Evaluating Preparatory Programs and Novice Teachers Teaching Performance and its Influence on Students' learning Process in Qatar University

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Article History	Abstract
	The role of the teaching workforce is sometimes undervalued, although they are responsible for shaping the future of students. Those teachers who have just completed their graduation are a novice and, thus, are regarded as incapable of producing students with adequate skills and knowledge. Therefore, the teaching method has a direct influence on the learning process of students. However, the incorporation of e-learning methods has proved to help improve the academic potential of students when they are equipped with digital ways of learning. Keeping in view these perspectives, this study aims at choosing the University of Qatar as a case study to explore the role of teaching in finishing graduate programs and, thereby, producing a talented pool of students. For this, the study opts for qualitative and quantitative analysis with the help of research participants entailing female students, teachers, and administration. By selecting a mixed method for the study, a survey questionnaire as a research instrument is chosen, which depicts positive and negative responses regarding teaching performance and its influence on students' learning process. Finally, a blueprint of suggestive recommendations to evaluate the method of conducting classes and evaluating preparatory programs is also incorporated. **Keywords:** students; teachers, teacher, preparation.

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1. Introduction

Qatar University, as the country's only government university, is one of the country's most prestigious institutions. As a result, the institution plays a critical role in providing the nation with graduates capable of providing the workforce so desperately needs. The college of education is one of the essential colleges of the institution and is responsible for producing teachers. The teaching profession is sometimes undervalued, with people choosing the glamour that comes with other disciplines such as doctors, engineers, and lawyers, to name but a few. However, the significance of teachers to any country can not be underestimated as they are responsible for teaching and guiding the next generation of learners and shaping them into successful persons that can contribute positively to society. As a result, the teaching program offered at a level such as Qatar University has a significant impact on the state of the education system throughout the whole country. The criticality of the teaching program is thereby one of the main reasons behind this study.

Novice teachers refer to teachers with 0 to 3 years of experience in teaching. All graduate teachers are referred to as novice teachers and are the leading focus group for this study. The study hopes to analyze and understand the effectiveness of the teaching program by assessing the readiness of novice teachers after completing the program. Universities have come under harsh criticism not just in Qatar but across the world. Universities and teaching institutions, in general, have been criticized for producing half-baked graduates who are not equipped with the necessary knowledge and skills required to succeed in their respective professions. This information and criticism formed the basis of the study. The study hopes to provide information regarding the state of the teaching program offered at Qatar University and how it affects both students and the institution, addressing the gaps generated in the research by the criticisms as mentioned above.

The following research questions will be addressed in this study:

How can novice teachers show their ability to help students learn?

How do novice teachers demonstrate their abilities to apply the professional knowledge, skills, and dispositions that their preparation program experiences aimed to achieve?

How are the employers satisfied with the novice teachers' readiness to enter public schools?

How do novice teachers perceive their teacher preparation program helpful for them to get prepared for their entry to public schools?

The study will make a significant contribution because it may be utilized to restructure the university's teaching program to benefit students more and, as a result, improve the country's overall education quality. Novice instructors have an essential role in the country's education system, and their activities substantially impact the country's educational system. Graduates from Qatar University's teaching program are expected to be ready to discharge their duties immediately. Ensuring that these graduates are prepared for this is significant to the country's education system especially considering the criticality of the education sector to any country.

1.1 The impact of teaching performance on student learning learning

According to Rivnik, Hanushek, and Kain (2005), teachers have a more significant impact on student learning than any other school-related element. Teachers' importance to student learning necessitates that they are well-trained and appropriately prepared to accomplish the country's educational goals. A country can have the best curriculum and facilities in the education sector, but all these could be useless if the instructional quality is poor. Investing in teachers who provide high instructional quality is critical to meeting the goals of the education sector in any country. Analyzing novice teachers and their level of instructional quality based on the teaching program provided at Qatar University would thereby offer comprehensive information on the level of instructional quality in the country.

Ball and Bass suggest that instructors who are more prepared are more successful educators (2000). Diaz (2015) says that this preparation is based on a diverse set of skills in three key areas: topic knowledge, pedagogical content knowledge, and lesson structure knowledge. Teachers develop these three areas of expertise from an effective teaching program in the institutions they

undertake their degrees. An analysis of the effectiveness of the teaching program at Qatar University requires an understanding of how well graduates of the institution are familiar with these three areas of knowledge.

Novice teachers lacking in one or all the three regions highlighted as critical for adequate preparation can thereby not be expected to be effective in discharging their duties. This is in line with what Ball and Bass state concerning practice affecting effectiveness. Pedagogical and content knowledge are especially critical for novice teachers since lesson structure knowledge can be developed from shadowing more experienced teachers at a school. It is important then to understand just how well novice teachers are prepared in these three areas through the teaching program offered at Qatar University.

