

Professional Ethics in Performance and Educational Technology

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Abstract

The purpose of the study is to discuss approaches for developing professional ethics in educational technology (ET) based on definitions of educational technology and performances in the field of instructional design and technology (IDT). We will do in several stages, first, we will review historical definitions of educational-instructional technology and discussions for ET field. Then, we will discuss each of definition of ET as previous concepts, focusing attention for rules to primary concepts and contents presented in each definition. In the paper, we discuss the professional ethics strategies and steps from past to present that a project design teams should follow the strategies and rules for designing learning environments in education, industry, business and army based on philosophy of educational technology and professional ethics in performance with ID models by using newest technologies in society. The process compares both understanding global ethics strategies and considerations for research and product design by ID Models. The steps include understanding words in educational technology practice concept, psychological and instructional trends in instructional design (ID) as well as educational technology movement and using professional ethics rules for conducting multimedia projects in last decays. At the end of the study, conceptions of educational technology will be discussing as a last definition of educational technology. In addition to professional ethical standards in performance in the field, we will present the relationships between educational technology and application problems for creating instructional materials in society. All steps and standards in professional ethics based on AECT's code and philosophical approaches in the field will be given at the end of paper.

Keywords: Practice in educational technology (ET), Instructional design (ID) models, Instructional design and technology (IDT), Professional ethics.

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Introduction

Ethics issues in the field of Educational Technology (ET) shows several different aspects, including internet, “netiquette”, student safety and privacy, unauthorized access at school, industry, business, and objectionable materials developed in class or schools. This is important work for designers, developers and learners in the classroom that use technology in classroom or learning environments. Learners and academician are encouraged to use technology in the classroom and in society. Thus, cyber ethics and professional ethics should also be part of instructional design and materials design for educational technology. All teachers and designers need to address cyber ethics and professional ethics, but they can address them in the context of their current instructional design models and learning environments and also provide contributions with lessons into ongoing instructional design and technology (IDT) field or educational technology programs.

Association for Education Communications and Technology (AECT) defined professional’s ethical standards as AECT Code of Ethics in 1977. Later, The AECT (1977) Task force on definition and concepts welcomed the newly code (p. 116, 118-119). Seels and Richey (1994) clarify the modification of professional’s ethical standards in instructional technology as well as educational technology field. At this time, they used instructional technology interchangeable with educational technology. This work recommended that reference is very important to keep specific ways given in AECT Code. Professional ethics was addressed in several perspectives, such as sociohistorical perspective, investigating a professional mystery, archaeology that includes public awareness, traditional expectations and professional knowledge defining good practice and historical beginning as well (Yeaman, Eastmond & Napper, 2008).

Historical definitions of educational-instructional technology

AECT has kept a definitions and terminology committee through the decades that review these educational and political issues. They defined instructional or educational technology with instructional design contexts. For instance, In 1994, AECT defined Instructional Technology as "the theory and practice of design, development, utilization, management and evaluation of processes and resources for learning" (Seels & Richey, p. 1). Later, the new definition of educational technology or instructional design and technology (IDT) contained by AECT as follows: “Educational technology is the study and ethical practice of *facilitating learning* and *improving performance* by creating, using, and managing appropriate technological processes and resources”(AECT, 2007; Januszewski & Molenda, 2008). The new AECT definition becomes the latest light to present our thinking into the 21st century society.

Ethics in education and the society brings together related topics, the practice of ethics in the education as academic ethics and the teaching of practical or applied ethics in the

society (Davis, 1999). The ethics respects, philosophy and the school work has connection to consider people behaviors which is right or false. Thus, the point includes academic freedom, academic ethics and professional ethics in university and society. Looking back over the last three decades, we can see several booms in our society. The first is in medical ethics. Because medical technology was also becoming expensive for patients and physicians as well. Medical technology was also changing the practice of medicine for people. During the last century, in 1850, there was several ethics such as medical ethics, business ethics and religious ethics as philosophy. Ethics can be also defined as an alternative to law in society (Davis, 1999). Basically, research ethics and teaching ethics including ethics in curriculum, case method, a moral values in teaching of practical ethics and sex ethics will be important points in our universities.

