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Pre-service Teachers' Perception of their Educational Preparation

Ahmed Khalid
ahmed.khaled@aau.ac.ae

Samir J. Dukmak
Al Ain University of Science and Technology, Samir.Duqmaq@aau.ac.ae

Fawzi - Fayez Ishtaiwa Dweikat
Zayed University, Duba,UAE, fawzi.dweikat@zu.ac.ae

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Dr. Ahmed Khalid

Samir J. Dukmak

Fawzi - Fayez Ishtaiwa Dweikat

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Ahmed Khaled, Assistant Professor
Department of Professional Diploma in Teaching, College of Education
Humanities, Social Science,Al Ain University of Science and Technology, UAE
Email: ahmed.khaled@aau.ac.ae

Samir Dukmak, Associate Professor
Department of Humanities and Social Sciences, College of Education,
Humanities and Social Sciences,Al Ain University of Science and Technologies, UAE
Email: Samir.Duqmaq@aau.ac.ae

Fawzi Fayez Ishtaiwa-Dweikat, Associate Professor
Zayed University, Dubai, United Arab Emirates
Email: fawzi.dweikat@zu.ac.ae

Abstract:

This study aimed at investigating the pre-service teachers' views of their educational preparation taking into consideration six study domains, namely: planning and preparation for instruction, classroom environment, professional responsibility, teaching skills, time allotted for learning different subjects, and time allotted for learning certain skills in the program. The differences among the six domains and pre-service teachers' demographic information such as gender, pre-service teachers' study majors, and the school level they were prepared to teach (Basic vs. Secondary) were investigated. Additionally, the study examined the extent to which the six study domains predicted the pre-service teachers' teaching skills. Findings of the study revealed that pre-service teachers have positive views on their own pedagogical preparation. In responding to their perception pertinent to the six domains of this study, the majority of the pre-service teachers thought that they had been "highly prepared" or "well prepared". However, there were no statistically significant differences in terms of the pre-service teachers' gender and teaching majors. Other findings were discussed and the study gives some recommendations.

Key word: Pre-service Teachers 'views, Educational Preparation, Perceptions.

Introduction:

The quality of teacher preparation programs and the production of quality teachers for public schools have always been, and continued to be the concern of many universities which offer teacher education preparation programs around the world (Graham & Garton, 2003; Tairab, 2008; Goldhaber & Anthony, 2003; Cobb, 1999; Varrati & Smith, 2008; and Durgunoglu & Hughes, 2010; Eckert, 2014; Cobb, 1999). This dictates that high quality teachers will have to possess pedagogical content knowledge, subject area content knowledge in addition to other skills (Darling-Hammond 2006a). To verify these qualities, evaluations must be conducted either by external agencies such as Departments of Education, National Council on Teacher Quality and the US accrediting organizations (NCATE, currently CAEP) or internally by giving the stakeholders questionnaires, surveys, or conducting interviews. The teacher preparation program being investigated in this study has been operational since 2005 and needed to be carefully examined. This was done through a process of internal evaluation. This internal evaluation focused on the pre-service teachers' pedagogical preparation.

With the paradigm shift from teaching to learning, it is imperative to evaluate what knowledge is needed to be an effective teacher (Kolis and Danlap, 2004). The pedagogical preparation is one of the most important aspects of teachers' preparation to contribute to producing quality teachers (Goldhaber & Anthony, 2003). This study examined pre-service teachers' views of their educational preparation in the Professional Diploma in Teaching Program at Al Ain University of Science and Technology. Almost all program participants come from Oman and the majority of program candidates are females representing the need of the Omani school system. They have completed undergraduate degrees in different specializations (Arabic Studies, Islamic Studies, Social Studies, English Language Studies, Mathematics, Instructional Technology, and Science) and wish to obtain a professional qualification in teaching. The program is two semesters.

Study purpose and research questions

The shift from teaching to learning requires evaluating the needed knowledge for the preparation of effective teacher education. The purpose of the study was to investigate pre-service teachers' views of their

educational preparation process taking into consideration six domains namely, planning and preparation for instruction, classroom environment, professional responsibility, teaching skills, time allotted for learning different subjects, and time allotted for learning certain skills in the program. The study also examined the differences between the six study domains and pre-service teachers demographic information such as gender, pre-service teachers study majors, and the school level that these teachers were prepared for (Basic Education vs. Secondary School). Specifically, this research study sought to answer the following four main questions:

To what extent do pre-service teachers think that they have been prepared with the necessary skills identified by the six domains (planning and preparation for instruction, classroom environment, professional responsibilities, teaching skills, time allotted for learning different subjects and the time allotted for learning certain skills)?

Is there any significant difference at the level of ($p \leq 0.05$) between pre-service teachers' gender, study major, and the school level that they are prepared for (Basic vs. Secondary), and their planning and preparation for instruction, classroom environment, professional responsibilities, teaching skills, time allotted for learning different subjects and the time allotted for learning certain skills?

Is there any correlational relationship between the four domains (planning and preparation for instruction, classroom environment, professional responsibility, and teaching skills)?

To what extend do the three domains of planning and preparation for instruction, classroom environment and professional responsibility predict teaching skills?

This study attempted to evaluate the outcomes of the Professional Diploma in Teaching Program from pre-service teachers' prospective. The findings of this study can provide evidence of the quality of the program or identify areas of weaknesses to be amended.

