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Teachers and ICT's in Secondary Education: The Turkish Case

Neziha Celebi

Abstract

Integrating ICTs and namely the internet into teaching and learning in the classroom offers potentials for the education sector through its capacity to facilitate new ways of teaching in a digital environment. As a result of this, national curriculums have changed to accommodate new demands and potentials which are provided by ICTs. This paper aims to discuss how and what factors affect internet integration Turkish secondary school Turkey's Mediterranean region. Through the use of semi-structured and focus group interviews this study aims to gain an understanding of how teacher values and motivations regarding internet integration can affect the use of internet. This study aims to determine whether teacher motivations and attitudes play an equally important role in internet integration into classroom for educational innovations as ICT investments. Integrating internet into classroom teaching is a process which requires infrastructure and a positive attitude towards its use. Previous literature suggests that there is also room to examine what teachers think about the use of internet in classrooms which could have a direct effect on its use in the classroom. Consequently, teachers of different subjects have been included in this study to develop a clearer understanding of thoughts across subjects.

Keywords: Technology, teachers, motivations, education.

Introduction

The recent developments in Information and Communication Technologies (ICTs) have a significant impact on all fields of life including the education sector (Tezci, 2009). Turkey's ICT sector made remarkable progress between 2002 and 2014 (ibid) and jumped from 71st in 2010 to 46th place in 2013. The integration of ICTs's and in particular the internet in education has been of increasing concern for Turkey (Jamieson-Proctor, Watson, Finger, Grimbeek & Burnett, 2007 cited in Oner, and Bumen, 2012) as it creates powerful learning platforms which transform teaching processes (Volman & Van Eck, 2001). As a result of this, the Turkish national curriculum has been changing to accommodate new demands and potentials which are provided by such ICT's. The Turkish Ministry of National Education (MoNE) has been working on the provision of ICT equipment and internet connections to enable innovation in education (Tezci, 2009).

Due to how it affects the learning and teaching process, it is important to identify what leads to the integration of the internet into teaching and learning in developing states, which could also be an important step in improving the quality of teaching and learning. This paper takes a qualitative approach, with the aim to understand what leads for the integration of the internet into teaching and learning in secondary schools in the Mediterranean region of Turkey. Teachers from Adana, Antalya, Mersin, Burdur, Hatay, Isparta, Osmaniye and Kahramanmaraş have been interviewed for this paper. Through the use of semi-structured and focus group interviews this study aims to gain an understanding of how teacher values and motivations regarding internet integration can affect the use of internet.

It has been revealed that while ICT investments to integrate the internet into classrooms for educational innovations have a key role, teacher motivations and attitudes is equally as important. Teachers use of the internet in the classroom is related to variables such as belief, experience, knowledge and general attitude. However, this paper has also revealed that, although teachers are fully trained and have experience using the internet, they tend to avoid integrating it into their teachings. As a result, integrating internet into classroom teaching is a process which requires infrastructure and a positive attitude towards its use.

Literature Review

Many studies have accrued on the effectiveness of using the internet in classroom teaching in Turkey and what allows for the integration of the internet into teaching and learning. There are two fundamental approaches for the integration of internet into classroom teaching and learning. The first approach assumes that government policies and projects play an influential role in internet integration. However, the second approach argues that internet usage in classrooms is based on the experiences, motivations and expectations of teachers. According to this approach, teachers can resist the use of internet in classroom teaching or integrate it into teaching regardless of its provision. What this approach is missing is that beliefs, self-confidence ability, knowledge (Galanouli and McNair 2001; Alev 2003; Jones 2002 and Markauskaite 2007 cited in Tezci, 2011), are pivotal for the integration of the internet in the teaching and learning process.

