A framework for developing preschoolers' critical viewing of multimodal texts in formal educational settings: The case of commercial videos

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Over the last years new communication contexts have reshaped print-based literacy pedagogy into a multimodal one. The changing nature of literacy is also reflected in the new curriculum for early childhood education, however without clearly articulating how this shift will be implemented in educational settings. Consequently, teachers are not familiar with ways to promote students' multimodal competencies and are not trained to develop instructional plans aligned with multimodal pedagogies. The article discusses an on-going exploratory research aimed to provide insight into teaching multimodal literacy in Early Childhood Education. Specifically, it focuses on formulating learning experiences in order to enhance preschoolers' critical viewing competencies concerning the intentions and meaning strategies employed by commercial video producers. The research included a framework of teaching multimodal texts, such as commercial videos, based on previous frameworks found in literature reviews. Specific learning experiences with commercial videos were designed and implemented in a Greek Kindergarten with twelve students. These learning experiences were organized in several units. Each unit included the spontaneous engagement of students with various commercial videos, the guided analysis of the structural features and typical functions of the videos as well as the guided 'reading' of literal and inferential meaning in them based on the explicit teaching of both meaning strategies employed by video resources and a metalanguage for justified interpretations and detailed descriptions of students' responses drawn from textual evidence. In the current article, this particular teaching framework is presented in detail as an integrated part of the research project - which is briefly discussed as well - for the implementation of multimodality in teaching practices in early childhood settings and the enhancement of preschoolers' literacy skills. Also, the constraints and further issues of both the research project and the teaching framework are being discussed.

1. Introduction

Students nowadays are exposed to information presented in various modes (written, language, speech, gesture, movement, music, image, etc.) and media (books, screen etc.) in comparison to the past when printed text was the only semiotic resource for conveying meaning (Kress and van Leeuween 2006). Kress (2003) claims that such changes 'are producing a revolution in the uses and effects of literacy and of associated means for representing and communicating at every level and in every domain' (p. 1). Multimodality refers to meaning making through various modes, including language, such as visual, gestural, spatial or audio modes (Kress and van Leeuwen 2001; Bateman 2008; Cope and Kalantzis 2009; O'Halloran 2009; Kress 2010; Serafini 2011; Jewitt et al. 2016). Each mode produces meaning through a certain medium (video, book etc.). Respectively, each medium has its own affordances for meaning making which vary from one another.

Serious attempts at transforming the multimodal literacy theory into teaching and learning practice have been described in literature research (Van Leeuwen 2005; Kress 2010). Undoubtedly, students should develop different literacy and communication skills in order to understand the meaning of multimodal texts and communicate effectively since meaning in them is produced from the combination of 'several modes in the design of a semiotic product or events' (Kress and van Leeuwen 2001; Adami and Kress 2014; Mills and Unsworth 2017). This kind of 'synergy' of different modes to meaning making (Doczi, 1981 cited in Cope and Kalantzis 2009) observed in multimodal texts indicated a necessity for developing a systematic metalanguage (Unsworth 2006; 2008) for effective literacy teaching (Martin 2008) and particularly for multimodal literacy teaching approaches (Walsh et al. 2007; Geoghegan et al. 2013; Papadimitriou and Makri 2015). Metalanguage, initially developed for describing meaning (New London Group 2000) in written and visual texts, drew on Halliday's Systemic Functional Grammar (1994) and on Grammar of Visual Design (Kress and van Leeuwen 2006) and expanded to multimodal ones. Also, later on, was this metalanguage assumed that would facilitate the assessment of multimodal texts because both teachers and students would share a common language to discuss multimodal texts and to describe multimodal products respectively. Furthermore, the metalanguage used by the teachers or acquired by the students throughout explicit teaching would serve for both of them as a tool for defining appropriate 'indicators of quality in multimodal creativity' (Wyatt-Smith and Kimber 2009: 86) in order for the quality standard of a multimodal text to be determined using certain criteria.

