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# Teaching language through "aesthetic flow activities". Levels of satisfaction in learning

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### ABSTRACT

Taking into consideration the need to optimize the learning environment and to increase students' positivity towards the teaching process, we designed activities, which arose from two theoretical underpinnings, 'flow theory' (Csikszentmihalyi, 1991) and the field of 'arts integration' (Deasy, 2003). We named these "aesthetic flow activities" (Sotiropoulou – Zormpala & Argyriadi, 2015). Afterwards, we integrated them into the Modern Greek course for the first grade, in order to examine how those activities influence the engagement of children in the learning process. In this study, we present the results relating to one indicator of children's engagement in the learning process, namely children's satisfaction during each activity. The sample comprised of 220 children in the first grade of primary school, divided into control and experimental groups. The curriculum and the experimental activities were matched one-to-one in terms of both academic goals and duration. We used a five-scale smileyometer (Read, MacFarlane & Casey, 2002) for the collection of data. The children filled in the five-scale smileyometer so that they could register their level of satisfaction in participating in each activity. Based on the findings, there is evidence that the learning environment improved and the children in the experimental groups were significantly more satisfied when occupied with the "aesthetic flow activities", than the children in the control groups. The results of this study are encouraging for the possibility of building an innovative and more ambitious type of schooling.

Keywords: student engagement, flow experience, arts integration, first grade, language arts teaching, student satisfaction

## INTRODUCTION

Research over the last two decades has shown that frequently students' level of pleasure/satisfaction from learning is low, and in many cases they feel passive (Shernoff & Csikszentmihalyi, 2009; Shernoff, Knauth & Makris, 2000; Suttie, 2012; Whitson & Consoli, 2009). The issue is important as students' satisfaction has been linked to engagement and achievement in the learning process (Appelton, Christenson, Kim & Reschly, 2006; Korobova, 2012). Studies suggest that alternative approaches are needed to provide deeper motivation and enjoyment in the learning process (Marks, 2000; Shernoff & Anderson, 2014; Shernoff & Csikszentmihalyi, 2009; Whitson & Consoli, 2009), and indeed among children younger than teens (McCabe, Bray, Kehle, Theodore & Gelbar, 2011). In response to this need, this study presents findings from the implementation of an innovative teaching practice consisting of activities with particular specifications so as to promote satisfaction and, more broadly, engagement among children in the first grade during a language arts lesson.

We sought the theoretical basis of this endeavour in two approaches. The first approach is the theory of experiencing "flow" (Csikszentmihalyi, 1990), which holds that it is a situation in which the individual feels complete immersion in an activity, so that worries, the sense of time, and self-consciousness seem to disappear. Research on flow experiences in educational settings has shown that it brings happiness, empowerment, internal drive, optimism and self-confidence (Csikszentmihalyi, Rathunde & Whalen, 1993; Shernoff & Csikszentmihalyi, 2009; Shernoff, Knauth & Makris, 2000; Shernoff, Schneider & Csikszentmihalyi, 2001). The second theoretical approach comes from the field of 'arts integration', whose focus is the educational value of the arts when they are integrated in the entire curriculum as a way in which children can approach any subject being taught (Deasy, 2003; Winner, Goldstein & Vincent-Lancrin, 2013). Studies have shown that when children are taught non-arts subjects through various modes of representation their engagement, self-confidence and satisfaction increases (Catterall, 1998; Cho & Vitale, 2014; Eisner, 2002; Smithrim & Upitis, 2005; Upitis, 2011). Based on these theoretical foundations, we designed activities which we call "aesthetic flow activities" (Sotiropoulou-Zormpala & Argyriadi, 2015) which: prompt students to use alternatives to language (sound, theatre, art, mobility etc.) to understand taught subjects; are experienced by students as playful situations; are developmentally appropriate and often challenging for students' skill level; and are largely controlled by the students, both in how they develop and in their results.

#### PURPOSE

The "aesthetic flow activities" were implemented to examine how they influence first graders' engagement in the language arts learning process. The purpose of this study is to present the results of one indicator of children's engagement in the learning process, namely their satisfaction during each activity.

#### SAMPLE

The sample comprised 220 children (123 girls and 97 boys) aged from 6.2 to 7.1 years (M=6.65) in ten first-grade classrooms, in two public elementary schools in middle to lower-middle income areas of Athens, Greece. Five classes functioned as the experimental groups and five as the control groups. Children in the control groups were taught using activities traditionally found in the curriculum. Children in the experimental groups were taught using the proposed "aesthetic flow activities".

#### DESCRIPTION OF INDICATIVE ACTIVITIES

The Institute of Educational Policy and the Elementary School Directorate of the Ministry of Education, Research and Religious Affairs gave permission to conduct the study, and then consent was given by the school consultants, headmasters and parents after they were assured of the anonymity of the respondents.

