context of teaching refers to the ability to decide the outcomes of the students' work. Bandura (2002) states that forethought and outcome expectations can help to master a situation and achieve the desired targets. In the past, a teacher's responsibility was only to teach (Gul, 2014); but today, special skills require to be taught to the students like decision making, critical analysis, and a balanced mindset, which will assist students in both professional and personal life. Observation of these factors could possibly assist develop methods to minimize high teacher turnover rates, increase teacher longevity, and ultimately improve student achievement in most districts if administrators and educators become

¹ Daw, Senior Teacher, No (1) Basic Education High School, Wakema Township, Ayeyarwady Region

² Dr, Associate Professor, Department of Educational Theory, Yangon University of Education

proactive in their efforts to maintain teachers through methods that directly improve efficacy beliefs. Determining if the factors significantly impact efficacy is the first step to identifying and developing the methods that can be employed to improve the motivation of students in schools.

Significance of the Study

Bandura (1997) stated that individual efficacy is highly correlated with teacher motivation, which in turn affects student achievement. Teachers with a strong sense of individual efficacy tend to use more time planning, designing, and organizing what they teach. They are open to new ideas, willing to attempt new strategies, set high goals, and persist through setbacks and times of change (Goddard, Hoy & Woolfolk Hoy, 2000). In the classroom, motivation is the key to assuring students will put forth the effort to do well on state mandated tests or even pursue the honor roll. If teachers are unable to motivate their students to perform, the child stands to lose a year of needed subject specific skills to help them later in their academic career. Moreover, if the teacher is not encouraged to teach, she will not put forth the efforts necessary to build relationships, arrange effective lessons or develop management strategies to give surety minimum classroom disruption.

Understanding to what extent certain factors impact efficacy has implications for not only the teachers, but administrators as well. If certain factors, such as administrative support or teaching style, change efficacy more significantly, then administrators can better plan their school year to include additional efforts to improve support activities geared to the needs of their staff. This study could also support administrators in revealing the building collective efficacy measures as well. If the majority of their staff has low individual efficacy, the buildings collective efficacy is definitely impacted. With that information, further research can be prepared to better understand why there is low efficacy and what can be done to increase individual and building efficacy levels to have a higher likelihood of increasing overall student achievement.

Aims of the Study

The main aim of the study is to study the teacher self-efficacy for promoting student motivation.

The specific aims are

- To study the perceived levels of teacher self-efficacy that promotes student motivation
- To study the variations of the levels of teacher self-efficacy in terms of demographic data

Research Questions

- What are the perceived levels of teacher self-efficacy that promotes student motivation?
- What are the variations of the levels of teacher self-efficacy in terms of demographic data?

Theoretical Framework

In this study, the investigation of teacher self-efficacy will be based on the teacher self-efficacy model developed by Bandura (1986). There are five dimensions in this model. They are:

Teachers' Motivation Beliefs: Schlechy (1994) found that students who are motivated to learn are very engaged in their work.

Administrative Support: The role of the principal was instrumental in the development of teacher self-efficacy (Walker, 2009).

Perceived Teacher Power: Wilson and Coolican (1996) found that the high self-empowered teachers felt that working with principals was important to improve decisions made about students or the school.

Teacher Morale: William Miller (1981) found that teacher morale can have a positive effect on pupil attitudes and learning.

Teachers' Teaching Methods: Bandura (1995) stated that effective behavior may heighten teacher self-efficacy and, in turn, higher self-efficacy beliefs support self-confident and effective behaviour.

Definitions of the Key Terms

- (1) **Teacher Self-Efficacy:** Teacher self-efficacy is teachers' confidence in the ability to promote student learning (Hoy, 2000).
- (2) **Motivation:** The forces that account for the arousal, selection, direction and continuation of behavior (Biehler & Snowman, 1997).

Methodology

Research Method

Both quantitative and qualitative methods were used to study the teacher self-efficacy for promoting student motivation in Sanchaung Township, Yangon Region. Questionnaire survey was used in quantitative study and open-ended questions was used in qualitative study.