In addition, apart from being equipped with a metalanguage to describe and to assess

their multimodal products, students need to develop critical viewing skills and strategies which are both 'essential to unpacking the layers of meaning (Lim and Yin 2017: 194) in multimodal texts they encounter daily. From a social semiotic perspective, critical viewing of multimodal texts means to 'interrogate human intentions and interests' (Cope and Kalantzis 2015: 20) expressed in them by posing questions to the text and analyzing them so 'as to identity features and patterns' (Lim 2018: 7). Also, Lim (2018) describes critical viewing as 'an inductive process' (p.7) during which students try to fully access meaning in multimodal texts and make elaborate and justified interpretation based on contextual evidence (O'Halloran et al. 2015).

In parallel, there is also a rapid shift from print based pedagogy to a multimodal one (Mills and Unsworth 2017) which is reflected in the new revised curriculum for Early Childhood Education (RCECE). According to RCECE (I.E.P. 2014), preschoolers should learn to recognize the multimodal nature of meaning that texts convey and also to develop a critical approach to them, since texts are claimed to be social constructions and, therefore, culturally and ideologically shaped (Hodge and Kress 1988; Van Leeuwen 2005; Kress 2010). Thus, teachers are confronted with the challenge to promote their student's multimodal literacy towards current 'literacy needs of the day and for the future' (Bazalgette and Buckingham 2013; Lim and Yin 2017; 2018). Multimodal literacy is a requisite, not an option for the new curricula due to the rapid technological advances. Obviously, teaching approaches to literacy should be updated to accommodate current curriculum requirements. Language literacy is expanding to a multimodal one. Thus, students need to be educated to question the text and analyze it in order to reveal hidden messages and make justified interpretations. In order to be able to analyze and derive meaning from multimodal texts such as commercial videos, children have to be explicitly taught multimodal grammar. According to O'Halloran (2009) 'Multimodal analysis involves theorizing functionality and systems which constitute the grammar of semiotic resources' (p.20).

However, different multimodal analysis processes should be followed for different semiotic resources according to their affordances. Commercial videos, which involve digital technology affordances for analysis purposes, 'require analytical techniques which are capable of tracing and analyzing the integrative patterns of inter-semiotic relations' (O'Halloran 2009: 20). Revealing those patterns, children will be able to understand the advertisers' intentions and the various persuasive strategies they deploy (Feng and Wignell 2011), which might lead them consequently to more elaborate and justified interpretations of the commercial's meaning.

During the analysis process, students have to realize the differences in logic with which elements between written and visual modes are organized in order to produce meaning. Readers of both books and videos follow different reading paths, depending on the medium's representational affordances that strongly affect the kind of meaning derived from each one of them separately. Writing follows the logic of the linear arrangement of elements on paper, while image elements are depicted simultaneously in the visual scene (Kress, 2003; Jewitt,

2008). In order to become multimodally literate, students have to learn to arrange the elements that are available from various semiotic resources in ways that best serve their communication goals, and also to be able to recognize, through certain means (color, size etc.), the semantic role of each element and their contribution to the interpretation of meaning (Jewitt et al. 2016). Consequently, multimodal literacy entails understanding of texts through the demanding tasks of analysis and the critical viewing of multimodal texts meaning. The authors of the revised Greek curriculum have recommended indicative ways of teaching multimodality to preschoolers, however teachers should be sufficiently qualified to feel capable of designing appropriate learning activities (Ajayi 2010; Anstey and Bull 2010; Stellakis 2012; Chandler 2017) that 'effectively engage students in thinking critically about text construction – their own and that of others' (Ryan et al. 2010).

There seems to be a need for teachers' further education on the current multimodal research in order to reduce their anxiety of how the research outcomes and curriculum priorities could be applied in educational practice, and also to align their professional development with current pedagogical trends and the new nature of literacy (Ajayi 2010; Anstey and Bull 2010; Walsh 2009; 2010). Students' critical skills related to the elaborate and thorough examination of the information presented in pictures – still or moving – are definitely not developed only because they are exposed to them. It takes time and the explicit teaching of the functions and uses of an image in order for students to develop a critical understanding of them (Bazalgette and Buckingham 2013; Jewitt 2008).