The field of educational technology (ET) consists of both theory and ethical practice in the educational process across different sectors (Januszewski & Molenda, 2008; Reiser & Dempsey, 2007; Seels & Glasgow, 1998; Seels & Richey, 1994). These sectors deal with new learning technologies to develop learning research-proposals, instructional materials and classrooms for environments, including digital learning, learning design and digital humanism, and programming language with ID models (İpek & Güney, 2018).

In addition to definitions of AECT in 1995 and 2007, another definition as the latest definition of Instructional Technology (IT) was introduced by Reiser (2007), He defined that “the field of instructional design and technology (also known as instructional technology) contains the analysis of learning and performance problems, and design, development, implementation, evaluation, and management of instructional and non-instructional processes and resources” (p. 7). The field of ET indicates several stages. Reiser and Dempsey (2007) use both systematic instructional design procedures and media in ID practices. They also use that human performance analysis have been integrated into the training future of IDT field which professionals receive and the activities individuals undertake. For this, professional ethics in performance will be vital for students as well as scholars in society.

Philosophy of educational technology and its theory, definition and applications

Philosophical approaches and instructional fields deal with ontology (existentialism), knowledge, epistemology and ethics, which consists of ethics and aesthetics. All performances and learning strategies in educational technology movement, from ancient times to present, include well known philosophers who work effectively and efficiently in society and educational organizations, such as Socrates, Plato, Dewey, Skinner and others (Phillips, 2008).

Each philosopher or scholar in education addressed and worked on philosophical perspectives as well as today's educational technology or instructional design dimensions to develop and improve ID models strategies and instructional projects for teaching in e-learning environments for society (İpek, İzciler & Baturay, 2008a, 2008b).

Hannafin & Hill (2007) addressed learning environments, including epistemological environment, design learning strategies, and design applications in education. As discussed before, study indicates research process with all steps in education, and ethics are not only principles but are main point for making practice and other stages in definition of ET. In addition to main contexts in definition, facilitating indicates design of the learning conditions, resources and providing all new technologies and instructional materials for instruction and learning.

Professional ethics perspectives and AECT code of ethics

After 1977, AECT accepted a new definition of IT and the definition was announced by Seels and Richey (1994). There are two main points. They are study (research) and ethical practice for collecting data and analyzing beyond conventional subjects of research, and also defining the field's ethical standards, principles and samples for making practice. According to Seels and Richey (1994), educational technology also has a role for providing in cognitive and constructivist learning theories to have connection between instruction and learning to provide professional ethics for learners and graduates. There is a more facilitative rather than controlling. In practice, there were definitions of instructional design with instructional technology which combined with educational technology (ET). On the other hand, Instructional design (ID) is the process of solving problems by systematic analysis of the conditions for learning (Seels & Glasgow, 1998). The domains of IT and their relationships are given in figure 1 and 2. There is also relationship between definitions both IT domains and instructional design. Also, IT has the same understanding with the combination of instructional design and instructional development as well. Thus, both instructional technology (IT) and instructional design (ID) are used instead of field of IDT. The definition of IT has been made by the Department of Audio-visual Instruction in 1963 (now well known as AECT). The definition was a conventional approach that included designing behavioral and cognitive messages to control the learning process. According to AECT, AECT's ethics code and historical beginnings for professional ethics can be summarized as follows.

1. The sociological explorations that ask what was going on? At that time, the philosophical heritage is relevant to the approach. Walsh's (1926) book *Teaching as a profession*. The book presented ethical principles in history of ethical codes in USA educational system. The first state to use a code of ethics was Georgia in 1896, then California in 1902, Alabama in 1908 and Arkansas, in 1910. After Walsh, Landis (1927) examined that "ethics codes developed around conflicts with clients, employers,

supervisors and schools including computer businesses, material businesses, and service businesses” (cited in Yeaman, et al. 2018). In the mid- 1930s, national code of ethics for teachers was produced but it did not get the support of the American Federation of Teachers (AFT). National Education Association (NEA) in 1924 developed national code and revised the code between 1941 and 1984.