Literature review

Public interest in the quality of school teachers led to a close scrutiny of education programs preparing them. It was reported by Hassan, Khaled, & Al Kaabi (2010) that many U.S. universities and colleges have evaluated their teacher education preparation programs' effectiveness by exploring their graduates' perceptions. In the US also, many critics of university-based teacher education preparation programs agreed with the

National Council on Teacher Quality's (NCTQ, 2013b, Sanchez, 2013, Layton, 2013, Elliot, 2013) findings as reported in Fuller (2014), that "US teacher preparation programs failed to produce quality teachers needed for the diverse classroom student population" (p. 63). Fuller's study (2014) closely examined the NCTQ's findings and concluded: "the study has a number of serious flaws which include but not limited to narrow focus on inputs, lack of strong research base, poor methodology, missing standards, and incorrect application of research findings" (p.63). The debate and interest in the quality of future school teachers led several researchers to conduct research studies related to teacher education preparation programs. These studies focused on pre-service teachers "perceptions of their middle schooling preparation" (Hudson, 2011); "pre-service teachers' perceptions in beginning education class" (Fajet et al., 2005); "new teachers' perceptions of their preparation" (Powers, 2012); "teachers' perceptions of their preparation to choose and implement effective teaching methods" (Blair, 2006); "teachers' perceptions of readiness to teach English language learners" (Wong, 2012) and "perceptions of preparation: using survey data to assess teacher education outcomes" (Darling-Hammond; Eiler; & Marcus, 2002).

Darling-Hammond (2006a & 2006b) believes that teachers need some combination of knowledge of subject matter, pedagogical content knowledge in addition to other qualities. Furthermore, Darling-Hammond and Brans Ford (2005) reported that "content knowledge alone does not adequately prepare teachers for the challenges they will face in today's classroom" (p.36). Hudson's (2009) study indicated the importance of pedagogical knowledge and the need for "linkages between middle school theories and middle school teaching practices". This means that pre-service teachers must be offered opportunities to real-life experiences to connect theory to practice.

In addition, researchers examined pre-service teachers' perceptions of their preparation to teach mathematics (Sears, Muller-Hill, and Karadeniz, 2013; Rosas and West, 2011) and concluded that the participants are either "adequately prepared to teach mathematics or needed more opportunities to prove and practice teaching proof". Tairab (2008) also investigated science teachers' views about their academic and professional

preparation for the purpose of producing well-qualified and well-trained science teachers. Findings of his study revealed that science teachers believed that they had been adequately prepared in most categories surveyed in the study. Likewise, Hassan, Khaled, & Al Kaabi's (2010) findings indicated that, generally the college of education's graduates thought they had been highly prepared in most of the competencies offered to them by the college programs. Both studies (Hassan, Khaled & Al Kaabi, 2010 &Tairab, 2008) reported positive views of the participants' preparation in four domains, which are planning and preparation for instruction, classroom environment, professional responsibilities, and teaching skills. Unfortunately, these were the only two studies found to examine these four domains. In addition, there was no literature found examining the relationship between these four domains and pre-service teachers' gender and study majors. These positive findings support the claim that teacher education preparation programs are mostly successful in performing their jobs even though there are areas that require careful attention to remedy the performance of some of these programs.

Method

The context of the study

The Professional Diploma in Teaching Program at the College of Education of Al Ain University of Science and Technology is a one-year program where the students complete 24 semester credit hours; of which eighteen credit hours are in class hours and six credit hours practicum. The program has been designed for teachers and educators who already hold undergraduate degrees and wish to obtain a professional qualification in teaching. The program is offered in English and in Arabic. Most of the participants of this study come from Oman. They are students who have completed four-year undergraduate degree in different specializations such as Arabic, Islamic Studies, Social Studies English Language, Mathematics, Instructional Technology, and Science and wish to obtain a professional diploma in teaching. Most students enrolled in the program are females whose ages range from 22-29 years. They are sociable, friendly and goal-oriented as reported by most of their instructors.

Design

The study used a quantitative research methodology with the hope of generalizing the findings. Furthermore, the type of research questions used for this study made quantitative methodology a more suitable research methodology. The study questionnaire consists of six domain scales in addition to a section that contains questions related to pre-service teachers' socio-demographics. The questionnaire intends to gather data and information concerning the participants' views about the quality of their educational preparation.

Participants

The participants of the study were 294 pre-service teachers. About 87.4% of them were females and 12.6% were males. Age was not a factor in this study. The majority of participants were female pre-service teachers because they represent the majority of student population enrolled in the program. The subject major specialty for more than half of the participants in the study (57.5%) was Arabic Language Studies while the subject major specialty for the rest of participants was Islamic Studies (18.4%), Information Technology (12.2%) and English Language Studies (6.8%). Some participants (5.1%) did not respond to the question related to their subject major specialty. The majority of participants in the study (82.7%) were prepared to be qualified teachers for Basic Education stage (elementary school) while the remaining participants (16%) were prepared for the Secondary Education stage, and (1.4%) of participants did not respond to the related question.

Instrumentation:

The data for this study was collected using a questionnaire that consists of six domain scales besides three demographic questions about pre-service teachers. The questionnaire was administered to the participants during their last semester in the program. Each domain scale consisted of a 5-point Likert type scale ranging from 1 to 5 where "5" indicates that the participants "thought that they had been highly prepared" in a particular component of the domain, and "1" indicates that "they thought that they had not been prepared at all" in that item. The participants were asked to indicate how they perceived their preparation by the Professional Diploma in Teaching Program to judge the effectiveness of the program. They were

given sufficient time and clear instructions on how to respond to the questionnaire.