In this light, an intervention of teaching multimodal literacy has been designed during a continuing research project for the implementation of multimodal literacy in teaching practices in early childhood education to serve as a framework for future implementation and to inform multimodal literacy practices. The teaching intervention was designed according to multimodal pedagogy principles and implemented in a Greek kindergarten. A series of lessons were designed to enhance the multimodal literacy of preschoolers, particularly their critical viewing of multimodal texts. Knowledge gathered through these efforts of putting theory into practice wishes to serve as teaching exemplar for future instructional plans for the development of students' multimodal literacy.

Parts of the teaching intervention are being described and discussed in this article. Emphasis is placed on enhancing preschoolers' critical viewing skills concerning a particular genre of multimodal texts, that is commercial videos to which small children are daily exposed.

2. The Research Project

In latest reform efforts within the Greek language curriculum there are suggestions for teaching practices of multimodality which imply 'that the incorporation of visual/multimod-

al literacy practices into the classroom is a matter of policy' (Papadimitriou et al. 2015: 39). However, as Stellakis (2012) mentions, in order to implant current trends in literacy practice, in-service teachers need to attend 'appropriate programmes of continued professional development … so that they obtain practical guidance and support, based on rigorous research evidence' (p. 70). National policy seems to underestimate teachers' need for updating literacy teaching practices and awareness of current multimodal pedagogy and research. Greek teachers should be provided with teaching exemplars in order to feel more confident to implement multimodality in classrooms. Obviously, the subject of teaching multimodal literacy in early childhood education needs to be addressed. Further research should shed light on how preschoolers will become multimodally literate so as to analyze, understand critically and produce multimodal texts.

Babbie (2011) claims that exploratory research 'occurs typically when a researcher examines a new interest or when the subject of study itself is relatively new' (p. 97) and there is a need for results that can provide insight into a given situation. In this respect, we conducted an exploratory research which aimed to explore the relatively new subject of teaching multimodal literacy in early childhood education that is a requisite for the current curriculum. It is an evolving research project that seeks to establish a framework to support multimodal teaching practices through the design and implementation of a teaching intervention. It was assumed that through explicit teaching of T.V. ads' structure and meaning making strategies, students would realize their interrelations with text purposes and effects on audience interpretation. According to the above assumption, the following research questions were formulated:

- What constitutes a teaching intervention for preschoolers' multimodal literacy skills development?
- What kind of pedagogy promotes critical viewing skills in meaning making processes of multimodal texts such as T.V. ads?

2.1. Participants

The participants in the current exploratory research were twelve preschool students, four boys and eight girls, at the kindergarten during the school year period 2018-2019.

2.2. Initial evaluation

In the first place, an evaluation of students' initial conceptions on the concept of commercial video ads, their purpose, their functions and the persuasive means used by advertisers to convince the intended audience was conducted. These preschoolers' preconceptions on commercial video ads gathered through the initial evaluation process inspired and supported teaching intervention design since students' prior knowledge on the subject of the research was carefully elaborated and incorporated in it in order to facilitate the intervention's effec-

tiveness. A semi-structured questionnaire was designed as well and used by the researcher as a guide to facilitate the discussion during the initial evaluation process. Questions were organized in two main axes for analysis purposes: Concepts of T.V. commercials and functions and semiotic resources of T.V. commercials (Table 1).

Concept of commercial videos
In your opinion what does 'T.V. advertisement' mean?
Do you usually watch T.V. ads?
Which one is your favorite? Why?
What's the story of your favorite T.V. ad?
Functions of T.V. commercial Ads
What is the intended purpose of a T.V. commercial ad?
Do ads always tell the truth?
Do you believe what the ad says? If not, how do you understand that the story isn't true?
Which means do advertisers use to tell a story in an ad and to persuade their audience? Can you give me an example?
How do you manage to find the truth in an ad? In what way? Can you describe it by the use of an example?

Table 1. Interview questionnaire guide developed for evaluating students' initial conceptions on the concept and the functions of commercial video ads.

2.3. Data analysis

Discussion during the initial evaluation process was recorded and transcribed in order to facilitate the subsequent analysis process. Collected data was analyzed according to content analysis methods (Krippendorff 2004). Codes were assigned to the data according to the most frequent appearance of words, concepts or ideas that appeared in the participants' answers, and it was assumed that they would offer an adequate insight into the subject being surveyed. Two main code categories resulted from data analysis that was collected during the initial evaluation process relevant to the aforementioned questionnaire axes (Table 1).

