

## The Challenges of the Upcoming Educational Age: Critical Thinking Versus Digital Thinking

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### Abstract

The main educational goal of the 20<sup>th</sup> century was based on critical thinking, face to face communication, research on real-life situations and pen-paper work. This approach brought to the world big political, social and economical movements. The new age comes with new outlooks, students being educated with the information from the digital sources, most of them losing their own critical thinking. If critical thinking means an original, fair, disciplined, overlooked point of view, digital thinking seems to be a copy-paste information out of the selection process, or just expressing the opinion of the majority. The slogan „thinking out of the box” becomes more popular day by day, people use to analyze the situation from the moment experience, without thinking critically about it. From digital thinking is closely related to digital communication, where the spiritual content and message disappear. This research is based on developing communicative competences using the digital communication and what are the advantages and disadvantages for a longer period of time. The article brings, also, proofs that students are being informed from others experience using forums and socializing debates. Digital thinking diminishes critical thinking, in as far as the results show that the viewpoint of the virtual makes the decision and brings the arguments.

**Keywords:** Digital, critical thinking;

Critical thinking is based on a mental process of information analysis and assessment. It develops several complex cognitive processes, starting with information collection and ending with concrete decisions. During the educational process teachers strive to make students ask questions as many as possible concerning a subject and at the end to give concrete personal responses, in this way to motivate them be original and capable in society to express their own point of view.

Our research had the purpose to determine how the students nowadays work or promote their personal point of view, the rank of their critical thinking during the lessons or out of them. Thus, we decided to identify two groups of students and give them the same tasks in two different ways. The students are in the 11<sup>th</sup> grade and are 17-18 years old. We have used the method “**We are preoccupied of to have instead of to be**” and their task was to explain the word “Value” and give concrete examples of Romanian values and European values: National, General and Personal. They had to take into consideration some questions like: *What is the cause of values difference? What is the role of culture and history in this diversity?* They were explained that the highest grades will get the students expressing their own point of view, using their own knowledge background about Moldova and Europe. Group Number A had to realize this task during 45 minutes during the English lesson, **without using any internet sources of information**. Group Number B had the same task as homework and presents it the next lesson.

As a result of the first part of the experiment from the group Number A and B we have identified the following responses regarding the values:

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| Group A                         |                      |                    |                                 |                      |                    |
|---------------------------------|----------------------|--------------------|---------------------------------|----------------------|--------------------|
|                                 |                      | Number of students |                                 |                      | Number of students |
| <b>Romanian National values</b> | Language             | 7                  | <b>European National values</b> | Democracy            | 14                 |
|                                 | History              | 6                  |                                 | Understanding        | 4                  |
|                                 | Religion             | 2                  |                                 | Holidays             | 2                  |
|                                 | Homeland             | 3                  |                                 |                      |                    |
|                                 | traditions           | 2                  |                                 |                      |                    |
| <b>Romanian General values</b>  | Kindness             | 13                 | <b>European General values</b>  | Tolerance            | 14                 |
|                                 | Tolerance            | 4                  |                                 | Mutual understanding | 6                  |
|                                 | Sincerity            | 3                  |                                 |                      |                    |
|                                 | understanding        |                    |                                 |                      |                    |
| <b>Romanian Personal values</b> | Family               | 6                  | <b>European Personal values</b> | Non-discrimination   | 10                 |
|                                 | Friendship           | 7                  |                                 | Sincerity            | 4                  |
|                                 | Love                 | 5                  |                                 | Punctuality          | 6                  |
|                                 | Mutual understanding | 2                  |                                 |                      |                    |
|                                 |                      |                    |                                 |                      |                    |

| Group B                         |                   |                    |                                 |               |                    |
|---------------------------------|-------------------|--------------------|---------------------------------|---------------|--------------------|
|                                 |                   | Number of students |                                 |               | Number of students |
| <b>Romanian National values</b> | Constitution      | 10                 | <b>European National values</b> | Human dignity | 7                  |
|                                 | Independence      | 4                  |                                 | Liberty       | 9                  |
|                                 | Democracy         | 4                  |                                 | Equality      | 4                  |
|                                 | Liberty           | 2                  |                                 |               |                    |
| <b>Romanian General values</b>  | Truth             | 8                  | <b>European General values</b>  | Human rights  | 10                 |
|                                 | Kindness          | 7                  |                                 | Democracy     | 6                  |
|                                 | Liberty           | 3                  |                                 | Rule of Law   | 4                  |
|                                 | Beauty            | 2                  |                                 |               |                    |
| <b>Romanian Personal values</b> | Opening           | 6                  | <b>European Personal values</b> | Money         | 7                  |
|                                 | Wisdom            | 5                  |                                 | Competence    | 5                  |
|                                 | A beautiful world | 4                  |                                 | Stability     | 4                  |
|                                 | A peaceful world  | 5                  |                                 | Peace         | 3                  |
|                                 |                   |                    |                                 | Assurance     | 1                  |

