

## DIGITAL EDUCATION, DEVELOPING TECHNOLOGY, TRADITIONAL EDUCATION TOOLS, A CRITICAL AND EXPERIMENTAL LOOK TO NEW STUDENTS

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**Abstract:** Traditional education tools started to change and evolve since the invention of first personal computer in 1970's (Paul, 2003: 11). This irresistible change informed the world based on individual, it also changed education tools.

The aim of this article is to handle positive and negative effect developing new technologies on digital education; comparing with traditional methods in general if for understanding the effect of digital age on education with a student centered experimental and critical view.

**Keywords:** Digital education, developing technology, advanced technology, traditional education tools, digital education tools, new student, experimental, critical.

### Introduction

Thanks to developed technology to become widespread, it is better to say that the habitat of human / human beings was undergone metamorphosis. This unforeseen high speed change / transformation did not only started seventy years ago by the invention of first personal computer in 1970, it also gave some hint about the current foreseen use of technology not to everybody but to those who put the computer into the service of common people in 1983 ( Paul, 2003 11 ). Television that interrupted face to face communication at least was required to share the same space. Upon it found a space for itself in bedrooms, this condition changed too. Today, they are replaced by their up to dated versions: tablet computers, smart phones etc. to name a few. They started to be in the form of devices equal as well as more than the number of individuals in a family.

A research says that there is at least one computer in every home. In rich families, this percentage is 100 % where this percentage is at least one computer in every three house of poor families. Besides, in every three family out of four has internet connection at home and this ratio to be in 40 % 's in poor families, and having e – mail or Facebook account is at 80 % even at second grade students of primary school gives us adequate clue about the connection of families and their children with technology and their technology dependence. The same is valid for cell phones. Cell phone usage rate is 70 % among second grade students of primary school where it is 90 % among secondary school students. Besides, two out of every three secondary school student has internet connection in their phone ( Akyürek, 200 : 80 ).

What is meant in Digital Education is the usage of multiple communication devices. There is not yet a unified identification of digital education. As we look at its historical development, we can see the concept of Smart Classes that entered our Education – Teaching life starting from primary education. For example, starting by 1998 – 1999, we can see three computers (desk top computers) in each classroom of Mef Schools. Public schools also included such digital possibilities into their curriculum.

When we have a look at our traditional education – teaching tools, we see that we used to have black (or green) board and dusty chalks, than it is replaced by white board and marker, for presentation we had acetate papers and overhead projector.

Even though it looks inevitable to transform digital age to digital education, in developed countries, the issue received necessary attention to manipulate the system and rooted educational traditions used digital possibilities as a complementary element of education.

This article will neither talk about digital education or traditional education at length. Due to the reasons that there is not a unity in education, even this does not have a clear definition (See The Law of The Unity of Education 1924). Instead of this, questions such as; are we ready to examine the route we follow in education and teaching? How will this transition be carried out? How was the student in the past? Why? How will the new students be? Were tried to be understood, foreseen and healthy recommendations were tried to be given.

Let's have a look at the fact that how learning might be maintained under normal conditions:  
Conditions of learning:

You can not change your innate capacities. You can improve the success in learning by better environmental conditions. Current level of success in most of the people nowadays is less than the real capacity of that person. For these people do not know how to improve their current capacities, they have accepted this level as a destiny, and they used to believe that this is all they could do (Özakpınar, 2001: 9).

If a person approaches at education with desire and determination, that person will perceive the thing he / she is going to learn with a keen dedication. He / she will observe the important parts of the content without losing sight of it. Mind of the individual who starts with interest and determination will not deal with the words but the meaning they bear. The mind that is interested in the meaning of the thing to be learned is not a passive system; it is a selective, interpretative, organising and internalising system. Another point to be taken into consideration is that outsourcing the desire and determination artificially will not work. Desire and determination should derive instantaneously by the mind eager to learn based on the relationship with the content to be learned. If the mind is supplied with the content to perceive and internalise by the current capacity, the mind takes action. The secret of putting mind into action is to supply mind with content that are vague in that it can embrace the mind as well as the content that can be perceived by it with a slight effort (Özakpınar, 2001: 11).