The study of Romanowski, Cherif, Ammari, & Attiyah (2013) reveal the teacher's perceptions regarding the impact of teaching programs on their performances who responded positively, that they believe the training programs would prepare them in using modern techniques of delivering an education which would be compatible with the world. Furthermore, they perceive that the teaching programs train and develop them for reflective and critical teaching, where the teachers are becoming trained in promoting crucial reflection in students.

The teachers believed that their performances had improved since they introduced new strategies while teaching, and they saw many students benefitting as well. This is because the students were becoming more engaged in learning and started to communicate better with the teachers.

According to Sadler, Sonnert, Coyle, Cook-Smith, & Miller (2013), the adequate performance of teachers has a significant impact on the growth and learning capabilities of students. The increase in the teacher's knowledge of not only the subject matter but also the skills of teaching has had an increased positive impact on the student's gain of knowledge and understanding in the subject area. It is mentioned by Blazar & Kraft (2016) that the development of new and unique strategies in teaching is required to increase the learning efficiency of the students. In addition, in the research work of Harris, Al-Bataineh, & Al-Bataineh, (2016), the use of technology as a teaching strategy has an immense impact by encouraging students to develop their abilities to learn. The integration of technology by the teachers is observed to increase engagement in students to adopt the new learning styles in the classrooms, which they had never done before. Harris, Al-Bataineh, & Al-Bataineh, (2016) further state that the incorporation of technology in teaching is a method that enables diverse strategieducationaching to be used which facilitates professional development for teachers and also leads to gain in academics for the students. Furthermore, Caciuc & Alexandrache (2013) mention that using technology as a teaching strategy impacts the learning styles of the students, which affects their learning performance overall. The combined use of visual and audio content for learning impacts the student's choice of choosing a type which they can best learn from, which categorizes some of the students having visual learning styles. In contrast, others had an audio learning style.

It is observed in the study of Bakken, Brown, & Downing (2017) that the teacher's training programs and efforts made on their professional development result in the social development of the students in their early childhood age. The students develop their social learning where they develop communication skills and constant interaction with the teachers and their peers due to quality teaching performance.

It is stated by Ballou & Springer (2015) that the evidence of the effectiveness of teaching performance can be best evaluated and proven through analyzing the test and performance scores of the students. If the students are performing well by achieving high grades, this will prove that the teachers are well-trained to use quality teaching strategies to improve student's learning gains.

1.2 The relationship between teaching effectiveness and teacher education programs

Novice teachers also influence the collective efficacy of instructors at a school. According to Goddard et al. (2000), collective efficacy refers to the notion that the school staff can impact students' outcomes. This translates to teachers believing in each other in their abilities to effectively motivate and support the students in the learning process. Collective efficacy is critical as it ensures

that all teachers work towards a common goal and improve the instructional quality in the school. This, in return, enhances the quality of learning provided at a school. Novice teachers are more likely to have a negative impact on a school's collective efficacy, especially at the lower levels.

In the study by Abu-Tineh, (2015) that the initiative of conducting teaching preparation programs and training them for advancements in their professional potentials was perceived by the teachers that the impact of the teaching program is significantly associated, impacting a positive change in their teaching methods. The research of Latouche & Gascoigne (2017) also revealed that the teaching programs that trained the teachers for effective teaching improved their self-efficacy and confidence in introducing new teaching methods to the students. It is analyzed by Reddy (2019) that the teacher training program involving micro-teaching where the teachers are placed in a suitable environment of teaching to be trained in how to teach extensively develops the skills education needed to increase the learning performances of students to develop new strategies educationhing, an increase in confidence with their teaching methods. Furthemore, Darwish & Sadeqi, (2016) state that microteaching, as a program for preparing them to become future teachers, not only developed their teaching performances but also helped them to assess their skills and make necessary changes in behavior and actions which they would not want to integrate when they become actual teachers.

According to König, Ligtvoet, Klemenz, & Rothland (2017), the teacher's preparation program provides a framework to develop teaching skills among the graduates who wish to teach and make them learn how to manage their classrooms efficiently. According to Dalen, Brommesson, Erlingsson, Schaffer, and Fogelgren (2018), the impact of teacher preparation programs on university graduates has improved their teaching approaches because they have become more student-centered, can work effectively with students, and can effectively use the syllabus' learning outcomes.

1.3 Missing points from a teaching preparation program

According to Lucas & Villegas (2010), there are certain critics on the training programs to prepare the teachers to teach professionally and develop the learning abilities in the students. The teachers feel various issues such as reluctance in teaching in the set language andpointissue of not being able to teach according to the students' understanding. In addition, it is stated by Bidabadi, Isfahani, Rouhollahi, & Khalil (2016) that the teachers feel that there is a barrier to the regulation set by the teaching preparation programs where they are not able to develop a unique method of teaching through a student-centered approach. Some of the teachers' responses stated that they had various student-centered methods of teaching each individual, . Still, due to the requirements of the curriculum and the teacher education criteria, the teachers were restricted in using their way of teaching suitable for each student.

