

EXECUTIVE SUMMARY

Title:	Self-efficacy, Teaching Behavior, and Teaching Performance of Faculty: Basis for the Creation of a Video for Professional Enhancement
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Background of the Study

In today's society, education has a greater impact on personal development, social development and national development. China attaches great importance to the development of education. A key factor of education is teachers, and the improvement of teachers' teaching performance is one of the important factors to promote the development of education. It is more essential and urgent to continue to explore how to improve the performance of teaching (Xie et al., 2018).

Ye, Lan et al. (2001) clearly stated that teachers are the key to the development of schools and the quality of teaching, and even directly determine the success or failure of education, therefore, the current education reform must seek multiple channels to promote the professional development of teachers in various aspects. The teaching performance level of elementary school teachers is directly related to their professionalism and affects the reform and development of the whole basic education. It is, henceforth, necessary that further study of the teaching performance of elementary school teachers in the teaching practice, analysis of the influencing factors of elementary school teachers' teaching performance, and exploration of strategies to improve

teachers' teaching performance must be conducted thereby to guide and lead the teachers' professional development, effectively promote teachers' professional enhancement, and provide a good foundation for the development of basic education of teachers.

In relevant studies, scholars believed that teachers' self-efficacy is one of the key variables affecting teachers' teaching performance and a key factor to improve teachers' teaching ability and professional level (Zheng, 2004), and teaching behavior is the key to affecting teaching performance (Yang, 2009).

Teachers' self-efficacy is different from teachers' understanding and attitude towards their profession, therefore, there are different teaching expectations and behavior, which consequently affect teaching performance. Teaching activities are vital activities of teachers. Teachers' self-efficacy is the starting point of teachers' teaching activities and determines teaching behavior, hence, teachers' self-efficacy is an object worthy of attention.

Chenxiuqin (2016) pointed out that teachers' self-efficacy affects their professional commitment, work motivation, and teaching behavior, and is the internal driving force for teachers' professional improvement. The intervention of teachers' self-efficacy in the form of group counseling can alleviate teachers' job burnout, stimulate teachers' work enthusiasm, help teachers present good teaching behavior, and promote teachers' professional development. Teachers' self-efficacy is the internal driving force of teachers' growth.

Literature review found that in the actual teaching practice, some teachers were full of confidence in themselves, had a high degree of teaching enthusiasm, and actively faced all kinds of work problems; some teachers with self distrust and lack of zeal, however, viewed teaching as an invariable routine, and just passively deal with work problems (Guo, 2020 & Chen, 2020). With the continuous implementation of teaching

reform, some teachers could not adapt to the new educational ideas and teaching methods. The current educational environment is full of tests for elementary school teachers, which make teachers feel powerless at the teaching scene, shake their confidence in their teaching, and affect their self-efficacy to a certain extent. Teachers' self-efficacy has an important influence on teachers' teaching performance and is important to their professional development (Pei, 2011). Research shows that teachers' self-efficacy can enhance teachers' professional development and also affects their motivation and performance, which is essential to teaching.

Scholars generally believed that the behavior of teachers' affect teaching performance and they had made several discussions on this, and two basic ideas surface: one, is to take the teaching goal as the guidance; follow the methodology of scientism; assume that other factors remain unchanged; and study the impact of teachers' various behaviors on teaching, which actually constructed the model of "ideal teachers". The other is to investigate and summarize the main characteristics and experiences of "successful teachers" or "good teachers", and expand these summarized characteristics and behaviors as an example and basis for teacher development.

In recent years, the trend of international research on effective teaching and results are integrated as follows: the individual level paid attention to teachers' personal characteristics and abilities, the activity level paid attention to teachers' behavior performance in the teaching process, and attaches importance to refining and summarizing the proven teaching behavior that is closely related to teaching performance as key points for improving teaching. Practice had proved that the teaching behavior which was comprehensive screened through empirical methods had greater guiding significance for teachers' development, therefore, changing the past ideas, using empirical methods and jointly attaching importance to teachers' teaching behaviors that affect teaching performance should be the new development direction of exploring how

to improve teachers' teaching performance and practice effective teaching (Chen & Ge, 2016).