Turkey has made many efforts for increasing the use of ICTs in classroom teaching and learning (World Bank, 2013). Between 1997-1998, Turkey implemented its first integration project named “Basic Education Project” which was also supported by the World Bank aimed at improving basic education equality through providing computers and other IT materials to schools (OECD, 2005). “Within the scope of the project, computer equipment was provided to 2,802 classrooms and ICT trainers and coordinators were trained” (Curaoglu et al, 2007). The main objective of this project was to simply improve the quality and relevance of basic education. However, as noted by the World Bank, insufficient computer software was provided and no training was provided on how to integrate computers into teaching.

The ruling AK Party government introduced Turkey's first ICT in education intervention policy named “Society Strategy (2006-2010)” which was implemented in July 2006. In this policy, the importance of “information” is acknowledged by underlining it as being a crucial element of civilization (State Planning Organisation, 2006). This policy acted as a crucial driver for the integration of ICTs and namely the internet into classroom teaching which inevitably spills in to development. This policy paper was in place when Movement of Enhancing Opportunities and Improving Technology (FATİH: *Fırsatları Artırma ve Teknolojiyi İyileştirme Hareketi*) project was conceived of. This project was designed by the MoNE to provide every student with the best education, the highest quality educational content and equal opportunities (MEB, 2016 cited in Çiftçi, Taşkaya, and Alemdar, 2013). With the initiation of the FATİH project, secondary and primary schools received smart boards, and students received tablet computers and classes were enriched with the use of e-books. The aim of this project was to integrate the use of internet in classrooms by allowing teachers and students to make use of ebooks and academic websites via tablets and smart boards. Tablets pre-loaded eBooks and applications were distributed to students so make access to the internet easier (ibid). Only websites that had been selected by educators and specialists and passed through MoNE's filtering system and deemed harmless are granted access. Under this policy, ICT classes became a compulsory course where by every secondary school student must have at least two hours per week.

This set of literature suggests that the internet integration in classrooms is a result of government policies. Teacher motivations and beliefs on the use of internet in classrooms have been ignored in this set of literature. However, other scholars who have paid attention to teacher motivations argued that rather it is teacher motivations which lead to the use of internet in the classroom more than the provision of the infrastructure. This research paper will take upon Everett Rogers (1995) argument that attitudes people have towards the uses of technology and in this case the internet, is what allows for its integration and diffusion. This theory has been chosen because its primary intention is to provide an account of the manner in which any technological innovation moves from the stage of invention to widespread use (or not) (Dillon, A. and Morris, M.G., 1996). The motivation of teachers towards the use of internet in classroom teaching has arguably been more effective in its integration in comparison to school policies.

Rogers (1995) has argued that attitudes individuals hold towards certain technologies fosters their uses or not, meaning it is a behavioral matter. The acceptance of using the internet for classroom teaching reflects positive intentions meaning increased levels of (Saga and Zmud 1994) of use (Martinko et al. 1996, p.322). Never the less he does add that, the availability of technologies is also necessary. According to Rogers (1995, p.208) teachers will adopt the use of internet if they perceive it as being useful and “may yield some relative advantage to the idea it supersedes traditional methods of teaching”. ICT's such as the internet have the power to diffuse knowledge of innovations and ideas to audiences on a large scale which arguably helps development both on national and international levels (Orr, 2003). Innovation is the name given to “an idea, practice, or object that is perceived to be new by an individual or other unit of adoption” (Rogers, 1987, p.89 cited in Windahl et al 2008) and when this innovation is communicated among the members of a social system through technologies such as televisions and other interpersonal channels (Orr, 2003) it is called diffusion. This theory predicts that the

internet through the information it provides, influences opinion and judgment which can have a positive effect on development on both national and international levels. Through the internet, teachers are able to inform students about the existence of innovations which creates knowledge or new practices which further motivates both teachers and students to use the internet for teaching and learning (Melkote, 1952; Steeves, 2001). Henry Jay Becker (2000) argued that teachers who engage in professional interactions with others and participate in activities and training sessions beyond the classroom tend to be more willing on integrating the internet into classroom teaching. This adds on to the argument made by Rogers (1995).