2.4. Results

2.4.1. Concepts of T.V. commercial ads.

The majority of the subjects who took part in the initial evaluation process confused commercial videos with animation videos. According to their justifications of their most favorite T.V. ad, preschoolers defined them as a short interval or announcement for the successive video between animation videos they usually watch. One student said: 'It's a video before the second part of Mickey Mouse animation starts again'. Preschoolers didn't realize the intended purpose of an ad and how their consumer attitudes and behavior were subconsciously affect-

ed. According to the analysis of the preschoolers' answers, their personal health attitudes and beliefs seemed to be constructed by scenes of joy and happiness with family members, while the persuasive power of the medium (that is T.V.) was strong enough so as to literally guide and intervene in the audiences' reasoning thinking process. Specifically, one of the video advertisements shown and elaborated during the teaching intervention claimed that the advertizing product is healthy. Children unquestionably accepted such a statement and when they were asked to explain why they agreed with this statement they easily answered 'because it's on T.V. and I believe her' and another child added '...because the girl and her parents are laughing and feel happy eating it'.

2.4.2. Function and semiotic means of T.V. commercial ads.

The persuasive function of the T.V. ad was only mentioned by one student: 'Videos tell us to go and buy'. Most of the students maintained the idea of T.V. commercial videos as short intervals between video animations and as regards the intended purpose of the ads they mentioned the advertisements' narrative function: 'it tells a story of kids going to the park to play football with a ball'. Preschoolers described exactly what was depicted on the video screen (the representational function of an ad, that is playing football) and not the hidden intention of the video producers to convince the audience to buy the ball to play football. Consequently, since they did not identify any intentionality in advertisers, preschoolers claimed that ads always tell the truth, and justified their claims based on previously gained experience or the unquestioned strength of the T.V. medium itself mentioned above, as we assumed from their answers: 'I believe that the ad tells the truth about the biscuits because I saw them on the market shelves the other day'. Therefore, it seems preschoolers had neither developed critical viewing skills to interpret the latent meaning of T.V. commercial videos nor were they equipped with tools for analyzing ads to the semiotic resources employed by advertisers for meaning making purposes.

The above results were incorporated into the instructional plan and affected the learning goals set in order to alter children's misconceptions concerning ads, in alignment of course with the objectives of the project.

3. Teaching intervention

The teaching intervention to scaffold preschoolers' multimodal literacy and critical skills drew on the multimodal discourse framework developed by Kress and van Leeuwen (2006), Cope and Kalantzis (2009), and later O'Halloran et al. (2015), and Lim and Yin (2018) who tried to apply previous frameworks into instructional strategies for secondary classrooms in Singapore.

The whole research project on multimodal literacy lasted for four weeks. It was implemented in a Greek public kindergarten situated in Volos, in central Greece. The researcher was also the teacher of this school who had been working there for the last five years.

3.1. Teaching materials

Pedagogically appropriate teaching materials that stimulated the students' interest, were relevant to their age and learning style, enhanced their learning experiences and met lessons' objectives as well were chosen and developed (Laborda 2011; Tomlinson 2012). In particular, the whole teaching project referred to a specific genre of multimodal texts, which is T.V. advertisements. Van Leeuwen (2005) refers to the term 'genre' as a 'type of texts which are typical when they have characteristics of content (what the text is about), form (means of expression or media texts use) and function (what texts do i.e. ads sell products, services, ideas) that can also be recognized in other, similar texts' (p. 122-123). The underlying reason for such a choice is mainly the fact that T.V. ads are typical multimodal texts - according to the aforementioned definition of 'genre' - and they also employ various modes (image, text, sound etc.) and semiotic resources in meaning making, and thus facilitate the accomplishment of the learning goals of the research project. In addition, commercial videos are one of the most common multimodal texts to which preschoolers are exposed on a daily basis.

