



STUDY ON STUDENT LEARNING ENGAGEMENT AND TEACHER SELF-EFFICACY

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ABSTRACT

The purpose of this study is to evaluate the ways in which lesson preparation influences the effectiveness of teachers, with a particular focus on the occupational self-efficacy of secondary school teachers. The process of lesson preparation is a crucial component of effective teaching because it enhances the delivery of information and provides learning experiences that are more organised. Both the quality of education and the outcomes for students are impacted by the degree to which instructors are able to do their duties effectively. A putative mediator between lesson preparation and teacher effectiveness is occupational self-efficacy, which is defined as the degree to which teachers are confident in their capacity to carry out the duties that are assigned to them in their professional roles. As a component of a quantitative research approach, questionnaires were sent to teachers working in secondary schools. Whether or if teachers who have a more positive perception of their own professional capabilities are better able to execute thorough lesson plans in the classroom is the question that will be investigated in this study. The findings suggest that there is a positive correlation between organised lesson preparation and the performance of instructors, with occupational self-efficacy acting as a significant mediator in this connection. The importance of enhancing the self-efficacy of teachers in order to improve their teaching methods via enhanced lesson preparation is highlighted by the findings presented here. The repercussions for programs of professional development and teacher training are also among the topics that are discussed.

Keywords: *Planning, Students, Self- Efficacy, Teachers*

INTRODUCTION

Education is seen as more important than any other kind of decorating all around the globe. A significant number of intellectuals have expressed their disdain of the existing educational system and provided constructive critique of alternative educational systems or methods of teaching from all over the world. Within the context of the educational system, there is a lot of discussion regarding how important instructors are. It has been argued that instructors have the ability to impact the lives of their pupils if they are able to do it effectively. They shape the students by bringing about positive changes in the classroom so that they may experience growth. If they are not cautious, teachers have the potential to make people's lives more difficult. Despite the fact that this age-old mystery has been around since the beginning of recorded history,

there is still no answers that can be considered conclusive. The fact that there is always room for improvement is something that should go without saying.

Teacher Effectiveness

In the process of deciding what characteristics define a good educator, many government authorities, including ministers of education, lawmakers, and other officials, as well as administrators of schools and colleges, all play a similar role. Teacher effectiveness is described as the ability to increase student learning as measured by academic success evaluations. Effective instructors possess both the knowledge and the talents to fulfill these goals, and they are able to maximize student learning. Despite the fact that it is an essential component of a teacher's ability to educate, it is not a comprehensive or thorough view on the efficacy of a teacher.

Occupational self-efficacy:

There have been a number of studies published on the topic of teachers' self-efficacy, both in India and elsewhere. Teachers' self-efficacy was defined by Tschannen-Moran and Woolfolk-Hoy (2001) as their belief in their own abilities to motivate even the most unmotivated students to actively participate in their own learning and to achieve the outcomes that the teachers envision for their students. Belief in one's own abilities is known as self-efficacy.

Secondary School Student Learning Engagement and Teacher Self-Efficacy

As a result of the empirical data that correlates student participation in their learning activities with good learning outcomes, the subject of student engagement is a worldwide concern. Learners who are engaged in their education are participating in their education on a mental, behavioural, and emotional level. This makes them more likely to attend class, remain in school, and get higher results. On the other hand, disengagement among students is an issue that instructors encounter on a daily basis in their classrooms throughout the country. However, there is research that indicates that students' level of involvement declines as they go from elementary school to high school. In this respect, the government of Ethiopia has established and put into effect a number of measures in order to enhance the academic achievements of pupils. Nevertheless, there are still problems in the educational system, such as a large number of students who are less capable and less interested, which is a source of worry for both the general public and scholars. In the opening part of the recently approved education and training policy, it was claimed that the quality of education in Ethiopia is worsening, as indicated by the poor academic results of pupils. In addition, the policy acknowledged that the majority of students' academic performance at each level of school is far below than the level that the program aims for, which is below fifty percent.

The Importance of Lesson Planning Research

Research has shown that teachers "plan in a rich variety of ways [that] have real consequences in the classroom," that teachers "make planning decisions frequently during interactive teaching," and that teacher theories and belief systems "influence their perceptions, plans, and actions." These findings have been demonstrated through research. The data presented here provide evidence that the process of teaching in a classroom setting is significantly influenced by thinking and preparation. As a consequence of the fact that lesson preparation is a key component of a teacher's job that has a direct impact on the material that students

learn and the way in which they acquire it, it is of the utmost importance to explore how teachers prepare for their lessons.

