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Iranian teachers` perceptions on teacher expertise

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In memory of my parents
with love and eternal appreciation

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Abstract

This study investigated Iranian teachers' perception on teacher expertise. The participants of this research were 60 Iranian high school teachers with at least 5 years of teaching experience, 30 males and 30 females. As the schools in Iran are separated based on the gender of the students and learners, this study compared the perception of male and female Iranian teachers on teacher expertise in order to recognize the effect of gender on the perception of teacher expertise. Thus, mixed methods consisting of qualitative and quantitative were selected for this research. A Likert scale questionnaire comprised of 60 questions distributed among the respondents. The questionnaire was designed based on the various themes of teacher expertise, such as teacher experience, student knowledge, curriculum knowledge, teacher beliefs and teacher-parent interaction.

In order to increase the validity of questionnaire, all of the questions related to a theme were disarranged randomly and then shifted to the first position in the data analysis part. Additionally, in order to enhance understanding of teachers' perceptions on teacher expertise, a semi-structured interview was used for high school teachers; 5 males and 5 females. Besides, two independent t-tests were run to investigate whether there was a statistically significant difference between the responses of females and males about teacher expertise. The results indicated that although female teachers had higher scores in some themes of teacher expertise such as student knowledge or pedagogical knowledge, this difference was not significant. Thus, the gender has a little effect on teacher expertise of Iranian high school teachers.



Key words: **Expert teachers** , **Iranian high school education** , **Iranian high school teacher** , **Perception**

The originality of this thesis has been checked using the Turnitin Originality Check service.



Chapter 1

Introduction

1.1 Background and purpose

Recently there has been growing interest in teacher expertise. Certainly being an expert in teaching career is one of the main dreams for any novice teacher. Considering that, the significant role of

teacher expertise is not deniable for anyone. As Palmer (2005) states, the relationship between teacher expertise and students' performance illustrates that a qualified teacher could have considerable impact on students' learning. However, the definition of an expert teacher may be distinctive in various contexts or levels of education. Thus, one question that needs to be addressed by educators is about the nature of teacher expertise. If this question is asked from the majority of teachers, they would have difficulty in their responses. The main reason for this could be mentioned as lack of any conceptual framework in the definition of teacher professionalism and that is why many could not specify the meaning of this phenomenon (Beairsto, 2013).

One example where teacher expertise is in question is Iran. For instance, many parents believe in that a good teacher is a person who is able to play with the kids or make them happy. Unfortunately, they do not assume any specific expertise for a successful teacher especially at the primary schools. Moreover, a belief exists among many Iranian parents, or even teachers themselves that holding some years of teaching experience is a certain guarantee for teacher expertise. It is noteworthy that in the mentioned country due to lack of adequate resources in the original language, the intentions for gaining information about this topic are often limited to a basic level of the issue. Hence, as mentioned earlier establish a framework for the teacher expertise seems vital. A question may bear in mind that what is the start point for making this framework? During my teaching career in Iran, I realized that the majority of my colleagues are not familiar with the concept of teacher expertise and maybe because of this making a framework for this research seems impossible. Thus I tried out to design a questionnaire based on the themes of teacher expertise and try to find out how much the Iranian teachers know about this.

Besides, in Iran the schools are separated based on the gender of students and teachers are selected from the same gender of the students. In other words, males teach boys and females teach girls. In this study I focused on both men and women as teachers in various high schools in order to investigate any differences/similarities among their perceptions on the nature of teacher expertise. In this case by making a comparison study, establishing a standard framework for the mentioned phenomenon is possible. Moreover, in the culture of a country such as Iran men's performance in any job such as teaching is considered more effective than the women so by this research, I would



like to first compare the responses of males and female teachers in teacher expertise and second to investigate if gender has any significant on the teacher expertise of Iranian teachers.

1.2 Research questions

This research aims to study the following research questions:

- Q1. What are the female Iranian high school teachers' perceptions on teacher expertise?
- Q2. What are the male Iranian high school teachers' perceptions on teacher expertise?
- Q3. Is there any significant difference between female and male teachers' perceptions on teacher expertise?

1.3 Statement of the research hypothesis

Since the first two research questions are qualitative in nature, stating a null hypothesis is not applicable to them. However, for the third question in order to be on the safe side, the following null hypothesis is stated:

H₀: there is no significant difference between the female and male teachers' perceptions on teacher expertise.

1.4 Definition of the key terms

Expert teachers: who is an expert teacher? answering this question may seem complicated. For instance, some people may believe in that the better performance of pupils indicates the more expertise in the teachers. To be more specific it should bear in mind that in order to find out how expertise is worked first we should recognize how the expert teachers think.

Expert teachers appear to have vast, complex and refined mental models for the domains of their practice. They don't know everything, but few others will know as much as them about their

subjects, what their pupils know about their subjects, or how to help their pupils learn their subjects (Schempp et al., 2002).

Iranian high school education: the students in Iran start the high school level at the age 15 which is a general review of all the courses they should study during the next three years. The courses of first grade include math, physics, biology, English, Arabic, Persian literature, physical education and religious education. At the end of the academic year, the teacher tries to suggest each single pupil to choose specific field of study in remaining years of the high school based on his/her final grades. Each different major in high school focuses more on one single course. For instance, math, biology or literature. After graduation from high school, the students will have diploma in science, math, literature and so forth. The evaluation system is divided to two 50% from 100%. The first 50% is focused on the yearly class activities, attendance or behavior of the students. And the second 50% is based on the final exams which are held at the end of each academic year.

Iranian high school teacher: teaching is one of the most competitive careers in Iran. The employment process is consisted of an entrance examination based on educational background, scientific, psychological interviews and medical examinations. Some criteria of teaching applicants are holding master`s degree or being under the age of 40. At high school levels in Iran, each teacher is responsible for only one course of the curriculum and as mentioned earlier the pupils have the teachers from the same gender of themselves.

Perception: “perception is a process in which people become aware about the objects in the world and includes five stages: stimulation, organization, interpretation- evaluation, memory and recall. To give a better definition it is notable to say that in perception process people have the final experience of the world and this involves more processing of sensory input”(ukessays.com).

1.5 Limitations and delimitations of the study: the participants of this study were high school teachers. Therefore, the results may not be generalizable to other levels of school. Moreover, given



the fact that the participants are all from the capital city of Iran; Tehran, the results may not be generalized to other cities of the country.



Review of literature

2.Overview

A number of important areas of educational research need to be examined in order to establish a foundation in the literature for this study. In this part, the general meaning of expert and expertise is being reviewed. Then, the nature of teacher expertise is focused and finally some points of teacher expertise recognition are being noted.



In the past time the pivotal role of teacher expertise both on students and educational system was not cleared widely. As Berliner (1994) notes, there have been some studies about expertise in different fields such as sport, art or any technical skills. However, the teacher expertise was missing from these kinds of studies. On the account of the fact that in the community many reckon that a successful teacher equals to a child care and remarkably not any specific expert seems essential at this case.

Fortunately, in recent decades there have been discussions and arguments over teacher expertise. This has led to a surge of theoretical and empirical studies about different dimensions of the issue. One argument is that the nature of the teacher expertise could not be defined by the present models including: Dryfus Brothers' model proposed in 1986, Glaser and Chi's introduced in 1988, and finally Bereiter and Scardamalia's model in 1993. As Yazdanmehr (2016) states, all of the mentioned models have common inadequacies as the followings:

“Lack of consistency and agreement on many features, core basis in static nature of expertise, no clarification of the interaction of features, main basis in comparing novice and experienced teachers and less interest in cognitive features related to expertise.” (Yazdanmehr, pp.2).

Another argument could be about the gap between experience and expertise in teaching. As Winkler (2001) notes, in south African teaching recruitment system there is a trend in which holding any formal qualification could lead to better status and payment for the teachers. Hence the main target for the majority teachers is to gain such kinds of certificates only for the mentioned results not to reflect the knowledge in their teaching practice. As a result, African educational system will have a group of experienced teachers but poorly qualified who have a long way to be experts in their careers. Besides, it is essential that experience and expert are distinguished from each other. For example, a study which was done by Hattie (2003) indicates the distinction of the two mentioned terms. It is said that expert teachers are different from experienced ones as the followings:

“on the way they represent their classrooms, the degree of challenges that they present to students, and most critically, in the depth of processing that their students attain. Students who are taught by expert teachers exhibit an understanding of the concepts targeted in instruction that is more



integrated, more coherent, and at a higher level of abstraction than the understanding achieved by other students” (Hattie, pp64).

It is noteworthy that there are some other differences between the novice and expert teachers. For instance, as Bigelow (2000) states, the model of class planning in novice and expert teachers are different. One of these points could be mentioned as expert teachers are more aware of class dynamics. In other words, as novice teachers emphasize on the students` needs, the expert teachers are concerned about their student interactions. Another difference could be about that expert teachers are the only people who let their students to be familiar with the objectives of each session and then check back if they have reached to these goals or not. The reason for doing this could be explained by that having so many years of teaching experience have led to this understanding of the teachers in which letting know the students of the course objectives and then checking it, will help students to focus on their thoughts better and they may have better achievement in the school as final result.

Considerably, the studies previously revealed that there are some vague points about teacher expertise and the present studies are not adequate or generalizable to all of the case or contexts. Additionally, although many characteristics of expert teachers or distinctions among experts, novices or experienced may mentioned several times in the studies there are still questions which emerge about teacher expertise.

2.1 What is expertise? who is an expert?

As definition meaning in dictionaries, “expertise is great skill or knowledge in a particular field”. (definitions.net). however, this is only a general statement about this term. Thus, in order to be more specific it is essential to find out how is it possible to define expertise in various examples of people. there are plenty of methods to define expertise. here some of the main ones are reviewed:



First, experts are that group of people who are aware to what to do with their knowledge. Second, although there is a weak relationship between experience and expertise, the time which is spent in a domain could be a key definition for the characters with expertise. third, it is stated by many scholars that expertise is an unconscious type of behavior (Dreyfus & Dreyfus, 1988). The fourth way to define expertise is to consider educational backgrounds in some disciplines. In other words, an expert is a person who is holding an official certificate such as doctoral degree or any other certificates. Honestly, this version of description has so many weak points. For instance, it is said that expert is related to declarative knowledge which is different from procedural knowledge that is used in various fields. By reviewing the mentioned definitions, it is obvious that there are many weak points about them.

However, among many articles related the meaning of expertise I figured out that Eade (2013) has a very nice experience about that. As he states in his paper he had enrolled a course to become a hockey coach. During this class, an international well-known goalkeeper was invited to the class in order to demonstrate something really significant and importantly very difficult. In front of the surprised eyes of the audience, the mentioned goal keeper indicated a very special and difficult movement of hockey goal keeping despite being less-equipped. This example shows how this person was aware of various things related to this difficult movement such as ‘body position’, ‘timing’ and ‘balance’. This example indicates that how an activity or a task is seemed totally simple and easy while it is done by an expert and looks something difficult when a less-expert tries to do it. (Eade,2013).

Sternberg and Horvath (1995) believe in that the best way to define expertise is to consider a kind of ‘prototype’ a place where some forms of similarities among all the experts in a field are existed. Glaser (1999) summarizes six main characteristics of the experts as the followings:

- (1) ‘Experts’ mastery is exceptional which is derived from the specialized knowledge that drives their reasoning, though some task domains may have transferable forms of expertise.
- (2) Experts perceive large meaningful patterns, with ‘pattern recognition occur (ring) so rapidly that it appears to take on the character of intuition’ (p. 91).
- (3) Experts’ problem solving entails selective search of memory or use of general problem-solving tactics, with an ‘efficiency that derives primarily from their knowledge being structured for retrieval, pattern recognition and inferencing’ (pp. 91–92).

(4) Experts' knowledge is highly procedural and goal-oriented since their concepts are bound to procedures and the rules and conditions for their application, and closely tied to the goal structure of a problem.

(5) Experts' knowledge enables them to use self-regulatory processes with great skill, which enables them to step back at appropriate points and observe their solution process and the outcomes of their performances. Their self-awareness is shown in the allocation of attention and sensitivity to information feedback, which may slow them down in the initial encoding of the problem, though they are likely to be quicker overall.

(6) Experts' proficiency can be routinized or adaptive, such that, under some conditions, maybe most, experts' performance becomes routinized, efficient and accurate, but they can adapt and exercise opportunistic planning "(Eaude,2013, pp.14).

It is notable that lots of studies have been done about the characteristics of expert teachers. Take Hattie (2003) research as an example. Let us consider some of the main points of this research towards the mentioned topic as the following:

1. "Can identify essential representations of their subjects.
2. Guiding Learning through Classroom Interactions.
3. Monitoring Learning and Provide Feedback.
4. Attending to Affective Attributes.
5. Influencing Student Outcomes." Hattie (2003, p. 14).