Sample

The target population of this study occupied fifty four Senior Teachers (ST), seventy four Junior Teachers (JT) and thirty seven Primary Teachers (PT) from four basic education high schools in Sanchaung Township, Yangon Region. Census method was used in this study.

Instrumentation

In this study, questionnaire survey was used to gather the required data concerning the research focus. The set of questionnaire was expanded based on the review of related literature. This questionnaire consists of 50 items in 5 dimensions (teacher beliefs in their ability to motivate students, teacher's perceived level of power, administrative support, teacher morale and a teacher's teaching methods) and 3 open-ended questions. The items in each dimension were rated on four-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree). This questionnaire contained demographic data. It composed of gender, service, qualification and position. All items in the instruments can be seen in Appendix.

Analysis of Data

The collected data of this study were systematically analyzed by using the Statistical Package for the Social Sciences (SPSS) software version 22 as it is widely applied in quantitative research. To find out the levels of teacher self-efficacy in Basic Education High Schools in Sanchaung Township, descriptive statistics such as means and standard deviations were computed. In scoring the level of teacher self-efficacy in schools, the average score from 1.00 to 1.49 showed low, from 1.50 to 2.49 moderately low, from 2.50 to 3.49 moderately high, and from 3.50 to 4.00 high. After that descriptive statistics, One-way ANOVA analysis and Tukey

Dimensions	School	Number	Mean	SD
Teaching Methods	A	20	3.15	.39
	B	86	3.06	.35
	C	31	2.98	.37
	D	28	2.64	.27
	Total	165	2.99	.38

According to Table 2, overall mean values of motivation belief, teacher power, administrative support, teacher morale and teaching methods were 2.94, 3.03, 2.87 and 2.83. It was found that School A, B, C and D were moderately high level.

Table 3 Mean Values and Standard Deviations of Teacher Self-Efficacy Grouped by Service (N=165)

No	Dimensions	Service Group	N	Mean	SD	Level of Self-Efficacy
1	Motivation Belief	1-6	5	2.96	.45	Moderately high
		7-18	46	2.85	.28	Moderately high
		19-30	47	2.85	.23	Moderately high
		31+	67	3.03	.27	Moderately high
2	Teacher Power	1-6	5	3.15	.22	Moderately high
		7-18	46	2.91	.24	Moderately high
		19-30	47	3.05	.29	Moderately high
		31+	67	3.11	.33	Moderately high
3	Administrative Support	1-6	5	2.89	.16	Moderately high
		7-18	46	2.97	.29	Moderately high
		19-30	47	2.86	.30	Moderately high
		31+	67	2.95	.37	Moderately high
4	Teacher Morale	1-6	5	2.91	.47	Moderately high
		7-18	46	2.95	.33	Moderately high
		19-30	47	2.95	.34	Moderately high
		31+	67	2.93	.32	Moderately high
5	Teaching Methods	1-6	5	3.24	.30	Moderately high
		7-18	46	2.91	.34	Moderately high
		19-30	47	2.99	.40	Moderately high
		31+	67	3.01	.39	Moderately high
	Overall	1-6	5	2.99	.12	Moderately high
		7-18	46	2.92	.18	Moderately high
		19-30	47	2.93	.17	Moderately high
		31+	67	2.99	.22	Moderately high

Scoring Direction: 1.00 - 1.49 = low 1.50 - 2.49 = moderately low
 2.50 - 3.49 = moderately high 3.50 - 4.00 = high

Table 3 shows that the mean values of motivation belief were ($\bar{X} = 2.96$), ($\bar{X} = 2.85$), ($\bar{X} = 2.84$) and ($\bar{X} = 3.03$), teacher power were ($\bar{X} = 3.15$), ($\bar{X} = 2.91$), ($\bar{X} = 3.05$) and ($\bar{X} = 3.11$), administrative support were ($\bar{X} = 2.89$), ($\bar{X} = 2.97$), ($\bar{X} = 2.86$) and ($\bar{X} = 2.95$), teacher morale were ($\bar{X} = 2.91$), ($\bar{X} = 2.95$), ($\bar{X} = 2.95$) and ($\bar{X} = 2.93$), teaching methods were ($\bar{X} = 3.24$), ($\bar{X} = 2.91$), ($\bar{X} = 2.99$) and ($\bar{X} = 3.01$) in (1 - 6) years teaching service group, (7-18) years teaching service group, (19 - 30) years teaching service group and (31+) years teaching service group respectively.

