Computer Teachers’ Attitudes Toward Ethical Use of Computers in Elementary Schools

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ABSTRACT

This descriptive study explores the elementary school computer teachers’ attitudes and awareness regarding ethical computer use in classrooms and the differences in teachers’ attitudes and awareness in terms of demographic variables including gender, teaching experiences, pre-service/in-service education about ethical computer use. In order to measure computer teachers’ attitudes, awareness, and teaching practices regarding computer ethics, an adopted version of Cyberethics Questionnaire (CEQ), originally developed by Yamano (2004), was used in this study. The CEQ was administered to 150 teachers working for elementary schools in Hatay, Turkey. After incomplete and erroneous forms were discarded, a total number of 141 questionnaires completed by 60 female and 81 male computer teachers were considered for analysis. Results show that the opinions of male and female teachers are significantly different.

Keywords: Computer Teachers, Cyber Ethics, Demographic Variables, Ethical Computer Use, Turkey

INTRODUCTION

Technology has been changing our world. It has a great impact on every component of our lives. It is conquering our future and will affect our coming generation, too. Most studies associated with the use of learning technology primarily focus on its implementation and impact on the learning environment. Yet, the increased use of computers for instructional purposes, for instance, has also caused some cyber philosophical debates about ethical and/or moral use of computers. Increased use of technology, for as for Yamano (2004), “by younger children has caused increasing societal concerns about who bears the responsibility of guiding these children in the appropriate use of technology.” Of all the institutions in a society, school is supposed to be the only one that potentially has the answer and solution to that concern. Inappropriate use of technology in education is a recent agenda among educational researchers and researchers of ethics (Adam, 2001; Akbulut, Uysal, Odabasi, & Kuzu, 2008; Baek, Jung, & Kim,

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Computer Ethics

Computer ethics is a cyber philosophical term. Moor and Bynum (2002) state that cyber philosophy is the intersection of philosophy and computing. Various authors imply that the ethical question of “what is the nature of right and wrong?” or people’s desire to do good and their wish/need to avoid doing harmful behavior is one of the field questions of that cyber philosophy (Bynum, 1997; Ess, 2007; Floridi, 2002, 2004; Hongladarom, 2008; Macer, 2007; Tavani, 2001, 2004; Van Den Hoven, 1997; Van Den Hoven & Lokhorst, 2002). In 1970s Walter Maner coined the concept of computer ethics (Beycioğlu, 2009). According to Beycioğlu (2009) computer ethics is viewed as a subfield of information ethics by some researchers. They use the term ‘information ethics’ as a name for the specific metaphysical foundation of computer ethics (Floridi, 1999, 2007, 2008; Floridi & Sanders, 2001). This information ethics, according to Floridi (2001), “must be able to address and solve the ethical challenges arising in the new environment on the basis of the fundamental principles of respect for information, its conservation and valorization” (p. 1). Briefly computer ethics is the ethical question of “what is the nature of right and wrong?” in the cyber space.

Computer Ethics As An Emerging Issue In Education

According to Ki and Ahn (2006), unethical use of ICT in education is a serious problem in all educational settings. Johnson and Simpson emphasize educators who deal with technology need to understand the legal and illegal uses of computer to provide ethical models for students (Beycioğlu, 2009). Some of the researchers have argued that whether students and teachers are ethically linked to the world through the use of technology or computers (Prosser & Ward, 2000). The advance of ICTs, for Roh (2004), “reveals negative consequences as well as positive functions and benefits such as hacking, infringements of privacy or intellectual property, uncontrolled access to obscene or pornographic material” (p. 168). Baum (2005) affirms that “the ethical issues that accompany educational technology have become more apparent as more educators have integrated technology into the classroom” (p. 54).

These issues include some concepts such as privacy, hacking, intellectual property/copyright, computer crime, software reliability and some further issues following new technological developments in educational context as well as other settings (Burnam & Kafai, 2001; Cow, 2001; Croy, 1985; Johnstone, 2007; Lin, 2007; Moor, 1985; Van Den Hoven & Lokhorst, 2002; Weckert, 2001, 2002).

Educational researchers observe that unethical use of ICT is a serious problem in educational setting (Ki and Ahn, 2006; Johnson and Simpson, 2005). Researchers have also argued that if students and teachers use computers ethically when they integrate computers into the classroom (Baum 2005; Prosser & Ward, 2000). Similarly, recent studies on ethical use of computers conducted in Turkey (Beycioğlu, 2009; Akbulut et al., 2008) revealed that unethical use of computers is an issue in Turkish educational context. If a computer (Beycioğlu 2009), is to be used effectively and continuously in educational settings, teachers are expected to teach students about the potential dangers of unethical use of technology and ethical challenges arising in the education environment. They should be aware of possible dangers of unethical use of computers.

In this context, this descriptive study aims to explore the following questions;

1. Computer teachers’ attitudes and awareness regarding computer ethics.
2. Are there any differences in teachers’ attitudes and awareness in terms of demographic variables such as gender, age, teaching experiences, etc.
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