Erdogan Tezci (2009) in his study "Teachers' effect on ICT use in education: The Turkey sample" argued that internet integration in classrooms is dependent on the level of experience teachers have with using computers. Tezci (2009) suggests that when the knowledge on computers is high, the higher the chance of it to be used for integrating the internet into teaching. This highlights that that teacher's knowledge plays an important role on the integration of the internet to education (Tezci, 2009). This argument falls in line with Rogers theory. Tezci in this paper has pointed out that teachers determine educational development and innovations as they are the ones who use ICT investments such as the internet for teaching. He points out that, "technology does not have an educational value" (Tezci, 2009). So, providing schools with all the technology, does not integrate the internet into teaching. The internet is only important when teachers use it in the learning-teaching process. Tezci pointed out that, in order for effective integration of the internet in classroom teaching and learning, decision makers of educational systems should invest directly according to teachers level of knowledge. So, as it is teachers who will be using the internet in the classroom to assist with teaching and learning, it is important to educate them through providing courses. This study revealed that the more the teachers' level of knowledge, the more their positive attitudes.

Yasemin Gulbahar and Ismail Guven (2008) in their study "A Survey on ICT Usage and the Perceptions of Social Studies Teachers in Turkey" have concluded that teachers who have a positive attitude towards using the internet and other ICT's to assist with their teaching. This suggests that, those teachers who do not have a positive attitude towards the internet do not use it for teaching in the classroom. This is similar to Tezci's (2011) argument that those who are not familiar with the technology tend to have a negative view on it. Again, similar to Tezci's argument, this study also revealed that due to the lack of in-service training, teachers are not able to use the internet and other ICT's (Gulbahar and Guven, 2008) effectively in classroom teaching.

Yong Zhao and Paul Conway (2003) have identified in their study "From luddites to designers: portraits of teachers and technology in political documents" that teachers play a significant role in the integration of the internet in classroom teaching. According to Zhao and Conway (2003), the reason why internet integration levels are low in classrooms for teaching and learning is dependent upon two reasons: a) schools don't have access to adequate hardware and software and b) teachers have not been adequately prepared. However, Zhao and Conway do also point out that with the growth in using ict's for educational purposes, it is no longer sufficient for educators to continue using traditional methods of teaching. Here, training provided by schools for development is necessary. Such training courses "skilfully and conspicuously utilize innovation-focused discourses served by compelling visual images to project a technological utopia for education". Teachers decide on how and what technology is used for teaching in classrooms, therefore deciding on whether students will profit from the potential benefits of the technology or not (Zhao & Conway, 2003). However, it has been pointed out that some teachers fear the use of technologies in classrooms and therefore actively resist its use. In conjunction with Rogers theory, teacher motivations lead to high levels of internet usage in classroom teaching. The term "motivation" concerns the process of why and how human behaviour is activated and directed (Ryan & Stiller, 1991).

So far, literature has argued that teachers who are positively motivated tend to use the internet. However, no mention has been made of teachers who are negatively motivated towards the integration of the internet. The adoption of technologies like the internet for classroom teaching can at times lead teachers to resist its use.

Kailash Joshi and Thomas Lauer (1998) in their study "Impact of information technology on users' work environment: A case of computer aided design (CAD) system implementation" argue that adopting new technologies such as the internet into work life can lead to negative consequences for employees. Technology change can lead to stress and eventually the resistance of using it. "Resistance is characterized by low levels of use, by a lack of use, or by dysfunctional, e.g., harmful use" (Martinko et al. 1996, p. 322). Liette Lapointe and Suzanne Rivard (2005) are in the opinion that teachers make projections based on the threats and potential advantages of using internet in teaching, which leads them to develop and intention to either accept it or resist its usage (Lapointe and Rivard 2005). For example, it has been pointed out that, some teachers fear that technology will replace them and so resist using them. Initial conditions such as traditional routines of teaching

such as only using power-point slides or just a simple board, may also influence how a teacher perceives the use of internet. On the other hand, teachers who have accepted the internet and other ICT's tend to reflect proactive intentions leading to increased integration of these technologies in the classroom (Saga and Zmud 1994).