Table 4 ANOVA Result of Teacher Self-Efficacy Grouped by Service

Dimensions		Sum of Squares	df	Mean Square	F	p
Motivation Belief	Between Groups	1.299	3	.433	5.905	.001***
	Within Groups	11.801	161	.073		
	Total	13.099	164			
Teacher Power	Between Groups	1.204	3	.401	4.540	.004**
	Within Groups	14.233	161	.088		
	Total	15.437	164			
Administrative Support	Between Groups	.295	3	.098	.918	ns
	Within Groups	17.271	161	.107		
	Total	17.567	164			
Teacher Morale	Between Groups	.024	3	.008	.072	ns
	Within Groups	17.657	161	.107		
	Total	17.680	164			
Teaching Methods	Between Groups	.625	3	.208	1.459	ns
	Within Groups	22.986	161	.143		
	Total	23.611	164			

* $p < .05$, ** $p < .01$, *** $p < .001$ at the significant level and ns = no significance

Table 4 shows that there was a significant difference between the level of motivation belief and teacher self-efficacy grouped by service at the 0.001 level. And there was a significant difference between the level of teacher power and teacher self-efficacy grouped by service at the 0.01 level.

Table 5 Tukey HSD Results of Teacher Self-Efficacy Grouped by Service

Dependent Variable	(I) Service 1	(J) Service 2	Mean Difference (I-J)	P
Motivation Belief	7-18 years	1-6 years	-.11	ns
		19-30 years	-.00	ns
		31+ years	-.18*	.003**
	19-30 years	1-6 years	-.11	ns
		7-18 years	-.00	ns
		31+ years	-.18*	.003**
	31+ years	1-6 years	.07	ns
		7-18 years	.18*	.003**
		21-30 years	.18*	.003**
Teacher Power	7-18 years	1-6 years	-.24	ns
		19-30 years	-.14	ns
		31+ years	-.20*	.003**
	31+ years	1-6 years	.04	ns
		7-18 years	.20*	.003**
		19-30 years	.06	ns

According to Table 5, teachers whose teaching service ranged from (31+) years teaching service group was significantly different from teachers whose teaching service ranged from

Table 7 ANOVA Result of Teacher Self-Efficacy Grouped by Position

Dimensions		Sum of Squares	df	Mean Square	F	p
Motivation Belief	Between Groups	.897	2	.449	5.957	.003**
	Within Groups	12.202	162	.075		
	Total	13.099	164			
Teacher Power	Between Groups	1.504	2	.752	8.743	.000***
	Within Groups	13.933	162	.086		
	Total	15.437	164			
Administrative Support	Between Groups	.536	2	.268	2.549	ns
	Within Groups	17.031	162	.105		
	Total	17.567	164			
Teacher Morale	Between Groups	1.063	2	.531	5.179	.007**
	Within Groups	16.618	162	.103		
	Total	17.680	164			
Teaching Methods	Between Groups	.567	2	.284	1.994	ns
	Within Groups	23.043	162	.142		
	Total	23.611	164			

* $p < .05$, ** $p < .01$, *** $p < .001$ at the significant level and ns = no significance

Table 7 shows that there were significant differences between the level of teachers' motivation belief, teacher morale and teacher self-efficacy grouped by position at the 0.01 level. And there was a significant difference between the level of teacher power and teacher self-efficacy grouped by position at the 0.001 level.