Another definition for expertise is a group of features that differentiates experts from novices. In other words, experts are people who have some skills as the followings:

1. great strategies for problem solutions
2. better and more organized knowledge
3. great amount of motivation
4. involved more in conscious practice
5. better advisor of their own performance "(Tassoobshirazi, 2008, pp.9-12).

It is notable that the above characteristics are considered as general features of teacher expertise, there are some domain related features. For instance, in medicine the progress is related to "narrative structured illness scripts" that are used to diagnose new cases (Schmidt and Boshuizen, 1993). Additionally, some researchers indicate that it takes for about 5-10



years that somebody gains progressed expertise in a domain. In other words, expertise is an outcome of experience and personality.

To have a better understanding, let us now consider another definition of teacher expertise. as Macallen states, expertise means to think better than the others in cases a problem occurs. In this paper another definition of Glaser has also mentioned about teacher expertise in which the real meaning of expertise is having two types of knowledge; “conceptual” and “procedural” knowledge that is accessible by a great version of metacognitive skill. (Glaser, 1988). By reviewing this explanation of teacher expertise, a question may bear into mind that what kind of exact knowledge is needed for teaching? Let us now consider literature related to this question. for example, as Shulman (1987) suggests the types of knowledge which are necessary for teaching are as the following:

“Content knowledge
 Pedagogical knowledge
 Pedagogical content knowledge”

But what are these mentioned knowledge mean? Content knowledge in a simple language is knowing what subject to teach. Pedagogical knowledge is generally how to teach and the last type of knowledge which is pedagogical content knowledge includes the above knowledge:

“Knowledge of how to structure and represent academic content of teaching; knowledge of the common conceptions, misconceptions and difficulties that learners may have when learning particular content; and knowledge of specific strategies that can be used to address learners` needs in particular classroom circumstances.” (adapted from Maclellan, Shulman 1987, pp.12).



A question should be asked here that what is a reliable version of expertise. So it is necessary to look for a description with a solid foundation. For instance, as Gobet (2015) mentions, an expert is a person who gets the best results in comparison with the majority people in the same domain. It is noteworthy to say that this description has several advantages in comparison with the other ones (psychologytoday.com). Among the various studies towards the question “who is an expert teacher”?, Kohen (1996) argues that:

“the majority of teachers with expertise has a significant sign in which a working atmosphere instead of controlling is made. in other words, the students ask questions from their peers as much as they ask questions from their teachers. Additionally, the climate of the class is more casual than traditional and these kinds of teachers enormously insist on facts and right answers. and there is a high amount of respect between students and teachers.” (Varrella and Yager 1998, p. 15).

Based on Iowa SS&C Project , expert teachers are :

- “had seniority in education (at least ten years of experience for all but one individual);
- were active in local, state and national school enhancement and reform efforts;
- were committed to lifelong learning, having earned additional degrees and continuing education credits;
- showed noteworthy consistency between what they did in the classroom (as recorded by outside observers) and how they described their philosophy and strategies for teaching;
- happened to be middle school teachers (over half of the teachers involved in the project itself were high school teachers); and
- stated that they were positively affected by their involvement in the project as a participant, and particularly as a leader (Varella, 1997, pp.21”).

As Varella states:

“It is noteworthy that expert teachers` method is much more context-based than text based. Particularly, the teachers with expertise try to apply the principles of the science- technology-society(STS) paradigm which focuses on local, personal and relevant context-based instruction. This STS focus on local, personal, and relevant context-based instruction--which reaches beyond traditionally didactic, commercially based, book-bound instruction--is at the heart of expert science teaching (Varella ,1997, p.4”).

It is noteworthy that Berliner states about expert:

“A teacher who demonstrates special skills exhibits a form of artistry in teaching (Berliner, 1988). This teacher shows precision in techniques and knowledge in action. The expert is intuitive and fluid. The expert integrates instruction, while being highly contextual and has skillful timing and execution. The expert does not appear reflective. Routines are a basic part of the expert’s performance. Expertise is specific to a domain and “is developed over hundreds



and thousands of hours” thus necessitating that “it is likely that every expert pedagogue has had extensive classroom experience” (Berliner, 2004, p. 201). Expert teachers rarely enter their classrooms without thoroughly understanding the content they will teach and nearly always plan one or more activities to teach that content. Expert teachers believe “their pedagogical expertise depends, in part, on knowing their students well” (Berliner, 2004, p. 202).

Moreover, Berliner states the differences between novices and experts. As he believes:

“Although individual differences abound, I would hypothesize that Novices are generally student and beginning first year teachers, Advanced Beginners are often in the second and third year of their careers in teaching, and if they have any talent and motivation whatsoever, along about the third or fourth year, a teacher may become Competent. ... Perhaps in the fifth year or so a modest number of teachers may move into a further stage of development, that of Proficient. Some of these proficient teachers will reach the highest stage, achieved by very few members of the field, that of the Expert (p. 2”).

Also an expert is a teacher who demonstrates special skills exhibits a form of artistry in teaching (Berliner, 1988). This teacher shows precision in techniques and knowledge in action. The expert is intuitive and fluid. The expert integrates instruction, while being highly contextual and has skillful timing and execution. The expert does not appear reflective. Routines are a basic part of the expert’s performance. Expertise is specific to a domain and “is developed over hundreds and thousands of hours” thus necessitating that “it is likely that every expert pedagogue has had extensive classroom experience” (Berliner, 2004, p. 201). Expert teachers rarely enter their classrooms without thoroughly understanding the content they will teach and nearly always plan one or more activities to teach that content. Expert teachers believe “their pedagogical expertise depends, in part, on knowing their students well” (Berliner , p. 202).

generally speaking, in giving an exact description for expertise and people who are known as experts in a special field there are lots of things that should be considered and this will make this case more complicated. Thus, it is better to move on the next topic which is about the nature of teacher expertise.

2.2 What is teacher expertise?

As far as teacher expertise is concerned in this study, giving an explanation for it seems vital. Hence, a question may bear in mind about the characteristics of a teacher who is known as an expert in this field. In other words, the criteria of expertise identification should be reviewed. Generally, teaching is an easy process of transmitting and delivering of an information, teaching expertise consists of various approaches. As Alexander (2008, p.36) believes in that there are two main features related to the teaching expertise. “didactic” and “exploratory” in which the former is relating to the teacher while the latter is completely about the learning of the students. As he states there are six versions of teaching such as “transmission”, “initiation”, “negotiation”, “facilitation”, “acceleration” and “technology”.

Certainly, one of the earliest studies towards teacher expertise could be the work of Berliner (1986,1987,1988). As he states the development of expertise consists of five stages : novice, advanced beginner, competent, proficient and expert. Berliner refers to the Dreyfus and Dreyfus model (1986) about the gradual progress from the point novice to expert (Varella, 2000). A question may bear in mind that there are various distinctions among the five stages of teacher expertise.

Stage	Strategies	Overall approach	Characteristic
<i>Novice</i>	Context-free rules and guidelines	Relatively inflexible, limited skill	Deliberate
<i>Advanced beginner</i>	Practical case knowledge	Use of rules qualified by greater understanding of conditions	Insightful
<i>Competent</i>	Discrimination of what matters or not	Conscious choices, but not yet fast, fluid or flexible	Rational
<i>Proficient</i>	Accumulated case knowledge enabling key points to be noticed	Degree of intuition based on prediction of pupil response	Intuitive
<i>Expert</i>	Deep reserves of tacit knowledge	Apparently effortless, fluid, instinctive, though able to fall back on deliberate, analytical approach	Arational

Table 1.2 Five stages of teacher expertise, approaches and characteristic

Adapted from Alexander (2010, pp. 416–417).

As the above table indicates 5 stages of expertise development are existed. Let us now describe each of these stages:

Stage 1; novice: at this stage the details of teaching practice should be learned beforehand and a group of “context-free” rules is maintained. For instance, waiting three seconds after asking question from the learners or avoid criticizing any students are some of these kinds of rules that novices learn in advance to their teaching performance. Additionally, the attitude of novices regardless to their domain is “rational”. Besides, at this stage there is no expectation for high amount of skills, and the novices try to learn more than gain skills.



Stage 2; advanced beginner: at this stage experience is combined with the “verbal knowledge”. Moreover, some kinds of progress is caused that the advanced beginners understand when to stop a rule for example. At this stage, experience impacts the attitude of the teacher however, there is still lack of understanding about the importance things during teaching. A question may bear in mind here that what is the real difference between novice and advanced beginner. In Berliner’s paper there is a quotation from Benner that this distinction is described among the nursing students. Let us review this as exact as it is mentioned in Berliner’s article:

“I give instructions to the new graduate, very detailed and explicit instructions: When you come in and first see the baby, you take the baby's vital signs and make the physical examination, and you check the I. V. sites and the ventilator and make sure that it works, and you check the monitors and alarms. When I would say this to them, they would do exactly what I told them to do, no matter what else was going on... They couldn't choose one to leave out. They couldn't choose which was the most important. . . They couldn't do for one baby the things that were most important and then go on to the other baby and do the things that were most important, and leave the things that weren't as important until later on. . . . If I said, you have to do these eight things . . they did those things, and they didn't care if their other kid was screaming its head off. When they did realize, they would be like a mule between two piles of hay" (Benner ,1986, pp. 23-24).

however, it should be considered that despite of some differences among the novices and advanced beginners, there are several similarities existed. For example, both of these two stages have lack of responsibility in their own gestures. This is because of that novice and advanced beginners still do not have sufficient decision making about what is happened at next stage.

Stage 3; competent: at this stage there are some progress points that are sensible in these group of teachers. First, they have deliberate choices about their activities. For example, they gain the skill about when to stop an action in the class. And second, in contrast with the first two stages at this stage, teachers understand about the importance of various aspects of teaching. In other words, they have their own plans of teaching however, their rhythm in their performances in class. It is notable that this feature happens in the next following chapters.

Stage4; proficient: at this stage the teachers do not need any deliberate effort in order to know what is interesting or boring in the class. Moreover, they have “holistic recognition” in which helps them to anticipate the happening based on the similarities with the previous events. They develop an "intuitive" sense of the situation. This level is related to most professional chess players but the highest amount of proficiency happens at the last stage which is expert.

Stage5; expert: as mentioned in the earlier stages the novices, advanced beginners and competent are rational. Also, proficient performance is “intuitive”. Here in this stage the expert`s performance is “arational”. At this stage the experts do not choose what to say or what to do. In other words, they already know what works and because of that they do it.

There are some others feature related to teacher expertise but it should be bear in mind that these are all descriptive models of five stages of expertise and I think when it comes in a research position the characteristics might be different with all these mentioned points and, this is something should be considered. Another significant point is that teachers who follow in any of these five stages may have different reactions in various aspects of teaching, learning and classroom issues. Berliner in his research has done an investigation in order to find out these differences. It would be great to review some of these distinctions here.

1. Based on the level of expertise and experience of the teachers the interpretation of the classroom events may be different. For example, as mentioned previously the novice teachers have some context free rules and because of that may not be ready for unplanned events in the class. This story is something else in teachers with more expertise.

2. Distinction about the usage of classroom routines in teachers with different level of expertise is existed.
3. Difference in the emotional behavior with the teachers in various stage of expertise.

Certainly, there are some other differences among the teachers with different level of expertise. but the above distinctions were the main ones that mentioned in Berliner`s paper. (Berliner,2004). It is notable that these features are the general aspects of teacher expertise and it would be great to review some specified details about this topic. One of these points is about the areas of teacher expertise. as Saphier (2007) indicates, there are some different areas about teacher expertise as the following:

1. “Management expertise which means that teacher tries to handle everything in the class in order to increase the involvement of the learners. Many studies indicate that the more management expertise the teachers may have, the better and more learning of students may occur.
2. Motivational expertise is that the teachers try to act as a psychologist in order to make the learners highly motivated in the classroom, believe in themselves or being more confident. In this case, the learning outcomes are increased.
3. Instructional expertise: this type of expertise is a set of skills that the teacher is able to understand what the students know or do not know about the lessons. In this case, the teacher could set the instructions in order to have well-established of learning process.
4. Planning expertise: is the area of expertise that gives the teacher a chance to design a kind of lesson plan that the content of it is suitable to the learners` needs and abilities.
5. Craft knowledge. This special knowledge helps the teacher to teach their “special content”(Saphier,2007, pp:20).



After considering all of these, a question may bear in mind that how is it really possible to distinguish expertise in the teachers. One of the best ways of is to compare the expert and novices. Clearly, experts and beginners in teaching have lots of distinctions. For instance, as Tsui (2003) states, there is significant difference in mental processing of decision making and planning. It is notable that there is distinction among novices and experts in cognitive process of various aspects of teaching. Take Jackson (1968) as an example. As he states there are two phases in teaching. “preactive” and “interactive”. Each of these phases related to a special time of teaching. For example, “preactive phase” is related to a time in which the teacher is planning to select a lesson or material and it is before teaching whereas, interactive phase is about the interaction time between teacher and students. By describing these two phases in teaching, it should be said there are differences in the mentioned points among the novices and experts. Thus, it should be great to review some of these distinctions in two groups of teachers as follows.