Digital technology, such as movie maker software, recording applications available in smart phones, videotaping equipment, you tube digital repository of videos, films etc. were used to facilitate the teaching procedures of the project. There seemed to be no necessity for platforms or software especially designed for the multimodal analysis of videos by both the preschoolers and the teacher. Digital technology which is available for free, such as windows movie maker software which supports both editing and analyzing videos adequately in a user's friendly environment and at a low cost, was thought to be appropriate. The most profound reasons for this software appropriateness were the facts that it was readily accessible and free to the teachers and the children as well and it also met the needs for instruction at a low cost. In addition, the software's friendly-to-use environment can help less technologically qualified teachers to carry out such a teaching intervention in the future even in poorly technologically equipped kindergartens, which is the most common case in Greek public schools. With regard to software facilities, windows movie maker software could serve as a tool for analyzing digital texts, such as videos, by enabling users to cut clips into individual segments in order to focus on certain visual elements, for example (color, angle etc.), or other modes (acoustic, language etc.) which were essential to meaning making and were also aligned to the intervention's learning objectives. Multimodal analysis conducted by preschoolers was restricted by their developmental skills. For example, there was no prerequisite for the software being used for the analysis by preschoolers to support annotation of the feature characteristics of the video or particular frames or scenes since they were illiterate.

Therefore it's obvious that digital technology was to be used appropriately for didactic purposes by the teacher mainly in order to scaffold preschoolers' knowledge concerning multimodality and ways of meaning making processes employed by multimodal texts.

The commercial videos used in the context of the project were downloaded from you tube website and were available from the following links: https://youtu.be/JBJKqNirmPk and https://youtu.be/cbLn_3xpaYY. Both T.V. ads were chosen according to the following criteria:

- Most of the structural characteristics of the advertisement genre and the semiotic resources intended to be taught should appear in them.
- Duration of the videos, according to literature reviews (Anderson and Levin 1976; Eickhoff and de Vries 2010) on preschoolers' concentration ability to watch a video, should be short.
- The content of the video should be appropriate and relevant to the interests of the intended audience.

3.2. Learning objectives

The educational goals that were set derived from the currently revised curriculum for early childhood education, particularly from the learning subject of language. Specifically, after the completion of the project in multimodal literacy, students should be able to:

- Identify various video text genres (weather forecast video, T.V. commercial advertisement and animation clip).
- Classify video texts genres by their objectives (persuade, entertain, inform).
- Distinguish the structural characteristics of T.V. commercial videos and their typical functions.
- Explain the advertisement's content and purpose.
- Discriminate the various modes in an advertisement and their interrelation in meaning making.
- Examine multimodal texts critically.
- Recall and properly use a metalanguage in order to describe and justify their interpretations of multimodal texts.
- Assess T. V. commercial videos they produce with the use of a grid analysis tool.
- Integrate new learning in their personal designs when advertising a product of their choice.

3.3. Teaching intervention

The instructional approach developed in the current project was organized in individual lessons. Each lesson investigated the children's ideas on identifying intended purposes of T.V. ads, analyzed the structural features of commercial videos and the arrangements of the

semantic elements on the video screen and also the functions of these elements in meaning making. The objective of the meaning making process was for students to extract the literal and inferential meaning of commercial videos and to evaluate the producers' design choices (Kress and Selander 2012) and intentions. In addition, visual grammar and language of multi-modal text were discussed in order for students to interpret ads they see in everyday life and gradually acquire a metalanguage to make justified interpretations.

In particular, five lessons were conducted

- Lesson one: T.V. commercial videos text genre and content comprehension.
- Lesson two: Synergy of modes in producing meaning.
- Lesson three: Structural elements of T.V. commercial videos and semiotic resources used for persuasive purposes.
- Lesson four: Producing multimodal texts (Students produce a T.V. commercial video).
- Lesson five: Assessment of the multimodal product.

3.3.1. Lesson one: T.V. commercial videos text genre and content comprehension

During the first lesson, students watched three videos: a weather forecast video, a T.V. commercial advertisement and an animation clip. They had to narrate the story of each video in their own words and to determine the differences in content. During this process, the teacher stimulated the narration with proper comprehension and guiding questions. In addition, students were encouraged to grasp the different objective of each story: informational, persuasive, entertaining and to justify their opinions and classify the videos according to this criterion.