The survey showed some interesting information: the students from Group A mainly had the same responses among them and their comments regarding the difference between the values looked similar to each other from the same group. Group B, had additions to the values the first group had mentioned and their values explanations had been different from each other, but most of them the next lesson could not explain firmly their decisions. In group B we had done another unknown hidden test where most of them confessed that their responses, comments and explanations had been taken from the internet, but they agreed with them. Their sources were specialized web-sites and forums where people discuss around different subjects and they (students) put down their personal views in relation to the information they search in the internet.

According to Wikipedia [1] "**Critical thinking** is the objective analysis of facts to form a judgment. The subject is complex, and several different definitions exist, which generally include the rational, skeptical, unbiased analysis, or evaluation of factual evidence. Critical thinking is self-directed, self-disciplined, self-monitored, and self-corrective thinking. It presupposed assent to rigorous standards of excellence and mindful command to their use. It entails effective communication and problem solving abilities, as well as a commitment to overcome our native egocentrism and sociocentrism." If the students during their homework preparation or people while expressing their points of view search the information from the internet their diminish their critical thinking, because they do not judge according to their personal experience, but are influenced by other experiences and knowledge. *The Foundation for critical thinking* [2] explains that a good critical thinker must come to well-reasoned conclusions and solutions and test them against specific criteria and standards.



Many researchers [3] explains the role of the critical thinking as a value in the teaching-learning process, a necessary practical goal for the society development and it has to become a dimension in our school life. Thus, all the present and future educational process would become a more effective one, if we let more the students use their own knowledge and experience, without using the internet resources at the lessons preparation.

We introduced **digital thinking** [6] as a term which diminishes the role of the critical thinking. The modern society, the modern schools and the entire education is based on computer and internet. Most of students and people before making a conclusion or writing an opinion firstly search that information on the internet, search the forums and come with opinions already made by others and this contravene the statement that [2] "Critical thinking is that mode of thinking — about any subject, content, or problem — in which the thinker improves the quality of his or her thinking by skillfully analyzing, assessing, and reconstructing it. Critical thinking is self-directed, self-disciplined, self-monitored, and self-corrective thinking. It supposes assent to rigorous standards of excellence and mindful command of their use. It entails effective communication and problem-solving abilities, as well as a commitment to overcome our native egocentrism and sociocentrism." Digital thinking is a copy-paste information, without a real experience. Usually most of the students do not analyze it, they find it as something nice written, well-done, well-said and if the teachers would bring an inverted argument, easily they change their point of view. Because of *digital thinking* students are not able to defend their point of view. It's like a house already made and they are not informed about its building.

People today are the consumers of the already made information and knowledge. An orally survey made at the lesson proved that even their online communication with close friends and relatives is based on the sentences, quotes and expressions they found on the internet. The biggest disadvantage of the *digital thinking* is that people do not create new things, new expressions and opinions. It is easier to find and use something already made like [4]: "There is only one happiness in this life, to love and be loved." George Sand, or "Infuse your life with action. Don't wait for it to happen. Make it happen. Make your own future. Make your own hope. Make your own love. And whatever your beliefs, honor your creator, not by passively waiting for grace to come down from upon high, but by doing what you can to make grace happen... yourself, right now, right down here on Earth." Bradley Whitford. All socializing pages has status copied, few people write their own adventure.

Most of students write nice essays on different topics, but there is no original and critical thinking, there is no self-experienced and assessed information, it's an already made experience.

It is not a negative action if we use the internet as a source of information, it is harmful if the students do not put insert their skills and attitudes in that information. Other researchers say that a good critical thinker is the person a little bit sceptic.

In conclusion, the critical thinking represents a form of thinking composed of scepticism and arguments evaluation. A sceptic thinker [5] helps to avoid manipulation, irrationalism and propaganda. Digital thinking is a way of expressins others opinions and beliefs using virtual knowledge, information and experiences. During the teaching and learning process teachers should carefully avoid these experiences, trying to make students ask questions, find different opinions and at the end make their own experienced point of view. Digital thinking in the future education is going to destroy the information self-control, make students think gaudy and lose originality, creativity and spontaneity. Critical thinking is the clear, rational and free thinking while digital thinking is critical thinking already done by others. The beneficiaries of the critical thinking are not only the persons involved, but also the society, which is cured of passivity and prejudgement.

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