If the level of learning material content is adjusted to the mind perceives level, desire and determination of learning reveals instantaneously. If content is already known, no problem such as learning difficulty prevails. On the other hand, if the content is in the level not to be perceived by the mind, so, there is no point in insisting on learning. Yet, a content that is not known and that might be learned by paying effort calls the attention of the mind: it triggers the wish to learn. A level of difficulty which both challenges the mind and that also gives opportunity to succeed is a required type of content. The content with the most appropriate level looks like vague at the first sight (Özakpınar, 2001: 11). But it gives the idea that it can be understood by our current knowledge. The mind that tries and recognises that it is going to succeed wishes to learn the content. There is a connection here like the one between being eager to solve crossword puzzle and its difficulty. If the crossword puzzle is very easy, solving it neither enjoys the mind nor gives an opportunity to present its skills. A very easy crossword puzzle does not bear a wish to solve. If the crossword puzzle is very difficult, it will not deliver a hope to solve it. In this case, solving crossword puzzle creates weariness; the wish fades away (Özakpınar, 2001: 12).

The level of success depends on the increase in these dynamics, they are: Studying plan, emotional effect, desire, dedication, will and mind (Özakpınar, 2001: 21).

If an appropriate studying method is not adopted based on psychological principles such as learning, memorising and thinking that form the main activities of studying lesson, the energy flows with no reason. The will debilitates. The student disappoints and dislikes studying. Thus, by the activities of desire and dedication, discipline and studying, combination of studying method composed of learning, memorising and psychology of thinking is necessary (Özakpınar, 2001: 23).

So, what is learning?

Learning and memory: Although we have a valid learning definition at hand, we can come across with incoherence's with this definition. We call them grey areas. They are; discrimination between maturation and learning together the ones between biology and environment.

Is it environment that cause behavioural change? Or is it biology? The border between learning and other changes that derive from experience are not almost always clear. For instance, we claim that we learn through experience, but we know that the brain is affected by the development of experience. When mature rat siblings are subjected to an enriched environment including other rat siblings and toys, it is found out that development is observed both in nerve cells and their connection of hippocampus responsible from learning in brain. Rats raised in enriched environmental conditions are more successful than rats raised in standard conditions concerning tasks like knowing and smelling the new items. Long term changes based on experience included in the literature are identified by learning in some certain situations; however it is almost impossible to call the product as learning in some others. Another grey area about the definition of learning is; the discrimination between learning and maturing. The main problem here is that learning and maturing are in interaction with each other. In terms of development, babies learn to sit first. Afterwards, they stand on foot and then they walk. In a classical experiment, Gesell and Thompson practices one of the twins with ladder walking up, and they did not practice

the same to the other. In the result, it is found out that the baby who lacks this practice gained the ability only one week after the other (Cangöz, 2012: 15).

Learning is rather long term changes in behaviour of behaviour literature based on experience. Temporary behavioural changes caused by ups and downs in attention, motivation and stimulation levels are excluded from this definition. Researchers studying learning commonly came across with innate behaviours or the behaviours that reveal as a result of maturation (Cangöz, 2012: 19).

On the Origin of Species published in 1859 by Darwin has effect not only on biology but also learning. In the theory of evolution that forms the basis of this study, Darwin explains how the organism changes to adopt its environment. In order to prove this, he focuses on the changes within a specific species. Said differences increase the organism's possibility of survival and multiplication. If the individual differences are transferred to next generations, the features related to adaptation will evaluate (Cangöz, 2012: 6).

### **We can consider digital education tools as instrumental conditioning tools**

Instrumental conditioning can be inserted in computer games for older children or university students where instrumental reaction task is fulfilled by pushing certain keys in keyboard. For instance students can be told that each time they press the "space" key, they will be playing a market game in which they will use some amount of their money for investing; the computer displays the profit or interest won on the screen as "reward" (Cangöz, 2012: 158).

"When university students play this market game, an instrumental condition is adjusted to space key for revealing certain numbers of reward upon certain amount of clicks on this key (Cangöz, 2012: 160). In positive reinforcement, reinforced instrument depends on carrying out the reaction (Cangöz, 2012: 159).

In the group where there is no dependence on condition, the same amount of win is obtained: but this amount is randomly distributed by the computer and it does not depend on clicking on the keys (Cangöz, 2012: 160). Rewarded group, will push the key more than the group whose reward is no depended on behaviour. If you as these students, they will explain that subjects in reward group, behaviour causes the behaviour. Subject in the control group on the other hand will not perceive a relationship between reaction and reward. Reinforcer in the form of behaviours is the systematic application of learning principle. Instrumental learning is different in human beings. Using out of conscious (Cangöz, 2012: 160 – 177 - 183).