3.3.2. Lesson two: Synergy of modes in producing meaning

Students watched one of the two T.V. commercial videos mentioned above as teaching materials of the project in three different ways: only image with no sound, sound only without image and both image and sound. Each show was followed by the students' narration of their understanding of the advertisement's content, initially based on visual elements and subsequently on auditory elements, and finally on both visual and auditory elements. Students' narrations varied according to which channel for information acquisition and processing was used each time. The teacher supported the comprehension process by asking questions and summarizing the students' statements into a coherent and holistic narration. In addition, the teacher encouraged preschoolers to realize the contribution of each mode separately and in cooperation to the comprehension of the meaning of multimodal texts. The summarizing strategy led to the co-construction of the comprehension of the story concerning T.V. commercial videos. These revised stories derived from the children's gradual exposure to different modes aimed to promote their awareness of the significance of each mode's involvement in

meaning – making and also the mode's synergy for gaining more elaborate and extensive knowledge of the video content.

3.3.3. Lesson three: Structural elements of T.V. commercial videos and semiotic resources used for persuasive purposes

During previous lessons, students ended up to an advertisement story which they thought to best fit the story told by various modes and in relation to each mode affordances. The objective of the third lesson was for the students to reflect on the purpose of this story and how this particular purpose was fulfilled. Students were guided through a grid analysis to identify certain semiotic resources (color, sound, gestures, light, text, size, movement etc.) employed by the advertisers and to relate them to certain meaning making strategies and to their impact on meaning. The semiotic functions and implications of the resources for the meaning that students identified were also examined and defined through a justification process. The teacher asked them for the justification of their arguments on how advertisements produce meaning with the use of textual evidence and recalls of previous personal experience. For example, one student said: 'I felt happy because of the light in the room. When it's a sunny day I feel happy too' and continued 'and parents in the advertisement feel happy. I heard their laughter and I saw them embrace each other'.

The third lesson was completed in two units. The first one was developed with students brainstorming on the intended purpose of ads and the semiotic resources used in attaining this particular purpose. Children were allowed to freely express their knowledge based on intuition of how ads produce meaning. Such intuitive knowledge was formed mainly out of students' past experiences and knowledge of meaning making strategies and resources employed by texts that they encountered in general. At this particular point, the students' opinions were not examined through the lens of correctness or congruence to the multimodal theory. Consequently, during the second unit of the third lesson, they were introduced to explicit teaching of visual grammar with the use of an especially designed grid analysis tool.

The second lesson's unit objective was to guide students to look for more precise elements in video scenes according to the grid analysis and to enrich their vocabulary in order to describe their justifications concerning the semiotic elements and their functions employed by T.V. commercial ads with the use of relative metalanguage of multimodality they would acquire during the lesson.

3.3.3.1. Grid analysis tool

The grid analysis was designed especially for the current instructional purposes (Table 2) and according to the Grammar of Visual Design (Kress and van Leeuwen 2006) and the Systemic Functional Theory (Halliday 1994). In particular, the grid analysis, which was finally used

during the instruction, was mainly based on the framework of multimodal texts' analysis proposed by Lim and Yin (2017) with necessary adjustments to the students' age and the leaning goals.

The grid was intended for the teacher's use only and served as the teacher's guide in order to design her questions for the students in alignment with the learning objectives of multimodal project. Our instructional proposal content expands further than the typical approach that mainly teachers used and which basically referred to strategies of asking students comprehension questions concerning multimodal texts being taught (Lim and Yin 2018). The questions included in the grid analysis corresponded to particular frames of the video that the teacher had previously divided into short clips with the use of the movie maker software and included tools. Due to the division of the ad into smaller units, the students had the ability to focus on one semiotic resource at a time and examine thoroughly the resource's relation with the intended meaning. This examination of semiotic elements in isolation provided students with chances of deep understanding of new knowledge and acquisition and retention of visual vocabulary. For example, when the children were asked to investigate the advertisers' different choices of expressing 'love' in the advertisement, they pointed out, among others: hugs, laughter, song words, warm shades of light in the room or on actors' faces and camera's close ups as well and they used proper language to justify their answers such as music, mode, gaze, zoom, light, mood and gesture accordingly.