However, until now, the general empirical study on the impact of teachers' teaching behavior on teaching performance is basically grounded on the teaching environment in the west, especially in Europe and America. For example, the "seven principles of effective teaching" (Bangert, 2005), five key behaviors of effective teaching" (Borich, 1994) and the like are all extracted from the western teaching situation.

Although these research results can be used for reference in China, they are greatly different from the local teaching situation in China. In China's current teaching environment, what are the specific teaching behaviors of teachers that really affect the teaching performance? Based on the teaching situation of the researcher's country, an in-depth exploration of this problem and the construction of a behavior structure of teachers affecting teaching performance are needed practically to improve the level and quality of teachers in the country and truly realize the "running education with people's satisfaction".

The research team of Xinzheng Bilingual School had studied the professional development of primary and secondary school teachers in Xinzheng with the title "Problems and promotion strategies in the professional development of primary and secondary school teachers in Xinzheng". The result of this study shows that Xinzheng Education Bureau has implemented a variety of measures and projects for the professional development of primary and secondary school teachers such as, "free education for normal students", "special post plan", "provincial training plan", "teacher performance salary incentive among others. In addition, Xinzheng Education Bureau requires each school to link teachers' salary standards and job promotions with teachers' teaching performance, so as to further build a guarantee system and incentive mechanism for teachers' professional development. Compared with a large amount of

investment, teachers' teaching performance in teaching practice has not reached the ideal state yet.

Teachers' teaching performance needs to be improved, as it is mainly reflected in the following aspects: first, teachers' subject knowledge has not reached professional level. There was time in Xinzheng city when the entry qualification or requirements for elementary school teachers were not high. Teachers could apply as elementary school teacher immediately after graduating from a three-year normal college. These teachers with low academic qualifications had become the backbone of the school. They had rich teaching experience and were unwilling to spend time and energy to change themselves to meet the new curriculum reform, which was the reason why the teaching performance of elementary school teachers is not at its best. Second, the practical skills of teachers were not at a professional level. In the pre-service training of elementary school teachers in Xinzheng City, the internship period was generally short and the practice experience was insufficient. This led to an inadequate opportunity for novice teachers' to practice their teaching ability which experts assume to have seriously affected the self-efficacy of teachers. Moreover, some elementary school teachers in Xinzheng City showed a perfunctory attitude towards training, learning and participating in activities, and were indifferent to the development of teachers' profession and the improvement of their own professional level. This shows that elementary school teachers' teaching attitude should be checked and aligned with their teaching behavior and performance.

Third, teachers lacked autonomy. The work of elementary school teachers in Xinzheng City was relatively trivial and busy. As observed, they prepared lessons, gave lectures, corrected homework, managed classes and arranged student activities step by step. They seldom engage in personal reflection and on how they could improve themselves, and rarely participated in research and development plans independently. All these hinder the improvement of teachers' teaching performance.

In the educational reform, the role of elementary school teachers have more challenges and tasks, they must face the trend of the times, and constantly grow and change. Enhancing the teaching quality, teachers' teaching profession and promoting the achievement of educational goals should be essentially considered at the level of education policy and teaching site. Among the many factors affecting the quality of education, the teachers are the most important one, hence, this study chose to study elementary school teachers, and attempted to use empirical methods to construct the effective teaching behavior structure of elementary school teachers affecting teaching performance under the current local teaching situation, to improve the education theory of elementary school teachers in China, and provide foundation and support for the improvement of teaching performance of elementary school teachers in China.

In the light of the foregoing situation, the researcher decided to conduct this study to discuss the present situation of self-efficacy, teaching behavior and teaching performance of the faculty in the elementary schools; to compare the differences of self-efficacy, teaching behavior and teaching performance of the faculty in the elementary schools under different background variables; to explore the correlation among self-efficacy, teaching behavior and teaching performance of the faculty in the elementary schools, and to explore different strategies to improve teachers' self-efficacy, teaching behavior and teaching performance? The understanding and solution of these problems are directly related to whether the professional level of teachers can be raised and whether the quality of school education and teaching can be effectively improved.