### **So, how teaching is carried out in education – teaching in our country?**

#### **Does the method by which we learn our mother tongue affects our whole life?**

#### **First of all, how we learn our mother tongue?**

Although there is an ever changing approach in this regard; it will be important with what methods the teachers who will involve in this change learned their mother tongue since it will be important in their ability to teach. In his work called "Language and Learning", Noam Chomsky states that: in the brain, "*there is a place for language learning*". The baby learns the language in family, the social environment where he born in, or by *interaction* with "meaningful others" (person who looks at it) (Chomsky, 2001: 20). Induction is subjected to language by an umbrella view. In other words, a baby hears, sees, feels, touches and learns the equivalent of a sentence in real life. But we including the author of this article learn to read and write our mother tongue by syllabising. In other words, it is the method of induction. Thus, natural development process of language is halted when we start school. However, human mind is designed to learn the whole better than the single in such maturity of learning language. Contrary to other sciences, deduction method is important for this reason. It is again based on the same reason that we learn to read and write late and it turns out to be a painful process (rewarding by red ribbon). This is not a simple thing. There is a close connection between language and thinking and your way of learning language affects your way of thinking. A behaviour not to see the whole can be obtained just because of learning a huge society language. When language, consequently though is a matter of question, an umbrella approach will be unavoidable. When giving meaning is a matter of question among the approaches of semiology or the case included semantics, it is necessary to use a cure all or deductive method (Rifat, 2009: 13). It is the sole reason of teaching foreign language for six years in public schools. When we simplify our terms, if the student learns his / her mother tongue, reading and writing in the conditions where speaking is learned, he / she both will learn it easily and correctly. Although they start to teach mother tongue in primary schools by deduction method, it should be kept in mind that, this will be obtained by teaching students by teachers who learned how to read and write their language by deduction method.

In Vygotsky System, language has an important place in mental development (Haktanır 2010: 14). It is thought that the biggest effect of the language in general is related to the content of language. What we thought and know is affected by the symbols and concepts we have. Vygotsky states that language has a great role on knowing. Language is a real mechanism and a mental tool for thinking. It is a process where external experience transforms into internal meaning. *Language makes thinking more abstract, flexible and independent of close range environmental stimulations.* Language recalls and helps to articulate related estimations about future with a new method. The more children use symbols and concepts about thinking; they will not need the presence of the object to think about it. Language helps the child to dream, create and transform new ideas, and share them with others. This is in a sense one of the social interchange means. Thus, language has two roles; it is a means in the development of cognition and it is a part of cognitive process (Haktanır, 2010: 22). As the children conducts assimilation, the self-learning of the children is permanent (Ökpınar, 2010: 38).

In the natural course of life, the child learns the mother tongue by forming a tight relationship / bond between language and reality. Language is a symbolic means required to form communication and comprehend the world. The children speaks to state its wishes to the elders, ask them the things he / she wonders and shape his / her ideas and observations based on the answers of the adults. The child states the things that call his / her attention in a questioning tone to the adults. According to their response (Özakpınar, 2010: 44), the child questions his / her thoughts. When he / she does not consider the answer complete or correct, he / she will direct consecutive questions. If the child is content based on its point of view, he / she accepts the answer. If the child is not content but its experience is not enough to ask new questions, the child get mute, but this silence is delaying the questioning until enlightening data arrives.

The child observes and thinks. The child uses these two criterions that are obtained by all researchers who look for truth diligently at the extreme. Once discovering that speaking / sounds are symbols to represent truth in the mind, the children initiates the environment they are told with reality and tries to figure out what is tried to be explained (Özakpınar, 2010: 45).

Child is a real entity in a real world. Its connection with the world is a concrete one. It obtains its knowledge based on the requirements of this reality. There is no artificial, temporary thing. Now, the child is no more an unconscious entity depended on external effect through representing the world in mind by language symbols and designs the things to do in symbolic plan (Özakpınar, 2010: 41).

The children hadn't learned the structural features, namely rules of the language apart from how to call what; the child obtained the skill of comprehending speech patterns it came across even in the environments it is part of (Özakpınar, 2010: 41) and forming sentences based on those speech patterns. Its grammar is a skill by all means. Knowing what to do, and articulate how it is done in words is something different from being able to do this thing. A person who learns how to articulate verbally has not yet obtained that skill; it only obtained the information related to the skill (Özakpınar, 2010: 46).