The questionnaire was developed using Danielson's (2002) model for teaching on one hand, and the literature on teacher education's knowledge and beliefs on the other hand. The questionnaire sought to gather information on the participants' views about their overall preparation on the components of the six domain scales. A panel of five university professors teaching in the program reviewed the items of the questionnaire on the different domain scales for their relevance and suitability for the purpose of the study. In addition, the questionnaire was field tested with a group of 40 students, and then modified for clarity, organization, and content based on the feedback from different individuals. The calculated reliability of each domain scale was reported. Each of these scales is described in details as follows:

Preparation and Planning for Instruction Scale (PPIS)

Preparation and Planning for Instruction Scale (PPIS) is a seven-item dispositional self-report index using a Likert-type scale that was designed to investigate pre-service teachers' skills and abilities to prepare and plan for instruction. This indicates whether the Professional Diploma in Teaching Program in terms of theory and practice helps pre-service teachers to acquire the necessary skills to prepare and plan for their instruction which is one of the pedagogical skills that is valuable in teachers' preparation (Goldhaber and Anthony, 2003). The total score for the PPIS was used in this study where the minimum score pre-service teachers can get is seven and the maximum score is 35 with a theoretical mean of 21. However, the higher the scores pre-service teachers get, the better skills they have in the preparation and planning process of their instruction. The mean for the total scale's items is 29.05 and the standard deviation is 4.28. The Cronbach alpha for the total scale is .85.

Teaching Skills Scale (TSS)

Teaching Skills Scale (TSS) includes 10 items and uses Likert-type scale designed to investigate the knowledge, skills and abilities needed by pre-service teachers to teach students in schools. This shows whether the Professional Diploma in Teaching Program in terms of theory and practice helps pre-service teachers acquire the necessary skills to teach students in schools. It is reported that "content knowledge alone does not adequately prepare teachers for the challenges they face in today's classroom" (Darling-

Hammond & Bransford, 2005, p36). The total score for the TSS was used in this study. The minimum score pre-service teachers can get is ten and the maximum score is 50 with a theoretical mean of 30. However, the higher the scores pre-service teachers get, the better skills they have in teaching students. The mean for the total scale's items is 41.87 and the standard deviation is 6.02. Cronbach's alpha for the total scale is .90.

Classroom Environment Scale (CES)

Classroom Environment Scale (CES) contains seven items using Likert-type scale to investigate the knowledge, skills and abilities required from pre-service teachers to manage various issues related to classroom environment. This shows whether the Professional Diploma in Teaching Program in terms of theory and practice helps pre-service teachers acquire the necessary knowledge and skills to deal with various issues related to classrooms. The total score for the CES was used in this study. The minimum score pre-service teachers can get is seven and the maximum score is 35 with a theoretical mean of 21. However, the higher the scores pre-service teachers get, the better skills they have in managing the classroom environment. The mean for the total scale's items is 29.38 and the standard deviation is 4.19. Cronbach's alpha for the total scale is .87.

Professional Responsibility Scale (PRS)

The Professional Responsibility Scale (PRS) consists of seven items using a Likert-type scale that investigates the knowledge and skills required from pre-service teachers to carry out various professional responsibilities in school. This shows whether the Professional Diploma in Teaching Program in terms of theory and practice helps pre-service teachers acquire the necessary knowledge and skills to carry out various professional responsibilities in school. According to Danielson's (2002) model for teaching, the professional responsibility has become an integral part (domain) of teaching and teacher preparation. The total score for the PRS was used in this study. The minimum score pre-service teachers can get is seven and the maximum score is 35 with a theoretical mean of 21. However, the higher the scores pre-service teachers get, the better knowledge and skills they have in carrying out various professional responsibilities in school. The mean for the total scale's items is 27.61 and the standard deviation is 5.01. Cronbach's alpha for the total scale is .87.

Time Allotted for Learning Different Subjects Scale (TALDSS)

The Time Allotted for learning Different Subjects Scale consists of seven items and uses a Likert-type scale that examines the length of time spent by pre-service teachers to learn the different courses offered in the program. This shows whether the Professional Diploma in Teaching Program provides pre-service teachers enough time to acquire the necessary knowledge and skills incurred in the courses. The total score for the TACS was used in this study. The minimum scores pre-service teachers can get is seven and the maximum score is 35 with a theoretical mean of 21. However, the higher the scores pre-service teachers get, the more suitable time allotted for the courses offered in the program to help them acquire the necessary knowledge and skills in courses. The mean for the total scale's items is 27.09 and the standard deviation is 5.72. Cronbach's alpha for the total scale is .89.

Time Allotted for Learning Certain Skills Scale (TALCS)

The Time Allotted to Learn Certain Skills Scale contains ten items and uses a Likert-type scale that examines the length of time spent by pre-service teachers to learn certain skills in the program. This shows whether the Professional Diploma in Teaching Program provides enough time to pre-service teachers to help them acquire the necessary skills incurred in the program in general. The total score for the TALSS was used in this study. The minimum scores pre-service teachers can get is ten and the maximum score is 50 with a theoretical mean of 30. However, the higher the scores pre-service teachers get, the more suitable time allotted for them in the program to help them acquire the necessary skills. The mean for the total scale's items is 36.07 and the standard deviation is 8.33. Cronbach's alpha for the total scale is .93.

Procedure

Participants were given the questionnaire during their last semester in the program when they were placed in the different schools for their practicum (teaching practice). The participants were requested to respond to the questionnaire with consideration given to the result of studying in the program and their training as prospective teachers. They were also asked to indicate the extent to which they perceived themselves to be prepared to effectively teach their subject matter. Participants were given sufficient time to read and respond to the questionnaire.

Statistical Analyses:

Different statistical analyses were performed in this study to examine differences between predictors and outcome measures. For example, a t-test was performed to study the differences between the six study domains (preparation and planning for instruction, classroom environment, teaching skills, professional responsibilities, time allotted for learning different subjects, and time allotted for learning certain skills) in addition to pre-service teachers' gender and the school level they are prepared for (Basic Education vs. Secondary School). One-way ANOVA was used to investigate the difference between these six domains and pre-service teachers' subject majors. Post hoc comparisons using the Tukey HSD test were used to show the difference between the subject majors in relation to classroom environment and professional responsibility. Furthermore, Pearson Bivariate correlation was conducted to see the association between the four main scale domains in the study which are preparation and planning for teaching skills, teaching skills, classroom environment, and professional responsibility. Finally, a multiple regression analysis was performed to investigate whether or not the three domains of the study (preparation and planning for instruction, classroom environment, and professional responsibility) significantly predicted the pre-service teachers' teaching skills.