“Preactive phase”

In this phase, planning is the most significant part in which the teacher tries to consider different points in lesson design. Some of these points could be the school expectations, their own beliefs or objectives of the lesson. (Calderhead,1984). A question may bear in mind about the model of planning in this phase of teaching. A model relating to this has been introduced by Tyler (1949). This model is a linear turn of decisions. These decisions are firstly about the objectives and goals of the lessons. Second, they are about the “content “ of the lesson. In which various aspect such as the materials or methods are considered in order to increase the outcomes of learning of the students. These mentioned sequences are the part of typical lesson planning which stated by Tyler. However, this story is different in experienced teachers. This group of teachers at the beginning consider “materials” , “resources” or student interests. Goals are considered as the last part. (Taylor, 1970). In other words, experienced teachers are mostly think about the activities of classroom and less about the objectives of the class. However, it is not meant that these group of teachers do not think about objectives. Take Mccutcheon`s research as an example. As he states, the teachers who are holding some years of experience think that objective is embeded in the class activities and, there is no need to consider them separately. However, something should be taken into account. And that is about the time of teachers think about objectives. In other words, learning

outcomes are reviewed more in interactive part. As Calderhead (1984) suggests, there might be an interchangeable conception for lesson planning which is problem solving as the followings:

“Research on teachers’ planning suggests that teachers engage in a process that contrasts sharply with the prescribed rational planning model. . . . the process of planning seems to be more appropriately conceptualized as a problem-solving process. Teachers, faced with a variety of factors such as pupils with certain knowledge, abilities and interests, the availability of particular textbooks and materials, the syllabus, the timetable, the expectations of head-teachers and others, and their knowledge of previous teaching encounters, *have to solve the problem of how to structure the time and experiences of pupils in the classroom*. Teachers, it seems, adopt a more pragmatic approach than that prescribed for curriculum design. Rather than start with a conception of what is to be achieved and deduce which classroom activities would therefore be ideal, teachers start with a conception of their working context and from that decide what is possible.” (p. 74, original emphasis) cited from Tsui(2003).”

this is because of that problem solving is not linear but “cyclic” and “recursive”. As it is mentioned in Tsui’s paper at first teacher create unclear model of knowledge.

Teachers in various stages of expertise have other differences in some aspects of teaching. For instance, in lesson planning it is said that the novices always follow the Tylor model that mentioned above because it is something they have to do during their trainings. Whereas, this model is not followed by experienced teachers as they think more about what to do in class or how to work (Tsui , 2003).

Another difference about these two groups is about short-term and long-term planning. It is believed that expert teachers have longer-term lesson planning in comparison with the novices. In other words, experienced teachers have weekly, monthly or yearly planning by contrast, the beginners in teaching have much shorter term planning. Besides of the above differences there are some other distinctions in teaching process. take written and mental lesson plans as an example. It is believed that teachers with some years of experience do not write everything in their lesson plan.

Now let us consider with the other aspect of teacher expertise which are about the paradigms of this phenomena. As Gage (1984) suggests there are three paradigms towards teacher expertise. the first porotype is called “process-product” which tried to find out the specifications of teachers with



expertise that improves the student learning. Muijs and Reynolds (2002) outline the significant features of this model. For instance, it is essential for the teachers to set the level of difficulty of their instruction with the needs of their students. Additionally, they have to use various methods of teaching in the classes. The second paradigm is called “cognitive science research” which is based from the cognitive psychology. In this type of research, an effective of teaching is described as creating cognitive knowledge of the pupils.

The third model is termed “constructivist” view in which the teaching is worked as promoter. Fenstermacher and Richardson (2005) hold the idea that teachers should have a special way of thinking about the pupils learning. It is noteworthy to say that the research of Vygotsky (1978) has become one of the core beliefs in the educational fields specially in social constructivist. He argues that zone of proximal development (ZPD) is one of the main concepts of any discussion related to student learning (Robinson, 2008).

as Goldstein and Freedman state (2003):

...close examinations of Vygotsky's work reveals that the ZPD (zone of proximal development) also includes feeling, emotion, and interpersonal relations. These affective aspects of the ZPD are of primary and fundamental importance:

Teachers must establish trusting, caring relationships with learners for those learners to be willing to take the risks required to enter into the ZPD. In other words, interpersonal connection must occur so that learning and growth can occur. If we lose sight of our relationships with our students, their learning will suffer (p. 452).

In other words, the social constructivist theory tries to encourage the teachers to make an atmosphere for the students to have an eagerness for the learning (Fenstermacher & Richardson, 2005, p. 205). For years, teacher expertise has been one of the main topics for the research. however, the thing that should be considered here is that there it may seem difficulty in choosing teachers that are known as experts in the field of teaching.



Additionally, as Sternberg's states in the science of expertise book (2018), there is a four-way model of human skill development in which expertise is "analytical", "practical", "creative" or "wisdom based". Now let us review some of the main points related to each of these kinds expertise. for example, analytical expertise includes analyzing or evaluating of any product or process. it is noteworthy that in many fields this kind of expertise is not essential as creativity is also needed. Another kind of expertise of this model is creative expertise in which involves creativity, imagination, exploring or producing ideas. The other kind of expertise is practical expertise which is distinctive with first two expertise. in this kind of expertise, the person uses or transfers the things he/she knows. In the last kind of expertise in this model which is called wisdom-based one. In this kind, experts are able to give advices to the others based on their experiences (Hambrik, 2018).

After reviewing the main points related to the meaning of expertise it would be great to focus on recognition of teacher expertise. thus, the next part will be customized to the mentioned topic.

2.3 Teacher expertise recognition

In this case a question may bear in mind that how it is possible to select an individual or a group of teachers who are known as experts. In other words, what are the best methods for identifying these group of teachers. One of these ways could be some self-rating scales for competent instructional behaviors (Leyser, 2002; Schumm & Vaughn, 1991).

However, one of the main shortages of such kinds of method could be the self- report of that in which some answers may not be based on the elements of the teacher expertise that are in three various research schools of teacher expertise; process-product, cognitive and/or social constructivist. Englert, Tarrant and Mariahge (1992) build up an equipment for teachers in order to self-rate their behaviors in the classes. The mentioned scholars combined the process-product method with the social construct theory and came up with four main features of teaching instructions which include higher-order of thinking and cognitive processes embedded in holistic and situated activities, richness of dialogue teachers and pupils, teachers who are responsive to the needs, capabilities and interests of their students, and teachers who emphasize classrooms as learning communities (Englert et al., 1992, p. 81).

2.4 Teacher beliefs

Certainly, teacher belief is the main key of any research related to teacher expertise. by way of illustration, Kagan (2012) shows while everyone studies about teacher thinking he/she believes in that this point has a central position in the discussion field of teaching or teaching expertise. there are many other studies about the significant role of teacher belief on teacher expertise. for instance, Richardson (1996) holds the idea that "In most current conceptions, the perceived relationship between beliefs and actions is interactive. Beliefs are thought to drive actions; however, experiences and reflection on action may lead to changes in and/or additions to beliefs" (p. 104). Moreover, Vasquez- Levy (1993) discusses about the important role of teacher belief relating to teacher expertise:

“may or may not be reasonable, justifiable, true, or coherent; and many beliefs, particularly those that guide our daily activities, are tacit and have been partially acquired from the demands of the work we do and from the assumptions and beliefs generated within our own culture. As long as they go unexamined, are not challenged by others, and engender no conflict that would prompt questions, teachers are likely to continue acting on beliefs without regard for evidence, believing in things they may not be justified in believing (p. 125). “

2.5 Gender and better teaching practice

As mentioned earlier, this study tries to find out if the gender of teachers has any significant effect on teaching career. A study with the same question has been done in context of India. As Islahi (2013) states, when there is a discussion of gender differences, the various teaching styles is under question. In this paper many characteristics have been mentioned for female teachers as the followings:

“Female teachers were reported to be more supportive, expressive [15-17], nurturing [18], informal and open toward students [19, 20], spend significantly greater proportion of time encouraging and allowing student participation [16, 21], involve students in peer collaboration [22], believed in flexible teaching methods [20], asked more referential questions, gave more compliments and used less directive forms[17], shared authority and maintained control in the classroom in a way that keeps their relationships with students intact” [21]. (p. 286).

However, males as teachers illustrated some different features during their practices:

“tended to be dominating, exacting and exercised greater control emphasized more to the group work and structured activities [20], asked more display questions that made the exchanges between teacher and students shorter but more frequent [17, 23], used their authority at the cost of involvement by students with an authoritarian and task oriented teaching style [15,21,22,24]. Researchers also found that male teachers typically lecture for the majority of each class session while female faculty members are more likely to engage students with active and collaborative learning approaches, which are classified as learner-centered instructional practices “(p. 286).

By now, I have reviewed some literature relating to the main topic of teacher expertise. As mentioned earlier, I have chosen Iranian teacher perceptions about expertise. as Kagan (2012) illustrates teacher belief is the main key for anyone who would like to do any research about teacher expertise. Additionally, as Islahi (2013) describes there are some differences in males and females in different aspects of teaching.

Thus, I think by collecting and comparing the conceptions of Iranian teachers, presenting an overview about the expertise would be possible. Additionally, at this chapter, the theoretical framework of this study including the nature of expertise, expertise of teacher or some differences in males and females of teacher have been reviewed. Now let us move to the other part of this research which is methodology details as follows.



Chapter 3

Methodology

3.1 Overview

This chapter discusses the overall study including the participants and materials as well as the procedure and data analysis.

3.1 Selection of participants

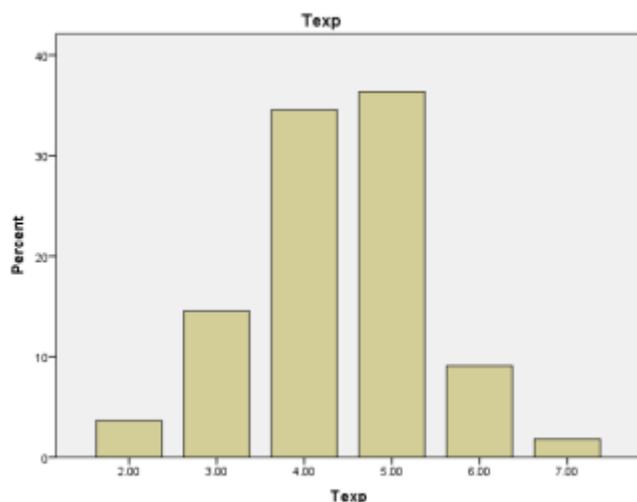
Prospective participants were identified in three ways. First, potential participants were drawn a larger sample of teachers who had recently passed a national evaluation testing which is annually taken from all the teachers who are recruited in any public school. This special kind of test includes a check list plus an observation that is managed by the quality check department from the educational ministry. As one of the QC (quality control) group stated, this list consists of 50 different items that the observer should monitor and check during the teaching practices of the participants. These fifty items cover various aspects of teaching such as method, correct ways of monitoring, sufficient amount of rapport, error correction, standard time of teacher talk (T.T) in class and so forth.

During each observation, an expert attends in one or two sessions of each teacher and then a grade from below standard, standard and above standard is given to the observed teacher. It is notable that among those group of teachers who fall into the below standard grading classification, some feedback sessions are customized and there is always an opportunity to compensate this low grading by having another observing session within one month from the first one observation. In some exceptional cases, some teachers may receive a double grading of below standard. In these cases, some additional teachers training classes should be passed and then another observation is done from the teaching practices of these kinds of employees. It is notable that despite the improvement of instructional practices of the teachers which may make by this observation system, some teachers in the below standard group stated that the high amount of stress during the observation has prevented them to teach properly. Unfortunately, this official checklist which is used in the mentioned observations is totally confidential, for this reason I could not have it as part of appendices in this study.

The participants of this study were chosen from five different high schools all located in the west part of the capital city of Iran, Tehran. All of them had at least three years or more of successful observation with standard and above standard grading. These criteria were used as a basic method to choose the participants of this study. Besides, as the main topic of this study is teacher expertise, the years of teaching experience were used as a second method for selecting this group of teachers for this study. Among the sixty teachers of this research consisting 30 males and 30 females, the total teaching experience is as the following:

	Frequency	Percent	Valid Percent	Cumulative Percent
Years of 1-2 teaching years	2	3.3	3.6	3.6
3-5 years	8	13.3	14.5	18.2
6-10 years	19	31.7	34.5	52.7
11-15 years	20	33.3	36.4	89.1
16-20 years	5	8.3	9.1	98.2
More than 20 years	1	1.7	1.8	100.0
Total	55	91.7	100.0	
Missing System	5	8.3		
Total	60	100.0		

Table 3.1 Teaching experience percentage of participants



*Figure 2.3 Teaching experience of participants

* in the above chart each number represents special year of teaching as the followings:

Number 2: 1-2 years

Number 3: 3-5 years

Number 4: 6-10 years

Number 5: 11-15 years

Number 6 :16-20 years

And number 7: more than 20 years

As the above table and bar chart indicate, 66% of the attendants hold from 6-15 years of teaching experience. The reason for taking the years of teaching career is due to the topic of this study which is teacher expertise. second, by considering the five stages of development teacher expertise suggested by Berliner (1968) and Dreyfus and Dreyfus model (1986) consisting of novice, beginners, competent, proficient and expert this research may not be applicable to the novice or beginner groups of teachers.