All learning of child is not memorising the words hanging in the air that do not have connection with the reality; they are the experiences driven from the *interaction* between events other than itself (Özakpınar, 2010: 51). However, it is the route we follow in learning how to use our mother tongue and it also can be considered as the source of memorising education because *in interaction, the mind* is in process.

The adults have a skill to learn about their processes. They benefit from discussions and brain-storming done about their learning processes. The adults can know how to learn by themselves (Baron, Tustingi 2010: 85).  
**How about Children?**

All educators who are aware of the problem brought out by a memorising and authoritative education and teaching will new searches within the framework of their possibilities. Without any question (İpşiroğlu, 2002: 11), knowing a foreign language means knowing the said culture with this or that way. A constant reality both in foreign language and fields of literature and other fields of science, higher education does not exceed being cut away from life and abstract transmitting. Whatever you tell about rules of literature to a person who does not read a book in their life, it is baseless. For this reason, students rush from lesson to lesson, they take notes and memorise them, if they have no interest, they even choose not to enter courses. Then, they prepare for the exams from somebody else's notes but the result is the same, both interested and uninterested, the one who wants to learn and the one who doesn't, they all are stored abstract data and they stuck in the end (İpşiroğlu,

2002: 15). Unless the problem is considered as a main problem of culture and fundamental changes do not appear, it is clear that the cultural status of the student will deteriorate every passing day (İpşiroğlu, 2002: 116).

In “our Universities that have a name but no a self, it is clear that as a sign of being an extension of distorted teaching system, thinking is replaced by memorising and reading is replaced by data storing. Students whose minds are filled with data that is cut off from life since early primary school years are not approached with a different method in their University Education. Taking notes, memorising, visa exam, exam cycle at cross purposes resumes. There is a problem of youth who has no idea about what is *independent thought*. The students whose development is prevented through various pressures, will be prone to be affected by simple advertisement for they are devoid of *skill to think independently* (İpşiroğlu, 2002: 15).

“ .. I am neither a teacher, nor scientist; I am only trying to think.” Was science and being a teacher coincide with thinking? I can understand more clearly in this period where scientist have not time for science, teachers continuously bombard students with encyclopaedic information and are away from thinking, looking at the questions from a critical point. In the light of my father’s criticism harsh in one time encouraging on the other, I was trying to learn how to think about a subject with all respects and how to express the scientific language of the thoughts away from dryness. By the way, there were obstacles to be pass over; first of them is *the more abstract and meaningless you utter or write, the more you are admired and you are considered scientific*. The other is *the more you fill the mind of students with encyclopaedic data, the more you receive respect* and it is not easy to learn and teach how to think in a society that is not used to thinking. To the students who got used to data transmission (İpşiroğlu, 2002: 17) and memorising for years, when you ask for their own comments regarding a poem, short story etc. they read, they are puzzled. For they do not know thinking and comprehend its necessity, there are a handful of thinkers appearing each season and their thoughts are listened, notes are memorised and their thoughts are adopted. Although these “*thinkers*” show university teaching not as hopeless as it seems, the tradition of memorising resume its affects at a grate scale (İpşiroğlu, 2002: 18).

The habit of reading books can be obtained by improving level of education and adopting a habit of reading to children from early childhood (İpşiroğlu, 2002: 39).

### **First of all, rethinking on the things to be done in Education . . .**

#### **How the critical thinking be thought?**

#### **Towards a healthy education.**

- 1 . Suggesting love of reading to students,
- 2 . Preparing ad lesson program that is focused on thinking,
- 3 . It is difficult for a student who did not obtain habit of reading in primary school to obtain it at university. But a subject to call the attention of the student may help to correct this problem (İpşiroğlu, 2002: 47).

Our teaching system is based scholastic teaching. Karl Jaspers identifies scholastic teaching as follows; in scholastically teaching, the teacher is not a researcher but a transmitter. There are certain books used. Teacher is only the spokesman of these books. In this respect, personality of the teacher is not a matter of question; another individual can easily substitute him. The teaching material is filled with some certain structures. The aim is to internalise and teach these structures. Scholastically teaching mainly depends on teacher’s dominancy on the student without any question. The reason of our education system to be based on scholastical teaching is based on tradition of Madrassa affected by our religion according to İpşiroğlu.