A proponent of the resistance to technology theory, Wim Veen (1993) who built his work on internet usage in Dutch secondary schools argued that teacher attitudes and motivations towards internet usage in teaching outweighed government investments of providing schools with the necessary ICT equipment and internet. The Dutch government, similar to the Turkish government, to integrate computers and internet into teaching, distributed computers for free to schools and internet at low costs as a means of development. Teachers were also provided with a computer at home (Veen, 1993). "The government's aim of the programme was to stimulate the use of computers in up to 5% of all lessons in secondary education" (ibid). However, only 9% of the teachers in secondary education use computers from time to time. Despite, describing school factors and the governments incentives as playing an important role in the integration of internet into teaching, Veen (1993), argued that "teacher factors outweighed the school factors in explaining the teachers' use of computers." This was mainly due to the reason that government efforts of integration were only focused on the distribution of the necessary equipment. Veen (1993), grouped teacher motivations into using the internet or not for teaching into two subcategories: beliefs and skills. "The most important of these were teachers' beliefs regarding what should be in the curricula and the way in which their subjects should be taught" (Veen, 1993). In order to not change their own methods of teaching, a number of Dutch teachers avoided the use of the internet in classrooms. Applying Veens (1993) findings to Turkey's case, it can be argued that government incentives, arguably are not enough to integrate the use of the internet into teaching. As with the Dutch case, preparing teachers for the use of technologies into classroom teaching was not among the goals of the Turkish government despite it becoming a compulsory course for secondary school students (Yildirim, 2000b).

According to Becker and Riel (2000) teachers who are involved in training activities have the power to diffuse these to other teachers and motivate them to participate as well. This is similar to Rogers theory of innovations and diffusion. In almost all literature relating motivations and attitudes towards internet integration, professional development and computer courses was mentioned repeatedly. It highlights that those who received professional training tend to be more warm to the idea of integrating internet into their teaching. Also, despite the influx of ICT's into schools, the extent to which these technologies are really being utilised is questionable. What this literature is missing is the reasons teachers give for their views on using the internet in classrooms.

Method

The internet has become an important feature of learning and teaching at schools as teachers use it to supplement their lessons, give students extra resources to add to their learning. Therefore, this research will concentrate on how the internet is integrated into learning and teaching and the factors that allow for this integration. This research will concentrate on teacher opinions, motivations and beliefs on the use of internet in classrooms. Consequently, semi-structured interviews and focus group interviews have been chosen for this study.

A qualitative approach has been chosen as it allows for individuals to speak about their own experiences, opinions and motivations (Bryman, 2004). When the subject matter is integration, Robinson (1998) has stated that "since integration is individualised, contested and contextual it requires qualitative methodologies which allow the voices of respondents to be heard in an unadulterated form" (cited in Castles et al, 2002, p.133).

Sampling and Participants

The main respondents for this study are Turkish secondary school teachers, teaching in the Mediterranean region of Turkey. The sampling method used for this study is snowball sampling, which is a non-random method, as it allows respondents to identify other possible participants that they know and so on (Atkinson, and Flint, 2001). This method of sampling was chosen as the characteristics possessed for the teachers needed for this study become rare and difficult to find during the period the interviews were scheduled to take place. The study was carried out during the summer, meaning that the schools in Turkey were closed and a number of teachers were away on holiday which would have made it difficult to contact them. As a result, snowball sampling allowed for teachers to be contacted through teachers which had already been contacted.

A total of twenty-nine teachers were interviewed for this study. All of the teachers interviewed, talked about how they used the internet in the classroom, their reasons for why they chose to use it or not, their knowledge on school policies and issues they faced in the classroom. Thirteen one-to-one semi-structured interviews were carried out and three focus group interviews were carried out which included 5-6 participants. Focus group interviews were divided between young teachers aged between 24-35 years and older teachers aged between 36-50 years, with each interview lasting for approximately 40 minutes. This study includes teachers from both public schools and state schools to further enrich our understandings of how internet integration takes place in different schools. Nine of the teachers were from public schools whereas twenty were from state schools.