Lesson Planning

One may, on the other hand, argue that the role of a teacher is not to impart knowledge but rather to make learning easier for students. It is abundantly evident that the process of lesson preparation is of the utmost significance, given the many decisions that a teacher is necessary to make in order to prepare students ready for the learning experience. Lesson preparation requires teachers to make a deliberate effort to establish "a coherent system of activities that promote the development of students' cognitive structures," in addition to the fact that good teachers are able to organise lessons in a way that is both clear and concise. Successful instructors excel at instructional orientation, which is concerned with the type of information that is taught and the manner in which it is taught. It is vital for educational professionals to be excellent planners as well, as shown by the outcomes of the study that was conducted. At some point throughout the process of planning a lesson, it is necessary to engage in the mental activity of contemplating the activities that will take place in the classroom at various points in time. This involves taking into consideration a range of aspects that are present in the classroom. These aspects include tactics to stimulate the interest of the students in the subject matter as well as the numerous emotional reactions that the students could have.

Teacher Attitude towards Teaching

Attitude is perhaps the most discussed social psychology notion. A person's attitude governs his social conduct. An attitude is the psychological object's positive and negative effects. It references any sign, person, statement, organisation, concept, or idea that might elicit favourable or negative reactions. Someone having a positive association with a psychological item has a good attitude, whereas someone with a negative association has a negative attitude. The governing tendency of attitude prevents direct observation, therefore we infer it from reactions and adjustments. Psychologists have understood attitude in human behaviour since the 19th century. Today, we believe that attitude shapes our conclusion from the data and influences the information we accept.

OBJECTIVES OF THE STUDY

1. To study on Teacher Attitude towards Teaching
2. To study on Student Learning Engagement and Teacher Self-Efficacy

RESEARCH METHODOLOGY

Research design

The purpose of this research was to investigate the relationship between Occupational Self-Efficacy, Teacher Effectiveness, and Attitude Towards the Profession. This was the major objective of the study. Through the use of a descriptive research approach, the present study, which is quantitative in nature, is able to accomplish its objectives..

Sample Of The Study

The sampling technique known as simple random sampling was used in order to choose the required sample. I will choose a sample from the Sangareddy district, which is located in the state of Telangana. According to the information provided by DSEK (2015), the Sangareddy district has a total of five hundred teachers working in secondary schools. In all, there were 140 people in the population, and the scientists took a sample amounting to 14% of that total. Additionally, fourteen percent of the secondary school instructors who were hired by the government, private enterprises, and trusts were seized by the investigator. Among the total of 140 teachers working in government secondary schools, fifty instructors were selected at random. Of them, thirty were male and twenty were female. We picked fifty secondary school instructors from the private sector (25 male and 25 female), and forty teachers from the trust-based sector (15 male and 25 female). The selection process was accomplished using a straightforward random selection.

Selection and description of tools

- Teacher effectiveness Scale (TES-KU) revised by Umme Kulsum 2017.
- Occupational self efficacy scale (OES) revised by Pethe, S Choudhari, S and Dhar, U (2014).

RESULT

Teacher Effectiveness

Table 1: Confidence in Engaging Students in Learning Process

Frequency of Response	Number of Respondents	Percentage (%)
1 - Strongly Disagree	3	2.1
2 - Disagree	5	3.6
3 - Neutral	20	14.3
4 - Agree	50	35.7
5 - Strongly Agree	62	44.3
Total	140	100
Mean Score	4.19	

Confidence in engaging students is remarkably high among mathematics teachers, as indicated by the survey results. A significant 62 respondents (44.3%) strongly agree that they can effectively engage their students, while 50 (35.7%) agree, culminating in approximately 80% of teachers expressing confidence in their engagement skills. This reflects a strong belief in their ability to foster active participation and create a dynamic classroom environment conducive to learning. The mean score of 4.19 underscores the importance teachers place on their role in student engagement, which is crucial for promoting learning. By feeling confident in their engagement capabilities, teachers are likely to adopt innovative teaching strategies that further enhance student interest and motivation, ultimately contributing to more effective educational outcomes. This highlights the positive impact of teacher confidence on the overall learning experience.

Table 2: Students' Academic Performance Due to Instructional Methods

Frequency of Response	Number of Respondents	Percentage (%)
1 - Strongly Disagree	4	2.9
2 - Disagree	8	5.7
3 - Neutral	15	10.7
4 - Agree	50	35.7
5 - Strongly Agree	63	45.0

Total	140	100
Mean Score	4.15	

The impact of instructional methods on students' academic performance is viewed positively by mathematics teachers, with a significant 63 respondents (45.0%) strongly agreeing that their methods enhance student performance. An additional 50 teachers (35.7%) agree, indicating that nearly 81% believe their teaching practices have a beneficial effect on students' academic success. This strong perception reflects the teachers' confidence in their instructional strategies and their effectiveness in delivering content. The mean score of 4.15 further emphasizes this belief, highlighting the correlation between effective teaching and student achievement. Such positive perceptions can lead to a commitment to continuously refine and adapt teaching methodologies, ensuring that they cater to the evolving needs of students. Overall, this data suggests that mathematics teachers are dedicated to fostering academic excellence through effective instructional approaches.