Following are descriptions of 18 indicative activities, integrated in the modern Greek language lesson, in the unit on the digraphs of the Greek language (Hellenic Pedagogical Institute–Hellenic Ministry of Education and Religious Affairs 2003). Of these, nine were the curriculum activities used in the control groups and were codified with the number 1 (A1, B1, C1, D1, E1, F1, G1, H1 and I1). The other nine were aesthetic flow activities used in place of the curriculum activities, in the experimental groups and were codified with the number 2 (A2, B2, C2, D2, E2, F2, G2, H2 and I2). These activities were designed to conform to the same academic/language goals provided for in the curriculum activities for language (Karantzola, Kyrdi, Spanelli & Tsiagani, 2012) and had approximately the same duration.

The goal of activities A1 and A2 was to have children "recount the contents of the taught text and express views on it" (Hellenic Pedagogical Institute–Hellenic Ministry of Education and Religious Affairs 2003, p. 3753). During A1 teachers read the text and asked the children comprehension questions. In experimental activity (A2), the text was read twice by the researcher, each time with background music in a different mood (Broken hearts, Ortega, 2002; Instrumental march of Smyrna, Dalaras, 2004). Pupils were asked to choose which music, in their view, suited the text best and to explain why.

The goals of the following activities (B1 and B2) were to recall and write words that contain the digraphs that had been taught (/ts/, /st/ and /gg/ and /gk/) (Karantzola, Kyrdi, Spanelli & Tsiagani, 2012, pp. 20-24). In B1, children had to fill in the appropriate digraphs in words, or fill in words in sentences from

a choice of words. In the aesthetic flow activity (B2), children were asked to draw and write "objects that begin with or contain one of the taught digraphs and were to be products to be sold in an imaginary market". Each pupil was also asked to create a 'pitch 'or argument to promote his/her product.

The specific goal of activities C1 and C2 was to enunciate and properly pronounce the taught digraphs and words which contain these digraphs. In C1 the teachers wrote words containing the digraphs on the board and asked the children to categorize them based on which digraph was used and to read them aloud. Then, pupils had to fill in the missing digraph and accent in a list of words, and were asked to read the words aloud. In C2 children participated in a theatrical event in which they played the role of market vendors. From the previous activity (B2) they had their drawing of the products they would sell and their pitches to sell them. The "customers" (pupils from another class) were instructed to make decisions to buy based on how persuasive the vendors were (drawings, pitches, theatricality).

The language objective of D1 and D2 was writing, recognising and thoughtfully processing digraphs (Karantzola, Kyrdi, Spanelli & Tsiagani, 2012, p. 30). In D1 the pupils highlighted words in the text containing the digraphs /ts/ and /st/ and said them in class. Pupils were then asked to come up with words that begin with or contain the taught digraphs, and the teacher wrote them on the blackboard. In D2 the children stood in an open circle. One child held an imaginary ball which he/she then threw to another child, calling a word that began with or contained the taught digraphs. The throws had to be as quick as possible. Afterwards, the children wrote the words they liked among those called out, and read them out to the class.

The objective of E1 and E2 was to note and produce compound words (Karantzola, Kyrdi, Spanelli & Tsiagani, 2012, p. 30). In E1 children were asked to describe a snowman depicted in the book and to think of why he was called a "snowdragon" in the text. The manner in which compound words are formed was explained, and the pupils were asked to repeat compound words in which the first part was the word snow. In activity E2 pupils were asked to draw a snowperson and dress him up however they wanted. They were asked to give it a compound name, beginning with "snow". Each child was then asked to say his/her snowperson's name and explain it based on its appearance.

Activities F1 and F2 aimed to have children "understand the connection and differences between written and spoken language" (Hellenic Pedagogical Institute–Hellenic Ministry of Education and Religious Affairs 2003, v. B', 3746). These were used in teaching the digraph "eu" which is pronounced at times as /ef/ and others as /ev/. In F1 the pupils had to fill in the /eu/ digraph in a text and read it. In F2 the children had to choose, without telling anyone, if they wanted "to be citizens of country Ev or country Ef". They then scattered in the classroom, walked around slowly and repeated the digraph of their country. When they heard someone else saying the same digraph, they continued together seeking other "compatriots". Two groups were then formed: the citizens of "country Ef" and "country Ev". Each group wrote down words that "could be used by the citizens of their country".

The purpose of G1 and G2 was to seek, understand and use information in a text (Hellenic Pedagogical Institute–Hellenic Ministry of Education and Religious Affairs 2003, p. 3753). In G1 the teacher asked children questions on the text ("what might the key in the text open?"). In G2 children sketched objects that the key could open. Then, one by one, they were asked to act out their idea while the other children tried to guess the object, and when the group guessed correctly, the sketch was shown to confirm it was the right word.