The students were allowed to make assumptions about the functions of the semiotic resources they observed and their meaning and to describe their interpretations with the use of appropriate vocabulary they became acquainted with during the lesson.

The role of the teacher was to reflect on the students' assumptions and to elicit a fruitful discussion about the T.V. commercial videos' literal and inferential meaning with the use of gained metalanguage, too. For example, one students said that "'Miranta' (biscuit brand) like Mama' means that biscuits are sweet as mother is" and someone else mentioned that 'ads convince us to buy meat products by getting the actor to look his audience straight in the eyes and say that they are good'.

The teacher also kept notes of the students' observations. The notes were organized in separate columns under headings similar to those included in the grid analysis. The notes were to be used both by the teacher and the students for future reference during the evaluation process of the learning outcomes and implementation task, correspondingly.

As an extension to this unit lesson, certain frames of the video were printed. The teacher had also transcribed the lyrics of the advertisement song or sentences of the scenario and cut them into small strips. The students had to match printed frames with word strips and to assign them to a certain meaning that they had previously found in the video (Figure 1).

	Metalanguage	Indicative questions
NARRATION	Content-message	What is the main story of the ad about?
	Context, location, time, participants, relations	Where does the story take place? When? (time of day) Support your claim with evidence from the text Who are the participants in the story? Can you tell their age? Which do you think is their relation?
GENRE	Structural features Call to action	What kind of texts are they? (animation, film, documentary etc.) How does it end? Does it inluence you in the end for doing something in particular? What? How is it done?
	Purpose, intentions	What is the aim of the advertiser? What do you think is the purpose of the narration? (entertainment, education etc.). Support your claim with evidence from the text
MEANING	Semiotic resources Mode/s: visual, oral, audio, gestural Affordances Synergy symbols	In what way/s the story is being told? (oral, written etc.) How many modes did you recognize? Which mode helped you more to comprehend the story? In what way/s are we told about the product offer? (image, symbol, text, etc.) What does the symbol of addition (+) between the image of the two meat products mean?
	Sound mode	Did you hear a sound/ voice/ music? Can you describe each of them? Where did they come from? What kind of music etc. was that? Has music etc. anything to do with the advertised product? How did music etc. make you feel? What did you think when you heard that music etc.?
	Oral mode	Who talks in the ad? How does she/he talk? How does she/he talk? What is she/he talking about? Who is she/he talking to? Why? What might be her/his interest?
	ENGAGEMENT: Gaze (direct, indirect), interaction Power, angle Location, background, foreground, arrangement Shot, zoom, intimacy Salience Light (sharpness, contrast)	How does the actor/s look at you? (straight in the eyes, indirectly, avoiding you etc.). Has this particular look any effect on you? How do you feel? Why? Which is the actor's eye-level in relation to yours? (lower etc.). How this impacts you? In what way? Which is the actor's eye-level in relation to the other actor/s in the scene? What can you assume from that about their relationship? Where is the actor placed in the scene in relation to the background (room)? Does he/she look very small (long shot)? Does the entire body or half of the body appear (medium shot) in the scene? Does a particular body part e.g. finger is being shown on screen (close up)? How this affects you? How does it make you feel? Does it affect the way you feel about him/her in a different way in each case? Has this particular shot of the camera an impact on you? Can you tell the difference? Would it be the same if the camera was positioned above the actor? Would it have affected your decision of buying the product? In what way? Which of the actors look bigger in size than the others? Is the camera closer to him/her? What will happen if a camera gets closer to someone or something? Does it help you to realize which of the actors is the protagonist and therefore the most important? In what way? How is the light in the scene? How makes you feel? How is your feelings related to the product?
	MESSAGE Literal, inferential Persuasive purpose mood	The actor says that the advertised product apart from being healthy makes children become obedient too. Do you agree? Why do you think you are told so? Does this statement affect you emotionally? In what way? Are you convinced that the advertised product is good? How? Which are the arguments of buying the advertised product?