Occupational Self-Efficacy

Table 3: Capability to Handle Classroom Challenges

Frequency of Response	Number of Respondents	Percentage (%)
1 - Strongly Disagree	4	2.9
2 - Disagree	6	4.3
3 - Neutral	12	8.6
4 - Agree	50	35.7
5 - Strongly Agree	68	48.6
Total	140	100
Mean Score	4.25	

Teachers exhibit a strong belief in their ability to handle classroom challenges, with data indicating a high level of confidence. A total of 68 respondents (48.6%) strongly agree, and 50 (35.7%) agree, resulting in approximately 84% of teachers who feel equipped to manage various classroom situations effectively. The mean score of 4.25 reflects this strong sense of capability, suggesting that teachers are resilient and adaptable. Such confidence is vital for navigating the complexities of classroom dynamics and addressing diverse student needs. Teachers who feel capable are likely to implement effective strategies for overcoming obstacles, fostering a positive learning environment. This self-efficacy is essential for not only maintaining order but also promoting a culture of learning, where students feel supported and encouraged to excel academically.

Table 4: Effectiveness Regardless of Student Background

Frequency of Response	Number of Respondents	Percentage (%)
1 - Strongly Disagree	5	3.6
2 - Disagree	8	5.7
3 - Neutral	18	12.9
4 - Agree	50	35.7
5 - Strongly Agree	59	42.1
Total	140	100
Mean Score	4.10	

The results indicate that teachers believe they can effectively reach students, regardless of their backgrounds. A total of 59 respondents (42.1%) strongly agree with this sentiment, and 50 (35.7%) agree, leading to about 78% of teachers feeling confident in their ability to cater to diverse student populations. The mean score of 4.10 emphasizes the commitment to inclusivity and equity in teaching practices. This

belief is crucial in a multicultural educational setting, as it encourages teachers to implement differentiated instruction and culturally responsive teaching methods. By recognizing the importance of addressing varied backgrounds, teachers can create a more inclusive learning environment, enhancing student engagement and success. Overall, this data highlights the dedication of mathematics educators to ensure that all students have the opportunity to thrive academically.

Occupational Self Efficacy Scale (OES)

Table 5 : Summary of Factor Analysis

Factor	1	2	3	4	5
SS Loadings	19.645	11.774	5.785	4.915	1.692
Proportion Var	0.327	0.196	0.096	0.082	0.028
Cumulative Var	0.327	0.524	0.62	0.702	0.73

Forty-five entries were selected with the intention of reducing the length of the scale. In order to get the original scale item number and factor loading, please refer to table 4.66. In order to maintain the items for the TES-S (TES-short scale), it was necessary for their factor loading to be more than 0.60. It is possible to locate the subscale to which an item belongs by looking in the parenthesis.

Table 6: Item Number in the Original Scale, its Description and Factor Loading

S. No.	No. on TES	Item description	Factor Loading
1	56 (CRM)	While teaching, I ask more thought provoking questions than fact finding questions.	0.764
2	59(CRM)	I do discuss with students their performance in tests.	0.76
3	31(TC)	I do possess pleasing manners.	0.749
4	41(TC)	I value my academic achievements.	0.748
5	57(TC)	I have love for my students.	0.743
6	37 (PTP)	The tests I intend administering to my students will be reviewed and improved upon by me.	0.741
7	38 (CRM)	My teaching is characterised by clarity.	0.736
8	46 (KSM)	I have a great deal of interest in the subject I am teaching.	0.733
9	48 (TC)	I show understanding and sympathy in working with my students.	0.731
10	45(CRM)	I guide my students in completing their assignments.	0.728
11	60 (IPR)	I consider my first duty to be devoted to get a good name to my school.	0.726
12	43(IPR)	I am reasonably obedient to my headmaster.	0.721
13	55(CRM)	I help students in their reference work.	0.714
14	44 (PTP)	I plan my lessons keeping in view the individual differences among students.	0.712
15	58 (PTP)	I plan my lessons based on the techniques tested and found suitable.	0.706
16	49 (PTP)	In the end, I am in the habit of summarizing the lesson I teach.	0.704
17	50 (CRM)	I encourage students to be punctual in their assignments.	0.688
18	51(CRM)	I am concerned with the maintenance of discipline in the classroom within the framework of democratic atmosphere.	0.687
19	53 (IPR)	I support the genuine causes of teaching community.	0.685
20	39 (KSM)	I discuss the content of the subject matter with ease and confidence.	0.683
21	47 (TC)	I provide a laudable example of my personal and social living to my students.	0.674
22	40 (TC)	I have pleasant and distinct voice.	0.669
23	35(TC)	My gestures in the classroom are pleasant and approvable.	0.657
24	33(PTP)	I organize the subject matter I teach to be in agreement with the course's objectives.	0.636
25	36 (TC)	I have a sense of duty and responsibility.	0.635