Third, it is notable that there was another option for identification of potential teachers to attend in this research and it was using my own network in some schools in the capital city of Iran; Tehran. Honestly, in Iran the atmosphere of educational systems such as schools are too competitive that the majority of teachers first do not feel comfortable in attending to any research project and second if they participate, they may not give so many honest responses to the questions. for the reason



that, they feel risky about their position at school or usage of the given information against themselves. Thus, for all of the reasons that I mentioned here finding some suitable potential participants seemed a bit challenging in Iran. However, as I indicated earlier I used my own networking in order to recognize the teachers who first interested in topic and second do not have any kind of negative feeling towards participating in this study.

3.2 Contacting potential participants

After selecting the potential participants based on the above methods, I presented a cover letter emailed it and asked all of them to be present in one briefing session. Also, by considering the separate schools in Iran, this introductory session should be held two times; girls' school and boys' school.

It is great to say that in my home country culture, giving important information via email is not that much appreciated especially by the people who are older or have a high social position. Thus, I preferred to give the needed information via in-person meeting as I guessed this way will much more effective in comparison with the other ways. The briefing sessions both held at the exam hall of the school and last for about 30 minutes. During the sessions, I tried to be like their own colleagues not an unfamiliar researcher in order to give them positive feeling about their participation. Also some descriptions about the procedure of the research were given to them in those meetings. Finally, at the end of the meetings some extra time was given to them for asking any additional questions which mostly was about the confidentiality of their personal information.

3.3 Participant teachers

The participant teachers were 60 high school teachers from five different schools located in the west part of Tehran capital city of Iran. Thirty of these teachers were females and thirty were males mostly aged between 30-39 years old and holding master's degree or being doctoral student. As mentioned earlier, all of these teachers were experienced ones with above standard or standard grade of teaching and they were the teachers of various courses at school such as math, language, religious studies and so forth. In order to save the confidentiality of teachers a numerical code was



given to each of them. The following table indicates some demographic characteristics of the participants:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	8	13.3	13.3	13.3
	2.00	19	31.7	31.7	45.0
	3.00	21	35.0	35.0	80.0
	4.00	12	20.0	20.0	100.0
	Total	60	100.0	100.0	

*Table 3.3 Educational status of the participants

* in the above table each number represents a specific educational status:

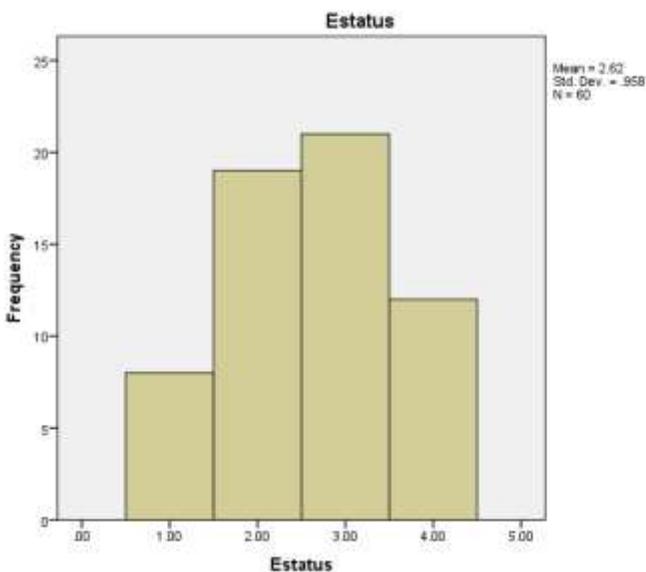
1 indicates bachelor degree

2 indicates master degree

3 indicates PHD student

And 4 indicates PHD degree

Better speaking, as the above figure demonstrates about 87% of the participants were PHD students or having master or PHD degree. On the other hand, the minority of them hold bachelor degree (13%). The following histogram displays the better view of educational status of the participants:



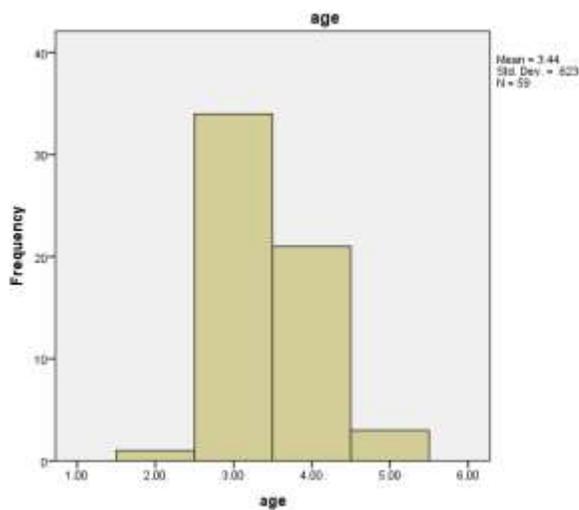
*Figure 4.3 Educational status of participants

*1 shows the bachelor degree

2 shows the master`s degree

3 shows PHD student

And 4 is PHD degree



*Figure 5.3 The age distribution of the teachers

*1 indicates the ages below 25

2 indicates ages between 25-29

3 indicates ages between 30-39

4 indicates ages between 40-49

And 5 indicates ages between 50-59 year old

As the above figure indicates the majority of the teachers were from 30- 49 years old. Besides the participants of my study were teachers of different courses at high school. The following table demonstrates this point:

Table 6.3 The subject course of the participants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	math	2	3.3	3.3	3.3
	Science	7	11.7	11.7	15.0
	Religious studies	6	10.0	10.0	25.0
	Physical education	3	5.0	5.0	30.0
	art	2	3.3	3.3	33.3
	literature	5	8.3	8.3	41.7
	Computer science	3	5.0	5.0	46.7
	Foreign languages	4	6.7	6.7	53.3
	others	28	46.7	46.7	100.0

Total	60	100.0	100.0	

3.4 Instruments

As mentioned in the introduction chapter, this study is a mixed of qualitative and quantitative method consisting of a questionnaire and interview. In this part the detailed information of these two are reviewed.

Questionnaire

In order answer the research questions of this study which were about the perception of females and males Iranian high school teachers` towards teacher expertise, a questionnaire was used which consisting of 50 questions. these questions first started from demographic ones such as gender, age, educational status, the amount of teacher experience and so forth. (appendix A) and then moved the main topic. To create a strong background for the questions, various themes of teacher expertise were firstly considered as the main points and then for each of them some questions were organized. These main themes were subject knowledge, curriculum knowledge, student knowledge, experience, pedagogical knowledge personal beliefs about teaching and learning, teacher-parent interaction and some questions relating to school management or colleagues` interaction.

There are some points that are great to mention here. First, the final version of the questionnaire was in English but for using it in my home country Iran, I translated it to Farsi language. For the reason that, I believe in that the participants will be more confident and comfortable to response a questionnaire in their own language rather than a foreign one. And second, in order to have a better method of data collecting, the questions related to each theme were mixed up randomly and then turned back in the data analysis part.

Interview

To get a deeper understanding of the topic a semi-structured interview was used comprising of 7 questions about some other aspects of teacher expertise such as the amount of confident, encouragement of less-motivated students, some materials or techniques or the teaching goals and so forth (Appendix B). also the majority of interview questions were adapted from Woolfolk (2001). It is notable that the participants of this interview were 10 teachers including of 5 females and 5 males. In other words, this interview is designed to get the more detailed information of the teachers' experience towards teacher expertise. It is notable that the first version of the interview questions created in English but a Farsi- version was used during the interview sessions.

3.5 Procedure

Introductory before questionnaire and interview

As mentioned earlier, before distribution of the questionnaire, two briefing sessions were held in order to give a good understanding of the procedure to the participants and significantly make them certain about the confidentiality of their personal information. It is notable that during these sessions, a consent form was given to the potential participants.

For doing the interview part, firstly an email was sent to the participants including some basic questions in order to help them gist the main idea of the interview. About the ethical issues of both of these methods it is noteworthy that participation in this research, that is, in the interview and observation was voluntary. However, a gift was given to the interviewees in order to appreciate their time and effort. During interviews, the participants were free not to respond any question, or not to discuss issues which she/he considered to be delicate. Also, the informants had the right to stop the interview at any time he/ she wished. In the same way, he/she had the right to cancel any appointment with the researcher at any time if she/he wished. All information was given to the



researcher kept protected with strict confidentiality and names did not mentioned in the data analysis to ensure anonymity.

Preparation of the questionnaire and interview

The preparation of the mixed methods consisting of ensuring that all of the needed equipment are present in order to prevent happening any unplanned things. Additionally, the day before of making the interviews I met the interviewees to finalize some main points such as the place or time of the interview. It is notable that based on that the in-person meetings are much more accepted in the Iranian culture than forwarding any Emails or letters, I had to commute to the schools several times in order to make everything ready for the data gathering.

Teacher expertise questionnaire

After the introductory sessions, the paper- based questionnaire was distributed to the participants in the morning of a school working day and they were free to return at the end of that day or the day after. As mentioned earlier, the questionnaire type was Likert scale and the respondents had to choose one option respectively from totally disagree, disagree, I don't know, agree and totally agree. Additionally, female participants were quicker in answering and returning the forms in comparison with the male ones. however, I should mention that both school headmasters and teachers were helpful and friendly during the process of the data collection.



Teacher expertise interview

Each interview held in a class at the school of interviewee's working after the school working time. Before getting started the process, I repeated both the confidential points and interview process. I did not customize any specific time for ending the interviews because I intended to make the teachers comfortable and free in describing the questions and do not interrupt them. Fortunately, all the interviewees were really responsive and I did not experience any problem during making all of the interviews. Besides, in the interview sessions, I used both note-taking and recording for the reason that, it helped me to understand the points that needed to be clarified by asking some additional questions.

3.6 Analysis

Teacher expertise questionnaire/ interview

As mentioned earlier, the methodology of this research was mixed consisting qualitative and quantitative. Initially, the answered questionnaires were turned back to the first version in which each question placed in the related theme of the teacher expertise. each question was represented by a numerical code and entered to the SPSS program. Descriptive statistics as percentage counts, standard deviation and means as well as inferential statistics (t-test) were used to determine any significant difference among female and male respondents' perception towards teacher expertise. Additionally, for analysis the interviews I transcribed all the recordings and entered it to my own laptop. I did several checks on each interview transcript in order to ensure that the transcriptions of the recorded interviews were as definite as possible. Once the transcripts were written and typed, I started the analysis process (content analysis) and I used the ground theory approach cover this phase which follows a well-established process where data collection and data analysis are intermixed (Charmaz ,1983, 2000, 2002; Strauss & Corbin, 1998). Themes in the interview answers became obvious to me that each teacher is a unique example in his/her own teaching experiences at the meantime there were many common trends among the interviewees' opinions about the questions.



Chapter four

Results

4.1 Overview

This chapter of the thesis discusses the results of the current study and presents a discussion on the basis of the results. To be more specific, in this research two methods including a questionnaire and interview were used. The questionnaire participants were 30 female and 30 male Iranian high school teachers from five different schools in Tehran the capital city of Iran. The questionnaire was designed based on the themes of teacher expertise in a Likert scale version and then distributed among the respondents. The data collecting for this method was accompanied by a brief introductory of the process in order to make everything clear for the respondents. So this section starts with the review of the questionnaire data collection and analysis.

About the interview method, I should say that the interview consisting of seven questions regarding the participants' personal experiences about some points of teaching practice such as technique usage or management for challenging/weak learners. As the questionnaire, the interview was made after holding a briefing session for the participants.

4.2 Restatement of Hypotheses

The present study was a comparison into male and female Iranian high school teachers in Tehran towards the perception of teacher expertise. In other words, regarding the separate schools based on the gender of the teachers and students in Iran, I wonder if the gender of the teachers affects the perception of the mentioned phenomenon. To do this, the following null hypothesis was raised:

H₀: there is no significant difference between the men and women teachers towards the perception of teacher expertise.

There were three research questions in this study, but only one null hypothesis since the other two were qualitative in nature. thus, as mentioned earlier in this chapter and the previous ones a questionnaire was distributed among the 60 high school teachers. What follows is the gained results of this method of the current study.

