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The Adjustment of the Teaching Process to the Educational Needs of Native Digital Students

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Abstract

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The native digital student is characterized by an entire set of peculiarities that require improvement and revising the architecture of the teaching process, seen as a very complex ensemble of operations and actions performed in an organized, consciously and systematic way, by teachers concerning students, in formal and nonformal situations in order to develop.

Through this study, we intend to make the psycho-pedagogical profile of the native digital student and to identify proper ways for adapting the teaching process to this profile.

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Keywords: Native digital; teaching process; children's personality; personality development.

1. A robot portrait of the digital native

The *digital natives* phrase was first put down in the literature by the American author Marc Prensky (2001) in 2001, in two articles entitled *Digital Natives / Digital Immigrants*.

In their *Homo Zappiens. Game and Learning in the Digital Era* work (2011), Veen and Vrakking (2011) think that the generation born in the late '80s belongs to the digital natives, which is also referred to as *the Net generation, the digital kids, the instant generation and the cybernetic generation*. In 2013, in Romania Delia Dumitrescu (2013) assigns other archetypes to this generation: *the facedown generation, digital residents, the 404 generation (not found), Y generation (Peattie, 2007), digital generation (Livingstone, 2002), the ubiquitous generation or the global generation*.

A study, from 2007 shows that this generation members use multitasking and estimates that at the age of 20, one of these members will spent 10000 hours playing video games and 20000 hours watching TV, will send 200000 emails and will speak to the mobile phone 10000 hours, but in the same time they will read less, for about 20000 hours (Barnes, Marateo & Ferris, 2007).

Further to studying the literature, we will try to make a *robot portrait of this generation*, with an aim to identify pedagogical solutions and a pedagogical pattern, able to come up with means of bettering the gap between the two generations, and for each of them we will determine the behaviours wished for the didactic enterprise. Thus, digital natives:

- are fond of quick information and multitasking, seen as a way of life;
- prefer graphics to the text and use keying in more often than handwriting;
- feel comfortable in the *social media* and prefer communicating by such alternatives as Messenger, Chat, Facebook, online games, Viber, WhatsApp, Skype or Twitter;
- are productive when getting rewarded immediately;
- are tempted to read short texts, combined with message sending;
- disclose their personal life without restraints by uploads on Facebook or by videos on YouTube;
- grow up in a world full of countless, extremely intense stimuli difficult to select;
- are better informed, more faithful to their own personality and discover their self identity in the digital environment (Dumitrescu, 2013);
- have got special behaviours, peculiar needs, habits and expectations (Dumitrescu, 2013);
- prefer learning by playing, the knowledge being often gained by funny activities, by games, by sailing over the Internet /playful mentality (Tapscott, 2011);
- have got a vulnerable private space, are exposed to harassment over the Internet and to the lack of intimacy and confidentiality ;
- perceive change and innovation as elements of a normal social behaviour.

2. Didactic relation reconstruction

With regards to the digital natives' relationship with teachers, the gap of perception is obvious: the faculty sees the pupil lacking interest, the pupil perceives the teacher's speech boring, even obsolete. Consequently and also as a result of the digital differences between the generations there may come up disputes, conflicts within the family (between parents and children and/or between siblings), at one's

workplace, between teachers and pupils or even between beginner teachers -digital natives and experienced teachers - digital immigrants (Prensky, 2001).

The reconstruction of the relationship between the faculty and the instant generation pupil is thus called for and at its fundament we identify at least two main reasons:

1. the actual means of receiving and processing information: The digital native takes over and processes information very quickly, learning has got a new configuration, his/her cognitive behaviour is more productive /cognitive multitasking (Ceobanu, 2016).

2. the new combination of cognitive skills, derived from a different neuronal connection, influenced by their having been using technology since early childhood: The features of the *instant generation*'s personality enable the focus on training simultaneously with the deployment of several activities at the same time, so that they will want to get feedbacks right away, as they get them in their digital *habitat*.