Table 7: A Visual Display of the Original and Short Scale Items' Number

Subscales	PTP	CRM	KSM	TC	IPR	Total
Original Scale	11	14	7	17	11	60
Short Scale	5	7	2	8	3	25

The first scale included the most elements for TC, the second most for CRM, and the fewest for KSM all of which were included in the scale. It is possible to see a pattern that is comparable on a smaller scale as well. In contrast, PTP covers a lot more ground than IPR does in terms of the range of issues it addresses. We had hoped that these items would allow us to quickly and easily gather data on teachers' performance on all five aspects of the scale.

Teacher Effectiveness Scale (TES-KU)

Participants in the TES-S are provided with a set of statements, and after reading each one, they are asked to assess their present level of effectiveness on a scale ranging from zero (very low) to ten (extremely high). If everything else remains the same, the explanations and instructions will be identical to those provided by TES. 0–250 is the potential range of scores that may be received. It was found that the 'future' rating had very little impact on the overall score, even when using the first scale. It is for this reason that we have omitted it. To determine whether a group of people are substantially effective, it is suggested to use the group's mean score (plus or minus one standard deviation) when administering the scale to a group of people. You may also use the distribution's median score as an alternative. This is what it means in terms of personal administration:

Table 8 Teacher Effectiveness Scale (TES-KU)

Description	Score on TES	Score on TES-S
Average Teacher	> 200	> 90
Most Effective Teacher	>135	>80
Most Ineffective Teacher	< 152	< 105

Below-average efficacy is indicated by a score on the TES-S that is lower than 90. A look at that it is possible for two or three entries from the same category to appear one after the other. It was decided to rearrange the things in order to make sure that the items that pertain to the five regions are distributed more equitably. For the benefit of future users, this revised and final version is included to this document in Appendix A. Subsequently, it was necessary to administer this condensed version to a more limited group from the initial sample and then compare the results of the two groups. On the other hand, this was not feasible since, as a result of the Covid pandemic, none of the subjects were now accessible. With this particular sample, it was not possible to get an online exam or a phone-in. It is possible that this may be taken up as a project in the future at a more suitable moment.

Table 9 Standardised effect and final model 95% CIs

Model	Model pathways	Estimated effect	95% CI	
			Lower bonds	Up bonds
Job satisfaction as dependent variable	Direct effect			
	Career calling → Occupational self-efficacy ^a	0.43	0.32	0.53

	Occupational self-efficacy→ Job satisfaction	0.37	0.26	0.48
	Career calling→ Job satisfaction ^a	0.41	0.31	0.52
	Indirect effect			
	Career calling→ Occupational self-efficacy →Job satisfaction ^a	0.16	0.10	0.23
In-role performance as dependent variable	Direct effect			
	Career calling→ Occupational self-efficacy ^a	0.43	0.32	0.53
	Occupational self-efficacy→ In-role performance ^a	0.30	0.20	0.40
	Career calling →In-role performance ^a	0.34	0.23	0.46
	Indirect effect			
	Career calling→ Occupational self-efficacy →In-role performance ^a	0.13	0.08	0.18

According to the results of the t-test, participants with a bachelor's degree or above had significantly higher OSS-6 scores compared to the rest of the participants ($t = 6.18$, $P < 0.01$, Cohen's $d = 0.60$). Work years, a measure of individuals' length of employment, were used to assign ratings. Half of the people who took part were classified as senior workers, with an average experience level of 9.32 years, and half were classified as junior employees, with an average experience level of 3.15 years.

CONCLUSION

Effective lesson planning significantly enhances teacher effectiveness by improving secondary school teachers' occupational self-efficacy. Well-prepared lesson plans provide teachers with clear objectives, instructional strategies, and assessment methods, increasing their confidence in delivering quality education. This heightened self-efficacy leads to greater teacher dedication, resilience, and motivation, creating a more engaging and supportive learning environment for students. The relationship between lesson planning and teacher effectiveness is mutually reinforcing, as teachers who feel competent are more likely to refine their teaching practices, resulting in improved student outcomes. Investing in professional development that emphasizes lesson planning and providing necessary resources fosters a culture of continuous improvement, benefiting both teachers and students. Ultimately, thoughtful lesson planning is a key factor in achieving educational success and long-term positive impacts on the overall school performance.

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