4.3 Data analysis of questionnaire

But first it is notable that, in order to find out the difference among the perceptions of males and females teachers on teacher expertise, the questionnaire divided to the main themes of teacher expertise such as subject, student, pedagogical and curriculum knowledge, teaching experience, personal beliefs towards teaching and learning and teacher-parent interaction. Then, this questionnaire was distributed among the respondents. For data analysis of the data taken from the mentioned questionnaire, independent t-test was used in order to compare the various themes of teacher expertise among the males and females high school teachers. Here are some tables relating to the comparison of the males and females towards the themes of teacher expertise:

Group Statistics

	gender	N	Mean	Std. Deviation	Std. Error Mean
Subject knowledge	males	30	13.6333	2.53912	.46358
	females	30	13.6667	2.88077	.52595

Table 4.1 Group statistics of subject knowledge

The above table indicates the mean and Std. deviation of males and females participants about subject knowledge.

Independent Samples Test

	Levene's Test for Equality of Variances	t-test for Equality of Means						
	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
Equal variances assumed	.391	-.048	58	.962	-.03333	.70109	-1.43673	1.37006
Equal variances not assumed		-.048	57.100	.962	-.03333	.70109	-1.43720	1.37053

Table 4.2 Independent samples test of subject knowledge

As the above table indicates (sig) there is no significant difference in subject knowledge of the male and female participants.

Group Statistics

	gender	N	Mean	Std. Deviation	Std. Error Mean
	Males	30	14.2667	2.83978	.51847

Curriculum Knowledge	30	14.2667	2.69013	.49115
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Table 4.3 Group statistics of curriculum knowledge theme

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Curriculum Knowledge	.095	.759	.000	58	1.000	.00000	.71417	-1.42957	1.42957
			.000	57.831	1.000	.00000	.71417	-1.42965	1.42965

Table 4.4 Independent sample T-test of curriculum knowledge

The above table indicates the independent sample T-test of curriculum knowledge theme in the participants of this research. as the information of the table illustrates there is no significant difference in this theme in female and male participants.

Group Statistics

	gender	N	Mean	Std. Deviation	Std. Error Mean
StuKnow	Males	30	7.8667	2.02967	.37056
	females	30	8.2000	2.15599	.39363

Table 4.7 Group statistics of teacher experience

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	.357	.552	-.234	58	.816	-.20000	.85415	-1.90977	1.50977
Equal variances not assumed			-.234	57.670	.816	-.20000	.85415	-1.90998	1.50998

Table 4.8 The independent sample T-test of experience theme

Table 4.8 indicates the independent sample T-test of experience which is the difference is not significant.

Group Statistics

	gender	N	Mean	Std. Deviation	Std. Error Mean
PedaKnow	Males	30	12.5333	1.90703	.34818
	females	30	13.0667	1.22990	.22455

Table 4.9 Group statistics of pedagogical knowledge

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
PedaK now	Equal variances assumed	.727	.397	-1.287	58	.203	-.53333	.41430	-1.36265	.29599
	Equal variances not assumed			-1.287	49.566	.204	-.53333	.41430	-1.36567	.29900

Table 4.10 Independent sample T- test of pedagogical knowledge

The above table indicates the sample T-test of pedagogical knowledge of the participants. It is noteworthy to say that although females scored a bit more than males, this difference is not significant.

Group Statistics

	gender	N	Mean	Std. Deviation	Std. Error Mean
PerBel	Males	30	8.1667	2.71755	.49615
	females	30	9.3333	2.24888	.41059

Table 4.11 Group statistics sample T-test of personal belief

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Per Equal Bel variances assumed	.731	.396	-1.812	58	.075	-1.16667	.64401	-2.45580	.12246
Equal variances not assumed			-1.812	56.039	.075	-1.16667	.64401	-2.45676	.12342

Table 4.12 Independent sample T-test of personal beliefs

As the table indicates there is no significant difference between the male and female participants

Group Statistics

	gender	N	Mean	Std. Deviation	Std. Error Mean
TeaParents	Males	30	16.3000	2.42331	.44243
	females	30	17.1333	1.63440	.29840

Table 4.13 Group statistics of teacher-parent interaction

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
TeaParent	Equal variances assumed	2.553	.116	-1.562	58	.124	-.83333	.53366	-1.90156	.23490
	Equal variances not assumed			-1.562	50.860	.125	-.83333	.53366	-1.90477	.23810

Table 4.14 Independent sample T-test of teacher-parent interaction

As the above table indicates female participants had higher score on the teacher-parent interaction theme. Although, this difference is not significant.

Group Statistics

	gender	N	Mean	Std. Deviation	Std. Error Mean
Management	Males	30	24.0333	3.29559	.60169
	females	30	25.0333	2.91823	.53279

Table 4.15 Group statistics of management

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
Management	Equal variances assumed	.182	.671	-1.244	58	.218	-1.00000	.80368	-2.60874	.60874
	Equal variances not assumed			-1.244	57.163	.218	-1.00000	.80368	-2.60924	.60924

Table 4.16 The independent sample T-test of management

The above table illustrates the independent sample T-test of management and, there is no significant difference among the female and male participants.

After analysis each theme of teacher expertise as the above tables indicates, I calculated all of the themes and saved it as the total expertise score. The analysis of this item is as the following:

Group Statistics

	gender	N	Mean	Std. Deviation	Std. Error Mean
totalExpertise	Males	30	117.3333	12.04684	2.19944
	females	30	122.8667	10.71812	1.95685

Table 4.17 The group statistics of total expertise

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
totalExpertise	.148	.702	1.880	58	.065	-5.53333	2.94395	-11.42628	.35962
Equal variances assumed			-1.880	57.2	.065	-5.53333	2.94395	-11.42798	.36131
Equal variances not assumed									

Table 4.18 Independent T-test of total expertise

The comparison of mean between the scores of teaching expertise in two groups of men and women show that the mean of female teachers' expertise (122.33) is higher than mean of male teachers' scores (122.86). However, as the above sample t-test tables indicates this difference is not significant.

By looking at the component of teacher expertise, the results indicate in some themes such as subject knowledge or curriculum knowledge the mean scores are almost equal in two groups of men and women. The difference between the score of student knowledge, experience, pedagogy knowledge, teaching parent...and management show that women earned higher scores than men. However, in none of them these differences were statistically significant at the 0.05 level. Therefore, the gender has little effect on the teacher expertise of the secondary teachers in Iran.

Additionally, there were some other results extracted from the questionnaire that should be taken into account. For example, some questions related to teacher- parent interaction or school management. As the results of such kinds of questions are important let us now review the



questions relating to these two aspects. About teacher- parent interaction the questions are as the followings:

37. Teachers' relationships with parents are usually very poor.

38. Parents' support to school's work is absolutely essential.

39. Contacting the children's parents is very easy to me.

40. I will not have any disputes with parents.

41. Debating with parents is the duty of rectors.

The above questions intended to find out how well is the relationship between parents and teachers. For instance, about 90% of both male and female teachers believed in that this relationship is really poor, contacting the children's parents are not easy, and they have many disputes with the parents whenever they have meeting. For about 60% of the teachers hold the idea that debating with parents is the duty of rectors not the teachers. by having a deeper looking at the consequences of these group of questions, it is clear that there are some fundamental issues relating teacher –parent interaction or school principal. Some teachers after returning the filled-out questionnaire told me that they have severe problems with the parents who always think the lack of success of their children at school is only their teachers' fault. Also, they believed in that the principal of school is not really cooperative with the teachers in cases that dispute occurs with the parent. It is notable that these kinds of issues are not related to teacher expertise and, they are due to weaknesses to educational system. Now let us consider another group of questions regarding regular meeting at school. The following questions tried to find out the amount of cooperation between teachers and managers:

How often do you do these activities at school in one academic year?

42. In meetings, the principal discusses educational goals with teachers.

43. The principal ensures that teachers work according to the school's educational goals.

44. The principal or someone else in the management team observes teaching in classes.

45. In this school, the principal and teachers work on a school development plan.

46. In this school, the principal and teachers act to ensure that education quality issues are a collective responsibility.

The result of these group of questions indicated that the majority of participants selected “never” or “seldom” for them. Also, there were some other findings via informal speaking with the participants. For instance, many of teachers who participate in this study complained about the lack of regular meeting with the principal or manager in order to make progress in the educational system of the school. As these group of questions indicate the amount of cooperation between the teacher and other school personnel, it would be great to take a look at the following tables of these questions:

		Q43	Q44	Q45	Q46	Q47
N	Valid	60	60	60	60	59
	Missing	0	0	0	0	1
Mean		2.5500	3.2833	2.5333	2.2167	2.6610
Std. Deviation		.56524	.52373	.53573	.88474	.65942
Variance		.319	.274	.287	.783	.435

Table 4-19 Frequencies of Q43-Q47 items

If we move forward in the questions of the questionnaire, some statements regarding regular sessions which teachers have together in order to improve the teaching and learning process. the statements below indicate this topic:

How often do you do these activities at school?

47. Attend staff meetings to discuss the vision mission of the school.

48. Exchange teaching materials with colleagues.

49. Engage in discussion about the learning development of specific students.

50. Discuss and coordinate homework practice across subjects.

Again for these group of statements I did not find a positive response as the majority of teachers chose the option once a year or once a month for these group of answers. I could describe this result due to the competitive atmosphere of educational places in Iran. Unfortunately, this issue has caused lack of appropriate discussion and cooperation among the teachers. Thus, sometimes the weaknesses in teaching could be because of these kinds of problems are not caused by the teacher expertise itself. And this is something should be taken into account. In other words, these questions and responses mean how much weakness is existed in relation of school staff

4.3 Results of the interviews

As mentioned earlier in this chapter and previous ones, I made interviews with 10 participants including 5 male and 5 female high school teachers. It is notable that the measurement criteria for selection of the interviewees was as the same as the questionnaire method. Also the main reason for existing 10 participants in interviews is that I reached the saturation point in which common responses was found during these interviews.

About the first part of question number one in interview which was:

Do you feel you are confident teaching all the subject matter?

In this question I found different responses from the male and female participants. For example, all the male participants indicated that they feel fully confident about their teaching practices on the other hand, the female participants did not feel as much as confident in comparison with the male teachers. Besides, there were some areas that female teachers claimed they do not feel confident in them such as vocabulary part in language teaching. Take the two following answer as examples of this question among the females and males participants:

A female English teacher responded:



... Honestly some areas are a little bit difficult to teach, such as subjects that are way too easy, I feel like there's nothing special to elaborate on, why are some students being silly and act like they don't get it. Grammar parts do not fall on this category. On the other hand, vocabulary teaching esp. Collocations are the parts that are hard to explain when the students do not get that "not all the words can go together."

Among the male participants a geography teacher answered to the same question as the following:

... From the very beginning days of TTC I've learnt and tried to be confident and prepared for the subject I'm going to teach. According to this, before attending the class I work on the subject and I do not find any area harder to teach.

The similar answers like the two above were received from the male and female participants. Surprisingly, during these interviews I found out that the male teachers are much more confident in their career in comparison with the female ones. I take this as a side effect of a men dominance country like Iran in which in most of the cases men have more confidence in any job than women however, the results of questionnaire indicate gender has a little effect on teacher expertise perception.

Although some differences were recognized from the male and female career confidence, there were some similarities as well. For instance, both women and men held the idea that when some areas are going to be taught and it is somehow related to other subjects, the teachers may feel stressful of some questions from the students that they may not know. Take the answer of a male Arabic teacher as an example:

... sometimes I feel less comfortable teaching subjects involving other subjects like Geography. Because, then you may encounter questions from students, which are not exactly related to the language learning, and this could be a little challenging.

The second question of the interview was as the following:

How have you encouraged the less motivated students to participate in the lesson and do their work? are there certain ways you have learned to apply in instruction to activate students to participate/study/ learn?



In all of the responds of both men and women there was a common answer that considering the needs of the learners is vital about the encouragement of the pupils. for instance, a female math teacher said:

... As a teacher believe that goal is not just teaching a subject, but also need to find out students' interests and feelings to be able to attract them for learning. Having in mind their age type, personally try to motivate them by speaking about their interests...

Another similarity which received from the participants in which designing some games that are suitable to the age and needs of the students could play a main role in motivating the students even the most challenging ones. for instance, an English female teacher said that:

... Having teams and setting matches specially for younger learners, had involved my students more, and it was motivating them to participate in the lesson, and try to help the team to win the challenge! It also made other students to help the less motivated students get more involved.

It is notable that 8 of the interviewees told me that they have lots of ideas in their minds about creative games however, the size of their class or better to say the number of the students prevents them for make them practical in their classes. And this point should be taken into consideration as an educational system barrier for having advanced teaching instructions. A female participant mentioned this point as the following:

... I have tried to put students' needs and interests into consideration, **however that's hard to do in large classes...**

Let us turn to the third question of the interview:

Q3 What student-centered techniques do you utilize to enhance student understanding? (e.g. small group work, class discussions, jigsaw method of group work, student-centered discovery, etc.) Do you recommend some types of student-directed learning over others, or not at all? Can you also tell what kind of effects each one of the techniques has on students?



