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## New approaches in design and vocational education: impact of the internet design education and digitalize

Nursan Korucu Tasova<sup>a\*</sup>

*<sup>a</sup>Istanbul Aydin University, Faculty of Fine Arts, Istanbul 34295, Turkey*

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### Abstract

Research...Read...Examine...Writing...Take a photo...Blog writing...Twitter... Instagram craze...Chat...Nudge...Plant feed on Facebook...Learn... Teach... Changing concepts of today, transformation with the change occurring in the world can not be prevented, brought in the name of education and art education in the digital world, our lives are we able to use our favor?

Nowadays, communication, technology and internet have an important role in life and especially in education. Nowadays, students generally use technology for communication also education.

Given the technological development process and the implications of this process, the result of the future will be computer-aided schools. This form of education, without a doubt, the new education system, as well as a new show that will emerge educator and practitioner profile. Now educators, to learn, to invention, to think, to try a position to teach (Gökaydın, 2003).

Internet access in conjunction with the globalized era, McLuhan the "global village", referred to as undertake greater responsibilities in today's world of artists and designers. Changing and globalizing world that the Internet that brings digitalize Digitalization and the transformation progresses, in the future a nested formation will come up with the Internet Digital media is growing rapidly in Turkey as in all over the world.

Nowadays, communication is the focus of digitization. Designers can play an important role in ensuring that communities and people to adapt the process of digitalization Individuals, political, technological, cultural perspectives have effects in the direction of the correct knowledge Visual communication designers and designers with digitization through the internet masses of the provision of communication, designs to achieve a wide audience, a universal approach to review and have authority to interpret.

To ease the digital conversion brought with it also raises different issues. In this context, study, and selected as the typical example on the internet As concept visual language and design of a particular language and identity is the universe of research institutions with the digital designs. Data to be collected in accordance with the sample examined, the results obtained will be examined in accordance with the concepts of digitization conversion, and solitude

Digitization process, the positive / negative aspects will be examined. Emergence of new approaches will be studied to be determined.

This study, together with the process of digitalization of the concept of visual culture, art, design, internet publishing and digital broadcasting is to investigate the effects and rewards of ownership.

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\* Corresponding author. Tel.: +90 533 410 07 47; fax: +90 212 425 57 59.  
E-mail address: [nursankorucu@gmail.com](mailto:nursankorucu@gmail.com), [nkorucutasova@aydin.edu.tr](mailto:nkorucutasova@aydin.edu.tr)

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## **1. Introduction**

The first reason that the necessary restructuring of teacher training institutions in Turkey is changing and evolving world of new professional roles and responsibilities in the process revealed. (Council of Higher Education [YÖK], 1998).

In today's conditions in the twenty-first century, one of the most important factors that determine the levels of development is possessed international human power attributes. Skilled manpower training is especially the task of education and vocational training institutions. Vocational education and training should also benefit from innovation to carry out the task effectively.

The need is increasing day by day for qualified individuals who mainly with scientific, economic, cultural and contemporary dimensions, equipped in accordance with the requirements of the era in all area of life itself and contribute to the environment with these accessories.

In this environment, the educational institutions has a position that specially obliged to perform the essential functions such as providing social, economical and cultural continuity of nations and socialization of individuals , transfer them the culture of the society, providing harmony between raised generation and the political structure of society, generating young people with leadership abilities and training of qualified manpower. (Bursalıoğlu, 1998, p. 37).

## **2. Purpose**

In this study, the positive / negative aspects of the process of digitalization will be examined and the emergence of new approaches will be looking for. New approaches to the design and vocational training along with the digitalization process; occurred with effect of internet on digitalization , new approaches in education and benefits are aimed to be investigate.

## **3. Method**

The screening model was used in this study.

## 4. Theoretical Framework

### 4.1. History of Internet

Internet is an essential part of today's life but it has a very short history. Basis of today's virtual realm came from a project initiated by the American Ministry of Defence and some American universities.

This project, called Arpanet was launched in 1970. At the beginning, ARPANET consisted of a network of interconnected 15 computers only and closed to private users. Rapid development of the Internet was the idea of the 70s.

E-mail appeared and the Queen of England sent her first e-mail in 1976 as the idea of internet began to become popular.

The 80s was the scene of technologically important steps. In 1984, the first domain names began to be used but host number was only 1000. The time of the explosion of the Internet is undoubtedly the 1990s.