1.4 Teacher learning

In a research study by Nasser & Romanowski (2011), qualitative studies based on the interviews held with the teachers showed results that the teachers perceived the teaching programs effective for their professional development, enhancing their teaching profession, improving communication abilities, and motivation to continue working in the educational field. The research outcomes demonstrated that the teaching programs held for the teachers were impnecessaryr for the new teachers as the teachers become professionally developed to move forward in their educational practice. Furthermore, the research also revealed positivity and encouragement from the teachers to continue learning new things throughout their professional duration (Nasser & Romanowski, 2011).

1.5 Teacher Self Efficacy Belief

Teacher self-efficacy belief (TSEB) relates to teachers' confidence in their capacity to influence students' learning skills, particularly those with poor desire and aptitude to learn (Ozber, 2011). Teachers with a high TSEB are better suited to effective use of instructional strategies. They also perform better in fostering student participation and classroom management skills. TSEB among novice teachers is thereby integral to their learning abilities. The teaching program is thereby

essential to the power of teachers to develop high TSEB. Novice teachers who have been through a practical and comprehensive teaching program are likely to develop high TSEB. This high TSEB will then affect their ability to affect the quality of teaching since it has been proven to have a direct correlation. TSEBs have also been shown to influence students by increasing their learning motivation, creating a higher sense of self, and developing better personal management skills (Tschannen-Moran & Hoy, 2007). A study on the effectiveness of the teaching program at Qatar University will allow the stakeholders to understand the state of TSEB that novice teachers are in once they complete the program. In the best interests of all stakeholders in the education industry, the program produces graduates with high TSEBs to ensure that there is quality education in the country since novice teachers play a critical role in the sector.

Clark (2012) captures the plight of novice teachers worldwide by stating that novice teachers often experience the urge to quit within the first two years due to negative experiences. Novice teachers are usually faced with the negative aspect of schools immediately after they enroll in these schools, which can be discouraging to many of these teachers. These negative experiences often drive them away from the profession, especially if they were not adequately prepared to cope with these challenges.

The ability to cope with these negative experiences is often linked to the level and type of mentorship provided at the respective schools. Clark (2012) states that mentoring novice teachers allows them to better cope with negative experiences and often prolongs their stay in the profession. It reduces the chances of novice teachers dropping out of work. An effective teaching program should thereby prepare novice teachers on how to cope with negative experiences effectively. It should not be left to the respective schools and school heads to influence the length of the novice teachers' stability in the profession.

Novice teachers also influence the collective effectiveness of instructors at a school. According to Goddard et al. (2000), collective efficacy relates to the idea that the school personnel can affect students' success. This translates to teachers believing in each other to effectively motivate and support the students in the learning process. Collective efficacy is critical as it ensures that all teachers work towards a common goal and improve the instructional quality in the school.

This, in return, enhances the quality of learning provided at a school. Novice teachers are highly likely to affect the level of collective efficacy within a school significantly downwards. This is because experienced teachers are unsure of what the novice teachers can offer and thereby treat them with caution regarding their abilities to affect student learning. However, experienced teachers can change their attitude towards novice teachers if they feel that they can positively influence student learning.

This depends mainly on how well the novice teachers were trained during their teaching program. A teacher who has been through an effective teaching program will positively influence the collective efficacy as the experienced teachers can witness their abilities. It is in the best interests of both the novice and experienced teachers that teaching programs are effective as this, in turn, ensures that the collective efficacy is high, which in turn improves the quality of learning at an institution.

2.   Methods

Along with other Middle Eastern countries, Qatar has emerged as a significant player in global politics and economy. Qatar's impending 2022 world cup is a testament to just how far the country and the Middle Eastern region have come in terms of being accepted across the world. Qatar's strong economy driven by its rich oil reserves has played a critical role in its emergence as a significant player globally. Qatar is, however, not renowned for its educational prowess, and this is an area that it needs to overcome to cement its status as a significant global force.

Qatar University's programs are thereby of significant interest as they significantly affect the state of education in the country. Being a state-sponsored university, Qatar University's performance reflects on the state of education in the country. Understanding the quality of programs offered at the University reflects how well the country is performing in education quality. The choice of the University for the Study was thereby influenced by its criticality and its reflection of Qatar's education system more than any other institution in the country. The University is affiliated with the state, which means that the state's interests in the education sector are reflected

in the institution.

