A MULTIPAGE TACTILE BOOK ABOUT EMOTIONS – UPPER-SECONDARY STUDENTS' CREATION ANALYSIS

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Abstract. The article is an attempt at presenting the visual analysis associated with the didactic experience of the author. She decided to conduct demonstration lessons related to the art of learning emotions for two groups of upper-secondary students in Poland. The students' teams were built of several people whom the task was to choose the specific emotion they were going to present in the book as well as to craft a tactile book using, for instance: coloured pieces of paper, glue sticks, stickers, textiles, felt-tip pens, magazines and so on. As a result of undertaken action, the author collected a dozen multipage tactile books about emotions created collaboratively by the lesson participants. The material was treated as cultural archetypes and then analysed with regard to sensational meanings given by their creators. **Keywords:** art, didactics, emotions, tactile books, upper-secondary students.

Introduction

This paper explores the didactic opportunities of teaching about emotions through crafting. The direct inspiration to write it were enthusiastic reactions of students for such form of classes. The research material was gathered during demonstration lessons related to the art of learning emotions for two groups of upper-secondary students in Poland (in one of the towns in Mazuria region). Demo-lessons were organized as a part of promotion strategy of the University of Warmia and Mazury in Olsztyn. The students' teams were built of several people whom the task was to choose the specific emotion they were going to present in the book as well as to craft a tactile book. Expressing emotions as the major topic was chosen because of their importance in nowadays youth's lives and at the same time, the absence of teaching about emotions in the formal school curriculums. Before the final analysis, it is worth also to write about the significance of teaching about emotions in the light of current research and knowledge.

Why are social-emotional skills so important?

As recent research indicate, early social-emotional skills are related to how socially, emotionally, academically and professionally skilled we are later in life

© *Rēzeknes Tehnoloģiju akadēmija, 2019* http://dx.doi.org/10.17770/sie2019vol4.3726 (Jones, Greenberg, & Crowley, 2015), so it becomes especially important when we think about equal opportunities. Social-emotional skills help children to persist in challenging tasks, to effectively seek help when they need it and to be thoughtful in their actions. But also the level of social-emotional skills in childhood may influence such aspects of adult life like completing a college degree, an increased likelihood of being employed, or even being less likely to have problems with the police.

Researchers argue that emotional intelligence is an important predictor of health, wellbeing, work-related outcomes and graduates employability. Admittedly, there are very few empirical studies which demonstrate that emotional functioning ability is something possible to teach and develop, but those which have been conducted so far now show that it is possible to improve levels of emotional intelligence and emotional self-efficacy through teaching interventions (Dacre Pool & Qualter, 2012). It has been proved that social-emotional skills can be taught and learning programs in schools can not only improve them but also increase positive attitudes toward school, positive social behaviour and academic performance. Such programmes can also decrease the likelihood of getting into trouble or experiencing emotional problems (Durlak et al., 2011).

We know so far now that there are individual differences in the ability to connect thoughts to emotions. People who can connect thoughts to feelings may better recognize "the emotional implications of their own thoughts, as well as understand the feelings of others from what they say" (Mayer & Geher, 1996). But specifically designed teaching interventions can enhance these abilities. It is possible to teach social-emotional skills at three levels: (1) knowledge of emotions and strategies to deal with emotional situations, (2) actual abilities in relation to emotional functioning and (3) personality traits in dealing with emotions (Dacre Pool & Qualter, 2012). The intervention described in the paper was based mainly in the first area – increasing knowledge about emotions and strategies of dealing with them.

As some researchers indicate, coping with emotions, such as anxiety and uncertainty, can be necessary for the process of career identity construction. These emotions are always related to metaphors and concepts available in the cultural community (Meijers, 2002). Even before, sociologists have located emotions in the interplay between social environment, mind and body (Hochschild, 1983; Turner, 2001). Through culture, we acquire habits of thinking and speaking leading to use of social, psychological and physical violence. But, as some authors claim, all human beings have the capacity for compassion and empathy (Rosenberg, 2003). We can learn more effective strategies to meet each other's needs than violence. One of the examples is an approach to nonviolent living developed by Marshall Rosenberg. Through workshops and books, he successfully taught lots of people how to communicate in a non-violent way, which often resulted in interpersonal harmony and learning for future cooperation (Rosenberg, 2003).

Rosenberg's model can be used successfully even with very young children (3-5 years). With adult support and the help of visual books, the children are able to develop an emotional language, which they use to negotiate conflicts in a way that meets everyone's needs. During her research, Elaine Fullerton acknowledged that children enjoyed this style of communication and Rosenberg's model is more than just a tool. It can help to model and teach values in general (Fullerton, 2009).

Nowadays many people suffer from emotional overreactions or being gripped by fear or anxiety, so managing emotions should be a compulsory lesson taught at schools.