Activities H1 and H2 aimed to familiarise the children with the language used in classified advertisements (ads) (Karantzola, Kyrdi, Spanelli & Tsiagani, 2012, p. 30). In H1, pupils read classified ads and were asked to write one about a lost dog. In H2 pupils were asked to write multimodal classified ads on the computer about whatever they wanted and to choose special fonts, drawings relevant to the text, sounds, photos, collages and extracts from web pages.

The purpose of activities I1 and I2 was to thoughtfully process the digraphs that sound the same, but are written differently (Karantzola, Kyrdi, Spanelli & Tsiagani, 2012, p. 30). In I1 pupils filled in the digraphs /gg/ and /gk/ in the blanks of words they were given and they circled them in the text they were taught. In I2, pupils were asked to walk in the rhythm of a piece of music and the researcher read words aloud every fourth step that sometimes contained the taught digraph /gg/. If they heard a word containing the digraph they had to clap.

#### MEANS OF COLLECTING AND ANALYSING DATA

To collect quantitative data, the smileyometer instrument (Read, MacFarlane & Casey, 2002) was used to measure the satisfaction of the pupils in the control and experimental groups. This tool is designed based on a 1 to 5 Likert scale, where pictorial representations of different kinds of faces are used to depict five levels, from great dissatisfaction to great satisfaction. Children were asked to choose one of five faces to represent the level of satisfaction they experienced while participating in each of the activities. When participants are young, this instrument has been shown to have two weaknesses (Van der Sluis, Van Dijk & Perloy, 2012). First, there is a tendency for children to choose the extremes of the scale. Secondly an experimenter effect has been observed: that is answers reflect the researcher's expectations, rather than the beliefs of the subjects. Despite these weaknesses, it was considered that using this instrument with children could provide interesting comparisons among the responses of the control and experimental groups.

In addition, to collect the qualitative data for the study, children's spontaneous comments as they were

filling in the smileyometer were recorded and transcribed. Subjects were counted who made one or more comments on satisfaction during an activity, and the comments were classified into three categories. The first contained comments that showed dissatisfaction, the

second contained neutral comments, and the third had comments that revealed feelings of satisfaction.

#### **RESULTS AND DISCUSSION**

The manner in which the children filled in the smileyometer to express their level of satisfaction in the learning process can be seen in Table 1:

Descripti e statisti of satisfacti n	A1	A2	в1	B2	C1	C2	D1	D2	E1	E2	F1	F2	61	GZ	н1	H2	11	12	Total Cur. Act.	Total exp. Activ.
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
8	4	0	48	0	34	1	22	1	18	0	13	0	25	0	83	0	13	0	260	2
	(3.7)	(0)	(45.7)	(0)	(31.5	{1}	(21.6)	(0.9)	(18)	(0)	(12.5)	(0)	(24.8)	(0)	(76.1)	(6)	(12.3)	[0]	(27.5)	(0.2)
3	20	0	5	0	6	1	0	3	3	0	1	0	0	0	2	0	0	1	37	5
	(18.3)	(0)	(4.8)	(0)	(5.6)	(1)	(0)	(2.7)	(3)	(0)	(1)	(0)	(0)	(0)	(1.8)	(0)	(0)	(0.5)	(3.9)	(0.5)
٢	66	0	30	2	41	4	41	0	46	3	48	0	43	2	16	1	74	0	405	12
	(60.6)	(0)	(28.6)	(1.8)	(38)	(3.5)	(40.2)	(0)	(45)	(2.9)	(46.2)	(0)	(42.6)	(1.9)	(14.7)	(1)	(69.8)	(0)	(42.9)	(1.2)
0	9	0	3	3	5	7	30	1	23	0	15	0	7	0	3	3	11	2	106	16
	(8.3)	(0)	(2.9)	(2.7)	(4.6)	(6.8)	(29.4)	(0.9)	23)	(0)	(14.4)	(0)	(6.9)	(0)	(2.8)	(2.9)	(10.4)	(1.8)	(11.2)	(1.7)
C	10	108	19	106	22	90	9	105	10	102	27	107	26	105	5	100	8	108	136	932
	(9.2)	(100)	(18.1)	(95-5)	(20.4	(87.4)	(8.8)	(95.5)	(10)	(97.1)	(26)	(100)	(25.7)	(98.1)	[4.6]	(96.2)	(7.5)	(97.3)	(14.4)	(96.4)

Table 1. Descriptive statistics of satisfaction (sample size A1=109, A2=108, B1=105, B2=111, C1=108, C2=103, D1=102, D2=111, E1=100, E2=105, F1=104, F2=107, G1=101, G2=107, H1=109, H2=104, I1=106, I2=111).