2.1 Case Study

The choice of the case study as the research design was influenced by the exhaustive nature of the case study compared to other research designs. A case study allows for the exploration and understanding of complex matters in a detailed and comprehensive manner. Therefore, a case study will enable researchers to collect as much information about a subject as possible, given that they follow the cases over a long period. A case study also allows the researchers to understand the behavioral conditions behind an individual's actions, and it is thereby more exhaustive than qualitative and quantitative studies. Case studies allow for both quantitative and qualitative analyses of data, which was a significant reason behind the choice of this research design. Collecting data on teacher programs offered at the Qatar University would require qualitative and quantitative analyses and no other research design would have sufficed in the study.

2.2 Participants

Graduate students' teachers who finished the undergraduate program study in 2017 and 2018 and their employers are participants in the research (administrators, vice principals, subject coordinators who are also supervisors and mentors of new teachers). By 2018 fall, among 160 program completers from QU-CED, around half worked in 70 public schools in Qatar. There was no official update of the employment situation for the rest of the program completers. The total numbers of participants for the quantitative and qualitative study were 12. Because 95 percent of QU-CED students are female, and we exclusively tracked the job status of female students, all the participants in this research were female. School administrators and reviewers also participated in the study. The study sought to assess the satisfaction that school administrators and reviewers had in novice teachers. This meant that administrators and reviewers had to be part of the study to ensure that the information gathered is based on accurate and credible opinions from the administrators and reviewers. The school administrators and reviewers were five in total.

2.3 Research design

For data collection, explanatory mixed-method research was used (Creswell & Clark, 2017). There were two phases and sources of data: first, a questionnaire survey was sent to all 70 public schools in Qatar that employed QU-CED program completers in 2017/8, and second, six case studies were conducted for data, including individual interviews with six teacher graduates and their subject coordinators, and observation data set, which included pre-and post-observation conferences, classroom observations, and pre-and post-observation conferences. Table 1 shows the data sources in detail.

Table 1
Research methods overview

	Participants	Data sources	Procedures
Quantitative data with surveys (D1 & D2)	• school administrators	Questionnaire *(Appendix 1)*	Questionnaire surveys were developed, expert validated, piloted, and revised (with minor modification) before sending to a list of 70 schools that employed program completers middle of December 2018. A reminder was sent the beginning of January 2019.
	• program completers	Questionnaire *(appendix 2)*	
Qualitative case studies data (D3, D4 & D5)	Six people who finished the program: • Two are employed at an early childhood center, while 4	Observation each program completer was observed three times with two observers each time, for a total of six sets of observation data for each completer.	In this research, the observation technique included various data sources such as lesson plans, pre-conferences, classroom observations, and post-conferences.)

	are emplousedatari government schools. • Administrators of educational institutions		The following stages are included on each occasion: • Pre-conference: a casual conversation with the program completer to get a sense of their work. (Appendix 3 of the guideline) • Documents such as lesson plans and other pertinent resources are acquired. • The assessment sheet is used to perform classroom observations (appendix 4) • Observational remarks from reviewers • • Post-conference: an informal discussion with the program finisher about comments and suggestions for improvement. (See also Appendix 3)
			The evaluators highlight and discuss the completer's progress on the next occasion. The observation set includes three loops of reflection for improvement to examine the completer's performance and learning skills for improvement.
		Interviews *(appendix 5-6)*	Six school officials were interviewed.
			Six program graduates were interviewed.

2.4 Quantitative data sources

A questionnaire-based survey technique was employed to get an overview of views from both program completers and their employers.

The study's research team created two questionnaires (appendices 1 and 2) based on the College of Education's curriculum goals (http://www.qu.edu.qa/education/programs/undergraduate) Qatar's national professional standards for teachers. (http://www.sec.gov.qa/En/SECInstitutes/EducationInstitute/Offices/Documents/NPSTSLE.pdf)

Each questionnaire has ten questions on which participants are asked to rate the program completionism's teaching abilities and qualifications on a four-point Likert scale. The questionnaire development processes, according to Creswell & Clark (2017), are as follows:

1) 1) The study team went through many rounds of internal evaluation (four team members are experts with high familiarity with the programs).

2) 2) Expert validation was carried out by senior specialists with 10-20 years of experience in the programs. Minor changes were made to the wording of several of the items, such as 1, 2, 6, 8, and 9. Statistical experts conducted another expert validation to review the rate and scale of the questionnaire design. Three rounds discussed led to revision on the scales before the research team and the experts reached a final agreement of the current version.

3) A language expert performed the first translation into Arabic, and back-translation was utilized to test the questionnaire's validity and linguistic parallelism (Cohen, Manion & Morrison,

2013). Two additional language specialists agreed after many rounds of translating back and forth between English and Arabic.

4) Four prior program graduates who worked in public schools and three professional experts who supervise new teachers participated in a pilot study. Item 2 and item 6 each have one word in the Arabic version changed to make the wording of the items more explicit.