In the 21st century, our world has entered an information age. Digital technology is changing our living environment and lifestyle. This trend has also brought great opportunities and challenges to education. In recent years, videos have been increasingly utilized in the field of education. With their advantages in terms of flexibility, security and convenience, videos have broken through the time and space constraints of

traditional campus teaching and training. Any student can learn in any way at any given time and anywhere and truly achieve the sharing of excellent resources.

Videos provide a variety of opportunities for front-line teachers' teaching "practice" and "reflection". Front-line teachers' teaching activities and reflection on teaching need guidance and help, and videos can do this. In 2020, because of COVID-19, the Ministry of Education put forward the initiative of "taking online learning and training as the main form" for the development of teachers, making the online learning platform an important way for teachers' autonomous learning and improvement. Videos have become important means to spread teaching ideas and improve teachers' professional quality.

Videos can help learners achieve cross-device learning. Learners can choose desktop computers, laptops, tablets, or even mobile phones. Learners certainly enjoy this freedom and the benefits of video learning on the device of their choice anytime, anywhere.

In view of the convenience and advantages of videos for learners, this study produced an instructional video, so that teachers can provide reference suggestions for teachers' professional improvement by learning from the content of the instructional video.

Objectives of the Study

General

This study aimed to determine the self-efficacy, teaching behavior, and teaching performance of elementary school teachers in Xinzheng City for Academic Year 2021-2022.

Specific Objectives

1. describe the teachers in terms of sex, educational attainment, length of

teaching experience, and occupied position;

2. describe the level of teacher self-efficacy in terms of efficacy for classroom management and efficacy for teaching and learning;

3. describe the level of teaching behavior of teachers in terms of formulation of objectives, lesson plans creation, teaching strategies utilization, class management, and assessment of learning;

4. describe the level of teaching performance of teachers in terms of self-assessment, students' final grade, supervisor evaluation, peer evaluation, and student evaluation;

5. determine whether there is a significant relationship between the teachers' characteristics in terms of sex, educational attainment, length of teaching experience, and occupied position, and their self-efficacy;

6. determine whether there is a significant relationship between the teachers' characteristics in terms of sex, educational attainment, length of teaching experience, and occupied position, and their teaching behavior;

7. determine whether there is a significant relationship between the teacher self-efficacy and teaching behavior;

8. determine whether there a significant relationship between the teachers' characteristics in terms of sex, educational attainment, length of teaching experience, and occupied position, and their teaching performance;

9. determine whether there is a significant association between the teacher self-efficacy and teaching performance;

10. determine whether there is a significant association between the teachers' teaching behavior and teaching performance; and

11. create an instructional video for professional enhancement of teachers.

Hypothesis

Based on the foregoing objectives, the following hypotheses were tested at .05 level of significance:

1. There is no significant relationship between the teachers' characteristics in terms of sex, educational attainment, length of teaching experience, and occupied position, and their self-efficacy;
2. There is no significant relationship between the teachers' characteristics in terms of sex, educational attainment, length of teaching experience, and occupied position, and their teaching behavior;
3. There is no significant relationship between the teacher self-efficacy and teaching behavior;
4. There is no significant relationship between the teachers' characteristics in terms of sex, educational attainment, length of teaching experience, and occupied position, and their teaching performance;
5. There is no significant association between the teacher self-efficacy and teaching performance; and
6. There is no significant association between the teachers' teaching behavior and teaching performance.

Research Design

This is a descriptive-correlational study that used one-shot survey design. The descriptive-correlational research aimed to describe the relationship among variables. It focused on describing how one phenomenon is related to another. Independent variables are variables that are considered to cause or affect dependent or outcome variables (Lappe, 2000). This descriptive-correlational study sought to describe the level

of self-efficacy, teaching behavior, and teaching performance, and the possible relationships that exist among these variables.