Research Purpose

Over the last 10 years Turkey's ICT sector has soared, which has brought a lot of attention to it. Turkey is a large emerging economy, which has gone through major crises: 2001 economic crisis (Macovei, M., 2009) and 2009 (Iomp, and Çolak, 2014) which were then followed by periods of fast economic growth over the past 15 years. The ICT sector has become an essential part of the economy and in particular the education system. With the growth in the ICT sector, Turkey has been in a process of transforming into an information society. ICT's and in particular the internet support new ways of teaching and learning in the classroom and can develop student's skills for cooperation, communication, problem solving and lifelong learning (Plomp et al., 1996).

Turkey, encourages the use of ICT's in schools and spends millions of Turkish liras each year on ICT infrastructure in schools (Tezci, 2011). The internet "is seen as an integral component of school curriculum (Al-Mahmood and Gruba 2007; International Technology Education Association 1996; Niederhauser and Stoddard 2001; Papanastasiou and Angeli, 2008 cited in Tezci, 2011).

The review of literature has highlighted a lack of research which examines how the internet is used in classrooms and for what purpose. According to the literature examined either teacher motivations or national policies allowed for the integration of the internet, rather than both working hand in hand. In perspective, this study aims to investigate the status of Turkey's secondary school teachers with regard to their motivations and belief on and use of internet in classrooms and their thoughts on the internet itself. Previous literature suggests that there is also room to examine what teachers think about the use of internet in classrooms. Consequently, teachers of different subjects have been included in this study to develop a clearer understanding of thoughts across subjects.

Data Analysis

Both semi-structured interviews and focus group interviews were transcribed and thematically analysed. As argued by Virginia Brown and Victoria Clarke (2006, p.79), thematic analysis allows for "identifying, analysing, and reporting patterns (themes) within the data". Using common themes allowed for the analysis to be done easier and applied across all data. Quotes have been selected to illustrate findings under each given theme heading.

Results

The findings for the following research questions are presented below:

1. What motivates or demotivates teachers to integrate the internet into teaching?
2. How do teachers use the internet in classrooms?
3. What do teachers think about the use of internet?
4. Does level of accessibility of ICT equipment's affects the use of the internet in teaching and learning?
5. Does ICT training for teachers effects the use of internet in classrooms?

Internet Usage in School and Policies

When discussing the respondents' awareness on the level of internet used at the schools they teach, each participant highlighted that they were aware of this level. All participants in both the semi-structured interviews

and focus group interviews also expressed that the internet has a crucial spot in the Turkish society permeating through all areas of life and not only education which was highlighted in previous literature.

However, most were not aware of any specific school policies on using ICT's and the internet for the teaching and learning process, but in fact they showed awareness of national policies on ICT usage. Teachers who were aware of these, however, tended to be the ones who used the internet less in classroom environments for the teaching and learning process. The main reason put forward by teachers here was that their "subjects did not require the use of the internet" as much as others. All teachers however, agreed that policies whether at school level or national level, did not really influence them integrating the internet into their teaching. This indicates that regardless of policies being put forward, it is the decision of the teacher to integrate it or not.

Although previous literature did state that teacher motivations played a larger role in the integration of the internet (Zhao & Conway, 2003), here it has become clear that other than motivations it is the subjects they teach which leads them to use the internet or not. For example, the arts and social sciences teachers who teach subjects such as history, Turkish literature, and sociology do not use the internet as often as language, biology, chemistry and physics teachers.

During Focus Group 2, a teacher made a very interesting statement regarding national policies on internet integration. This teacher teaches Turkish History and is aged 34:

"the history curriculum is shaped by the state, so we teach what the state wants us to teach. For example this may be all good things about the Ottoman Empire or all bad events that effected society during the creation of the Republic. It is actually pretty strict. Material is already provided to us, so we as teachers do not really need to look on the internet or use it for additional support" (Focus Group 2, Interviewee 4).