5) In early December, the Dean's office emailed an electronic (word file) version of the final version of the two questionnaire-surveys to 70 public schools that employed QU-CED program completers in 2017/8, along with an ethical approval document from the Ministry of Education and Higher Education and a signed request letter from the Dean.

6) By mid-January 2019, 10 school officials and 12 program graduates had replied anonymously after three reminders.

2.5 Qualitative data sources – case studies

• Six program graduates agreed to participate in the case study, which took place from late November 2018 to the first week of February 2019. Each program finisher acts as a case study. The following data sources are included in each case study; for further information, see table 1:

• Each program completer will be observed two to three times in the classroom, including before and post conferences, a classroom observation evaluation sheet, and documentation such as lesson plans, teaching materials, and student performance.

• Following the observation sessions, conduct interviews with each program graduate and their topic coordinators.

The classroom observation rating sheet (Appendix 3) was developed in line with the development of the two questionnaire surveys and followed the same procedures 1-5, as listed above.

The pre-and post-observation conferences (Appendix 4) and the interviews (Appendix 5-6) were held at the schools at the participants' convenience. Each one lasted between 30 and 60 minutes. The interviews were done in Arabic and audio-recorded before being transcribed and translated into English (Kvale & Brinkmann, 2009).

2.6 Data analysis

To evaluate the answers of the panelists, quantitative data analysis was performed using calculated descriptive statistics. We calculated the mean and standard deviation for each item on the questionnaires and the observation rating sheet.

Individual answers were revealed by establishing communication patterns and inferring meanings through linguistic characteristics in the given settings using an inductive content analysis method for qualitative data (Cohen, Manion, & Morrison, 2013). A summary of the meanings provided by the respondents was coded and organized into shorter formulations using theme analysis with an emphasis on meaning condensation (Kvale & Brinkmann, 2009).

2.7 Ethical Considerations

This research has undertaken ethical consideration. The participants were provided with consent forms that stated that their personal information would not be disclosed, and their identity will be kept anonymous. Verbal consent of the participants was also taken. It had been made sure that the qualitative data collected is not plagiarized.

3. Results and Discussion
3.1 Quantitative data results

The results from the questionnaire surveys and observation rating sheets were subjected to fundamental fundamentalstical analysis. To determine the views of program completers, school administrators, and expert reviewers, the mean and standard deviation of each item on the questionnaires and observation rating sheet were computed. A cumulative mean and standard deviation were calculated for each item combining three (items 1-8) or two (items 9-10thingsms. Table 2 summarizes the findings of three quantitative data sources by giving descriptive statistics for three groups of participants' answers.

Table 2
The results of three quantitative data sources

	Data sources							
	Completer Survey		Employer Survey		Observation rating sheet		Total	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Item 1	3.41	0.62	3.13	0.96	3.59	0.57	3.42	0.71
Item 2	3.18	0.73	2.88	0.96	3.41	0.50	3.21	0.73
Item 3	3.47	0.62	3.19	0.83	3.76	0.51	3.53	0.67
Item 4	3.35	0.61	3.25	0.77	3.93	0.26	3.60	0.61
Item 5	2.94	0.83	2.69	0.79	3.76	0.44	3.26	0.81
Item 6	2.71	0.77	2.88	0.96	3.10	0.41	2.94	0.70
Item 7	3.47	0.51	2.81	0.83	3.66	0.48	3.39	0.69
Item 8	3.12	0.70	3.06	0.93	3.31	0.47	3.19	0.67
Item 9	2.94	0.56	2.63	0.72	na	na	2.79	0.65
Item 10	3.53	0.51	3.56	0.51	na	na	3.55	0.51

Table 3 reports the reliability test of the two surveys developed in this study. Cronbach's alpha of studyrvey for the program completers is .80, Cronbach's alpha of the survey for school administrators is .95, Cronbach's alpha of both surveys in total is .91, indicating a good scale of reliability of the measure.

Table 3
Reliability test of two surveys

Data sources	Cronbach's Alpha	N of items
Survey for School Administrators	0.95	10
Survey for Program Completer	0.80	10
All	0.91	10

Table 4 shows the results of the classroom observation rating sheet. Across many instances, the mean of each item by each observer was determined.

Table 4
Results of classroom observation rating

	Mean by observation occasions		
Item	Observer1	Observer2	Observer 3
Item 1	3.7	3.7	3.2
Item 2	3.4	3.4	3.4
Item 3	3.9	3.9	3.0
Item 4	4.0	4.0	3.6
Item 5	4.0	3.8	3.0
Item 6	3.1	3.1	3.2
Item 7	3.7	3.7	3.6
Item 8	3.3	3.3	3.2

Table 5-8 reports the inter-rater reliability tests' results—coefficient reliability among judges 0.678, suggesting a moderate level.