2. As a different direction, AECT began in 1923 as the department of visual instruction (DVI) of the NEA. Later there was Motion Picture Research Council supported by Motion Picture Producers and Distributors Association (MPPDA). Edgar Dale began at Ohio State University in 1929 and their team works on projects in field defined as “an industrial flacks”. After that The DVI called as the Department of Audio-Visual Instruction (DAVI). Later, Finn (1953) declared first time professional ethics in audio-visual literacy. He became also father of visual literacy as well.
3. By the mid-of 1960s, a Professional Standards Committee was founded and worked on professional ethics. The committee focused on audiovisual instruction in DAVI San Diego convention in 1966, to apply NEA code of ethics in specific problems for teachers.
4. In 1975, Jack Davis left his committee chair position and work as a member. A new code was presented based on the NEA Code and approved in 1974 by AECT and continued to acknowledge NEA’s Code of ethics of the Education Profession for another 10 years. AECT’s Code of Ethics include intellectual freedom, affirmative action, humanistic technology and opposed stereotyping but it did not deal with ethical issues and values, and professionals in the field of ET. As a result, the current version of AECT Code was accepted in 2001. The AECT Code includes preamble (principles of ethics), individual principles (commitment), principles for society, and principles for profession.
5. Here are new ethical subjects for AECT. They are:
 - a. business problems about environmental pollution.
 - b. physical and psychological aspects of learning environments related to human–computer interaction effects and ergonomics considerations.
 - c. information technology and learning.
 - d. research and development in our field and major problems in the world.

As a result, AECT's code should have attention cultural and cross-cultural aspects. Cultural diversity and cultural pluralism need to be included in instruction and education (Branch, Brigham, Chan & Stout, 1991).

Professional ethics in performance with ID models

Professional ethics should not be confused with the branch of philosophy known as ethics. This point is important for students and practitioners in university and society. Using technology in ethical development for learners include several stages as follows. (a) research base including information support in education, research task, sample case-study and demonstration reports. (b) development of ethical competencies for learners in university, including active learning methods in learning approaches that the approaches include theoretical analysis, content analysis, audio and visual methods in ethical problems in psychology practice and among students. (c) Educational technology in ethical development for learners includes several structures and educational components. They are theoretical and practice modules (figure 1). For this, ID models should be used effectively and efficiently for designing projects, materials and using ethical issues in learning environments as well (Güney, 2019a, 2019b; Ipek, 2001; Güney & İpek, 2018). There are effective performing of ethical qualifications for learners. Practice significance of the educational technology with active teaching deal with graduate students and teachers within the framework of the professional ethics for educators and psychologists as well (Song, Ustin, Popov & Mudarisov, 2017; Yeaman, et.al, 2008).

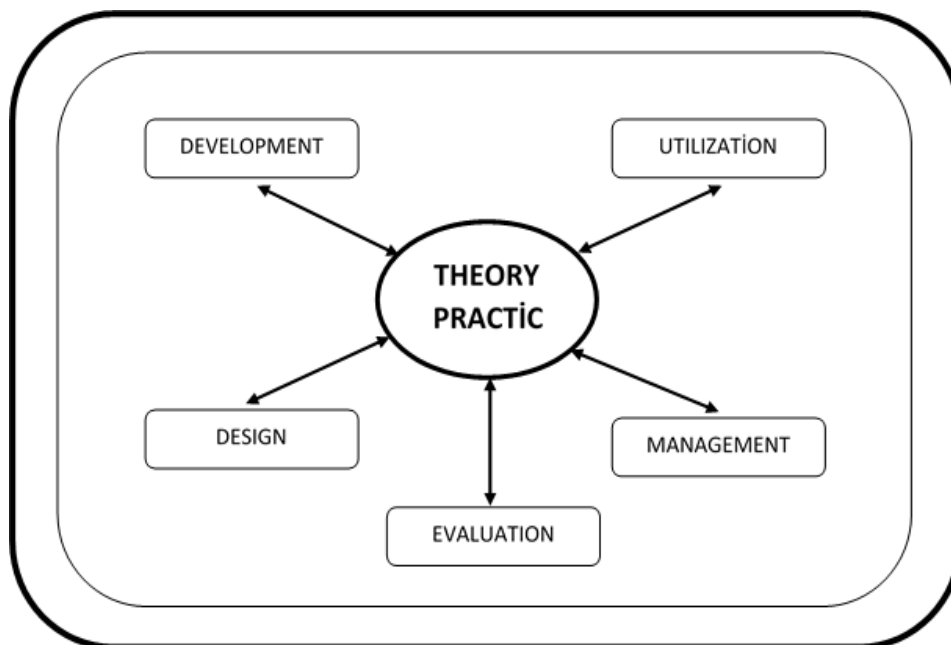


Figure 1. The domains of instructional technology (taken from Seels and Richey, 1994)

