Micro Expressions and Graphology in Education
A psycho-educational analysis model

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Abstract

During last years the communication topic between student and teacher become very important. The aim is to make the learner to become aware about him, during the educational program and to adjust teacher behavior to accomplish his mission. The self-knowledge and self-control usefulness of the actors involved in the educational process is visible within a known and controlled training process and within socio-cultural relationships. The teacher competence to attract attention regarding his profession depends on his professional experience. In case when the educational context requires, teacher guides by words the learner about his activity. Nevertheless the guidance by words is not a single tool able to strength the relation of communication and to train the learner. So teacher has to use another ways to facilitate the behavioral self-regulation of his learners. Teachers could use some tools he often ignores them because during his own training these were not presented as fundamental. We observed systematically micro expressions and handwritten texts from a relevant group of subjects having different ages and we analyzed learners and teacher's reactions, and relationships between pupils and teachers. Results of this research demonstrate that learners involved in an educational process can control an optimized communication that improve their relationships and strengths their knowledge and self-knowledge if they are involved in training process in micro-expressions and graphology fields.

Key words: relationships, communication, education, micro expressions, graphology, self-knowledge

General considerations

Our interest in writing this article is focused on the education and training field. The strength of this research consists in investigation of the handwritten works of over than 1.000 students (from high school and university level, from rural and urban area) and in observing and evaluating micro expressions of about 150 students during their classroom diverse activities.

We intend to promote graphology and micro expression as tools able to support the teacher's psycho-pedagogical professional training. The aim of this kind of training is to base the relationships between teachers and students on comfort [1]. We consider this contribution a starting point also for the wider training field in different domains, because the thoroughgoing study of the direct or indirect communication relationships is an opportunity to adjust them and to make them to develop properly.

The ministry of education as a regulatory institution has to follow values able to sustain quality of the teacher training

process in order to improve the social relationships development.

Our faculty is interested in discovering and define those factors involved in improving relationships between educational actors. Research events such workshops (*Expertize in the field of graphology – theory and practice, Emotions evaluation in different contexts* focused on micro expressions organized within The Experimental Applied Psychology National Conference – EAPSI 18-20), master dissertations or doctoral thesis were oriented on this topic during the last year. The satisfaction feedback received from the participants determined the association of the two evaluation tools in a single article – openness through knowledge and self-knowledge.

The *time* concept is the linkage between handwritten and micro expressions. This concept is conceived from the point of view of:

- Immediately expressing of thoughts, knowledge, emotions;
- Storing data that will be expressed after a long or a short term and will generate emotions.

The human writing (hand written especially) is adjusted during the writing process itself or during the reading process by:

- The reception time of the message by a subject (receiver);
- The emotions determined by the message received – inside, invisible, perceived only by the subject himself or outside, visible for the others;
- The brain activity through the iconic memory (100 milliseconds), echoic memory (200 milliseconds), and facial mimic (1/25-1/15 from a second).

The iconic memory let's to be expressed the letter shape that corresponds in echoic memory to its harmonic vibration of the sound stored in brain [2]. On the other side emotions determine the handwriting pressure, direction, size, space between letters or rows, etc.

The handwriting shape and size of the letters relive the vibrational charge of the sound corresponding to a phoneme, its translation from the abstract to the concrete state through the semantic dimension. The space between letters offers the opportunity to the graphologist to know the handwriting message author and to correlate its meanings with micro expressions generated during the writing process.

The depth study of these tools transferred in to the teaching practices could improve learning results of the students, especially during compulsory education. Also through reading human being receives information about his own emotions being affected by them [3].

The following question requires an answer: *Why the written tests (during the current learning activities in the classroom or during the national examinations) should be holograph?*

Investigation description

The target group consists in subjects from urban area (94,49%) and rural area (5,51%), age between 15-45 years old, having a distribution described in Table 1 and figures 1, 2, and 3.