This is a rather interesting finding, as to an extent defeats the government's aim in trying to transform Turkey into an information society. The Society Strategy (2006-2010) policy paper which was designed by the Turkish Ministry of Education, was aimed at providing all students with the best possible education. However, by limiting the resources used, the government has portrayed an image of 'bias'. Despite the provision of the necessary equipment and broadband connection due to the fact that lessons have been shaped by what the government believes to be appropriate, teachers of certain subjects such as history are limited with integrating the internet in to their teaching.

The same teacher also added that, he preferred traditional methods of teaching:

"History is something very special. How you teach it does not change the content. I prefer to use CD's and DVD's for my teaching only to keep the students interested and interactive." (Focus Group 2, Interviewee 4)

"My colleagues do use the internet a lot to assist with their teaching. however, I try to use it only when I'm really desperate to prepare for class. For example, if I'm carrying out a research and there's lack of information on the journals and books, this will encourage me to look for other sources on the internet." (Focus Group 1: Interviewee 2).

In School ICT Training

Using the internet in classroom teaching was not an activity social sciences and arts teachers preferred, however, most of them had also taken training classes offered by their schools. As a result, this has increased their understanding and enhanced their skills on using the internet for teaching. Eight of the eleven semi-structured interview participants had received ICT training courses at their schools. The results here are also rather intriguing. In previous literature those who had received training were more likely to use the internet for teaching purposes in the classroom (Curaoglu et al, 2007; Zhao & Conway, 2003) but teachers interviewed for this current study rather said training did not motivate them to integrate the internet.

"My school does not offer training but I think it would be safe to say that in my school the use of internet in classrooms is based absolutely on subjects taught. For example, English teachers are very active in my school, including myself. For example, in most of my lessons I use the internet and there was a time I couldn't connect to the internet for about forty-five minutes which made it very hard for me to teach." (Interviewee, 5).

Despite the fact that not all schools provided teachers with ICT development courses, all teachers who participated in this study said that their schools provided them with the necessary ICT equipment and internet connection. This reflects Turkey's aim of transforming into an information society. However, as mentioned earlier the way in which some subjects such as history have been shaped, act as a barrier to achieving this. Nevertheless, it also fits in with the first integration project: Basic Education Project which aimed at providing all schools across Turkey with the necessary equipment. Additionally, it is in line with the F@TIH project which was put in place by the Turkish ministry of Education (MEB, 2016 cited in Çiftçi, Taşkaya, and Alemdar, 2013; Society Strategy 2006-2010). Similarly, all participants claimed that internet connection is available in all of the secondary schools they teach at, which again is in line with the Society Strategy policy paper (Society Strategy 2006-2010).

Personal thoughts on the Internet

As the research objectives state, an aim of this paper is to also examine what teachers generally think about the internet. Teachers were asked how often they use the internet outside of teaching, what they use it for and if they think they could do a day without using the internet. As with other questions, responses varied. But respondents mainly had positive thoughts on the internet. Teachers who were aged between 40-50 tended not to use the internet or used it less in their personal lives, whereas teachers aged between 23-39 used it more often. This was arguably expected as those who used the internet for teaching were again aged between 23-39.

It was also revealed that some of the participants aged 30 and above who had received training and were familiar with most aspects of the internet believed they were better off without the internet and avoided it as much as they could. This is interesting when compared to other young teachers' responses who believed they "could not live without the internet". This also describes how maybe internet usage actually may not be dependent on the level of experience teachers have with using computers as Erdogan Tezci (2009), had argued.

"I received training in preparing internet based activities to assist me with my teaching. However, I only "know" and "understand" how to do this. I do not feel the need to actually use internet based methods... I am a bit of a traditionalist. [...] training is provided to all teachers regardless of their subjects." (Interviewee, 3).

This is thought-provoking, as those who believe the internet to be useful in all areas of life also tend to avoid its usage in classrooms to assist with their teaching.