Internet world as we know with 'World Wide Web' statement was introduced in 1991. Number of hosts was exponentially increasing each year. By 1994, the number of sites on the Internet 10 thousand, the number of hosts had reached 3 million and in this new world entrepreneurs realized new earning doors.

Banks and shopping malls began to open virtual branches. The first internet radio launched. Governments and then many organizations opened website. A brand new understanding of marketing and economics was born.

In 1994, the first ad on the internet was on the screens. The first hacker arrested in Hong Kong in 1995. The domain name was paid in 1995. Software wars began between Netscape and Microsoft. ([www.ntvmsnbc.com](http://www.ntvmsnbc.com))

### 4.2. Internet and Education

According to Boldt, Gustafson and Johnson (1995), the Internet is an excellent tool to use in order to enrich students' learning habits and experiences. The first target of the use of this tool is introducing students to the Internet and helping them to create a worldwide attitude of being a part of this network. In the more advanced levels, in this network, to enable students to benefit from project-based working environments efficiently (Akbaba-Altun, 2011).

#### 4.2.1. The Importance of Lifelong Training for Vocational Education. ([www.mebnet.net](http://www.mebnet.net))

- Nowadays, companies all over the world are now able to compete with qualified employee.
- Qualified employees are more important than materials and technology.
- There is a need of qualified employees who implement all kinds of life-long training program, easily adapt to business changes and closely monitor and implement the technology. It is very important to gain these achievements in vocational education institutions. In the short term, these achievements to be gained via "CERTIFIED TRAINING"

- Training in the universities and then applying it in the workspace last two years with outcome of the training program. When asked to companies they say they don't have such time.
- Employer-oriented programs to be developed and training evaluating education programs should be established.
- In this case, a more compact education package, with short-term returns for business life can be given based on "certification system"
- Companies can hire more quickly the employees of this nature.
- While this structure is creating; because learner will be thrown into a career after graduating; employer to be in the front and create a structure based on employer's ideas. In the meantime, while creating the scope of vocational training, it should be done with consensus of ministry of employment, the ministry of health, municipalities, universities, industrial companies, public opinion and the Council of Higher Education.
- Because of their structure design education and vocational training have dynamic content. Education which is given should be keep up with the dynamic structure to satisfy employer expectations.

Qualifications need to bring somebody under MEYAP Vocational Education Restructuring Project are as follows: (These competencies are similar and the priority sequence varies in each country).

- Sense of Social Responsibility / Skill
- Communication Skill
- Technology Skill

Scope of Social Responsibility Skill: individual acquire skills to take the job, to conclude and to identify a source of the problem and solutions.

Scope of Communication Skill: The project-based training should be established. For ability to communicate, data should be determined for being transmitted and understood correctly.

Scope of Technology Skill: We should accommodate the technology. Educational institutions should be included skills training courses for businesses.

With each individual is valued move, with the principle that there must be an area to be successful in and the area should be discovered. Otherwise, it is pushed out of education life for individuals, for the sector also they remain at risk of extinction.

### 4.3. Digitalization / Digital Publishing

Following the restructuring process at the end of November 2009, Adobe has decided to expand its investments in the field of digital publishing. As a first step in the organization, books, newspaper and magazine publishers will be focused on. According to experts, another step is to move even higher positions what InDesign (popular tool for known publishers) do with VDP (Variable Data Printing) and other similar publishing technologies. Adobe has all the technologies like Adobe Reader Mobile SDK (ebook improvement tool), Adobe Content Server and Adobe Digital Editions to move digital newspapers, digital magazines and digital books to the next stage. Now it is easier to understand the size of this market when we look at reading device wars abroad, between Amazon and consumer electronics giants such as Sony.



Fig. 1. Example of “Open Screen Project”

Acceleration of OpenScreen Project led by Adobe and after flash applications in mobile phones, Adobe has found its market position. In this respect, Adobe's special organization to be worked on digital publishing is last piece of the puzzle working on since the beginning of this year. Adobe allocated an important budget on this issue since 2010. Because they knew instead of paper, newspapers, magazines and books will be read out on every screen. Whether membership / subscription or advertising, whether through direct sales new distribution methods would be less costly and faster to reach a wider audience.