Emotions management becomes especially important in contemporary organizations aiming at the perfect adjustment to the organizational environment. At personal or subjective level being in charge of one's emotions means the selfcontrol capacity, the emotional intelligence, the ability to administrate the positive and negative emotions, whereas an interpersonal or social level is focused on coping with the emotional changes between employees and leaders, as well as between employees and clients. Leaders become more aware of emotioncognition interactions that determine the relative significance of emotion and cognition in planning, decision making and actions. In teaching emotions management it can be significant that the language associated with a given emotion feeling in particular situations becomes a tool in emotion management, self-regulation and other executive functions (Izard, 2009).

When teaching children and youth, we should remember that artworks can be a way of better understanding the culture acquisition process. Thanks to arts we can gain insight into how youth sees this important part of a social world constituted by emotions. Being inspired by these facts, we planned demo-lesson for the upper-secondary school students in accordance with the scenario presented below.

The course of a demo-lesson about emotions

The teaching intervention was designed to engage adolescents into active forms of learning and to liberate their creativity. Crafting tactile books was one of several tasks aimed at increasing the knowledge about expressing emotions. We divided the class into five teams of six persons each. Teams got three QR codes to decode them with their smartphones and find out what are the names of emotions hidden. Those were: joy, sadness, contentment, rage, embarrassment, anger, anguish, suffering, disgust, fear, surprise, shock, apathy, dissatisfaction, disappointment. The task of the teams was to draw an emoticon depicting the "decoded" emotion. The next task was a reversal. Each team got nine emoticons and their goal was to discuss and write down on a coloured sticky notes emotions or feelings represented by each emoji. After presenting their ideas, the students had to watch acting etudes of the New York Times performed by Matt Damon, Tilda Swinton and Robert Duvall. After each etude participants created a word cloud in the Mentimeter application using their smartphones, entering three associations that occurred after watching each video. Then all the answers were discussed. The last task for the teams was to create the tactile book in reference to the World Book and Copyright Day established on 23 April by UNESCO to promote reading and protection of intellectual property rights. Each team chose a specific group of emotions from Plutchik's Wheel of Emotions and made a multipage tactile book using materials brought by the educators. Then books were presented and the ways of expressing emotions were discussed. All the projects were digitalised by Scanbot application. The results were so promising that we decided to use the books as visual research material. Obviously, soon the question of how to analyse such data aroused.

Frameworks of analysis - colours and shapes of emotions

Natural basis for the analysis should be the theory of relationships between colours and emotions. Although popular opinions link colours and emotions (Mohr et al., 2018), such studies are rare. One of quite interesting research is a series of experiments conducted by David R. Simmons (2006). He created a two-dimensional model to explain the relationship between colour and mood. Those two affective dimensions have been: pleasant-unpleasant and arousing-calming. It turned out that the most pleasant colours were found to be saturated blues and purples and the most unpleasant were greenish and yellowish browns. Saturated reds and yellows were assessed as the most arousing ("mood-lifting") and pale blues and purples were perceived as more calming. Moreover, Simmons claims that colour-emotion associations are stereotyped within a given culture, possibly due to media influences (Simmons, 2006).

The connections between colours and emotions have at least three sources: evolution, culture and personal experience. Evolutionary connections refer to colours of objects that were critical to survival (and thus evoked extreme emotions), for example, the blue of water or redness of some fruits and berries. These connections are probably universal for all humans. Cultural connections are specific associations of colours to people, places, objects or emotionally charged events, for example, the reds and greens of Christmas and the blacks and oranges of Halloween might trigger culture-specific emotions. And personal connections are created by idiosyncratic personal experiences (Cuykendall & Hoffman, 2009).

SOCIETY. INTEGRATION. EDUCATION Proceedings of the International Scientific Conference. Volume IV, May 24th -25th, 2019. 378-389

Affective connotations of colours are heterogeneous because they relate to different contexts (for example, red represents anger and love). According to an international online survey on semantic colour-emotion associations, colour choices can differ between moods on hue, lightness and chroma. Yellow hues were systematically associated with joy while yellow-green hues with relaxation. Lighter colours were matched to joy and relaxation (positive moods) than fear and sadness (negative moods). Most chromatic colours were matched to joy, then relaxation, fear and sadness (Mohr et al., 2018). Also, people tend to associate colours with their smells (Schifferstein & Tanudjaja 2004) and shapes.

Paul Ekman, one of the most famous emotions researchers, created the *Atlas* of *Emotions*, which represents what researchers have learned from the psychological study of emotion. The *Atlas* shows the range of states of each of the five main emotions (anger, fear, disgust, sadness and enjoyment). For each emotion, there is a shape, colour and animation that is specific for that emotion's states. Designed shapes for each set of emotional states can be seen in the figure below.