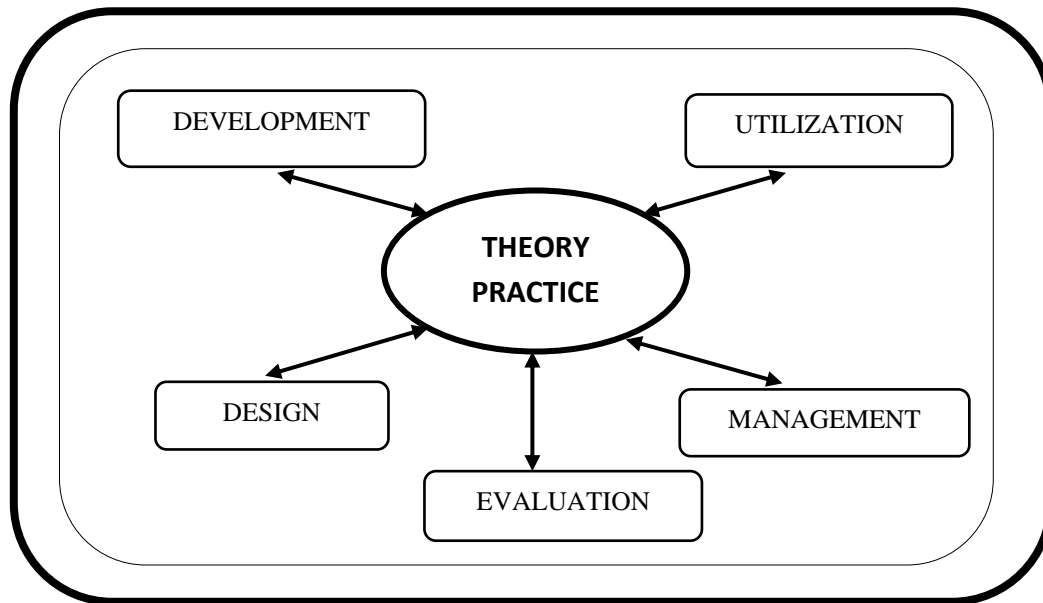


Figure 2. The relationships between the domains of IT field (taken from Seels and Richey, 1994)

Professional ethical standards in performance in the field for society and human

In the history, epistemology is defined as the branch of philosophy. For this, many educators and scientists have focused on learning and teaching procedures and develop theories in IDT field. All approaches will be used with integrated technologies to develop virtual and real time simulations and e- learning activities in education. The improvements in educational technology as follows.

- The definition of educational technology or instructional technology field has been addressed and presented as a movement with ID process during World War II (Seels, 1989).
- When we look at 1994 and newest definition of 2008, there are two main points still addressed as theory and ethics practice with their sub domains which were presented in figure 1 and figure 3.

Januszewski & Molenda (2008) made a full discussion of the components of this definition. In doing this, they explain history of field and its developments based on learning theories and instructional theory. Professional ethics should not be confused with the part of philosophy known as ethics. Nor should “professionally unethical” be accepted as a euphemism for conduct which is illegal, immoral, sinful, or violation of workplace rules (Yeaman, et.al. 2008).

The definition of ET in 2007 includes mainly theory (study) and ethics practice in the educational technology field and other sub parts of definition (Figure 3). Historically, in an age of specialization, these tasks related to three different kinds of people. Typically the three did not overlap. A professional writer, director, artist, etc. was the creator; the teacher was the

“manager” of instruction; the student or learner was the end user (Januszewski & Molenda, 2008). The visual structure of current definition and its elements is presented in figure 3.