Respondents of the Study

In this study, only Chinese, Math and English teachers working in elementary schools in Xinzheng City in the academic year 2021-2022 were included. Teachers other than Chinese, Math and English teachers and intern teachers were not included in this study.

The target population of this study consisted of faculty members who have been working in elementary school in Xinzheng City. The total population of elementary school teachers in Xinzheng city during the conduct of the study was 1020 (Chinese, Math and English teachers).

Sampling Technique

The sampling technique used in this study involved two major steps: stratified and random sampling. The stratified random sampling method was adopted to select six (6) from 10 elementary schools in Xinzheng City as samples for investigation. There are four (4) private elementary schools and six (6) public schools in Xinzheng City.

According to the proportion of various types of schools in the population, the sampling quantity of various types of schools was determined. Among them, private schools accounted for 40% of the total, and two (2) schools were selected according to the proportion; four (4) public school samples were selected according to the same calculation method. The random sampling method was then used, selecting 50 teachers from each selected school. A list of faculty was secured from the Human Resource Department of each school and were collated and used as the sampling frame. Each name that appears on the list was assigned a corresponding number. Then a table of random numbers was generated using a computer program, and used to identify 50

respondents. Only 295 respondents who were given a survey questionnaire participated in the survey, of which eight (8) questionnaires were invalid. Ultimately, 287 respondents' questionnaires were included in the study.

Ethical Consideration

Before conducting the study, approval from Central Philippine University Research Ethics Committee was sought. The Research Ethics Committee certified that the study had been reviewed and approved. Informed consent was given by the respondents who participated in the study. The consent form explained the aim and essence of the study, and provided participants with sufficient and understandable information.

The respondents were informed about their rights and responsibilities. The respondents were informed that the research poses no risk to their security; no conflict of interest exists; and anytime they would wish not continue answering, they were free to do so.

The respondents were also informed that the data gathered would be treated with utmost confidentiality. All data collected were solely for research purposes, for overall analysis, not individual exploration, and was protected from being leaked to others. In this study, anonymity was maintained to protect the identity of the respondents, thus, no names and other information that may reveal the informants' identities was mentioned in the study. All collected questionnaires and data were kept by the researcher, and will be destroyed after the survey results have been published and presented.

Research Instruments

The data needed in this study was gathered using questionnaires. The questionnaires consist of four parts:

Part I is the profile of respondents (The teacher questionnaire). The questionnaire was used to gather the data on the profile of respondents in terms of sex, educational attainment, length of teaching experience, and occupied position.

Part II is The Chinese version of Short-form Teacher Self-Efficacy Scale (C-TSE) (The teacher questionnaire). This is a scale developed by Wu, Liang and Zhan, Haoyang of the Hong Kong Institute of Education. The items in the main questionnaire on self-efficacy were answerable by the degree of agreement to the statements based on the following categories: 5= strongly agree; 4= agree; 3= neutral; 2= disagree; 1= strongly disagree.

Part III is the questionnaire on teaching behavior (The teacher questionnaire). It was answerable by the degree of agreement or disagreement to the statements based on the categories as follows: 5= strongly agree; 4= agree; 3= neutral; 2= disagree; 1= strongly disagree.

Part IV is the questionnaire on teaching performance (Academic affairs office staff questionnaire). The questionnaire was filled in by the staff of academic Affairs Office.

The effective evaluation of teachers' teaching performance needs to integrate a variety of different evaluation methods to promote teachers' improvement and development. This study relies on researcher to mobilize multiple subjects and organize multiple surveys to comprehensively evaluate each teacher's teaching performance, which is obviously difficult to achieve. This study asked the Academic Affairs Office of the investigated school for help. This part contains five items, which respectively reflect

the "self assessment", "students' final grade", "supervisor evaluation", "peer evaluation", and "student evaluation" of teachers' teaching.