Table 5
Reliability test of classroom observation rating

	Reliability of Observation (Correlation Coefficient)		
	Observer1	**Observer2**	**Observer 3**
Observer1	1		
Observer2	0.99	1	
Observer 3	-0.03	0.0597	1

Table 6
Reliability test

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.678	.626	3

Table 7
Reliability test among observers

Item Statistics			
	Mean	Std. Deviation	N
OB1	3.64	.338	8
OB2	3.61	.314	8
OB3	3.28	.238	8

Table 8
Intraclass Correlation Coefficient

	Intraclass Correlation Coefficient						
		95% Confidence Interval		F Test with True Value 0			
	Intraclass Correlation	Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.412[a]	-.028	.816	3.105	7	14	.034
Average Measures	.678	-.089	.930	3.105	7	14	.034

3.2 Qualitative data results

The following format is used to present the results of the cross-cases using various data sources: 1) an overall assessment of program graduates' professional knowledge, teaching abilities, and professional attitudes; 2) the effect of teaching performance on student learning gains; 3) the relationship between teaching performance and teacher training programs; 5) teaching-learning via work; 4) missing points from the teacher training program.

3.2.1 Overall assessment of program graduates' professional knowledge, teaching abilities, and professional attitudes

In terms of professional knowledge, teaching skills, and professional dispositions, all six program graduates have confidently self-evaluated their preparedness to work as a teacher. Better comments came from their superiors, who said the following about the completers:

Supervisor of Case 3: "I don't see her as a graduate. I feel like she has more experience than a new graduate. Because I work with her, she exceeds the levels. I attended some of her classes, and I liked many things she did."

Supervisor of Case 4: "She is excellent in terms of knowledge. She loves the subject that she's teaching, math. And it shows that she is well informed in the field. So you get a sense that in terms of knowledge and skills, she's excellent. And her understanding of the subject. In terms of her professionalism, I like that she came here with the mentality of being a teacher, and she accepts her job with all the pressure that comes with it. I want to learn responsibility. And yes, she's proven herself. The school has been in rough a few situations. She was charged two curriculums. Now she's currently in charge of three curriculums. If it were another person, they would have probably rejected that. She was so accepting. We're lucky to have her."

"She has grown after obtaining a diploma in elementary education," says Case 5's supervisor. On a modest basis, she used to train with us on standards and tactics. In terms of the department's size. She used to go to seminars where she learned about tactics and how to put them into action.

We used to monitor her strategy implementation, but I saw a difference when she had her graduation. She had formed a commitment at this point. She must put her plans into action to get a diploma. As a result, it has become her approach.

Supervisor of Case 6: "She is excellent. She has new strategies, especially in technology. She knows a lot abtechnicalical programs. She is well developed in her strategies. Her language skills are excellent in class and while asking students questions."

3.2.2Teaching performance and its impacts on student learning gains

All of the program's alumni also mentioned how their ability to educate helped students learn more. Surprisingly, the participants' evidence in this respect was mixed. As one of them put it, helping students using different teaching techniques and tracking their learning processes is an excellentnice achievement for two of them (cases 3 and 5).

"I apply a lot of teaching strategies and teaching methods. I also take into account individual differences. For example, I use different visualized strategies...you know, some students are visual, some are auditory, some like hand-on experiences. So I use all of that to deliver information well to students. To instill information through visual and auditory means, we could watch a video. That's sufficient to instill information in a student's mind. That affects the student in that it improves their performance." (Case 5)

Increased scores are excellent proof and success for specific instructors (cases 4 and 6).

"The proof is the increase in student scores, which is evident by the fact of the significant decrease in the percentage of students who failed" (Case 4)

In the instance of the two early childhood instructors (cases 1 and 2), they saw student development as a result of both teaching and learning.

"I have only been here for a month, and I haven't managed a class yet. But I tried to make the shy students who never speak and interact. There was a student who never spoke when I first got here, but now she does, and she's more social now." (Case 1)

Interviews with supervisors verified the impact of completions' performance on student learning outcomes, such as advancement and grades. As they put it,

Supervisor of case 3: "The top proof is that her class was the lowest-performing, which is 3rd grade. Their grades were low in the midterm exam, but that's not because of her. The reason is that they have trouble reading. And they have an additional value of 14% in the final exam. That's a very high value that she was able to increase. That's an achievement that the academic vice-principal and we have thanked her for this. And she earned it."

Supervisor of case 4: "the way she interacts with students...she made her students solve problems without feeling that the subject is difficult. Some of them are sitting there, so involved in solving a problem. There is also a simplicity in her teaching. She doesn't make the subject complicated, her students feel comfortable, and they love her. She has taken an almost full score, even though she's just started. You wouldn't say that that report is by a new teacher. That's even her first semester in training."

Supervisor of case 5: "She starts treatment plans for low-performing students continuously. So the percentage of success in her classes is high."