Table 8 Tukey HSD Results of Teacher Self-Efficacy Grouped by Position

Dependent Variables	(I) Position 1	(J) Position 2	Mean Difference (I-J)	P
Motivation Belief	JT	PT	-.10	ns
		ST	.14*	.006**
	ST	PT	-.24	ns
		JT	-.14*	.006**
Teacher Power	PT	JT	-.36*	.003**
		ST	-.21	ns
	JT	PT	.36*	.003**
		ST	.15*	.008**
	ST	PT	.21	ns
		JT	-.15	.008**
Teacher Morale	PT	JT	.38*	.004**
		ST	.36*	.012*
	JT	PT	-.38*	.004**
		ST	-.03	ns
	ST	PT	-.35*	.012*
		JT	.03	ns

According to Table 8, Junior Teachers' (JT) motivation belief was significantly different from Senior Teachers (ST). Junior Teachers' (JT) perceived level of power was significantly

different from Primary Teachers (PT) and Senior Teachers (ST) in their schools. And Primary Teachers' (PT) morale level was significantly different from Junior Teachers (JT) and Senior Teachers (ST).

Findings from Open-ended Questions

The open-ended Question (1) is **“Do you believe you can make your students engaged in your teaching? If so, how can you make your students to become interested in your teaching?”** For this question, the teachers participated in this study answered as follows.

The 72% (n=53) of teachers stated that they can offer students opportunities to participate in teaching-learning process. The 42% (n=37) of teachers answered that they can use various teaching aids. The 20% (n=34) of teachers replied that they can explain subject matter by linking with outside events and external knowledge. The 13% (n=21) of teachers stated that they can stimulate all students to collaborate and cooperate in the activities. The 10% (n=16) of teachers answered that their students were interested in their teaching.

The open-ended Question (2) is **“How does your principal help and support in your teaching?”** For this question, the teachers participated in this study answered as follows.

The 81% (n=36) of the teachers responded that their principal provided advices in his teachers' teaching. The 19% (n=31) of the teachers answered that their principal didn't permit them to participate in the decision making process of the school. The 18% (n=29) of the teachers answered that their principal supplied necessary teaching aids. The 18% (n=29) of the teachers answered that their principal detained school assembly regularly and told students to study lessons and be polite. The 12% (n=20) of the teachers responded that their principal gave professional development opportunities for the teachers. The 5% (n=8) of the teachers responded that their principal often gave suggestions and praised teachers for their success.

The open-ended Question (3) is **“What kind of instructional strategies can use for student achievement?”** For this question, the teachers participated in this study answered as follows.

The 29% (n=48) of the teachers answered that they decided teaching methods that were appropriate with the students' intellectual level. The 20% (n=33) of the teachers answered that they employed explanation method in their teaching. The 18% (n=30) of the teachers answered that they applied student-centered approaches rather than traditional teaching methods. The 13% (n=21) of the teachers answered that they utilized questioning method in their teaching. The 7% (n=11) of the teachers answered that they connected subject matter to real life situation.

Conclusion

In this chapter, discussion, recommendation, and needs for further research for improving teacher self-efficacy for promoting student motivation are presented in detail.

Discussion

The purpose of this study is to study the teacher self-efficacy for promoting student motivation. A total of 165 teachers from four high schools in Sanchaung Township, Yangon Region participated in this study. Questionnaire Survey Method was applied in this study. The major findings of this study and discussions are presented below. Based on the findings of quantitative study, the conclusion can be drawn as follows.

In a quantitative study, teacher self-efficacy consisted of five dimensions: motivation belief, teacher power, administrative support, teacher morale and teaching methods. The mean values of teacher self-efficacy for promoting student motivation in School (A, B, C, D) were high. Therefore, the level of teacher self-efficacy in each school was high.

In studying the total mean values of teacher self-efficacy according to respective schools, School B had the highest mean value ($\bar{X} = 3.03$) among four Basic Education High Schools. Then, the School D had the lowest mean value ($\bar{X} = 2.83$) among these schools.

According to the mean value for teacher self-efficacy grouped by service, the mean values of (1-6) years teaching service group and (31+) years teaching service group obtained the highest mean value ($\bar{X} = 2.99$). The (7-18) years teaching service group and (19-30) years teaching service group obtained the overall mean values were ($\bar{X} = 2.92$), and ($\bar{X} = 2.93$). So, it can be said that the teachers from (1-6) years teaching service group, (7-18) years teaching service group, (19-30) years teaching service group and (31+) years teaching service group perceived that all dimensions were high.