Moreover, the money for this bet is not just from Adobe. New York Times use AIR-based application that delivers out of the newspaper, media's most prestigious worldwide publishers share this vision of Adobe. In Turkey, we can see the reflection of this vision with more importance from the giant publishers' to websites and the success of interactive agencies which are recently tried to keep out of the advertising market. When you think in the frame of this vision, the acquisition of Omniture which has ratings of the digital world, play an important role for the companies giving importance to the privacy ([www.adobegunlugu.com](http://www.adobegunlugu.com))

#### *4.3.1. Company Examples for Digitalization:*

##### *4.3.1.1. Use of the Internet and the increasing recognition of Brand: Rowenta Case*

Rowenta vacuum cleaner is a well known brand in Turkey, but was not satisfied with the situation. Rowenta is well known on the global markets with innovative products also in the category of personal care, but in Turkey Rowenta is known only with vacuum cleaners. It was not enough for the brand so company officials acted.

In the internet campaign Of Rowenta, selected group of consumers was between the ages of 15-24. It reached the target audience via Internet and retail outlets. Facebook, Google and Youtube are used effectively. Following these studies, the results of research carried out by survey via the Internet showed an average 16 percent increase in brand awareness., Those who want to buy a product before and after the Internet-based campaign has been increased of 41% on average compared to rate. ([www.capital.com.tr](http://www.capital.com.tr))

##### *4.3.1.2. "Pure New Media"*

Burak Gözalan founded the Agency 27 9.5 years ago. 6 years ago he saw the potential of the digital sector and has launched Pure New Media. In 2010, he merged these two companies. By doing this, a digital agency was joined with a traditional agency. ([www.capital.com.tr](http://www.capital.com.tr))

#### *4.4. Internet-Based Education: The Case of vidobu.com*

Vidobu's website is an example of the reflection of the Internet on education. In the framework of this website , as well as theoretical and practical training at universities, people watching project-based application videos and learned a lot via internet. These applications are realized by watching the recorded videos. Number of members as of May 2013 was around 23 160 +. It has a total of 2454 training videos and 91 education sets.

Category titles of education within the framework of this database are as follows;

- Digital Publications,
- Photography,
- Graphic Design,

- Interactive Design,
- Internet / Social Media,
- Operating System,
- Mobile Programming,
- Office / Information Worker,
- Video Production,
- Web Programming,
- Web Design

From here, it is possible to say that the internet has positive effect in design education.

One of the sectors affected and changes direction inevitably with the development of the internet is education sector. This sector remains face to face with both positive and negative inputs of Internet and digitalization. If you take a negative point of view there are only two negative returns. A group of students in the project / assignment preparation / lesson preparation: being addicted to the Internet, and creating (copy + paste) student profile.

However, there is quite a lot of positive gains if we look. One of them is the use of digitalisation and the Internet in education. Internet, serving as "distance education" in some education systems is also the executive in the education.

#### 4.4.1. Contribution of Internet to Education

Internet is a great tool to enrich students' learning habits and experiences. The Internet network provide project-based studying environment. Extensive use of the Internet in schools brings these achievements to the students. (yunus.hacettepe.edu.tr)

- Internet creates an environment of mutual information sharing, and offers the opportunity to discuss their ideas with other users.
- Internet provides the ability to communicate with people in different regions within the framework of common interests.
- Internet, give students skills like resarch on this network and search skills. Proper techniques for effective use of the information accessed can also be used.

Wilson and Marsh II (1995), draws attention to two important inputs of accessig to the Internet. The first of these, students' Internet communications, research, access to information, and sharing capabilities. In this case, the individuals prepare themselves for information-based technology environment after graduation. In this case, the Internet, give students a constructive role and each student as an individual learner, a researcher, communicator and as individuals who are willing to work together, to form their own sets of information (Pektaş, 2011)

Other important input, the access to the Internet removes all the boundaries also the classroom walls. Thus, they gain self-confidence for communicating. (Pektaş, 2011)

According to Parmley (1994), the Internet enables students to share their ideas with classroom projects, and reach the necessary critical thinking skills to use information as individuals

## 5. Method

In the study "screening model" is used. Model is describing an incident somebody witnessed and telling without unnecessary detail and efforts to find formulas and symbols to summarize. (Karasar, 1984.79). The method used in this study is screening model.

Screening model is a research approach which describes a condition that existed in the past or present as it is and aims to identify it. Whatever the subject of the research , there is no effort to influence and change them. Desired things are evident. The aim is to identify and observe those things correctly. The main purpose is to observe without attempting to change. (Karasar, 1984.79) In screening model, the purpose is not only to collect data, but also process and interpret them.