Results

The current study attempted to examine the pre-service teachers' perceptions of their educational preparation in terms of how well they thought they were prepared to effectively teach their subjects in schools. The domains examined in this study were based on areas described in Danielson's (2002) model of teaching which includes four domains: planning and preparation, classroom environment, instruction, and professional responsibility.

Research Question one: To What extent do pre-service teachers think that they have been prepared with the necessary skills identified by the six domains (planning and preparation for instruction, classroom environment, professional responsibilities, teaching skills, time allotted for learning different subjects and the time allotted for learning certain skills)?

Descriptive statistics using means and standard deviations were conducted to investigate pre-service teachers' views of their preparation in these domains. The total scores for the domains were used to indicate that the higher the scores, the more positive views pre-service teachers have about their preparation in these domains. This means that the more or higher the scores pre-service teachers get with a mean exceeding the theoretical mean in any of the domain, the more they are highly prepared to become knowledgeable and skilful teachers. It is worth noting here that the theoretical mean for the PPIS, CES, PRS, and TALDSS is 21 while the theoretical mean for the TSS and TALCS is 30. As table 1 shows the pre-service teachers have high means for all the study domains since they are all higher than the theoretical mean of the different domains scales.

Table 1: Study domains and their means and standard deviations

Domain	N	Minimum	Maximum	M	SD
PPI	286	7.00	35.00	29.05	4.28
TS	283	13.00	50.00	41.87	6.02
CE	285	14.00	35.00	29.38	4.19
PR	287	11.00	35.00	27.61	5.01
TALDS	282	9.00	35.00	27.09	5.72
TALC	273	15.00	50.00	36.07	8.33

Furthermore, frequencies and percentages were calculated on the items in each domain scale to investigate the views of pre-service teachers concerning their preparation in these items/skills. The ratings scale used to reflect the participants' views was a 5-point Liker-type scale ranging from 5, indicating the participants' thought they had been "highly prepared" in a particular component of the domain, to 1, indicating that they thought they "had not been prepared at all" in that item. For all study six domains, the majority of respondents thought that they had been "highly prepared" or "well prepared". This is shown in table 2.

In table 2, higher percentages of respondents showed tendency towards "highly prepared" and "well prepared" for each item of the first four study scale domains, which are "Planning and Preparation for Instruction, "Teaching", "Classroom Environment", and "Professional Responsibility". The two options "highly prepared" and "well prepared" for each item in the scale were added together in order to clearly show the highest percentages

of responses given by respondents in each scale domain. For example, the percentages for the "highly prepared" and "well prepared" responses for the "planning and preparation for instruction" domain ranged from 74.8% to 85%. For the teaching domain, the percentages for the "highly prepared" and "well-prepared" responses ranged from 75.4% to 86.7%. For the classroom environment domain, the percentages of respondents for the "highly-prepared" and "well-prepared" ranged from 75.3% to 87.4%. For the "professional responsibility" domain, the percentages "highly prepared" and "well-prepared" responses ranged from 55.8% to 84.4% (see Table2).

Table 2: Frequencies and percentages of pre-service teachers who responded to the PPI, TS, CE, and PR study scales.

Scale	Items	Frequency					Percentage				
		HP	WP	AP	AC	NP	HP	WP	AP	AC	NP
Planning and Preparation for Instruction	-To select appropriate pedagogy suitable For the content in the specialist subject.	117	132	28	14	2	39.9	45.1	9.6	4.8	0.7
	-To identify students' characteristics.	105	138	33	12	5	35.8	47.1	11.3	4.1	1.7
	-To demonstrate knowledge of &Consider students' learning styles.	103	140	39	7	4	35.2	47.8	13.3	2.4	1.4
	-To formulate learning outcomes.	106	131	49	2	3	36.4	45	16.8	0.7	1
	-To design, select & use appropriate Resources.	139	108	34	8	3	47.6	37	11.6	2.7	1
	-To design coherent teaching in terms of selection o appropriate activities, Instructional materials, & group Formation.	125	120	41	7	1	42.5	40.8	13.9	2.4	0.3

Scale	Items	Frequency					Percentage				
		HP	WP	AP	AC	NP	HP	WP	AP	AC	NP
Teaching Skills	-To design & select assessment &Evaluation techniques appropriate for Students' learning.	88	132	58	14	2	29.9	44.9	19.7	4.8	0.7
	-Communicating clearly & accurately with students.	161	87	36	7	3	54.8	29.6	12.2	2.4	1
	-To use appropriate classroom- Questioning techniques.	124	126	39	4	1	42.2	42.9	13.3	1.4	0.3
	-To demonstrate knowledge of how to engage students in learning	108	136	43	3	4	36.7	46.3	14.6	1	1.4
	-To provide proper feedback to students	131	117	40	4	1	44.7	39.9	13.7	1.4	0.3
	-To adjust teaching to suit diverse students' needs when appropriate	90	131	59	9	4	30.7	44.7	20.1	3.1	1.4
	-To encourage students to reflect &investigate learning situations.	115	120	42	11	3	39.5	41.2	14.4	3.8	1
	-To use teaching strategies appropriate to students' age, ability and learning levels	107	126	46	9	3	36.8	43.3	15.8	3.1	1
	-To observe individual differences among students	107	117	54	9	5	36.6	40.1	18.5	3.1	1.7
	-To use & implement technology in teaching & learning	146	108	30	6	3	49.8	36.9	10.2	2	1