**2 . The problem of university reform:** It was in the agenda when Ottoman University was closed and when İstanbul University was constituted for the first time. Before Professor Mlache prepared his report about the foundation of the University, he declares that he conversed with Turkish students and learned that the students confined themselves with repeating their professors and do not eager to discuss openly. In this respect, the reason of new university formed was getting clearer. İstanbul University was to teach Turkish youth free thought. Teaching was not confined in abstract level but make its route towards reality and not to the tradition of transmitting but research (İpşiroğlu, 2002: 101).

As we can not see a development preparing the past and present and shed light to future, we are roaming in vicious circle (İpşiroğlu, 2002: 102).



As this was the situation, the reason for equipping the education – teaching with tablet computers looks as if the EU programs where Turkey is a part of because one of the EU programs is: Life - long Learning Programme. Specific objectives of Life - long Learning Programme (LLP) are as follows:

- By improving the capacity of life – long learning programme, having high performance, innovation and Europe dimension to be developed together with entire system and applications,
- Forming European life – long learning programme area,
- Together with improving the feeling of European Citizenship based on human rights and democracy basis of life – long learning, improving social reconciliation, intercultural dialogue, gender equality and understanding,
- *Promotion of innovative IT (Information Technologies) base scientific approaches and encouraging language learning and versatility,*
- In order to reach below mentioned targets, people of all ages including the ones with special needs and disadvantaged groups are supported to participate in life – long learning irrespective of their socio – economical background (Toygür, 2012: 8).

IT approaches valid in life – long learning can be designed for the whole education – teaching life starting from primary school. However, we have the said problem in this land that start in the past and still valid. We shouldn't have started these applications before recognising and thinking over them.

**Digital communication means to be widespread in University Education caused financial powers to take action in this field as a profitable sector area.** University education became a part of financial race (Portnoi, 2010: 17).

Education unions are using the comparison in order to increase the performances by observing the results of applications since 1990. Comparison in education unions has been based commonly on *school performance* and financial planning (Ensari, 2009: 95).

E – Education is a part of it. While supplying individuals with the ability to configure, fast update, educative materials in electronic environment including different technologies into learning process, 24 / 7 availability based on suitable time; it is a formation where institutions serve and transfer their educations. In e – learning processes, e – communication technologies gain more effectiveness. Especially internet based distant education systems puts away the concept of time and place in education / teaching by in-situ connection of human resources in world of work power, education / teaching and it enables the highest amount of success (Demirci et al., 2011: ix).

Since 1999 in schools of Turkey, Total Quality Management application EFQM perfection model has been practiced. Thus, by Total Quality Management getting widespread, importance of comparing which is a management means increased (Ensari, 2009: xii).

**On the other hand, the process of operation starts with attention.** By the means of digital communication, colourful / appealing environments could be maintained. Stimulants that do not call attention vanishes away. The individual discriminates some of the stimulants from inside and outside consciously, and for some of them, the individual discriminates instantaneously. In another words, selection can be selective and instantaneous. Selective attention is under the supervision of the individual. Individuals have the capacity to divert their cognitive powers towards certain sources of data in the environment. Effective learning depends on the selectivity skill of the individual (Ulusoy, 2007: 377).

Storing the data in short time memory is approximately 20 seconds. In the end of this duration, the data vanishes away. The data taken to short time memory; is repeated in the limitation of time and its proficiency can be increased by grouping. Continuous repeating will activate the data and help the data stored in the memory to be used. The research's say that short time data is limited to 5 – 9 unit data. Transferring the data to long time memory; depends on the process used and open and covered repeating. If the data is repeated in adequate frequency, it is transferred to long time memory. Repeating is conducted in two ways; verbal and in mind. The role of the individual in repeating process is important. By the process of repeating, the individual should be active rather than passive in learning. Besides, intermittent repeating is more effective than continuous repeating. Coding: It is initiating the data present in long time memory with the one in short time memory and transferring it (Ulusoy, 2007: 377). 1 . Activity: Learning is the individual's being active; According to the theory of data processing, data is not a recessive receiver of the individual but itself an affective individual carrying its own leaning responsibility. The individual does not suck the data in itself like a sponge; instead, it prepares and structures the data in its long term memory for storing. 2 . Organisation: it is a process that conducts; preparation

or data groping, forming consistent structures and help coding ( Ulusoy, 2007: 380). 3 . Articulation: It is the process of increasing relationship and explanation between articulation and data units which is an effective strategy in placing the date in long term memory (Ulusoy, 2007: 381).