3. Pedagogical architecture reconstruction

In order to provide success in the teaching-learning activity, in case of the representatives of this generation we think that faculties ought to analyse the explanatory patterns of the educational process, as in fact this is a valuable option exercise, given that this informational background already exists.

In this respect, we also assert that pedagogical attitude reshaping has to be reconsidered as an adaptation of the didactic communication style to the cognitive profile of the digital native pupil, also taking into account the objective data of the information reception and memorisation processes.

In order to reconstruct the pedagogical architecture we should also take into consideration the fact that even though the digital native grows up surrounded by the new technologies, the digital skills are not assimilated very successfully by each and every pupil.

The absence of guided learning could lead to situations where the digital natives never succeed in reaching their potential, just like in any other field.

We face a pronounced inequality of access to the resources and school is the one that may balance this gap.

Even though we have enumerated a series of characteristics assigned to the digital natives, we have to specify that these ones do not have identical manifestations, as their attitudes and capacities are different, hence the controversies linked to the conceptions and the theories assigned to this generation. From the analysis of the literature preoccupied with digital natives and from our professional experience we may say that they do not manifest themselves in the same way, they do not form a homogeneous group from the standpoint of using digital technology.

In this regard, some of them, even born in the digital era, are not particularly interested in the digital technologies, they do not have a Facebook account, like most of their colleagues, they do not send messages, they do not possess cell phones or even though they do have mobile phones, they use them for their initial destination: for communicating with the people close to them.

The reasons for which this part of the digital natives rather belong to non digitalisation can be:

- individual, accounted for by their personality traits (the temperament and the character);
- related to the impossibility of having access to the Internet, as *digital inequality* is still high in some countries;

- caused by different parental attitudes linked to spending time around digital devices (in some families, the computer is part of the learning activity and in some others it is looked upon as a source of entertainment).

4. A possible pedagogical pattern

The solutions on which the *hypermarket of education* is to be rebuilt must depart from a unique condition in the history of humanity : *it is for the first time when teachers and parents learn from their pupils and children (we may talk about a dissipation of the twofold authority : didactic and parental).*

As a consequence, we think that a reconsidered pedagogical pattern has to be rebuilt on the structure of classical pedagogy and according to the following guidelines:

- the reconsideration of the didactic process from the viewpoint of virtual reality, the current educational pattern being the Comenius-type one;
- the initiation of learning communities that exceed the formal framework, entering the non-formal and informal ones, which enable collaborative and social learning;
- waiving single school subjects and accepting the integration on various levels of the curriculum (the cross-curriculum topics);
- excessive teaching is not associated to the Net generation, as individual study, discovery by collaboration, asking questions and providing answers are a signature of the natives;
- the geographical, historical etc. data are no longer interesting, as they can be found in the virtual environment; the important thing for them is to know how to look for them and select them;
- the creation of customised study programmes, in accordance with the Net generation's own pace and culture;
- waiving the *illustrious pedagogue* phrase and accepting the *facilitator pedagogue* hypostasis by passing from single form teaching to multiform and differentiated teaching;
- the acceptance of digital inclusion (the digital natives) and digital alphabetisation (the digital immigrants), in order to eliminate digital inequalities.

5. As conclusions...

- The meeting place of the digital natives with the digital immigrants is school. Does this space sometimes become an area of fighting rather than of mediation?
- Is digital gap rather a state of mind, a linguistic delimitation in the relationship between certain generations and technology?
- Does digital alphabetisation distract the pupil from actual learning?
- Does school lay too much stress on technology itself and too little on the purpose for which it should be used?
- Can technology be a factor of social isolation and implicitly of introversion?
- Will the school of the future be a digital inclusion school or a digital segregation one?
- Must we focus the interest on the solutions for improving digital inequalities rather than on an educational pattern specially created for the digital native?

- What comes after the digital natives' generation?

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