The Academic Affairs Office of the school often organizes teacher's self assessment, supervisor evaluation of teaching, peer evaluation of teaching and student evaluation of teaching. The staff of the academic affairs office can fill in a questionnaire according to the evaluation results to truly and objectively reflect the situation of each teacher's teaching in different teaching performance evaluation methods.

The items in the questionnaire on teaching performance were answerable based on the following categories: 5=excellent; 4=good; 3=average; 2=below average; 1=poor.

Content Validity of the Questionnaire

After the preliminary questionnaires were completed, an opinion survey on their validity by experts and scholars was conducted to improve the content validity of the research questionnaire. Three scholars and experts (Content validity expert advisory list in Table 6) were invited to review the content of the research questionnaire and provide valuable opinions as the basis and reference for revising the research questionnaire.

Table 6

Content Validity Expert Advisory List

Name code	Basic information	Research direction
W	Doctor of Education, Henan University; professor	Basic Theory of Education, Education Policy, Education Law
L	Doctor of Education, Pingdingshan University	Curriculum and Instruction, Teacher Education
M	Principal of Lefu Elementary School in Pingdingshan city	Primary education

From the literature discussion, it is found that some researchers have developed relevant scales with good reliability and validity. The researcher-made questionnaires in this study were compiled into a preliminary draft by referring to the scales of various researchers, and the analysis of relevant literature and the opinions discussed with experts and front-line teachers. After the first draft of the questionnaires was completed, the questionnaires were sent to experts and scholars for review and revision, and the researcher revised the questionnaires with reference to the opinions of experts and scholars. The researcher-made questionnaires had been certificated valid by three experts.

Reliability of the Questionnaire

After the questionnaires were found valid, they were submitted for pilot-testing to 96 respondents who were the elementary school teachers in Xinzheng. Those who participated in the pilot-testing were excluded from the actual respondents in this study. Cronbach's Alpha coefficient was used to test the intrinsic reliability of the questionnaires. Using the Cronbach's alpha, the questionnaire would be considered valid if the reliability coefficient is between .70 and 1.0. Cronbach's alpha coefficient reflects the homogeneity reliability of the scale, and the size of the coefficient directly reflects the degree of internal consistency of the scale. It is generally considered that Cronbach alpha coefficient ≥ 0.7 has very high reliability, When Cronbach's alpha coefficient is below 0.70, the questionnaire should be revised and improved (Jin, 2010).

The Cronbach's alpha coefficient of the questionnaires are shown in Table 7, and each dimension is greater than 0.7, indicating good internal consistency. The results showed that the questionnaires had good reliability and were considered reliable. The reliability test extraction results of the questionnaires are shown in Table 7:

Table 7*Reliability of Questionnaires*

	Dimension	N of Items	Cronbach α
The Chinese version of Short-form Teacher Self-Efficacy Scale	Efficacy for Classroom	4	.854
	Efficacy for teaching and learning	8	.916
	Total	12	.946
Questionnaire on Teaching Behavior	Formulation of objectives	4	.869
	Lesson plans creation	5	.804
	Teaching strategies utilization	8	.962
	Class Management	6	.895
	Assessment of learning	5	.887
	Total	28	.928
Questionnaire on Teachers' Teaching Performance Evaluation	Teaching performance evaluation	5	.919

Data-Gathering Procedure

The questionnaires were administered to the respondents in this study. Prior to the administration of the questionnaires, an endorsement was sought from the Office of the Dean of the School of Graduate Studies of Central Philippine University. Secondly, the researcher explained to the respondents and the staff of the Academic Affairs Office the purpose of the survey and the matters needing attention in filling out the questionnaires. Finally, the researcher was personally responsible for the distribution and collection of the questionnaire.

Data-Processing Procedure and Analysis

The gathered data from the respondents through the survey were reviewed and assigned codes for data processing. A software, Statistical Package for the Social Science (SPSS), version 27.0 was used for data transformation and analysis.

The following statistical tools were used to present, analyze, and interpret the data in this study:

For the descriptive analysis, the frequency distribution and percentages were used to present data on elementary school teachers' personal characteristics as well as the level of teacher self-efficacy, teaching behavior, and teaching performance.