4 . Memory supporting hints: By forming hints that are not present naturally, it helps coding. In another words, in times where natural connections are no more valid, they form communication by creating associations (Ulusoy, 2007: 382).

You can not change your innate potential. You can improve your success by adjusting more feasible conditions. Success levels of most of people are under their potential capacity. For these people do not know how to increase their level of success, they adopted that level as a destiny and they came to believe that their current level of success is their capacity (Özakpınar, 2001: 9).

In the individual approaches and the act of learning with desire and dedication; it can comprehend the content to learn with a grate attention. The individual observes the important parts of the content without missing any point. The mind of individual who starts with desire and dedication focuses not on the words but their meaning. The mind that is interested in the meaning of the content it is going to learn is not a passive system; it is as selective, interpretive, organising and internalising system. Another point to be taken into consideration is that outsourcing the desire and determination artificially will not work. Desire and determination should derive instantaneously by the mind eager to learn based on the relationship with the content to be learned. If the mind is supplied with the content to perceive and internalise by the current capacity, the mind takes action. The secret of putting mind into action is to supply mind with content that are vague in that it can embrace the mind as well as the content that can be perceived by it with a slight effort ( Özakpınar, 2001 : 11 ).

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*The necessity of thinking, trying and serving all of these digital communication tools by dividing them into place, time, subject etc. that it will contribute in education – teaching comes to fore. Is the data reached for normal conditions of education and teaching are reached in digital communication tools?*

**If all these data pertaining data acquisition methods are to be uses as a dominant means in education starting by primary school onwards, the necessity of reorganising and preplanning them for digital education tools came to fore.**

***In the process of planning normal education – teaching environment:***

In the children having innate potential, the important is the possibility for them to meet environments to reveal this potential, because the potential is not revealed instantaneously in most of the cases. If the children meet wrong stimulants, they can consider themselves silly. They can interpret the failure not caused by the material

but by their own mistakes. When this idea is stable in the mind of the child, it is highly difficult to erase it (Selçuk, 2004: 108).

When teachers plans the lesson or making plans, the issue to be kept in mind at first should be what to do in the step of calling attention. The methods of calling attention are; making continuous eye scan in the classroom, using word like “ready” before start, removing attention distracting effects before starting the course, asking the questions to students from the list at random basis, knowing how to use the voice, ups and downs of teacher’s voice, writing key words related to the subject told at the white board, making eye contact etc. (Selçuk, 2004: 178 – 179).

**Project based, technology supported learning applications in primary school 5<sup>th</sup> grade classes; an example for the beginning years of project based, technology supported learning applications in primary school 5<sup>th</sup> grade classes:** It was carried out in 2005 – 2006 education year winter semester in Eskişehir Province, Lawyer Mail Büyükerman Primary School (Ersoy, 2007: vi). The students prepared their projects by using multiple media features in PowerPoint presentation and by combining their project reports, and formed a book named “Lets Learn Eskişehir”. In general, the students state that they like the project. Some of them state that they have problems because of broken down diskettes, searching in the net and presentation preparation. The teachers stated that they were worried in pre – PTO process. But upon application of PTO, they mentioned that PTO is both profitable for them and their students. Devices such as computer, internet, television, digital photograph machine are used. Student oriented problems are; noise in the classroom, forgetting the diskette studied on at home, brokered down diskettes, chatting in the net during the class, playing games and being not able to check the validity of the information present in the internet. Teacher oriented problems are; making negative criticism about some students, not giving adequate feedback to the presentation of students, not forming the cells heterogeneously and not telling the students evaluation part adequately. School oriented problems are; IT technologies, inadequacy of the number of computers in classes, improper classroom location and lack of new technologies (Ersoy, 2007: vii).

**Mind today is evaluated from a structure of new information requirement that focuses calmly but where less amount of information is served to a short overridden structure and it is evolved with the motto of “the faster is the better”. But, as it is said by Karp in 2008, we are trying to play the game based on both the old and the new rules but we are not wholly depended on these rules. We are not wholly depended on both new and old rules** (Demirci, Yamamoto: 2011: v). This case of being dependent and independent should be well calculated and adapted on the conditions of our country when the arena of education – learning is a matter of discussion.

## RESULT

Education is a force to enable constructing interdependent and participative societies and *train multidimensional and acknowledged citizens*. The investment on today’s human capital and especially education; has arrived at an important status in determining strategies for determining social unity and whole employment, economic growth, progress and welfare.