Experiences & Motivations

As the subject matter of this paper is how the internet is integrated into teaching and learning in the classroom, it was important to ask teachers the ways in which they use the internet. However, it is rather noticeable that despite the influx of ICT's and namely the internet into schools, the extent to which these technologies are really being utilized is questionable. Within this, the most popular answer was to use the internet to open links embedded in PowerPoints.

Almost all teachers interviewed felt that using the internet in the classroom improved the quality of teaching and students got a better experience of learning. It was clear from the accounts just how easier internet made the teaching process by allowing access to videos and images within seconds. Of course, there were exceptions. As mentioned earlier some teachers avoided the use of the internet as they believed it made them lazy due to direct access to answers. This is rather interesting as in previous literature it was stated that teachers who had a positive attitude towards the use of internet were also mainly motivated to integrate the internet into teaching (Gulbahar and Guven, 2008; Kozma, 2003; Tezci, 2009).

While this somewhat suggests that those who have positive thoughts about the internet use it more often, it does not really mean those who use it also integrate it into their teaching. This suggests that, those teachers who do not have a positive attitude towards the internet do not use it for teaching in the classroom. This is similar to Tezci's (2011) argument that those who are not familiar with the technology tend to have a negative view on it. Again, similar to Tezci's argument, this study has revealed that teachers who have a high perception of efficacy tend to use computer related tools in classroom more frequently than the others. This teachers experience with libraries is arguably what has led to wanting his students to use the internet more often.

Discussion

Research suggests that teacher motivations, beliefs and thoughts on the internet to an extent play a role in the internet's integration into classroom teaching. Training courses offered at schools have paved way for teachers to improve their skills and knowledge on the internet. However, regardless of the training received a number of teachers resisted the use of the internet for their teaching.

The vast majority of participants said that the financial stability of schools arguably to an extent play a role in the integration of the internet in classroom teaching. By providing the necessary equipment the government and schools have made the internet accessible. By having a number of sources with "diverse qualities and authenticities" (Ehman, 2002; Saye, 2002; White, 2002) teachers are able to promote critical thinking and problem solving to students, which leads to development in the long term. The provision of the internet and other ICT's for classrooms, governments also indirectly try to convince teachers about the value of the internet (Friedman & VanFossen, 2010). This was an expected finding, as having the technology acts as a motivator. On the other hand, however teacher motivations and thoughts on the internet have been revealed as to be more important.

This study revealed that teacher motivations across subjects varied. Previous studies had not concentrated on how different subject teachers feel about using the internet for classroom teaching. teachers of science subjects are more likely to use the internet, in comparison to social science teachers. Although, this was expected it was rather interesting that the younger teachers despite using the internet on a day to day basis avoided using it for their teaching. They argued that the internet made people lazy and so it demotivated them from using it. previous literature pointed out that younger teachers and those who had experience with the internet, integrated into their teaching, which has not been the case for this study. These teachers pointed out that since the introduction of the internet into education, students were less likely to go to libraries.

Participants who used the internet for their teaching pointed out that, they used the internet to assist with their teaching through videos, images and online activities. However, it has been pointed out that, government controls the use of the internet along with school network controls which limit access on the usage of the internet. For example, Wikipedia is blocked in Turkey. Although it is not a trustable site, it gives a general overview on topics/subjects. Such blockages, as mentioned earlier lead to reduced access to information and biased learning which overall have a negative effect on development. Overall, all participants, both young and older teachers believed the internet to be useful especially in their day to day lives.

Conclusion

To conclude, internet integration in secondary schools across Turkey's Mediterranean region is rather complicated. This paper argues that while ICT investments to integrate the internet into classrooms for educational innovations have a key role, teacher motivations and attitudes is equally important. Teachers use of the internet in the classroom is related to variables such as belief, experience, knowledge and general attitude. However, this paper has also revealed that, although teachers are fully trained and have experience using the internet, they tend to avoid integrating it into their teachings. Through the analysis of semi-structured interviews and focus group interviews it has been revealed that, despite a number of teachers who prefer not to use the internet for teaching, all teachers believe the internet to be useful.

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