In the aggregate 27.5% of pupils in the control groups and 0.2% of pupils in the experimental groups indicated that they experienced great dissatisfaction, while the respective percentages for dissatisfaction were 3.9% and 0.5%, 42.9% and 1.2%, were neutral, 11.2% and 1.7% experienced satisfaction and 14.4% and 96.4% experienced great satisfaction.

More analytically, it seems that their participation in activities A1, F1 and I1 left pupils feeling neutral, while B1 and H1 created feelings of great dissatisfaction. There were few pupils who expressed great

satisfaction or satisfaction, confirming the studies that note such problems in implementing current curricula (Shernoff & Csikszentmihalyi, 2009; Shernoff, Knauth & Makris, 2000; Suttie, 2012; Whitson & Consoli, 2009). The great difference in the satisfaction experienced by children who were taught using the aesthetic flow activities reveals the educational benefits of activities that aim to create flow experiences (Csikszentmihalyi, Rathunde & Whalen, 1993; Shernoff, Knauth & Makris, 2000; Shernoff, Schneider & Csikszentmihalyi, 2001) and to employ arts integration (Catterall, 1998; Deasy, 2003; Cho & Vitale, 2014; Eisner, 2002; Smithrim & Upitis, 2005; Upitis, 2011; Winner, Goldstein & Vincent-Lancrin, 2013).

The findings of this study do not confirm the view that young children tend to choose the extreme answers on the smileyometer (Van der Sluis, Van Dijk & Perloy, 2012) as, among the control group, the percentages of children who expressed satisfaction or great satisfaction was similar. It should also be noted that in the results of the experimental group there were very few children who chose the great dissatisfaction face, while there were very many who chose the great satisfaction face.

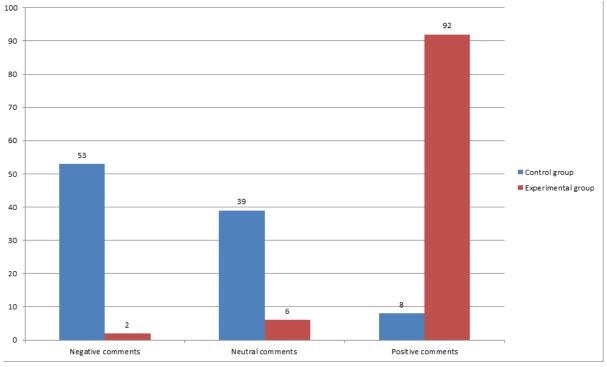


Diagram 1. Levels of satisfaction based on comments

The transcript of the recordings showed that 54 of the 220 children (24.5%) commented while they were filling out the smileyometer (Diagram 1). Among the control group 53% made comments on their dissatisfaction at taking part in the activities (B1: "We filled in photocopies again", "I'm bored – every day the same thing"), while the respective figure for the experimental groups was 2% (C2: "I'm tired of clapping all the time"). Thirty-nine per cent of the control group made neutral comments (C1: "I neither liked it nor disliked it") and 6% of the experimental group ("I like everything the same in school"). The comments expressing satisfaction were 8% among the control groups (G1: "I liked it because I found what the key opens") and 92% among the experimental groups (B2: "I liked it because I made 4 fireplaces", D2: "I liked the ball because it was invisible", D2 "Before you go, can we play ball again?", F2: "I liked that we held hands", all activities: "at school we don't play but since you came we play, as well").

What made an impression is the tendency of some children to focus on the aesthetic characteristics of the activities and not on the experience. For example, in A2 some pupils chose the smiley to express the pleasure they felt with the music and not the activity (Eisner, 2002). Generally, the findings in Diagram 1 confirm the findings of the smileyometer: very high levels of satisfaction among pupils participating in the experimental activities compared to pupils doing the curriculum activities. Also, in comparing the two instruments, it was seen that quite a few children in the control groups who chose the middle scale in the smileyometer made negative comments, revealing a harsher stance when commenting than when they graded their experience.

The results cannot be generalised because of the size of the sample and the number of activities. Despite this, there were indications that the "aesthetic flow activities" (Sotiropoulou – Zormpala & Argyriadi, 2015) had a positive impact on the emotional atmosphere of the classroom in teaching language arts to first graders. It seems necessary to continue the research among a broader sample and for a longer time, as it seems possible that it is important to systematically integrate activities especially designed to increase pupils' satisfaction and more generally their engagement in the learning process in the curricula of the first grades of elementary school (Appelton, Christenson, Kim & Reschly, 2006; Korobova, 2012; Marks, 2000; McCabe, Bray, Kehle, Theodore & Gelbar, 2011; Shernoff & Anderson, 2014; Whitson & Consoli, 2009).

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