Supervisor of case 6: "The proof is in their grades. Their grades went up. And she creates support plans for students that are behind. She tries to simplify information for students. So moves gradually in her questions. She uses a variety of teaching methods with students while taking into consideration their differences."

3.2.3The relationship between teaching effectiveness and teacher education programs

The interviewed program graduates were generally pleased with what they learned in the teacher preparation program and could relate the program's advantages to the regular teaching job. Theories that assisted with a conceptual grasp of teaching and learning, a wide variety of teaching methods and abilities for classroom management, and chances for Micro-teaching are among the most often mentioned advantages of the program on their teaching practice. They said it

themselves,

"I am glad I was in that program, and it made a huge influence on me. It made me feel confident at work…. I am used to creating new teaching strategies…. I can see I know quite a lot of strategies that even experienced teachers do not know." (Case 3)

"It (the university program) has a great influence in the sense that I experienced the situations I now experience with my students. The experience of managing a class during the internship was highly beneficial, and my university instructors were role models for me at work." (Case 4)

"I benefited a lot because even during the diploma, there was micro-teaching which I learned a lot from, and from the different strategies that I learned from the instructors there, which I applied here practically." (Case 5)

Similarly, all questioned supervisors credit the efficacy of the teacher training program for the satisfied performance of program graduates. The supervisors contrasted instructors from Qatar University's College of Education with teachers from other backgrounds, as stated by them.

"There's a difference. She (QU-CED program completer) knows the society, she knows the students and how to deal with them. Also, I see a big difference in terms of teaching methods." (Supervisor of Case 3)

"I'm fortunate to have them. Their batch is very good, really. Not just me, but my entire department all say the same thing." (Supervisor of Case 4)

"She's not originally specialized, but this diploma in primary education was very beneficial for her. You help your students to develop depth in knowledge in the subject." (Supervisor of Case 5)

"A graduate from the College of Education knows the educational objectives; she knows about teaching students. That's in contrary to students coming from an Accounting background or any other background, they take a lot of our efforts because we teach them how to work with students, about class management, how to formulate objectives of a lesson plan, but a graduate from the College of Education is different. She's already prepared. She knows how to prepare a lesson plan. She knows how to formulate questions and objectives. She's trained to use different strategies. That's contrary to those who come to work without relevant educational background." (Supervisor of Case 6)

Nonetheless, Case 3's supervisor pointed out that teaching quality was also influenced by individual characteristics such as responsibility and enthusiasm, as she put it.

"Being a teacher isn't about being a graduate from the college of education or other colleges. I believe that delivering information is a gift that's within a person. Some people have this gift; some don't. Some people love their job, and some don't. Some focus on their students; some just come in to do their job and leave. So I feel like it also depends on the individual."

3.2.4 Missing points from a teaching preparation program

Interviewed program graduates highlighted two significant gaps in their teaching preparation program. Two instructors said that, despite their trust in professionals, they sometimes feel uneasy about handling certain real-life situations due to their expertise and skills, as one of them put it.

"I know the teaching strategies, and I know when to use each strategy. But my problem is that sometimes I don't know what to do in certain situations. For example, I took the course Child Development but now I deal with children 3 years old. I cannot give them academic stuff because they should only learn some letters and pronunciation. The strategies that I learned are not very helpful in this situation. " (Case 2)

Another program graduate spoke about her lack of preparedness for dealing with individual diversity in the classroom.

"I should know how to deal with individual differences in students. I shouldn't give them one question and force each student to answer that question. If a student is not a high performer, I will give him a question that's suitable to his level to avoid making him feel discouraged." (Case 3)

Another completer mentioned this element but also noted a process of learning how to build coping methods.

"A lot of things I wasn't aware of before I joined the diploma program. For instance. Individual differences. After having gone through the diploma program, I learned a lot more about individual differences. And I currently use treatment plans in the 4th grade, and as an effect, my class performs best in mathematics. Last year, the coordinator gave me a certificate of excellence for teachers because I had the top-performing students." (case 5)

This improvement was verified in an interview with her supervisor, who gave the teacher excellent marks for the treatment plan she created and executed in her class to address individual differences, which aided the low-performing students.

3.2.5 Teacher learning

All of the questioned program graduates indicated their enthusiasm for continuing to study while working as a teacher and putting what they had learned in university programs into practice. One instructor put it this way, "We must continue to learn new things. Although we learned a lot from the university program, it wasn't enough for me. I still have to learn some things." (Case 1)

In addition to this, two participants mentioned their reflections on real-life events, one of whom said, "What I learned from the program is meaningful now from the work experience. The teaching experience makes me learn more comprehensively." (Case 4)

Completers expressed their ongoing learning based on problems from the real-life situation in response to the missing element, as one said, "when I face situations where I don't know what to do, I am now reading books to search for answers, for example, children psychology…" (case 2).