All of the participants claimed that class discussions are suitable for the age range of high school students. In other words, considering the age of learners is important in using the student-centered techniques in the class. Another significant point in the answers of this question is that the females believe in that arranging students as pairs is much more effective while using any student-centered activities in class. However, the males thought putting the students in group is better. Take these two answers as example of the mentioned points. A female participant said:

...Test-teach-test is one of my favorites, since it highlights the parts students already know and the parts which need practice. It can be done in groups or pairs, **but pairs give students a better chance to participate...**

A male participant answered this question as the following:

I believe using all the methods are good to enhance student understanding. Depending on the students and the class different methods can help.

I believe small group work can help students get more confident, class discussions will give the students the opportunity to enhance their ability to work on their fluency. The jigsaw method helps students create their own learning, and student-centered discovery gives the students the opportunities to learn independently and from one another and coaches them in the skills they need to do so effectively...

The next question of interview was about the teaching materials that the teachers may use during their practices as the following:

Q4. What teaching materials have you found to be educationally useful in the classroom (e.g. computer, Internet, CD-ROM, board games, flash cards, etc.) and why?

Some of the participants had the experience of teaching to young learners. And all of them claimed that in classes with young learners using various colors for board games or flashcards could be really effective in the learning process while, in classes with teenager or adult learners utilizing computer or internet are vital in the present teaching methods. It is notable that I did not find any



difference among the responses of male and female participants about this question. take this answer from a female participant as an example of the mentioned result:

...Board games are the best because of the wide range of questions and the fact they are GAMES and students do enjoy the competing. In the second place I would say videos and flash cards. Actually in my opinion students do not enjoy a book-based classroom thus they welcome any extra activity and...

Also a male participant said:

... Due to changing interests in the world towards computer and internet. I believe that it's fruitful to have a part of class using the net and tablets. People should learn that tablets are not just used for playing time consuming games!

Let's move to the next question which was about as the following:

Q5. How have you dealt with issues of classroom management and disruptive students (e.g. set rules and consequences, notes home or conferences with parents, principal, etc.)? Can you describe an example of a typical situation?

Again both male and female participants claimed that two main methods for disruptive students in their class. First, is related to the young learners and teacher behavior towards the disruptive pupils and second is about the same issue but with teenage students. The interviewees during this study believed in that based on the age of the students the teacher behavior should be differed in the issues of classroom management or disruptive students. For instance, a female participant said:

... age of the learners is really important in here. For example, in young learner classes I personally prefer to set some basic rules in my class, print them out and attach on the walls, repeat and ask them through the class and in case of any rule-breaking point at the rule...

A female English teacher told one of her own experiences during the interview about a disruptive learner:

... Once there was a student who was not loved by the teachers although she was good at English. Therefore. she had the assumption that I hated her like most of the other teachers. I didn't react



whenever she acted wired. I gave her responsibilities, e.g. In every group work she was the head of the group. For some activities I checked her answers, since she was an early finisher, and told the other students to check with her. It was a success, she once told me she loved me more than all the teachers she's had and started sharing her problems with me ...

There are some points about the answer of this question that should be taken into account. First, all of the teachers that I interviewed claimed that talking to the parents of a disturbing learner is the last choice because this may cause bad effects on the confidence and personality of the teenage students so they preferred talking to the students not the principal or parents. Second, giving responsibilities to these kinds of students could really be effective in order to manage their disturbance in the classes. Last but not the least, I did not find any difference about reacting to problematic learners among the participants with different gender.

Now consider the next question of the interview:

Q6. What are some of your professional goals with a) students, b) yourself? Can you separate short-term and long-term goals concerning your students?

This question was a bit more important to me myself because of two main reasons. First, I used to be teacher for about 6 years and I asked myself this question as I was listening to the participants' responses. Second, it is always said by many people even in important educational positions that males are better in teaching career than women. I intended to prove this belief to myself and as I thought prior to this research there were not any significant difference among the male and female teachers who participated in this study and this is something should be taken into account. Now let's review some the answers related to this question:

A female interviewee responded to this question as the following:



... My short-term goal is to help my students develop their skills, and my long-term goal is to help them believe in themselves and to enjoy learning and be successful in their learning. My professional goal is to inspire my students to love and enjoy learning...

As the above answer and some similar ones indicate, helping for confidence progress of the learners is the priority of any expert teacher. For the reason that, giving the students an opportunity to first love themselves and second love learning could be a key element in making better future for them. Another female said:

...students spend many hours daily at school and because of that their teachers play an important role in the learners' lives. I have had many examples in my own classes that student is demotivated because of many reasons such as book-centered methods or having written exams all the time. So I have always considered my students' joy for learning as the main goal of teaching...

A female participant claimed that:

...I'd like to make the students believe in themselves and believe that everything is possible if only they want. If they just want to pass an entrance exam, I'd help them believe that they can. If they have a bigger goal like pursuing a career in English, again I'll try to provide them with as much help as I can. I guess like everyone else I want to be the best in anything I do. To be the best teacher who trains the students in a way no one does...

Now let's review the last question of the interview here:

Q7. In your own words, what should be the main goals of any teacher?

For this question, I received common answers from both male and female students. It was interesting for me that these participants claimed that the main goals of any teacher should be first considering the learners' needs and second inspire them to love learning. Also, one of the main worries of these teachers was focusing on demotivated students and try to encourage them to be interested in learning. Here you could see some of the responses related to this question.

A male participant said:



... to take every individual's need into consideration...

A female participant claimed:

...Teachers need to motivate students to participate and focus, and even bring introverted students out of their shells. A great teacher can get students reading, inspire a passion for the language. One of the goals is to inspire students to love learning...

To sum up, by considering the results there are some points that should be considered. First, the outcome of questionnaire indicates that in some points the female participants had little higher scores such as student knowledge, experience, pedagogy knowledge or teaching parent interaction. However, this difference was not significant. Therefore, gender has little impact on teacher expertise. Second, the interview results suggest that regardless the gender of the participants, they have common beliefs towards various issues about teaching such as long-term or short-term goals, class management problems and so forth.

By here, I have analyzed and reviewed the results of the questionnaire and interviews as my research methods. Now I would like to have an in-depth review of some other points which I got during data collection and data analysis of this study in chapter; discussion and conclusion to follow.

Chapter five

Discussion and conclusion

5.1. Overview

The purpose of the current study was to determine and compare the perception of male and female Iranian high school teachers in capital city of Iran, Tehran towards teacher expertise via questionnaire and interview method. Therefore, three research questions were designed as objectives of this study in order to achieve the mentioned aim. These research questions were as the followings:

Q1. What are the female Iranian high school teachers' perceptions **on** teacher expertise?

Q2. What are the male Iranian high school teachers' **perceptions on** teacher expertise?

Q3. Is there any significant difference between female and male teachers' **perceptions on** teacher expertise?

This chapter including the discussion part and the summary of the findings of this research. also some points regarding recommendations and implications for further researchers are given as follows.

5.2 Discussion

To my knowledge this is the only study that has explored the effect of gender on teachers' perceptions on expertise in the Iranian context. In other words, Iran is one of the minor countries in the world that has separated school based on gender of the teacher and students. Thus, comparison the male and female teachers in their careers has been always a question.

Besides, by considering the men-dominancy culture in Iran, the majority of people in my country hold the view that men are more skillful and successful in any position they are such as manager, teacher, clerk and so forth. additionally, as mentioned earlier in the review of literature chapter teacher expertise has always had some vague points in my country because of many reasons such as lack of sufficient references in the official language of Iran. This has led to many issues in which many people may misunderstand the difference between expertise and experience or have wrong

ideas about the definition of a good teacher. Therefore, some Iranian researchers have done studies about giving a description for teacher expertise which was not that much successful. For instance, as existed in the review of literature of this study, an Iranian researcher claimed that defining teacher expertise by considering the existing model is somehow difficult based on many reasons:

“Lack of consistency and agreement on many features, core basis in static nature of expertise, no clarification of the interaction of features, main basis in comparing novice and experienced teachers and less interest in cognitive features related to expertise” (Yazdanmehr, 2016).

By considering all the above points, I started doing my study in my home country and I got interesting findings. For instance, in my home country or better to say in middle east countries, mostly men may be known as better teachers. And this has been a topic for many researchers. For instance, as reviewed in the review of literature chapter a study has been done in India in order to find out the differences between teaching practice of males and females. As Islahi (2013) suggests in his study female teachers:

“Female teachers were reported to be more supportive, expressive [15-17], nurturing [18], informal and open toward students [19, 20], spend significantly greater proportion of time encouraging and allowing student participation [16, 21], involve students in peer collaboration [22], believed in flexible teaching methods [20], asked more referential questions, gave more compliments and used less directive forms [17], shared authority and maintained control in the classroom in a way that keeps their relationships with students intact “[21]. (p. 286).

On the other hand, as mentioned in the same paper male teachers:

“tended to be dominating, exacting and exercised greater control emphasized more to the group work and structured activities [20], asked more display questions that made the exchanges between teacher and students shorter but more frequent [17, 23], used their authority at the cost of involvement by students with an authoritarian and task oriented teaching style [15,21,22,24]. Researchers also found that male teachers typically lecture for the majority of each class session



while female faculty members are more likely to engage students with active and collaborative learning approaches, which are classified as learner-centered instructional practices” (p. 286).

While I was analyzing the questionnaire responses in my study, I found out that surprisingly women had higher scores in some themes of teacher expertise such as pedagogical knowledge or student knowledge. Although this difference was not significant, it demonstrated a contrast point regarding the traditional views in Iran. Additionally, as mentioned earlier some differences in teaching of females and males were found however, the results of my study demonstrated that there is not any significant difference among the perception of teacher expertise among the Iranian male and female participants. So it means that gender has little effect on the teacher expertise. and this could be an interesting result in a country such as Iran that always men may be considered better in their teaching practices.

Let's move to another point about the results of this study. As mentioned earlier in the review of literature teacher beliefs are the main part of any study related to teacher expertise. for instance, as reviewed previously Richardson (1996) holds the idea that "In most current conceptions, the perceived relationship between beliefs and actions is interactive. Beliefs are thought to drive actions; however, experiences and reflection on action may lead to changes in and/or additions to beliefs" (p. 104). Thus, I considered this main point in designing both the questionnaire and interview questions. during the analysis the interviews I recognized there are some similarities about male and female participants' beliefs towards various issues in teaching. For instance, about the question about behaving a disruptive student both female and male held some common views in which first talking to the parent or principal of the school would be their last option. Second, giving some kinds of responsibilities to the disturbed pupils would be so effective and third the best option is to talk to these kinds of students after the class personally not in the whole class in front of his/her classmates.

Another interesting result which I got from the interviews is that as mentioned in the review of literature Glaser (1999) reviewed some main characteristics about the teacher expertise. some of them are as the followings:

“4) Experts’ knowledge is highly procedural and goal-oriented since their concepts are bound to procedures and the rules and conditions for their application, and closely tied to the goal structure of a problem.

(5) Experts’ knowledge enables them to use self-regulatory processes with great skill, which enables them to step back at appropriate points and observe their solution process and the outcomes of their performances. Their self-awareness is shown in the allocation of attention and sensitivity to information feedback, which may slow them down in the initial encoding of the problem, though they are likely to be quicker overall.

(6) Experts’ proficiency can be routinized or adaptive, such that, under some conditions, maybe most, experts’ performance becomes routinized, efficient and accurate, but they can adapt and exercise opportunistic planning “(Eaude,2013, pp: 12).

Surprisingly I recognized some similarities between these features and the answers of the participants. Take the interview question for short-term and long-term goals of the teaching as an example. In the responses about this question, all of the teachers claimed that considering the needs of the learners or helping the students to be inspired about learning is vital while a teacher is setting his/her goals. Additionally, during the interview sessions I found out another similarity in which the following description about teaching expertise which mentioned in the review literature chapter matched the interviewee responses. These mentioned feature were as the following:

would be great to review some specified details about this topic. One of these points is about the areas of teacher expertise.

“1.Management expertise which means that teacher tries to handle everything in the class in order to increase the involvement of the learners. Many studies indicate that the more management expertise the teachers may have, the better and more learning of students may occur.

2.Motivational expertise is that the teachers try to act as a psychologist in order to make the learners highly motivated in the classroom, believe in themselves or being more confident. In this case, the learning outcomes are increased.

3. Instructional expertise. this type of expertise is a set of skills that the teacher is able to understand what the students know or do not know about the lessons. In this case, the teacher could set the instructions in order to have well-established of learning process.

4. Planning expertise. is the area of expertise that gives the teacher a chance to design a kind of lesson plan that the content of it is suitable to the learners' needs and abilities.