Table 1. Subjects tested photographically, filmed, with polygraph, and biofeedback
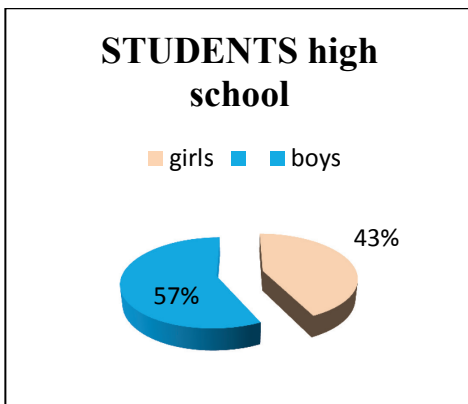
		Girls	Boys
Students from university	960	825 (85,93%)	135 (14,06%)
Students from high school	56	2 (42,86%)	32 (57,14 %)
Total by categories		849 (83,56%)	167 (16,44 %)
Total		1016	
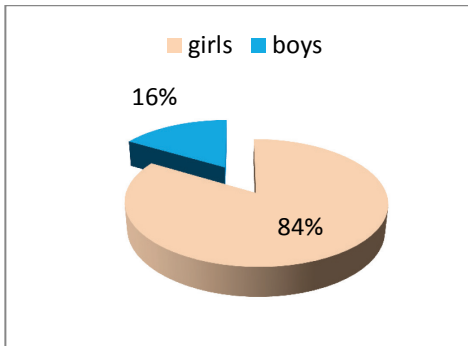
Figure 1. Total number of participants (1016) distributed by gender
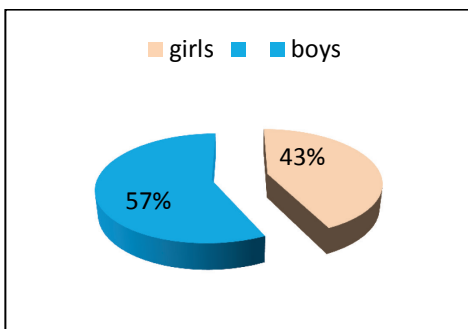
Figure 2. Total number of participants from university (960) distributed by gender

Figure 3. Total number from high school (56) distributed by gender

It is necessary to explain that all subjects participated in graphological evaluation, and for the next steps they were distributed for: polygraph – 50%, biofeedback – 30%, filmed – 10%, photography – 10%.

Initially we separated the investigation stage into: a) graphology stage, b) micro expressions stage, c) the combination of a) and b).

Regarding the graphology, we followed the next steps:

a.1. Firstly, a group of students were required to write from dictation on A4 sheets a cheerful text, with a high speed. Even if the text was known by students, they skipped some words because of the high speed. The aim was to not allow a careful writing.

a.2. Secondly, another group of students was required to write from dictation a sad text, maintaining the context.

a.3. The third group of students was required to write from dictation a neutral text, maintaining the context.

At the end the tests were collected. Immediately subjects passed to solve exercises focused on micro expressions. The aim was to make subjects familiar with each features type of emotion perceived or expressed.

A supplementary step was to require a student to read one text written from dictation reacting contrary to the text content and maintaining his face to his colleagues.

All the observers noticed such incoherence, a controlled movement determined by the effort of changing the authentic fillings. It was possible to measure the difference between the duration of the thinking process and the duration of the expression. This difference is corresponding with the distance between letters, words and rows from a handwritten text. This is the necessary period of time to pass from abstract to concrete.

Additionally, during a different moment of the investigation another student

participating in the graphology evaluation was required to write down in his own pace:
- The same text written with high speed,
- The modified version of the initial text – from the cheerful text into a sad one, from a passive text into an active one.

Another student was required to identify the initial (original) text. Even if the original text was known by all the students, our intention was to reveal the incoherencies in the modified text.

Conclusions

These measurements demonstrate that high performances in learning results are possible gradually and observable during the learning process. For teachers as practitioners the learning progress is possible using also biofeedback. If the subject writes a text generated by his prior learning during the polygraph and biofeedback evaluation this demonstrates logical coherence of the content and also of the written aspect. Using the biofeedback in testing emotional reactions added new information about the new tested subject ideas – from the depth knowledge or from improvisation.

References

1) Iucu, R., *Formarea cadrelor didactice: sisteme, politici, strategii,* edited by Humanitas Educațional, București, 2007, 10-12.

2) Neacşu, I. *Metode şi tehnici de învăţare eficientă,* edited by Polirom, Iaşi, 2015, 115-140.

3) Westbrook, D., Kenneelez, H., Kirk, J., *Introducere în terapia cognitiv-comportamentală,* edited by Polirom, Bucureşti, 2010, 90-97.

4) Tacea, F.-A., Mion Pop, M., 2014, *Innovation possibilities in the field of education and training staff competencies development micro expressions - "the voice of the truth" in the socio-educational environment*, Proceedings of ICSS – 2014, Bucharest International Conference On Social Sciences, Bucharest, September 19-20, Volume II, 2014.

5) Wezowski, P.; Wezowski, K. (New Vision – Center for Body Language). Micro Expressions Training Videos. On line training course. Accessed during -June 2015, at:
http://www.microexpressionstrainingvideos.com/members/#sthash.XUAe2aoH.dpuf