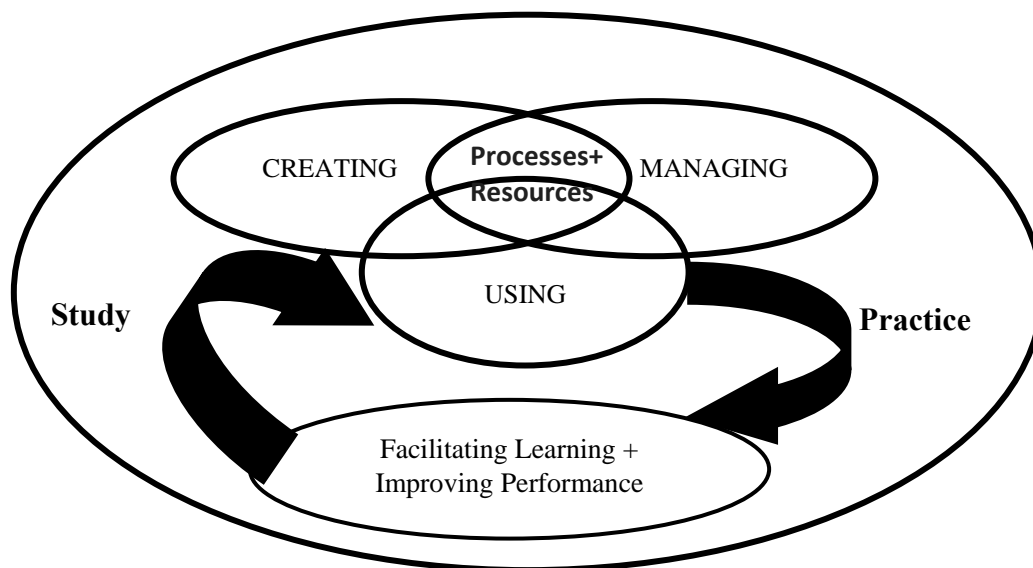


Figure 3. A visual summary of key elements of the current definition (taken from Januszewski & Molenda, 2008)

Conclusions

Educational technology allow students to communicate with each other and with instructors across time and space. For a course on ethics, students can use different learning technologies to have good practice in different ways by using ID models. The approach provides student and faculty motivation, cooperation among participants, gives feedback and active learning for students.

Professional ethics should be designed for individuals, protecting children, digital insecurity, professional ethics and research, technology and health and safety, and making professional ethics makes educational technology visible. As a result, The ethical standards of a profession do not require scientific directions as rules in the field. Educational technology do support learning techniques and cooperative learning methods, although these instructional methods do not require electronic and digital technologies. As a result, professional ethics in educational technology and using ID models should include following variables. Teachers and learners should aware of professional ethics in using materials and developing their projects. The ethical issues are given in table 1.

Table 1. Professional ethical issues using educational technology

privacy	vandalism	electronic communications
spamming/hacking	access	netiquette
property/copyright	accuracy/trust wordiness	confidentiality
academic honesty and research ethics	cyber ethics and social networks	awareness of new ethical issues in educational technology.

From the AECT standards, educational technology has several standards as content knowledge, content pedagogy, learning environments, professional knowledge and skills and, research base. The standards can be related to indicators in a matrix. The indicators are distributed in table to present relationships between the components of educational technology and its historical issues as well as ethics for standards in educational technology field. In brief, when we look at table 2, we can see indicators that used for learning and designing process in ET or IDT field.

Table 2. Matrix for indicators and AECT standards (adopted from AECT, 2012)

	Standard 1 Content Knowledge	Standard 2 Content Pedagogy	Standard 3 Learning Environments	Standard 4 Professional Knowledge &Skills	Standard 5 Research
Creating	X	X	X		
Using	X	X	X		
Assessing/Evaluating	X	X	X		X
Managing	X	X	X	X	
Ethics	X	X	X	X	X
Diversity of Learners			X		
Collaborative Practice				X	
Leadership				X	
Reflection on Practice				X	
Theoretical Foundations					X
Method					X

In addition, ethics is also important instructional variable in practice and performance for all the standards, which adopted by the AECT in 2012. These ethical issues and standards should be used in instructional design process and developing instructional system politics as well as learning ve teaching with humanistic approaches in politics and society. Educational technology and its domains should be used effectively for analyzing human performances as well as using instructional design models in theory and practice. As a result, learners, educators, managers and learning designers should be aware of this considerations for developing instructional materials, creating multimedia projects and using instructional technology tools as well.

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