Figure 1 Shapes and colours of emotions (Ekman's Atlas of Emotions)

Anger is symbolized by redness and sharp triangle-like shapes. Fear is connected to purple and also sharp but more vibrating figures. Disgust is green and jittery. Sadness is represented by bluish colours and round shapes. Enjoyment is in all shades of orange and even more round and extensive forms. These charts were used to compare youth's representations and interpretations of emotions to what researchers have discovered in recent years.

Methods

The analysis method used in the presented study is a content analysis which usually studies human communication including websites, newspapers, paintings, or books (Engward, 2013; Erlingsson & Brysiewicz, 2013). In this particular case, upper-secondary students' artworks were treated as a possible way of expressing emotions. Generally, analysis of human creation is one of the qualitative research methods which can be successfully used in educational studies. It aims to cognition, description and interpretation of the outcomes of students' or teachers' creative activity (Kubinowski, 2010). Such research is usually conducted in two phases (Kwiatkowska, 1996):

- 1) gathering the material (a series of created artifacts) and contextual data information about the creator/artist (in this case the group of students)
- 2) interpretation of the empirical material:
 - the formal description of the artifact,
 - discovering contents of the artifact within the interaction between a creator and an interpreter,
 - specification of symbolism occurring in the artifact,
 - conclusions of the analysis in the context of students' present and future functioning.

Doing visual analysis (Ledin & Machin, 2018) we should also pay attention

- typography (weight, height and width, expansion, curvature, proximity, regularity, slope and flourishes of fonts),
- line spacing and alignment,

to:

- colour (dimensions and composition),
- borders (segregation, separation, integration, overlap, rhyme and contrast of objects).

In this particular study analysed students' creations are tactile books about emotions made during optional classes conducted by me and my colleague – Lidia Bielinis in April 2018 at upper-secondary school in Kętrzyn (classes were described in details previously). The books were made with the use of coloured pieces of paper, glue sticks, stickers, textiles, felt-tip pens, old magazines and so on. Due to this fact, the additional dimension of analysis are tactile impressions. The main research questions organising the analysis are:

- 1) Which emotions are being chosen by upper-secondary school students to represent them in artworks?
- 2) How upper-secondary school students, being asked about making tactile books, represent visually the emotions in their artworks?

Observations of students' discussions and reactions can also increase our understanding of how visual representations of emotions can improve teaching about them.

The formal description of the tactile books

Emotions that have been chosen by upper-secondary school students were love, anger and suffering. We gathered eight books. Five of them were about love, two were about aggression and one about suffering. The formal description of the artifacts was concluded as in the table 1.

SOCIETY. INTEGRATION. EDUCATION

Proceedings of the International Scientific Conference. Volume IV, May 24th - 25th, 2019. 378-389

Features of the artwork	Artworks connected to love	Artworks connected to aggression	Artwork connected to suffering
typography (weight, height and width, expansion, curvature, proximity, regularity, slope and flourishes of fonts)	small, round letters, with numerous flourishes; in most cases – red font; letter M (the first letter of Polish word "miłość"="love") is bold	sharp, big letters, usually black font	sharp, big letters, usually black font; exclamation marks added
line spacing and alignment	narrow spacing, text centred	just single words	just single words
colour (dimensions and composition)	background: red or light yellow/orange or intensive green other colours used: blue, red, green, pink, yellow, purple, white, orange, silver, gold	background: light blue or red other colours used: red, dark blue, black, grey	background: red and light blue other colours used: black, navy blue, silver, brown, dark green, dark violet, yellow
borders (segregation, separation, integration, overlap, rhyme and contrast of objects)	contrasting colours next to each other, many different shapes of regular boarders (mainly hearts, flowers and rabbits), thought-out composition	irregular, sharp shapes, chaotically spread around the pages; motives of angry, distorted or sad faces with empty eyes	irregular, sharp shapes, chaotically spread around the pages
tactile impressions	glued: foam soft elements, twisted ribbon, rough grid, soft pompoms, tiny crystals tape (cut into a heart shape or just small decorative pieces), carelessly crumpled tissue-paper	none	glued: thorn balloons, tiny crystals tape (cut into rectangle shape), thorn sharp plastic cups and plates, carefully formed tissue-paper

Table 1 The formal description of the artifacts (own analysis)

Artworks connected to love are more eye-friendly, colours are bright and optimistic, shapes are gentle and touching elements are soft. Students use rabbit figures to tell stories about love. Rabbits in their books meet with each other, think about love and look at each other with love (symbolized by the heart). One rabbit is crying because of losing its love.

Grochalska, 2019. A Multipage Tactile Book about Emotions – Upper-Secondary Students' Creation Analysis



Figure 2 Rabbits in love (students' work)

Beside heart symbols also the rainbow, the sun and clouds and lots of flowers are used. Love seems to be very pleasant.