For the inferential analysis, Chi-square test was used to determine the significance of the relationship between the variables. Chi-square and Cramer's V tests were utilized to determine significance of relationship between nominal variables while Gamma test was used to determine strength, extent and significance of relationship between ordinal variables. All inferential statistics were set at 0.05 level of significance.

The findings revealed in this study on teacher self-efficacy were interpreted as shown below:

<u>Mean</u>	<u>Interpretation</u>
3.67 – 5.00	High
2.34 – 3.66	Moderate
1.00 –2.33	Low

In like manner, the results on teaching behavior were interpreted as follows:

<u>Mean</u>	<u>Interpretation</u>
3.67 – 5.00	Good
2.34 – 3.66	Fair
1.00 –2.33	Poor

Whereas, the findings on teaching performance were interpreted based on the following scale:

<u>Mean</u>	<u>Interpretation</u>
3.67 – 5.00	High
2.34 – 3.66	moderate
1.00 –2.33	Low

Major Findings

Based on the results, the main findings of the study are:

1. Majority of the elementary teachers in Xinzheng City were female; more than half of them graduated from a normal university; nearly half of the teachers have been teaching for 6-10 years; more than half of the teachers were “course teachers”, and less than a fifth of them were teachers and administrators.

2. The level of teacher self-efficacy among the elementary school teachers was moderate, likewise with the level of teacher self-efficacy in terms of efficacy for classroom management and efficacy for teaching and learning.

3. The overall level of teachers' teaching behavior was fair. The level of teaching behavior among the elementary school teachers in terms of formulation of objectives and class management was good, however, the level of teaching behavior in terms of lesson plans creation, teaching strategies utilization, and assessment of learning was

fair.

4. The overall level of teaching performance of the teachers was high while their level of teaching performance in terms of students' final grade, supervisor evaluation, peer evaluation, and student evaluation was high. The level of self-assessment, however, was moderate.

5. There was a strong relationship between the teachers' characteristics in terms of occupied position and their self-efficacy; however, there was no significant relationship between the teachers' characteristics in terms of sex, educational attainment, and length of teaching experience, and their self-efficacy.

6. Sex and occupied position were found to have moderate relationship to teachers' teaching behavior; however, no relationship existed between the teachers' educational attainment, length of teaching experience, and teaching behavior.

7. There was a significant relationship between the teachers' self-efficacy and teaching behavior.

8. There was no significant relationship between the teachers' characteristics in terms of sex, educational attainment, length of teaching experience, and occupied position, and their teaching performance.

9. There was a strong positive association between the teachers' self-efficacy and teaching performance.

10. There existed a strong positive association between the teachers' teaching behavior and teaching performance.

Conclusions

Based on the above findings, the following conclusions can be drawn:

1. The elementary school teachers in Xinzheng City were mostly female, young and were not experienced course teachers.

2. The elementary school teachers' subjective cognition and belief in their teaching ability were weak. Their passion for work was not strong as they were not confident enough to teach.

3. The teaching behavior of the elementary school teachers was not good enough as evidenced by their slightly inadequate behavior in lesson plans creation, their inability to do proper planning and preparation before teaching, and low utilization of appropriate teaching strategies and assessment methods.

4. The teaching performance among elementary school teachers in Xinzheng City is currently good as a whole, high in peer evaluation, student's evaluation, supervisor's evaluation, and students' final grade; but low in self assessment. On the whole, the teaching performance of elementary school teachers in Xinzheng City is worthy of affirmation; however, the low score of teachers' self assessment is due to the modest and progressive character of the Chinese people. Teachers generally have higher requirements and expectations of their own teaching performance.

5. The level of teacher self-efficacy of non administrative teachers in elementary school is higher than that of teachers in administrative positions. The "head teachers" (the teacher in charge of a class) are responsible for heavy and trivial affairs in the daily class management, which takes up a lot of their time and experience resulting in insufficient investment in teaching that causes them to lack confidence in teaching and reduces their sense of self-efficacy. Regardless of the teachers' sex, educational attainment, and length of teaching experience their perceived self-efficacy is the same. In these regards, the null hypothesis cannot be rejected.