According to the mean values for the dimension of teachers' motivation belief grouped by service, (31+) years teaching service group obtained the highest mean value ($\bar{X} = 3.03$). It can be interpreted that the teachers in (31+) years teaching service group obtained high motivation belief. It was congruence with the suggestion of Ford (2002) that old service teachers are more aware of what works and what does not work in the classroom for students, hence, there is a higher sense of belief for old service teachers when motivating.

According to the mean values for the dimension of teacher power grouped by service, (1-6) years teaching service group obtained the highest mean value ($\bar{X} = 3.15$). It can be interpreted that the teachers in (1-6) years teaching service group obtained high teacher power. It was congruence with the suggestion of Ford (2002) that younger teachers have already been trained in the more progressive best practice strategies that are currently being applied by the majority of the school districts, hence their ability to make decisions in the classroom would be more accepted by administrative staff because they are based on what districts are currently using.

According to the mean value for teacher self-efficacy grouped by position, the mean value of Primary Teachers (PT) group obtained the highest mean value ($\bar{X} = 3.03$), Junior Teachers (JT) group and Senior Teachers (ST) group obtained the overall mean values were ($\bar{X} = 2.96$) and ($\bar{X} = 2.93$). So, it can be said that Primary Teachers (PT), Junior Teachers (JT) and Senior Teachers (ST) perceived that all dimensions were high.

According to the mean values for the dimension of teachers' motivation belief grouped by position, Primary Teachers (PT) group obtained the highest mean value. It can be interpreted that the teachers in Primary Teachers (PT) group got high motivation belief. Primary Teachers (PT) group experienced that they were able to motivate the unmotivated student and Senior Teachers (ST) group did not feel that way. Primary Teachers (PT) group also felt that they could stimulate their students regardless of the resources offered to them and that they were able to develop activities in the classroom that would motivate their students. Senior Teachers (ST) group showed significantly lower beliefs in their ability to motivate the student as opposed to the primary level. It was congruence with the suggestion of Ford (2002) that younger students tend to be more eager and ready to learn compared to older students. Students' interests change as their age level, and minimizing the amount of time a student's interest is able to focus on school.

According to the mean values for the dimension of teacher power grouped by position, Junior Teachers (JT) group obtained the highest mean value. It can be interpreted that the teachers in Junior Teachers (JT) group obtained high teacher power. This is because teachers from all groups perceived that some teachers had chances in making decision about their teaching but some didn't. By means of the teachers' word in the open-ended responses, they had less opportunity to freely say their views about the school matters in school meetings. Also, some principals didn't permit them to participate in the decision-making process of the schools. The teachers seldom had an opportunity to participate in the decision-making process of the school. It was supported by Ford (2002) that assisting in decision-making aids support the belief that their contribution is crucial from a teachers' point of view, hence increasing their self-efficacy. Therefore, the more the teachers were participated in decision-making, the higher their level of teachers' efficacy.

According to the mean values for the dimension of teacher morale grouped by position, Primary Teachers (PT) group obtained the highest mean value. It can be interpreted that the teachers in Primary Teachers (PT) group obtained high teacher morale. It was congruence with the suggestion of Ford (2002) that teachers who are teaching primary level have gained a better understanding of their own teaching limitations as well as strengths and have adjusted to better educate students. Their understanding makes them feel stronger about their teaching environment, hence, they would show higher morale.

In a qualitative study, all of the teachers in each school provided students opportunities to participate in teaching learning process. They motivated all students to collaborate and cooperate in the activities. Their principal supported them the necessary teaching aids to increase professional development. Some teachers require the opportunities that can help to make decision making. They employed student-centered approaches rather than traditional teaching methods. And they utilized explanation and questioning methods in their teaching. Therefore, it was concluded that the levels of teacher self-efficacy in Sanchaung Township were moderately high according to their answers.

Recommendation

Arising from the findings of this study, the following recommendations are suggested for improving teacher self-efficacy in schools. These recommendations are based on the study of teacher self-efficacy for promoting student motivation in Basic Education High Schools in Sanchaung Township, Yangon Region.