Scale	Items	Frequency					Percentage				
		HP	WP	AP	AC	NP	HP	WP	AP	AC	NP
	-To use a variety of evaluation and assessment tools.	108	121	53	10	1	36.9	41.3	18.1	3.4	0.3
Classroom Environment	-To create classroom environment based on respect & rapport	168	89	31	5	1	57.1	30.3	10.5	1.7	0.3
	-To establish a culture of effective Learning	127	121	39	3	1	43.6	41.6	13.4	1.0	0.3
	-To demonstrate knowledge of classroom management and learning situation procedures and classroom control	102	138	48	4	2	34.7	46.9	16.3	1.4	0.7
	-The ability to effectively manage teaching –learning groups	113	129	47	3	1	38.6	44.0	16.0	1.0	0.3
	-To maintain students' interest & motivation to learn	116	124	42	9	1	39.7	42.5	14.4	3.1	0.3
	-To handle classroom behaviour problems	95	125	63	8	1	32.5	42.8	21.6	2.7	0.3
	Manage classroom space for specific tasks.	99	123	53	16	2	33.8	42.0	18.1	5.5	0.7
Professional Responsibility	-To communicate with parents to discuss educational issues concerning their children's learning	65	99	75	26	29	22.1	33.7	25.5	8.8	9.9
	-To contribute to the professional development of teacher	83	113	72	15	6	28.7	39.1	24.9	5.2	2.1
	-To contribute professionally in favour	107	111	58	12	4	36.6	38.0	19.9	4.1	1.4

Scale	Items	Frequency					Percentage				
		HP	WP	AP	AC	NP	HP	WP	AP	AC	NP
	of the school & school zone										
	-To develop effective working relationship with colleagues	126	122	39	5	2	42.9	41.5	13.3	1.7	0.7
	-To interact & engaged with the local community	88	112	77	11	5	30.0	38.2	26.3	3.8	1.7
	-To make professional decisions on matters related to improving work performance	92	127	60	13	2	31.3	43.2	20.4	4.4	0.7
	-To Keep records of students' progress & performance	115	101	58	12	8	39.1	34.4	19.7	4.1	2.7

HP: Highly prepared, WP: Well prepared, AP: Average prepared, AC: Acceptable level of Preparation, NP: Not Prepared

For the other two scale domains which are related to the "time allotted for learning different subjects" and the "time allotted for learning certain skills", table 3 shows that the highest percentages of respondents showed tendency towards "very much appropriate time" and "appropriate time" for each item in of these two scale domains. These two options were added to each other in order to clearly show the range of responses given by respondents in each scale domain. With regard to the items for the "time allotted for learning different subjects' domain", the highest percentages of respondents were on the options "appropriate time" and "very much appropriate" responses, which ranged from 63.7% to 76.2%. In relation to the "time allotted for learning certain skills' domain", the highest percentages of respondents were given to "appropriate" and "very much appropriate" time which ranged from 46% to 65% (see table 3).

Table 3: Frequencies and percentages of pre-service teachers who responded to the TALDS and TALC Study scales.

Scale	Items	Frequency					Percentage				
		VT	AT	ST	LT	NT	VT	AT	ST	LT	NT
Time Allotted for Learning Different Subjects	-Methods of Teaching Course .	72	114	77	16	13	24.7	39.0	26.4	5.5	4.5
	-Classroom Management & Environment.	77	120	71	15	9	26.4	41.1	24.3	5.1	3.1
	-School Curriculum and Curriculum in U.A.E	96	89	70	27	8	33.1	30.7	24.1	9.3	2.8
	-Practicum (Teaching Practice).	134	86	44	22	3	46.4	29.8	15.2	7.6	1.0
	-Human Development and Learning	90	105	60	25	7	31.4	36.6	20.9	8.7	2.4
	Instructional Technology.	98	87	76	18	11	33.8	30.0	26.2	6.2	3.8
	-Teaching in Diversified Environ Ent.	99	92	59	31	10	34.0	31.6	20.3	10.7	3.4
	-Time for learning educational Principles & theories.	35	100	101	40	17	11.9	34.1	34.5	13.7	5.8
Time Allotted for Learning Certain Skills	-Time for spent learning assessment and Evaluation skills.	44	106	103	33	7	15.0	36.2	35.2	11.3	2.4
	-Time spent for microteaching.	63	90	82	35	21	21.6	30.9	28.2	12.0	7.2
	-Time spent for planning and Preparation for	85	98	68	35	6	29.1	33.6	23.3	12.0	2.1

Scale	Items	Frequency					Percentage				
		VT	AT	ST	LT	NT	VT	AT	ST	LT	NT
	instruction.										
	-Time spent for using educational Materials & resources	91	98	75	21	6	31.3	33.7	25.8	7.2	2.1
	-Time spent on individualized personal Learning.	77	96	86	24	7	26.6	33.1	29.7	8.3	2.4
	-Time spent on how to select & teach Specific content.	78	96	77	28	10	27.0	33.2	26.6	9.7	3.5
	-Time for critical & research skills.	57	103	77	36	18	19.6	35.4	26.5	12.4	6.2
	-Time for different teaching strategies.	65	86	91	40	9	22.3	29.6	31.3	13.7	3.1
	-Time for modifying classroom Behaviour.	74	101	73	31	14	25.3	34.5	24.9	10.6	4.8

VT: Very much Appropriate Time, AT: Appropriate Time, ST: Somehow Appropriate Time, LT: Little Time, NT: Not Appropriate Time

Research Question two:

Is there any significant difference at the level of ($p \leq 0.05$) between pre-service teachers' gender, study major, and the school level they are prepared for (Basic Education vs. Secondary School), and their planning and preparation for instruction, classroom environment, professional responsibilities, teaching skills, time allotted for learning different subjects and the time allotted for learning certain skills?

Study domains and pre-service teachers' gender

The six study domains shown in table 4 were all examined in relation to pre-service teachers' gender. The t-test results found no statistically significant

differences between these study domains and pre-service teachers' gender (see table 4).