## 6. Result and Conclusion

Graphic design and advertising industries are one of the sectors most affected by the communication facilities provided by computers.

From previous years, the scientific advances of the 20th century has continued to increase, as a result of scientific discoveries emerging technology products has become greatly affect on people's lives. Simplifying access to information through technology, and to be the first one to use it and make it usable, has an advantageous position compared to others. In old times, most valuable people were the people who knows everything but it replaced by people who knows where the information and how to access it when we need.

Research examples of the brand / promotion / education continue its activities over the internet and the companies said there is positive contribution of the Internet.

(According to Akbaba and Altun ,2011) students in the use of the Internet in schools is thought to provide the following achievements:

- Internet creates an environment of mutual sharing the information for people, and offers the opportunity to discuss their ideas with other users.
- Internet provides the ability for a particular group of students and teachers to communicate with people in different regions within the framework of common interests.
- Internet gives students search and research skills to make their own search on the network around the world. Proper techniques for effective use of the information can also be used.

If learner participates actively in the learning process, learning takes place more easily. (Gokce, 2010).

- For learners it is easier to learn meaningful and logical issues.
- Easier learning takes place if there is a motivation created with individual's interest.
- Repetition is very important for learning of skills.
- If learner establishes connections of relationships between topics learned, learning becomes more permanent.

To give an example of the reflection of the Internet on education institutions, [egitimsiteleri.gen.tr](http://egitimsiteleri.gen.tr), [vidobu.com](http://vidobu.com), [adobegunlugu.com](http://adobegunlugu.com), [sanalkurs.net](http://sanalkurs.net) sites can be counted.

In the framework of this websites, as well as theoretical and practical training at universities, people watching project-based application videos and learned a lot via internet. For instance, as of May 2013 Vidobu has the number of users 23160 +'s around.

Technology education is important in vocational education and design.

Education model which gives individuals technological culture and values is important.(Gordon, Hacker and Vries 1995: 225). Accordingly;

- Development of culture of technology,
- Exposing individual interests and skills,

- Gaining purchasing power to select the technological products and services to buy.
- Developing the competencies for using technological products and services,
- Required by working life and professions, skills and attitudes essential to gain.

## **7. Recommendations**

- Design education should focus on a critical mindset compatible with communication tools
- Design education should support communication and collaboration strategies.
- Design education should prepare learners more in accordance with the requirements of change.
- Now the world is progressing in the process of digitalization. Electronic devices, phones, tablet PCs, internet applications are available to the individual at this point.
- Design education transferred into three dimensions from two dimensions. Digital devices, programs for internet applications, the sound, image, video, motion and typography are together. Therefore, multi-media education is to be addressed in design education.
- New concept in design promises to arrange nature, people, and technology, and provides a balanced harmony between the east and west, north and south, past, present and the future. This is the meaning of great harmony. (Karamustafa, 2003).
- Thinking power about the near and far future, will be an essential part of the design. Concept of thinking and designing skills should be given to the individual.
- Internet also provides the possibility to easily access the data. According to Clemmit (1996), internet provides access to information in a wide perspective of science, not only in teaching art education, but also in science and social science. Dyril and Kinnamen (1995), claims that there is no such an application can provide the Internet's easy and effective communication between students and teachers and models for real-life for student-teacher relationships.
- When learners share a text via the Internet, share their reading skills of analysis, give them synthesis skills as well as activities that improve reading skills on the internet For this reason, online courses / internet alternatives in educational systems are also useful.
- Internet gives students active learning skills.
- It contributes to student-centered education.
- Internet improves problem-solving skill.
- It supports the activities of having first-hand information.

### *7.1. Benefits of Internet for Education Institution*

- Communicate via e-Mail
- Families can access to information about school and student with a password.
- Global education activities
- Registering for classes and learning grades remotely
- Monitoring Developments
- Equal Opportunity
- Transparency in management.

### *7.2. Benefits of Internet for Education*

- Student-centered
- Exploring
- Resources
- Technology support for education
- Global education
- Cooperative (collaborative) learning
- Individual learnings
- Rapid spread of information
- Global libraries
- Versatile and global communication
- Equal opportunities in education
- Different opinions
- Project-based teaching
- Cultural exchanges
- Information storage and virtual library.

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