5. Craft knowledge. This special knowledge helps the teacher to teach their "special content". Saphier (2007, pp:23).

As mentioned above the expertise knowledge is goal oriented and procedural and I found out the interviewees answers fit to this characteristics of the expertise. therefore, doing these kinds of interview will help the researchers to know better about the knowledge or other points of the teaching expertise. although the experience and expertise are somehow different aspects and carrying some years of teaching experience do not necessarily mean expertise, the more interviews with experienced teachers the better understanding about expertise is occurred.

Now at this stage, it would be great to review some meaning from different aspects of this research. first, regarding Iranian school education and expertise there are some issues which are known as lack of teacher expertise but in fact these kinds of problems are due to educational weakness points. For instance, in many observation sessions from teachers it was noted that teachers could not present a complete teaching practice and this was because of excessive number of students in each class that avoid teachers to indicate the whole version of their expertise. another aspect of this research is about the theory of expertise and Iran. As mentioned in chapter2; review of literature, the term of "expertise" is interchangeably used instead of "experience". Additionally, it is notable that the references in Persian language about teacher expertise is not sufficient thus, having some kinds of research about teacher expertise would be helpful for both educators and teachers. Third, as mentioned earlier interview was one of the data collection methods in this research. from the results of interviews, I recognized that there are some trends in the participants' answers based on



their gender and moreover, there were several other points which extracted from these interviews. As many of these mentioned in this and previous section, in here I review the main points and give some general meaning regarding them. First, male participants were more confident in comparison with the females. Second, the females felt more comfortable with me during the interview sessions and I take these two as cultural effects on Iranians. Third, the age of the learners was one the key points in both of the teachers about choosing the best games and techniques in class. Fourth, it is notable that both male and female participants claimed some common points regarding excessive number of students or behaving disruptive students. By considering all of these main findings from the interviews and also questionnaires, it is noteworthy to say that first, Iranian teachers regardless of gender have somehow equal perception about teacher expertise. second, there are some issues due to educational system weaknesses or school management which may be known as teaching practices when an observer trying to give rate to the teachers and this is something that should be taken into account. Thus, the results of these kinds of studies would be helpful to educators, observers and novice teachers.

Turning now to the limitations of this study during the data collection. First, despite having a great network in the schools of the capital city of Iran; Tehran the permission process for doing the research took so long. it roughly lasted a couple of months to pass this phase of the research. second, finding the suitable participants for this study was a bit hard for me. for the reason that as mentioned earlier in the previous sections, the atmosphere of the educational system in my home country is really competitive. Thus, the majority of teachers do not feel comfortable to attend any research related to their career. In other words, in most of the cases the teachers are afraid about losing the level of position they are holding at their workplace. And because of that I spent a long time for convincing the teachers about the safety of my research.

Third, as anybody knows Iran is a men-dominancy and Islamic country with separated schools based on the gender of the students and teachers and because of this I had some difficulties in collecting my data in male schools. For example, some male teachers especially the religious studies teachers did not feel comfortable for being interviewed by a woman. Another limitation



that I had during the data collection of this study was that giving indirect messages about the introductory of doing any research such as questionnaire or interviews is not really formal in the Iranian culture so I had to spend lots of time in order to arrange a face-to face meeting with the participants. And all of these mentioned limitations made the process of my study a bit longer.

Let us now consider the language of the questionnaire and interviews. At the designing stage of the both of these methods I used English language. However, in data collecting phase I realized that the majority of the participants do not feel confident enough to answer some questions or being interviewed in English. So I translated both questionnaire and interview questions to Farsi language and then reset it to English. Although this point was not that much difficult about the questionnaire, it was challenging for the interview answers. because the answers were given in Farsi and the results should be translated to the English. This was also a kind of limitation for this research.

By considering all of the mentioned points about the limitations of this study it is clear that most of the these challenging items are due to the cultural or language barriers of my home country. But there are some other features that should be taken into account. First, as reviewed earlier there is always the need of clearing the meaning of teacher expertise in my home country due to lack of sufficient references in the official language of Iran so I think doing these kinds of research in Iranian context could be effective for both researchers and teachers.

Second, as repeatedly mentioned in the previous chapters in most of the cases, based on the Iranian traditional culture there is always a belief existed about the better performance of the men in any career including teaching. I myself used to be teacher in Iran and among my colleagues there was a question about the correctness of this belief. So I decided to do a kind of comparison study in order to investigate the effect of the gender on the teacher expertise perception or knowledge of the experienced male and female teachers. And surprisingly, the results of this study indicated that the gender has little effect on the perception of teacher expertise of the Iranian high school teachers.

Besides, the results of the interview demonstrated that regardless the gender of the teachers, they had some common beliefs towards some main points of the teaching such as short-term or long-term, behaving the disruptive students and so forth. However, I recognized that there are some

differences among the male and female participants. For instance, the males were much more confident about their career in comparison with the females. Besides, females gave me longer responses than the male ones and I take this as a cultural result that males did not feel that much comfortable with a female interviewee. Another point that I found among the responses of the interview is that, there are some problems due to school or educational system. For instance, all of the participants including males and females claimed that the number of the students of class is more than they always expect and this has prevented them to do many activities in the class such as games. Next weakness point that is clear from the interviews is that the teacher-parent interaction or teacher-school head manager is not satisfactory in my country and I think this is due to the issues of the whole educational system and needs time and effort to be solved. For example, in some locations there are lack of sufficient schools and this may cause excessive amount of students in each class which makes the case complicated for the teachers. Or in most of the cases, there is no emphasis for the importance of any interaction and relation between the teacher – parent, teacher-teacher or teacher-manager and because of that there is lack of regular meetings among the mentioned people. In my opinion, although the results of this study may not be completely generalizable, it may be precious because first it showed contrast results with the traditional beliefs about the excellency of men performance in teaching or any other career. Besides, there some problems relating to the educational system of Iran and this is something that should be taken into account separately from the expertise of Iranian teachers.

Conclusion

5.3. Main findings

The most obvious finding to emerge from this research is that regardless the gender of the experienced teachers as participants of this study there is no significant difference existed. Besides, in contrast to earlier cultural beliefs about the superiority of males in any career in comparison with the females, the women attenders of this research got some higher scores in several themes of teacher expertise. although this difference was not significant, this point could be an interesting

finding in a man-dominancy country such as Iran. By now, all it is mentioned here in this subsection is related to the questionnaire results. Now let us consider the interview outcomes.

As it is reviewed in previous section 10 experienced high teachers including 5 males and 5 females were selected to be interviewed towards some issues related to teacher expertise. As earlier indicated the interview consisting questions to various aspects of teaching such as usage of educational techniques, class management, behaving demotivated or disruptive students and the short-term or long-term goals. The consequences of the interviews indicated that there are many common points about the viewpoints of the males and female teachers about the mentioned features. For instance, both men and women participants hold the view that using different tools for supporting learning process is dependent to the age range of the students or utilizing some colorful flashcards for the young learners could be effective.

Another similarity that I found out via the responses of the interviewees was that all of the participants claimed that it would be really helpful for any teacher to establish some rules at the first session in order to have more discipline in class.

The next common belief was about behaving demotivated or disruptive students. This question was important to me for the reason that during my own teaching experience in Iran I recognized both demotivated and disturbing students. And some of my colleagues believed in that the main external reason for such kinds of learners could be due to teacher-centered and book-centered educational system of the country. I recognized this idea in the responses of the participants of this research too.

Besides, the main method towards behaving disruptive students was giving them responsibilities or talking to them after the class time. It is notable that all of the teachers participated in the research believe in that some negative effect may occur if talking to the school principal or parents of such kinds of pupils becomes the main solution. The other common thing among all the participants' responses was that both short and long-term goals of the teaching was to inspire the learners in order to love learning. They also hold the idea that if the teachers firstly love their career they would be able to inspire the students to learning. There were some other findings rather than these mentioned ones. For instance, during my interviews I realized that the male participants were



more confident about their career and own teaching practices in comparison with the female ones. as mentioned earlier this could be due to man-dominancy culture version of my home country. Because as the results of this study demonstrate the gender has little effect on the knowledge of the teacher expertise. besides, it is notable to mention two main points about this study. First, as this research was based on comparison between tow genders I have to say that I found out many similar points among the male and female responses to the questionnaire and interview and this is something that should be taken into account. Second, by reviewing the theoretical framework of this research I recognized many common things between the different papers and the data of this study which are mentioned previously in the discussion part of last chapter.

5.4 Pedagogical implications

As mentioned earlier Iran is a country with book and teacher centered educational system and, the recruitment or regular observation seems challenging to the teachers. However, the participants of this study were selected from the successful examples of the observation records, teaching experiences and other standard features for being a teacher in Iran.

The results of this study indicate that regardless of the gender of the teachers, the teacher expertise knowledge do not have significant difference and this is something that should be taken into account in a man-dominancy country such as Iran. Besides, during the interview sessions the participants presented some interesting points about different aspects of teaching issues. Therefore, by considering the great work and educational background of these attenders the information which is received from them could be precious because of so many reasons. First, such kinds of information are applicable to the teacher training programs. Second, these teachers would be play as role models for the pre-teachers and novice ones. third, thorough this study some weaknesses about the educational system such as boring course books, excessive amount of students the class or plenty of book exams were mentioned which has led to less motivated students at the schools. it is clear that such kinds of issues are not related to the experience or expertise of the teachers and, having a more progressed educational system would be a suitable solution.

5.5. Suggestions for further research

First the subjects of this study were 60 male and female Iranian high school teachers in capital city of Iran, Tehran. It can be replicated with different context rather than Iran. The context change may have some distinctive results. It is also possible to consider only one gender of the participants in the study.

Second, the teachers of this study all worked in high school. Focusing on other groups of teachers such as primary school may lead to different responses in the interview sessions as the needs of learners depends on many aspects of teaching career.

Third, this study was carried out in certain schools. it could be done in other schools in other cities or language schools. it is clear that various institutes and situations might change the results of a study. It will be beneficial to conduct other studies and see whether it changes the consequences or not.

References

Alexander, P. (2003). Can we get there from here? *Educational Researcher*, 32(8), 3–4.

Beairsto, B. (2013). What is teacher expertise : www.Cea.ace.ca

Berliner, D. C. (1994). Expertise: The wonders of exemplary performance. In John N. Mangieri and Cathy Collins Block (Eds.), *Creating powerful thinking in teachers and students* (pp. 141-186). Ft. Worth, TX: Holt, Rinehart and Winston.

Berliner, D. C. (April 1988) Memory for teaching as a function of expertise.

Paper presented at meetings of the American Educational Research Association, New Orleans

Berliner, D. C. (1988, February). The development of expertise in pedagogy.

Paper presented at the meeting of the American Association of Colleges

for Teacher Education, New Orleans, LA.

Berliner, D. C. (2004). Expert teachers: their characteristics, development and accomplishments. In R. Batllori Obiols, A. E Gomez Martinez, M. Oller i Freixa & J. Pages i. Blanch (eds.), *De la teoria a l'aula: Formacio del professorat ensenyament de las ciències socials*, pp. 13-28.

Bereiter, C. & Scardamalia, M. (1989). Intentional learning. L. Resnick (Ed) *Knowing, learning and instruction*. Hillsdale, New Jersey: Lawrence Erlbaum Associates.



Bigelow, L, 2000, class planning strategies of expert and novice teachers: the sloping hall review: research show case@CMU

Calderhead, J. (1996). Teachers: Beliefs and knowledge. In Berliner, D. & Caffee, R. C. (Eds.), *Handbook of Educational Psychology* (pp. 709-725). New York: Simon & Schuster MacMillan. Calderhead, J. (1996). Teachers: Beliefs and knowledge. In Berliner, D. & Caffee, R. C.(Eds.), *Handbook of Educational Psychology* (pp. 709-725). New York: Simon &Schuster MacMillan.

Charmaz, k. (1983). The grounded theory method: An explication and intepretation

Cohen, M. S., Freeman, J. T., & Wolf, S. (1996). Meta-recognition in time stressed decision making: recognising critiquing, and correcting. *Human Factors*, 38, 206–219.

Dreyfus, H L., & Dreyfus, S E (1986) *Mind over machine* New York, NY. FreePress

Dreyfus, H. L., & Dreyfus, S. E. (1988). *Mind over machine: The power of human intuition and expertise in the era of the computer* (2nd ed.). New York: Free Press.

Eaude, T. (2014). What makes primary classteachers special? exploring the features of expertise in the primary classroom. *Teachers and Teaching: Theory and Practice*, 20(1), 4-18.
doi:<http://dx.doi.org/helios.uta.fi/10.1080/13540602.2013.848513>

Englert, C. S., Tarrant, K., & Mariage, T. (1992). Defining and redefining instructional practice in special education: Perspectives on good teaching. *Teacher Education and Special Education*, J5(2), 62-86.