6. Among elementary school teachers, the level of teaching behavior of female teachers is higher than that of male teachers. The carefulness, caution and comprehensiveness of female teachers enable them to show better teaching behavior in teaching practice. In addition, the level of teaching behavior of "head teacher" (the

teacher in charge of a class) and teachers in administrative positions is lower than that of course teacher. In addition to completing the most basic teaching tasks, the course teachers have enough time to reflect and learn, and can update and supplement their knowledge in time. These are the necessary conditions for teachers to present good teaching behavior. Some teachers in administrative positions have little classroom teaching practice, and have heavy routine work. They lack the time for repeated teaching practice and reflection learning, resulting in poor teaching behavior. These provide enough evidence to reject the null hypotheses that there is no significant difference between the teachers' characteristics in terms of sex and occupied position and their teaching behavior; however, regardless of the teachers' educational attainment and length of teaching experience their teaching behavior is the same. In these regards, the null hypothesis cannot be rejected.

7. The higher the level of teachers' self-efficacy, the better their teaching behavior is. In other words, a high level of teachers' self-efficacy will enable teachers to show better teaching behavior. On the contrary, a low level of teachers' self-efficacy will not be conducive to a good performance in their teaching behavior. Teachers' self-efficacy is closely related to their teaching behavior.

8. Regardless of the teachers' sex, educational attainment, length of teaching experience, and occupied position, the teaching performance is the same among elementary school teachers in Xinzheng City. The null hypothesis cannot be rejected.

9. The higher the level of the teacher self-efficacy, the higher the level of their teaching performance also. A high level of teachers' self-efficacy will promote the improvement of teachers' teaching performance. On the contrary, a low level of teachers' self-efficacy will not be conducive to their teaching performance. High level of self-efficacy is the influencing factor to promote teachers' teaching performance.

10. The better the level of the teachers' teaching behavior, the higher the level of their teaching performance is. Good teaching behavior will promote the improvement of teachers' teaching performance. On the contrary, poor teaching behavior will not be conducive to the improvement of teachers' teaching performance. Good teaching behavior is an influencing factor that improves teachers' teaching performance.

Recommendations

Considering the major findings and conclusions presented above, the following are recommended:

1. The proportion of male to female teachers is unbalanced. It is recommended that the government revisits the remuneration package and working conditions of elementary school teachers to attract more males to teach in the elementary grades.

2. An optimistic and active attitude cannot only help teachers maintain physical and mental health, but also transmit positive messages to students, create a cheerful and confident teaching and learning atmosphere for students, and affect the cultivation of students' good psychological state and the improvement of their ability to resist pressure and frustration. Positive attitude can improve teachers' self-efficacy. It is suggested that teachers should identify what they are best at their work and optimize their advantages to establish self-confidence. When facing difficulties at work, teachers can adjust the pace, not to be anxious and impatient, and positively affirm that they have "the ability of sustainable development" to maintain the continuous "work passion and the pursuit of reshaping themselves" and to always meet the different situations in the process of teachers' professional growth with the best condition.

3. Teachers should have the initiative for self-awareness learning, establish the concept of lifelong learning, and improve teaching behavior in practical actions.

Teachers are encouraged to learn, research, practice, and summarize at the same time

to gradually improve their teaching behavior. The specific measures are as follows:

Teachers can invest time, strengthen theoretical study, cultivate good autonomous learning habits, read at least one education and teaching theory book every semester, take reading notes and write down their experiences; actively participate in training, lectures, demonstration classes, seminars and the like, learn from expert teachers, enrich their own teaching experience, expand their advantages and make up for their disadvantages through continuous exploration and learning; teachers can do a good job in teaching reflection and summarizing the gains and losses, form mentoring groups with their colleagues: in the equal and mutual aid mentoring exchange, they can jointly ponder on the problems existing in education and teaching, and jointly explore the most suitable education and teaching methods for pupils so that teachers can achieve complementary advantages and common improvement.