Table 4: Study domains and pre-service teachers' gender

Study Domains	Gender	N	M	SD	T	Df	P
- Prep. & planning of instruction	Female	250	29.03	4.31	.339	44.58	.736
	Male	35	29.29	4.20			
- Teaching skills	Female	245	41.82	5.89	.466	44.40	.643
	Male	37	42.39	6.85			
- Classroom environment	Female	247	29.22	4.16	1.646	46.73	.106
	Male	37	30.46	4.29			
- Professional responsibility	Female	249	27.64	4.89	-.343	43.86	.733
	Male	37	27.30	5.83			
- Time allotted for learning subjects	Female	246	27.16	5.54	-.526	40.42	.602
	Male	35	26.51	6.93			
- Time allotted for learning certain skills	Female	237	36.01	8.31	.301	45.57	.765
	Male	36	36.47	8.57			

Study domains and pre-service teachers' subject major

This study also investigated the differences between pre-service teachers' subject major (Islamic Studies, Arabic Studies, English Studies, and Information Technology) and the six study domains. A descriptive analysis was also conducted to identify means and standard deviations for the domains. Furthermore, a one-way ANOVA between subject majors was conducted to compare the effect of subject major on the six study domains. The results revealed no statistically significant difference between pre-service teachers' subject major and four of the study domains which are preparation and planning for instruction, teaching skills, the time allotted for learning certain skills, and the time allotted for the study courses. The only significant difference was found between pre-service teachers' study subject majors and two of the study domains which are classroom environment, $F(3, 266) = 4.70$, $p = .003$, and professional responsibility, $F(3, 268) = 3.39$, $p = .019$ (see Table 5 & 6).

Post hoc comparisons using the Tukey HSD test were used to show the differences between the subject majors in relation to classroom environment and professional responsibility. With regards to classroom environment, the results indicated that the mean score for the Arabic studies major ($M = 29.97$,

SD = 4.00) was significantly higher than the mean score for English studies major (M = 27.45, SD = 3.46) at a level of p = .040. The results also indicated that the mean score for the Arabic studies major (M = 29.97, SD = 4.00) was significantly higher than the mean score of IT major (M = 27.97, SD = 4.35) at a level of p = .035. In relation to professional responsibility, the difference in the mean score between Islamic studies major (M = 28.67, SD = 4.67) and English studies major (M = 25.10, SD = 5.30) was statistically significant at p= .025. Moreover, there was a statistically significant difference between Arabic studies major mean score (M = 28.10, SD = 4.97) and English studies major mean score (M = 25.10, SD = 5.30) at p = .043. There were also no statistically significant differences between other subject majors in relation to the classroom environment and professional responsibility at p < .05. These results suggest that pre-service teachers whose majors are Arabic studies exhibited better classroom environment than English studies and IT majors

Table 5: Means & standard deviations for subject majors in relation to study domains

Study Factor	Subject Major	N	M	SD	Minimum	Maximum
Preparation & planning of instruction	Islamic Studies	51	29.59	4.01	18	35
	Arabic Studies	164	29.44	4.13	14	35
	English Studies	20	28.10	4.22	17	35
	IT	36	27.86	4.13	19	35
	Total	271	29.16	4.14	14	35
Teaching skills	Islamic Studies	50	42.74	6.20	16	50
	Arabic Studies	162	42.52	5.50	28	50
	English Studies	20	40.40	4.30	32	48
	IT	36	40.61	6.10	28	50
	Total	268	42.15	5.67	16	50
Classroom environment	Islamic Studies	51	30.14	3.85	20	35
	Arabic Studies	163	29.97	4.00	16	35

Study Factor	Subject Major	N	M	SD	Minimum	Maximum
	English Studies	20	27.45	3.46	21	34
	IT	36	27.97	4.36	18	35
	Total	270	29.55	4.07	16	35
Professional responsibility	Islamic Studies	52	28.67	4.67	15	35
	Arabic Studies	165	28.10	4.97	11	35
	English Studies	20	25.10	5.30	12	34
	IT	35	26.82	3.64	20	35
	Total	272	27.82	4.85	11	35
Time allotted for learning different subjects	Islamic Studies	49	27.14	5.56	14	35
	Arabic Studies	163	27.68	5.85	11	35
	English Studies	20	25.30	4.14	17	32
	IT	35	26.14	5.92	9	35
	Total	267	27.20	5.72	9	35
Time allotted for learning certain skills	Islamic Studies	48	36.94	7.53	18	50
	Arabic Studies	155	36.75	7.97	17	50
	English Studies	20	33.10	8.26	18	45
	IT	36	34.64	9.17	15	50
	Total	259	36.21	8.13	15	50

The results also suggest that pre-service teachers whose major is Islamic studies exhibited better professional responsibility than pre-service teachers whose major is English studies. Furthermore, pre-service teachers whose major is Arabic studies exhibited better professional responsibility than pre-service teachers whose major is English studies.

Table 6: The effect of the subject majors on the six study domains

Study Factor	Subject Major Groups	df	F	Sig.
Preparation & planning of instruction	Between Groups	3	2.08	.104
	Within Groups	267		
	Total	270		
Teaching skills	Between Groups	3	1.95	.121
	Within Groups	264		
	Total	267		
Classroom environment	Between Groups	3	4.70	.003
	Within Groups	266		
	Total	269		
Professional responsibility	Between Groups	3	3.39	.019
	Within Groups	268		
	Total	271		
Time allotted for learning different subjects	Between Groups	3	1.53	.207
	Within Groups	263		
	Total	266		
Time allotted for learning certain skills	Between Groups	3	1.80	.148
	Within Groups	255		
	Total	258		

Study domains and the pre-service teachers' school level they are prepared for (Basic Education vs. Secondary level).

The differences between the six study domains were all examined in relation to pre-service teachers' school level they are prepared for (Basic Education vs. Secondary level). A t-test analysis was used to investigate the difference between these domains. The results indicated no statistically

significant differences between these study domains and pre-service teachers school level they are prepared for (see Table 7).