Essays, UK. (November 2018). Definition and the five stages of perception. Retrieved from



<https://www.ukessays.com/essays/psychology/definition-and-the-five-stages-of-perception->

[psychology-essay.php?vref=1](https://www.ukessays.com/essays/psychology/definition-and-the-five-stages-of-perception-psychology-essay.php?vref=1)

Fenstermacher, G. D., & Richardson, V. (2005). On making determinations of quality in teaching. *Teachers College Record*, 107(1), 186-213.

Goldstein, L. S., & Freedman, D. (2003). Challenges enacting caring teacher education.

Journal of Teacher Education, 54(5), 441-454

Glaser, R. & Chi, M. (1988) overview, M. (1988) overview, M. Chi, R. Glaser and M. Farr (Eds.)

the nature of expertise, Hillsdale, NJ: Erlbaum.

Glaser, B., 1999. Keynote address for the fourth annual qualitative health research conference.

Qualitative Health Research 9 (6), 836–845.

Gobet, F. (2015). *Understanding expertise: A multidisciplinary approach*. London: Palgrave

Gobet (2016). What is Expertise retrieved from <https://www.psychologytoday.com>

Hambrick, David Z. (2018), *the science of expertise: psychology press book*

Hattie, J., 2003, *teachers make a difference what is the research evidence: university of Auckland,*

Australian council for educational research

Islahi, F and Nasreen (2013), *who make effective teachers, men or women? An indian perspective.*

Universal journal of educational research 1(4) :pp. 285-293

Kagan, D. (1992). Implications of research on teacher belief. *Educational Psychologist*,

27, 65-90.

Jackson, Philip W. *life in classrooms*. New York : Holt , Rinehart and Winston , 1968. 177pp\



- Leyser, Y. (2002). Choices of instructional practices and efficacy beliefs of Israeli general and special educators: A cross-cultural research initiative. *Teacher Education and Special Education, 25*(2), 154-167.
- McMahon, L. A. (1995). A study of how teachers employ their teaching skills during interactive decision making. University of Lowell. UMI ProQuest Digital Dissertations- Full Citation & Abstract, DAI-A 56/06.
- Palmer, D. Stough, L. Burdenski, T. Jr. & Gonzales, M. (2005) Identifying Teacher Expertise: An Examination of Researchers' Decision Making, *Educational Psychologist, 40*:1, 13-25, DOI: 10.1207/s15326985ep4001_2
- Richardson, V. (1996). The role of attitudes and beliefs in learning to teach. In Sikula, J., Buttery, T. J. & Guyton, E. (Eds.), *Handbook of Research on Teacher Education* (2nd ed., pp. 102-119). New York: Simon & Schuster MacMillan.
- Robinson, Paul Edward. (2008). The characteristics of teacher expertise in elementary schools Inclusive classrooms.
- Saphier, J. (2007). John Adams's promise: How to have good schools for all children not just for some. *Research for better teaching.*
- Schempp, P., Tan, S. & McCullick, B. (2002) The practices of expert teachers. *Teaching and Learning, 23*(1), 99–106.



Schmidt, H and Boshuizen, H (1993) on acquiring expertise in medicine. *Educational psychology review* 5(3).

Sternberg, R. J., & Horvath, J. A. (1995). A prototype view of expert teaching. *Educational Researcher*, 24(6), 9-17.

Shulman, L. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57(1), 1-22.

Taas oobshirazi, G and Carr, M (2008). Gender differences in science : An expertise perspective, 20(2) p. 149.

Tsui, Amy B. M. (2003) characteristics of expert and novice teachers, Cambridge university press.

Varrella, G. F. (2000). Science Teachers at the Top of Their Game: What Is Teacher Expertise?

Clearing House, 74(1), 43. Retrieved from <http://search.ebscohost.com/helios.uta.fi/login.aspx?direct=true&AuthType=cookie,ip,uid&db=ejh&AN=3537033&site=ehost-live&scope=site&authtype=sso&custid=s4778523>

Vasquez-Levy, D. (1993). The use of practical arguments in clarifying and changing practical reasoning and classroom practices: Two cases. *Journal of Curriculum Studies*, 25(2), 125-143.

Vygotsky, L. S. (1978). *Mind and society. The development of higher psychological processes*. Cambridge, MA: Harvard University Press.



Winkler,G. (2001) .Reflection and theory: Conceptualising the gap between teaching experience and teacher expertise, *Educational Action Research*, 9:3, 437-449, DOI: 10.1080/09650790100200168

Woolfolk, Anita. (2001). *Educational Psychology*. (9th ed.). Boston: Allyn and Bacon

Yazdanmehr, E. Akbari. R, Kiani.GH & Ghaffar Samar, R .(2016) proposing a conceptual model for teacher expertise in ELT : *Theory and Practice in Language Studies*, Vol. 6, No. 3, pp. 631-641 ,DOI: <http://dx.doi.org/10.17507/tpis.0603.25>

Zeichner, K. (2006). Different conceptions of teacher expertise and teacher education in the USA. *Education Research and Perspectives*, 33(2), 60-79. Retrieved from <http://helios.uta.fi/docview/217873796?accountid=14242>

Appendices



Appendix A

Dear recipient

Thank you participating the study in which we want to know about your teaching experience. Second theme is your personal beliefs of teacher profession. all answers are totally confidential and anonymous. Your name or other respondent information is not asked or included into any database. The results will benefit the design of my master thesis. If there are any questions , please do not hesitate to contact me through email.

Arghavan Maleki

University of Tampere

Please answer the following the questions:

1.What is your gender? 1.male 2. female

2. How old are you?

Under 25 (1)

25-29 (2)

30-39(3)



40-49 (4)

50-59(5)

3. What is your employment status as a teacher? Full time (1) Part time (2)

4. What is the highest level of education you have completed?

Bachelor`s degree (1)

Master`s degree (2)

PHD student (3)

PHD (4)

5. How long have you been working as a teacher?

This is my first year (1)

1-2 years (2)

3-5 Years (3)

6-10 years (4)

11-15 years (5)

16-20 years (6)

More than 20 years (7)

6. How long have you been working as a teacher at this school?

This is my first year (1)

1-2 years (2)

3-5 years (3)

6-10 years (4)

11-15 years (5)

16-20 years (6)

More than 20 years (7)

7. What is the actual name of subject you teach at this school?

Math (1)



Science (2)

Religion (3)

Physical education (4)

Arts (5)

Literature (6)

Technology (7)

Language (8)

Social sciences (9)

Other (10)

8. Was the teaching of this subject part of your academic training? Yes (1), No(2)

How strongly do you agree and disagree with the following statements?

Subject knowledge:

1.Strongly disagree 2. Disagree 3 .I don't know 4. Agree 5. Strongly Agree

9.I have an excellent knowledge ₁ ₂ ₃ ₄ ₅
about the subject I teach.

10. if it is possible, I would like ₁ ₂ ₃ ₄ ₅
to continue my studies in the subject I teach.

11. I have the best knowledge ₁ ₂ ₃ ₄ ₅
about the areas that curriculum covers.

12. I feel I lack some important ₁ ₂ ₃ ₄ ₅
understanding about the subject I teach.

13. I am confident about my subject ₁ ₂ ₃ ₄ ₅
knowledge in front of my students.

Curriculum knowledge:

₁ ₂ ₃ ₄ ₅

14. I know the general goals of curriculum.

15. I know the specific goals of the curriculum. ₁ ₂ ₃ ₄ ₅

16. I know the learning objectives of the lesson I teach. ₁ ₂ ₃ ₄ ₅

17. I am aware of what type of assignments or projects are suitable for my students. ₁ ₂ ₃ ₄ ₅

18. I am aware of the assessments and other methods to evaluate my student learning. ₁ ₂ ₃ ₄ ₅

student knowledge:

19. boys are much more talented than girls in the subject I teach. ₁ ₂ ₃ ₄ ₅

20. I am totally aware of my students' family backgrounds including economic, social and cultural aspects. ₁ ₂ ₃ ₄ ₅

21. I completely know what are the attitude of learning, habits and school life of my students. ₁ ₂ ₃ ₄ ₅

experience:

22. I feel I have a good experience as a teacher. ₁ ₂ ₃ ₄ ₅

23. I always follow my principles in teaching students with special needs. ₁ ₂ ₃ ₄ ₅

24. I think I have a good experience in teaching boys. ₁ ₂ ₃ ₄ ₅

25. I think I have a good experience in teaching girls. ₁ ₂ ₃ ₄ ₅

26. if I try really hard, I can make progress with even the most unmotivated students. ₁ ₂ ₃ ₄ ₅

27. I have a good experience in teaching large groups of students. ₁ ₂ ₃ ₄ ₅

28. I have a good experience in teaching small groups of students. ₁ ₂ ₃ ₄ ₅

Please write your optimum number of students in class.....

pedagogical knowledge:

29. I have the knowledge of classroom management. ₁ ₂ ₃ ₄ ₅

30. I have excellent knowledge of teaching methods. ₁ ₂ ₃ ₄ ₅

31. I have poor knowledge of teaching methods. ₁ ₂ ₃ ₄ ₅

32. I have a good knowledge of class assessment. ₁ ₂ ₃ ₄ ₅

personal beliefs about teaching and learning

33. Effective/good teachers demonstrate the correct way to solve a problem. ₁ ₂ ₃ ₄ ₅

34. When referring to a ₁ ₂ ₃ ₄ ₅

“poor performance”, I mean a performance that lies below the previous achievement level of the student.

35. It is better when the teacher – not the student – decides what activities are to be done. ₁ ₂ ₃ ₄ ₅

36. My role as a teacher is to facilitate students' own inquiry. ₁ ₂ ₃ ₄ ₅

Teacher-parent interaction

37. Teachers' relationships with parents are usually very poor. ₁ ₂ ₃ ₄ ₅

38. Parents' support to school's work is absolutely essential. ₁ ₂ ₃ ₄ ₅

39. Contacting the children's parents is very easy to me. ₁ ₂ ₃ ₄ ₅

40. I will not have any disputes with parents. ₁ ₂ ₃ ₄ ₅

41. Debating with parents is the duty of rectors. ₁ ₂ ₃ ₄ ₅

Below you can find statements about the management of your school. Please indicate your perceptions of the frequency with which these activities took place during the current school year.

Seldom	Quite often	Very often	always	Never
42. In meetings, the principal discusses educational goals with teachers.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ <input type="checkbox"/> ₅
43. The principal ensures that teachers work according to the school's educational goals.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ <input type="checkbox"/> ₅
	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ <input type="checkbox"/> ₅

44. The principal or someone else in the management team observes teaching in classes.

45. In this school, the principal and teachers work on a school development plan. ₁ ₂ ₃ ₄ ₅

46. In this school, the principal and teachers act to ensure that education quality issues are a collective responsibility. ₁ ₂ ₃ ₄ ₅

How often do you do the following in this school?

Never once per year 3-4 times per year monthly weekly

47. Attend staff meetings to discuss the vision and mission of the school. ₁ ₂ ₃ ₄ ₅

48. Exchange teaching materials with colleagues. ₁ ₂ ₃ ₄ ₅

49. Engage in discussion about the learning development of specific students. ₁ ₂ ₃ ₄ ₅

50. Discuss and coordinate homework practice across subjects. ₁ ₂ ₃ ₄ ₅

It is notable that some of the general questions has adapted from the following reference:

Teacher questionnaire :

International Association for the Evaluation of Educational Achievement (IEA), The Netherlands
IEA Data Processing and Research Center (IEA DPC), Germany
Statistics Canada, Canada

Appendix B

INTERVIEW QUESTIONS ABOUT TEACHER EXPERTISE

1. Do you feel you are confident teaching all the subject matter? Are there some areas you feel more comfortable teaching? Less comfortable? Why, can you tell what makes some areas easier and some harder for you to teach? Has an area of specialization aided you in teaching the subject matter?

2. How have you encouraged the less motivated students to participate in the lesson and do their work? Is there certain ways you have learned to apply in instruction to activate students to participate/study/ learn

3. What student-centered techniques do you utilize to enhance student understanding? (e.g. small group work, class discussions, jigsaw method of group work, student-centered discovery, etc.) Do you recommend some types of student-directed learning over others, or not at all? Can you also tell what kind of effects each one of the techniques has on students?

4. What teaching materials have you found to be educationally useful in the classroom (e.g. computer, Internet, CD-ROM, board games, flash cards, etc.) and why?

5. How have you dealt with issues of classroom management and disruptive students (e.g. set rules and consequences, notes home or conferences with parents, principal, etc.)? Can you describe an example of a typical situation?

6. What are some of your professional goals with a) students, b) yourself? Can you separate short-term and long-term goals concerning your students?

7. In your own words, what should be the main goals of any teacher?

***It is notable that the majority of questions are adapted from Woolfolk, Anita. (2001). Educational Psychology. (9th ed.). Boston: Allyn and Bacon**