4. There is no best teacher teaching performance, only higher standards of teaching performance. The teaching performance in terms of self assessment needs to be improved. For this reason, it is suggested that teachers can correctly position their teaching performance, not be blindly confident, actively summarize and reflect on their teaching performance in teaching, and identify problems promptly and seek solutions. At the same time, teachers could not be too modest, but have enough self-confidence, which will stimulate teachers' work morale and promote the improvement of teaching performance.

5. The self-efficacy of teachers in administrative positions needs to be improved. It is suggested that these teachers should not undertake the teaching of Chinese, Mathematics and English as much as possible, because in China, teachers who teach these three courses have sufficient time and energy; however, the daily work of teachers in administrative positions is essential, which makes the abovementioned condition difficult to meet. Teachers in administrative positions, however, can teach some

subjects, such as science, morality and the rule of law, information and technology. Teaching subjects such as these is relatively easy, which can reduce pressures in teachers, and gradually improve their sense of self-efficacy in the teaching process.

6. The teaching behavior level of male teachers needs to be improved. It is suggested that female teachers share their teaching experience and help male teachers improve their teaching abilities. Male teachers can pay attention to various factors that lead to their bad teaching behavior through communication and learning, finding gaps, making up for deficiencies, and making common progress. Moreover, the teaching behavior level of teachers in administrative position needs to be improved, hence, it is suggested that teachers in administrative position should evaluate their teaching behavior in terms of formulation of objectives, lesson plans creation, teaching strategies utilization, class management and assessment of learning; have sufficient teaching preparation and good teaching plan; and pay attention to the arrangement of teaching activities, process control and systematic evaluation. These will help improve the level of their teaching behavior. Teachers can revise their ideas and cultivate their interest in learning. Learning requires a certain amount of time to internalize and absorb. Teachers can constantly implement higher-level teaching behavior in the process of learning. It must be noted that teachers' teaching thoughts and ideas directly affect teachers' teaching behavior.

7. In order to improve teachers' teaching behavior, teachers can strive to improve their sense of self-efficacy in order to display good teaching behavior in teaching activities and promote the development of teaching activities.

8. In order to promote teaching performance, attention to the perception of teacher self-efficacy should be given importance. Through this teachers could have the internal driving force of sustainable development and maintain a high level of self-efficacy. If we can improve teacher self-efficacy, it will help to improve teaching performance.

9. In order to promote teaching performance, attention should be given to teachers' teaching behavior. If teachers' teaching behavior is improved, it will boost teachers' teaching performance.

10. The research method adopted in this study is questionnaire survey. Although questionnaire survey can obtain a large amount of information in a short time, the results obtained are superficial and it is impossible to deeply understand the ideas of the teachers. In addition, the questionnaire is likely to affect the accuracy of the results because of the personal factors, defensive psychology, and the situation of the subjects when answering the questionnaire, therefore, the follow-up research can adopt the method of observation and interview at the same time to make the research on teacher self-efficacy, teaching behavior, and teaching performance more thorough and complete.

11. The research objects of this study were Xinzheng elementary school teachers, which does not include the rural teachers; future research can be incorporated into a wider range of sample, and increase the inferential nature of the research results, or the comparison of different counties and cities, in order to understand teacher self-efficacy, teaching behavior and teaching performance differences among different counties and cities, and also can provide education authorities valuable information from the different parts of the data comparison for their improvement strategy formulation. In addition, this study is based on the general teachers of elementary schools in Xinzheng City, and is not limited to teachers in specific learning fields. The follow-up study can conduct in-depth discussion on teachers in different learning fields to understand the differences between teachers in different learning fields and provide reference for the educational authorities to formulate improvement strategies.

12. The teachers' background variables in this study include teachers' sex, educational attainment, length of teaching experience and occupied position. Future

research can include other background variables for analysis, such as "school size", "class size" and "school region" of teachers, so as to provide more complete data for follow-up research.