This point was also brought up in the supervisor interviews. Four supervisors (cases 3, 4, 5, and 6) said the program graduates they oversaw had a good attitude and were eager to learn new topics in a school setting. These instructors see the eagerness to learn as an asset in their job. As Case 4's supervisor put it, "she is interested in learning new things, and come up with new ideas and activities…".

In this study, multiple data sources (D1-5) were generated for triangulation and internal reliability (Creswell & Clark, 2017).

- D1. Survey with school administrators

- D2. Survey with program completers

- D3. Observation by reviewers (including a set of data)

- D4. Meet with school officials for an interview

- D5. Meet with program completers for an interview

Aligning research questions to data sources

Research questions	Data sources for providing answers
RQ 1	D1, D2, D3, D4, D5
RQ 2	D1, D2, D3, D4, D5
RQ 3	D1, D4
RQ 4	D2, D5

- RQ1 (S4.1) How can program graduates show their ability to improve student learning?

- RQ2 (S4.2) How do graduates show their ability to apply the professional knowledge, skills, and dispositions that their preparation program experiences were designed to develop?

- RQ3 (S4.3) How pleased are the employers with the completers' preparedness for admission into public schools?

- RQ4 (S4.4) How do graduates see their teacher preparation program as assisting them in preparing for their entrance into public schools?

The study offers the following responses to the research questions by combining various

sources of data.

In response to study questions 1 and 2, program graduates and employers are usually pleased with their graduates' ability to apply the professional knowledge, skills, and attitudes targeted by their preparation program. Eight of the ten items/standards received a score of 3 or above. This indicates general satisfaction, but there is room for improvement. Two standards – item 6 and 9 from the surveys – were rated slightly lower than three on average for the survey, namely "Engaging in assessment activities and using the data for instructional decision making and student improvement" and "Reflecting and using multiple resources such as professional literature and interacting with colleagues to aid my growth as an educator." However, in the observation of t In regards to item 9, the findings indicate that teacher preparation programs should offer more chances for student teachers to participate in research activities or practices that include real-life issues to learn how to link theories to practice in the workplace.

In addition, qualitative data showed that teaching performance and its effects on student learning gains, based on a range of evidence given by program graduates and their supervisors.

Employers in this study are usually pleased with program completers, according to research question 3. Employer participants in this research indicated a preference for program completers over instructors enrolled from other sources.

In response to study question 4, respondents are usually pleased with their learning outcomes regarding their profession, particularly in terms of knowledge provision. Nonetheless, qualitative data revealed a wide range of views on using what one has learned in the workplace.

4.   Conclusion

Finally, it is acknowledged that the teacher preparation program has a significant impact on the growth of novice teachers in terms of their professional skills acquisition and overall contribution to student development. The participants chosen had expressed a wide range of views on the effect of development programs to prepare them for the future. The programs significantly increased the confidence and self-sufficiency of the rookie instructors, allowing them to become strong teachers in practice. Furthermore, the instructors were able to acquire creative talents to improve the kids' future learning abilities. Even if some teachers found the programs limited their ability to use creativity to address the unique needs of each student, as suggested by the proposed theoretical evidence in this study, the overall analysis confirms that teacher preparation programs are necessary to help novice teachers establish a solid footing in the educational profession.

Based on the theoretical and practical results of the present research, the following conclusions and suggestions are made. First,more excellentr knowledge and abilities about utilizing assessment to provide learning opportunities for their students, particularly with diverse views on assessment theories and practices, are required for teacher students. Second, to bridge the gap between the study program and the actual work environment in schools, the teacher preparation program should provide more opportunities for teaching students to gain more real-life experience and develop a desire to become teachers from the beginning of the program. Furthermore, using a reach-based strategy to include student teachers in exploring real-life issues in school settings would improve their critical thinking and problem-solving abilities. Finally, coping techniques and management abilities for dealing with conflict and problems in the workplace may aid student instructors in being more equipped for their careers.

Even though the research offered evidence for program effect by interviewing program graduates and employers and observing their practices, the findings are still preliminary due to limitations. To begin, additional validation of the created instruments is required. Second, bigger sample size may result in greater variance in the practices. Furthermore, other views, such as comments from parents and opinions from professional development facilitators, may improve the study's findings. Furthermore, greater reviewer and observer preparation and discussion for classroom observation grading may enhance inter-rater reliability.

To develop good research in the future, it is recommended that reliable techniques for analyzing the effects support the study. The emphasis of the impact study was on utilizing academic administrations and instructors as participants to evaluate the value of the preparatory programs. Future studies should include students as participants since they may be better judges of whether

what the instructors say is accurate or biased, thus increasing the research's validity. To improve the accuracy of the findings, future studies should solely use quantitative analysis.

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