Table 7: Study domains and pre-service teachers phase of intending specialty

Study Domains	Specialty phase	N	M	SD	t	df	P
-Preparation & planning of instruction	Basic	236	29.20	4.03	1.051	54.82	.298
	Secondary	46	28.30	5.50			
- Teaching skills	Basic	233	42.21	5.74	1.821	56.78	.074
	Secondary	46	40.15	7.21			
-Classroom environment	Basic	236	29.46	4.06	.689	58.09	.493
	Secondary	46	28.93	4.82			
- Professional r responsibility	Basic	237	27.78	4.82	1.344	57.34	.184
	Secondary	46	26.54	5.87			
-Time allotted for learning different Subjects	Basic	234	26.98	5.76	-.295	64.04	.769
	Secondary	45	27.24	5.49			
- Time allotted for learning certain skills	Basic	230	36.08	8.09	.246	48.65	.807
	Secondary	40	35.68	9.82			

Research question three: Is there any correlational relationship between the four domains (planning and preparation for instruction, classroom environment, professional responsibility, and teaching skills)?

A Pearson Bivariate correlation was conducted to see the association between the main four scale domains in the study which are preparation and planning for instruction skills, teaching skills, classroom environment, and professional responsibility. The results showed that there were positive strong associations between all of the domains. For example, there was a strong positive association between pre-service teachers' preparation and planning for instruction, and their teaching skills, $r\ (274) = .66$, $p < .001$, between preparation and planning for instruction and classroom environment, $r\ (275) = .54$, $p < .001$, and between preparation and planning for instruction and professional responsibility, $r\ (278) = .57$, $p < .001$. For other associations between the domains (see Table 8).

Table 8: Bivariate correlations among the four study domains including preparation and planning for instruction, teaching skills, classroom environment & professional responsibility

Scale		PPI	TS	CE	PR
PPI	Pearson Correlation	-	.661**	.543**	.568**
	Sig.	-	.000	.000	.000
	N	286	276	277	280
TS	Pearson Correlation	.661**	-	.791**	.678**
	Sig.	.000	-	.000	.000
	N	276	283	276	276
CE	Pearson Correlation	.543**	.791**	-	.690**
	Sig.	.000	.000	-	.000
	N	277	276	285	281
PR	Pearson Correlation	.568**	.678**	.690**	-
	Sig.	.000	.000	.000	-
	N	280	276	281	287

PPI = Preparation & Planning for Instruction, TS = Teaching Skills, CE = Classroom Environment,

PR = Professional Responsibility. **. Correlation is significant at the 0.01 level (2-tailed).

Research Question four: To what extend do the three domains (planning and preparation for instruction, classroom environment and professional responsibility predict teaching skills)?

A multiple regression analysis was used to test if the three domains of the study significantly predicted teaching skills. The results revealed that there were significant differences between the preparation and planning for instruction, (M= 29.13, SD= 4.29), classroom environment, (M = 29.40, SD = 4.97) professional responsibility (M= 27.67, SD= 5.04), and teaching skills (M = 41.93, SD = 6.01). The regression results also revealed that the three independent domains in the regression model accounted for 71% of the total variation in pre-service teachers' teaching skills (R^2=.71, F (3, 262) =211.4, p <.01) (see Table 9). This means that the three predictor domains (PPI, CE, & PR) significantly predicted teaching skills (see Table 9).

Table 9: Model summary of three predictors in predicting teaching

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.841	.708	.704	3.26545

Predictors: (Constant), professional responsibility, preparation & planning of instruction, classroom environment.

The regression model's significance for the F-test statistics indicates that there is essentially no chance that the observed correlation of one or more of the independent domains and the dependent domain is due solely to random sampling error. Table 10 shows the "F-statistics" for the model.

Table 10: Fstatistics for the model of the three predictors in predicting teaching

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6763.026	3	2254.342	211.414	.000[a]
	Residual	2793.755	262	10.663		
	Total	9556.782	265			

Predictors: (Constant), professional responsibility, preparation & planning of instruction,

Classroom environment. Dependent domain: teaching skills

By examining each predictor domain in the coefficients output, it was found that preparation and planning for instruction predicted teaching skills (β = .302, $p < .001$), as did classroom environment (β = .740, $p < .001$) and professional responsibility (β = .058, $p < .001$). (See table 11). The regression equation is TS = Constant (2.99) + PPI (.423) + CE (.740) + PR (.176)

Table 11: The relationship between PPI, CE and PR, and TS Dependent domain: teaching skills

Model 1		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Standard Error	Beta	t	Sig.	Lower Bound	Upper Bound
	Constant	2.997	1.588		1.888	.060	-.129	6.124
	PPI	.423	.059	.302	7.169	.000	.307	.539
	CE	.740	.068	.517	10.804	.000	.605	.874
	PR	.176	.058	.148	3.019	.003	.061	.291

Discussion and Conclusion

The findings of this research are consistent with the findings exhibited in the literature (Durgunoglu & Hughes, 2010; Rosas & West, 2011; Hassan, Khaled & Al Kaabi, 2010; Hudson 2009; Tairab, 2008, Darling-Hammond, 2002). These findings exhibited positive views of the pre-service teachers about their own pedagogical preparation. For all study six domains, the majority of respondents thought that they had been "highly prepared" or "well prepared". About 74.8% to 84% of participants thought they had been well prepared or highly prepared in the skill of planning and instruction. This finding corresponds to a finding by Hassan, Khaled, and Al-Kaabi (2010). In their study, 79.4% of their respondents reported that they had been highly prepared to plan for instruction. Based on Danielson's (2002) model of instruction, being prepared for instruction included the abilities to use suitable communication skills effectively, as well as questioning and the use of various teaching strategies to engage students in learning activities, provide feedback, to use technology in teaching, and to modify teaching to suit different students' abilities. About 75.2% to 86.4% of participants in this study reported that they had been "highly prepared" to "well-prepared" for teaching. This finding corresponds with Tairab's (2008) finding that the majority of his participants expressed their satisfaction with their preparation for basic teaching skills and methodologies. Furthermore, more than half of the participants in Tairab's study 'thought that they had been highly or well prepared to teach science when it comes to knowledge of students and their characteristics'. Durgunoglu and Hughes (2010) reached a different conclusion. They reported that pre-service teachers articulated that they did not feel prepared to teach ELL students.