- a. The current study should be expanded to include more male teachers using a quantitative approach when analyzing the research data. A large sample size of males will provide a better picture of what male educators teacher efficacy tends to be on average.
- b. A comparative study of urban and suburban teacher self-efficacy to decide the differences would be beneficial in understanding ways to increase efficacy.
- c. In seeking the other factor that affected on teacher self-efficacy in schools, teachers should be given full opportunities to make decision for their teaching. From a teacher's point of view assisting in decision-making assists support the belief that their contribution is important, hence increasing their self-efficacy.

- d. In analyzing the effect of administrative support factor on teacher self-efficacy, some of the teachers from schools said that they didn't obtain any support or direction from their principals. Therefore, teachers should be given proper support and direction by the principals or experienced teachers in schools. This is because even a teacher who is less confident in his instructional methods, classroom management techniques, or ability to engage students can improve his level of self-efficacy with proper support and direction.

Needs for Further Research

This study concerned with the study of teacher self-efficacy for promoting student motivation in Sanchaung Township, Yangon Region. Therefore, the need for further study is obviously necessary. The collected data were based on the teachers' perception of their own teaching self-efficacy for promoting student motivation. But it is still required to examine students' perception of their teachers' attitudes towards them and the principals' perception on supportiveness to teachers. In the future, if research studies can include those from all schools, more detailed and accurate results of teacher self-efficacy will be acquired.

Acknowledgements

First and foremost, we are deeply grateful to Dr. Aye Aye Myint (Rector, Yangon University of Education), Dr. Pyone Pyone Aung, (Pro-Rector, Yangon University of Education) and Dr. Kay Thwe Hlaing (Pro-Rector, Yangon University of Education). We very thankful to Dr. Daw Htay Khin (Professor and Head of Department of Educational Theory, Yangon University of Education) and Dr. Su Su Thwin (Professor, Department of Educational Theory) for their administrative support and expert guidance and navigation along each step of the way in doing this study. Furthermore, we are truthfully thankful Township Education Officers, headmistresses and teachers who participated in the study, the librarian and the staff members of Yangon University of Education.

References

- Bandura, A. (1986). Self-Efficacy. *Encyclopedia of Human Behavior*. V4. 71-81.
- Bandura, A. (1995). Exercise of personal and collective efficacy in changing societies. In A. Bandura (Ed.), *Self-efficacy in Changing Societies* (pp. 1– 46).Cambridge University Press.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman & Company.
- Bandura, A. (2002). social cognitive theory in cultural context. *Journal of Applied Psychology: An international Review*, 51, 269-290
- Biehler, R.; Snowman, J. (1997). *Psychology Applied to Teaching*. Houghton- Mifflin.
- Ford, I. R. (2002). *Teacher self-efficacy and its influence on student motivation*. Cleveland State University.
- Goddard, Roger D.; Hoy, Wayne K.; Anita Woolfolk. (2000). Collective Teacher Efficacy: Its Meaning, Measure, and Impact on Student Achievement. *American Educational Research Journal*. Volume 37 n2 p479-507.
- Gul, E.(2014).Efficacy of skill development techniques: empirical evidence. *Journal of Education and Educational Development*, 1(2), 134-144.
- Hoy, A. W. (2000). Changes in teacher efficacy during the early years of teaching. The Ohio State University. *Paper Presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA*. Session 43:22, Qualitative and Quantitative Approaches to Examining Efficacy in Teaching and Learning.
- Miller, William. (1981). Staff Morale, School Climate, Education Productivity. *Educational Leadership*. 38. n6. 483-486.
- Schleety, P. (1994). *Increasing Student Engagement*. Missouri Leadership Academy.
- Walker, J. (2009). The impact of principal leadership behaviors on the efficacy of new and experienced middle school teachers (Doctoral Dissertation). Available from Pro Quest dissertations and theses database. (UMI No. 3387319)
- Wilson.; Coolican. (1996). How High and Low Self Empowered Teachers work with Colleagues and School Principals.