Figure 3 and 4 Hearts as a symbol of love (students' works)

Artworks connected to aggression are the opposite. They seem to be unpleasant and even frightful. They present angry faces with distorted lips, furrowed eyebrows, empty eyes and even devil horns.

SOCIETY. INTEGRATION. EDUCATION

Proceedings of the International Scientific Conference. Volume IV, May 24th -25th, 2019. 378-389



Figure 5 and 6 (Un)touchable suffering and aggression (students' works)

There are also drawings of abused people. These works do not contain touch elements, unlike the one artwork connected to suffering. It is full of touching-able items, but they are sharp, spiky and repulsive.

The symbolism of youth's tactile books

The heart-shaped ideograph used by the youth is the best known, universal symbol of love. It represents the romantic love, affectionate emotion and caring. Since the 19th century, the symbol has become popular worldwide and has been used on Valentine's Day cards, candy boxes and other popular culture artifacts as a symbol of romantic love. Not surprisingly, the heart was used in many ways in students' tactile books.

In turn, the rabbit is a symbol of fertility, because it has a lot of offspring during the adult years. The rabbit totem can also represent more symbolic fertility of ideas. Moreover, a rabbit (or bunny) has fluffy and soft fur, so it is associated with pleasant feelings. It becomes often the character of children's books and cartoons. Generally, people find it cute. It is perfect to represent sweet and pure love.

The symbols of aggression and suffering are not so universal. That is why these emotions were represented in students' works rather by human reactions and facial expressions.

All symbols used by the students are a reflection of a culture in which young people live. Love emotions are experienced by many people, in most cultures of the world. The feeling itself is universal, but cultures influence how people feel,

think, and behave being in romantic love (Karandashev, 2015). In western culture, the concept of romantic love became very popular. Our mainstream media is filled with love symbols. Pop songs, music clips, movies are often about falling in and out of love as well as romantic relationships dilemmas. On the other hand, our media system promotes violent or aggressive behaviours. Such content is common on television, in movies, on the internet and in some of the most popular video games. No wonder that these emotions were chosen by the youth.

Conclusions and discussion

The emotions chosen by students were extreme. The most popular was love, which seems quite natural and connected to the youth's developmental phase. In adolescence, love becomes a very important part of young people's lives. This is the time of first romantic relationships and also first painful experiences connected to rejection. At the contrary end of the scale are located tough emotions associated with aggression and suffering which are also youth's everyday experience. Symbolism in students' artworks is universal and taken mainly from the popular culture. Where symbols are well-known (like in the case of love), the artworks are less creative. In works where symbols of emotions were not so obvious, students generated more complex and innovative solutions. Visual representations of emotions developed in groups help young people to better understand them. It was revealed in summarizing discussions after completing the task. Such insight is necessary to effectively manage our own and others feelings. Projects of this type might potentially enhance the ability of critical reflection on people's behaviours.

The range of colours used in artworks seems quite interesting. According to David R. Simmons (2006), saturated reds and yellows assessed as the most arousing ("mood-lifting") colours were chosen and combined together by the students as love symbols. Red was also the colour of suffering and aggression, but it is worth noticing that in this case it was combined with pale blues perceived as calming. It is fully compatible with studies indicating that affective connotations of colours are heterogeneous because they relate to different contexts. That is why red may represent anger as well as love (see: Mohr et al., 2018). Selection of tactile books colours and shapes is also consistent with Ekman's (2016) *Atlas of Emotions*. Tough emotions, like anger, are often perceived by students as red and sharp. The hopelessness of violent relationships is seen as bluish, so it seems very sad. On the other hand, positive moods triggered by love can be located everywhere on a scale between yellow and red, which is close to Ekman's vision of enjoyment.

Using crafting techniques in teaching can actively engage students in the learning process. This kind of teaching can not only develop significant skills such

SOCIETY. INTEGRATION. EDUCATION Proceedings of the International Scientific Conference. Volume IV, May 24th -25th, 2019. 378-389

as reflection and critical thinking, as Lake et al. (2015) claim but also increase understanding of emotions crucial for successful professional and personal functioning in adult life. Working in groups is equally important because it teaches how to communicate and collaborate in order to develop the best possible collective visual representation. The most significant moment in one of the team's work was involvement their colleague from Korea who spoke neither Polish nor English. At first, his team invented the way of communication that allowed them to incorporate Korean colleague's view into their artwork. The phonetic record of the word "aggression" in Korean was included as the part of the tactile book. They were very sensitive about involving everybody in their work.

Creating the artwork provides an opportunity to spot the things that might not have been noticed before. Visual thinking about abstract concepts (like emotions) releases the unconscious knowledge resources. Reflecting on the process and experience can also help the student to apply the learning experience to the practice settings.

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Grochalska, 2019. A Multipage Tactile Book about Emotions – Upper-Secondary Students' Creation Analysis

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