*Education and learning are multidimensional phenomenon*. Education has a great role in development of the countries. Education in essence is an economical investment. *Increasing the work force for the needs of country with education, accelerating structural development of improvement of economy can be maintained by increasing the productivity in production and producing higher employment possibilities*.

Increasing economical effectiveness *based on work force by education* can be supplied by human capital or labour force in literature.

Human capital in general is innately owned by the individual and obtained later on (Eby et. Al., 2012: 23).

Development of human source from cultural and social aspects opens the roads that lead to modern civilisation. Education factor in globalising world is a concept commonly related to many variables such as; human capital, growth, development, employment, technology, productivity, price, earning, culture etc. (Eby et. Al., 2012: 24).

*Making the best use of human capital means to construct the future of our society on behalf of our society*.



To do this, together with other features that is tried to be explained in this article, environmental preparation for traditional education tools called “educable time” should be re - organised this time for digital means of communication. First of all, these activities should be carried out, and then the students who will use these means of digital communication will be acknowledged with updated information continuously through education about in which media they start to present themselves, afterwards those devices might be given to them with an heart at peace and this will act as an assisting factor.

In the article by Ferit Edgü about Turkish politician’s “Connection with Art and Culture”, the author tries to imply that we are grown up with a higher culture than European countries, I agree with this. For the fact that we are not ahead of European countries in terms of technics, they consider us illiterate. For me in short, in terms of technics, we are more illiterate then them, and in terms culture, they are more illiterate then us (İpşiroğlu, 2001: 23).

*Starting by primary school now, does using digital means of communication makes us superior in terms of technic?*

One of my findings in this study is that, the type of learning mother tongue affects type of thinking in later ages. My desire of research derive from the supposition by Canadian and British Lecturers in Bağaziçi University YADYOK prep class to us, the graduates of public high schools, that “do not divide the language and put it into pieces continuously”. I resolved at the idea that independent thinking occurs based on the type of reading – writing learning of mother tongue from that point and I tried to shed light in this issue here in this article. My interest in this field will continue at a great scale.

In developing countries such as us, considering the developing technology as a field of income and interest and in such a fundamental and less develop and still problematic status in education, it is of utmost importance to calculate the results.

While TV is number one child dilatory factor in houses and is a device opened by many as soon as the person wakes up, and while tablet computers act as an extension of human body instead of books starting from early primary school to years of university education, it tries to give the impression that we are trying obtain knowledge by smart digital devices, we are trying to borrow “mind” and try to be “knowledgeable”.

Such digital equipment cause damages such as; obesity, circulation disorders, a un-sociability and addiction due to continuous sitting: is the radiation received by children and the youth from these equipment, damages by led screens, results of magnetic field pollution are discussed and calculated?

European countries should act in this field that; demolishes written and verbal expression, uses a distinctive type of communication, and forms a world based on clicking, dragging and monitoring and take necessary measures. Although their education – teaching system is not depending on memorising, they are discussing this field at a great scale.

“Critical, self-guided human thought” that we consider forming the basis of humanity without any question, can only developed through **reading – writing**. Human is a product of **literacy**. Collapse of written culture means increase of violence (Sanders, 1010: 10).

We should not forget that, “Eye with a sight is not only an organ; it is also a means of perception conditioned by the culture the individual grows in” (Mlodinov, 2013: 47). This field where feeling of sight is dominant constitutes its world order.

Although we have fundamental problems in education such as teaching how to think, producing generations to think independently and being formed of memorising that start from early years of primary school, using digital education tools in this scale in education – teaching will lead to problems in the future we can not foresee from now.

On the verge of a period where these devices are discussed by their being a technical means, not by the messages transmitted by type of media, by comparing the previous formations with the current ones, the features that discriminate them from others will be identified and their innovative sides will be stated. In another words, soon after the period they came to being, it is not true to make new opening to the new media without taking the

changes they caused in the society into consideration (Binark et, al., 209 – 247). **How about it in the field of education?**

On the Origin of Species published in 1859 by Darwin has effect not only on biology but also learning. In the theory of evolution that forms the basis of this study, Darwin explains how the organism changes to adopt its environment. In order to prove this, he focuses on the changes within a specific species. Said differences increase the organism's possibility of survival and multiplication. If the individual differences are transferred to next generations, the features related to adaptation will evaluate (Cangöz, 2012: 6). As a matter of fact, it is necessary to think twice before equipping the new students with digital devices.

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