For the classroom environment domain, 74.8% to 87.4% of the participants in this study thought they had been "highly-prepared" or "well-prepared". Tairab (2008) had a similar finding. He reported that half of the participants in his study believed that they had been adequately prepared for this skill. In Hassan, Khaled, and Al Kaabi's study, 66% of the respondents thought that they had been highly prepared in using various teaching methods to motivate student learning. Furthermore, findings of this study revealed that for the professional responsibility domain, 59.2% to 84.4% of respondents thought they had been "highly prepared" to "well-prepared". This skill is concerned

with the pre-service teachers' wider professional role and responsibilities in the school and society. Similarly, Tairab (2008) reported that three quarter of the participants in his study thought that they had been "highly prepared", "well prepared", or "adequately prepared" in all competencies perceived in this skill such as communicating with parents and officials and contributing to the schools and educational zones.

With regard to the time allotted for learning different subjects' domain, 62.9% to 74.9% of respondents of the current study thought the time had been both "appropriate time" and "very much appropriate" for learning the different subjects. Finally, the time allotted for learning certain skills' domain, 45.9% to 64.4%, of respondents reported that the time was "appropriate" and "very much appropriate" for acquiring the different skills. There were no statistically significant differences between the study domains as a result of the pre-service teachers' gender. Likewise, the findings of this study revealed no statistically significant difference between the four domains which include preparation and planning for instruction, teaching skills, time allotted for learning certain skills, and the time allotted for studying the different courses as a result of the pre-service teaching majors. The only significant difference was found between pre-service teachers as a result of their majors was in the classroom environment and professional responsibility. Moreover, the findings indicated that Arabic Studies majors had been better prepared than the IT majors in relation to classroom environment skills. In addition, the Islamic Studies pre-service teachers had been better prepared in professional responsibility than English major pre-service teachers. There were no statistically significant differences between other subject majors in relation to classroom environment and professional responsibility.

To sum up these results, Arabic major pre-service teachers have better classroom environment skills than English and IT majors. The findings also suggest that pre-service teachers whose majors are Islamic studies have been better prepared in professional responsibility skills than pre-service teachers whose major is English. Moreover, Arabic Studies pre-service teachers have been better prepared in professional responsibility than pre-service teachers whose majors are English. These findings can be attributed

to the fact that the Arabic language can contribute to a better communication between pre-service teachers and their students. The most significant findings of the current research revealed that there were positive strong associations between all of the domains. For example, there was a strong positive association between pre-service teachers' preparation and planning for instruction, and their teaching skills, between preparation and planning for instruction and classroom environment, and between preparation and planning for instruction and professional responsibility. The regression results indicated that the three independent domains in the regression model accounted for 71% of the total variation in pre-service teachers' teaching skills. This means that the three domains are significantly predicted in the teaching skills and that pre-service teachers who have been highly prepared or well-prepared in planning and preparation, are most likely to be highly prepared or well prepared in the other three components of Danielson's (2002) model of teaching (classroom environment, instruction, and professional responsibilities). It is surprisingly evident that the findings of this study are mainly positive in most domains evaluated. This indicates that the professional diploma in teaching program is performing well in preparing pre-service teachers as revealed in their own views.

Implications of the study:

The findings of this study suggest a number of implications, and can be useful to pre-service teachers, faculty members, decision makers, stakeholders, and the community at large. These beneficiaries can suggest modifications and changes in the programs or benefit from the program outcomes as these findings being summarized and discussed. Another important implication of the study is the fact that a successful one-year program such as the Professional Diploma in Teaching can be considered as a viable option to a four-year program. In addition, this study provided a valuable insight for program planners and teacher education reformers. If we seriously consider a continuous improvement of the professional diploma in teaching program, we need to examine the findings carefully and find ways to make the necessary changes or continue with best practices. Pre-service teachers can contribute in many positive ways to the efforts exerted to improve and reform teacher education preparation programs. Several studies indicated that graduates' perceptions of their competencies are important for the assessment of their academic programs in higher education (Davidson-Shivers, Inpornjivit &

Sellers, 2004; Heywood, 200; Rice, Stewart & Hujber, 2000; McGuire & Casey, 1999)). To reform teacher education preparation programs, we must take into account the ways in which pre-service teachers perceive their preparation. Pre-service teachers' experiences have valuable and lasting impact not only on themselves, but also on the school level they are prepared for. The authors of this paper will certainly take the findings seriously in their efforts to improve and reform the Professional Diploma in Teaching Program at Al Ain University of Science and Technology. Although the findings of this study suggest that participants are mostly satisfied with the type of preparation activities offered by the professional diploma in teaching program, there is always some room for improvement and change.

Study Limitations and Recommendations

The limitations of the present study are those common to most survey research. First, the sample includes pre-service teachers who may or may not have carefully examined their personal experience in the program, and their responses could have been biased. This is the nature of self-report surveys. Pre-service teachers may be influenced by the fact that they are still in the program, when completing the survey. Furthermore, since the data is limited to pre-service teachers' perceptions, it does not tell the whole story. Other stakeholders such as principals, mentors, and supervisors can probably give different perspectives to the reality of teacher preparation in the Professional Diploma in Teaching Program at Al Ain University's College of Education.

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