Table 2. Grid analysis tool for helping students to reveal and describe the meaning making strategies and the semiotic resources employed by the T.V. ads.
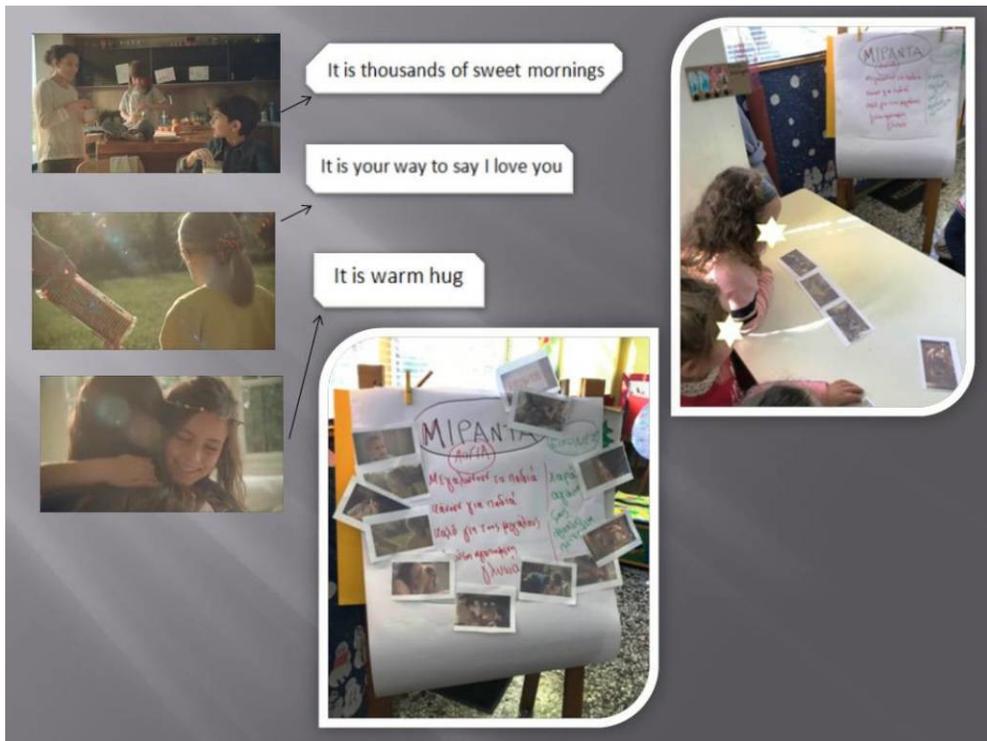
Figure 1. Students discovered similar meanings expressed through different modes

In addition, further experiments with movie maker software tools allowed the teacher to change the color of the whole video (e.g. sepia or black and white color) or to apply certain effects (e.g. blurred effect). Alternatively, different music from the original background was added (e.g. sad music). Such interventions in the original video aimed at the students' deeper comprehension of the decisive role of semiotic resources and modes in the meaning process.

3.3.4. Lesson four: Producing multimodal texts (Students produce a T.V. commercial video)

Students had to produce their own T.V. commercial advertisement from the available semiotic resources. Also, they had to incorporate into them learning gained from previous lessons. In the beginning, they revised knowledge of how an ad is constructed, how various modes interact in multimodal texts and produce meaning, how arguments about the product advertised are presented in order to persuade consumers and what kind of semiotic resources are employed by multimodal texts to produce meaning. Furthermore, students applied new learning to a commercial advertisement they produced for a product of their choice. It was significant to be a product relevant to their interests because they had to find

and develop strong arguments in order to successfully pursue the advertisement's objective to convince intended audience, and to present them according to the visual grammar they learnt (Pardi et al. 2018). Interest was assumed to be an incentive that would reinforce the students' efforts towards the accomplishment of the objectives of the task that was assigned to them.

After defining the product advertised, the students were separated in small groups while certain tasks were assigned to them. During the fifth lesson, under a cross-thematic learning approach, students in groups:

- Constructed a T.V. screen made of a cardboard (Figure 2)
- Sketched and colored the advertisements' background
- Designed the logo of the advertised product
- Defined the possible audience of the advertisement
- Explained the reasons for buying this particular product
- Discussed and defined the arguments for the product and dictated them to the teacher in order to write them down (Figure 3)
- Wrote the script for the advertisement incorporating the arguments they had agreed on
- Searched on you tube for the proper music background that could be used for the advertisement, downloaded it and saved it in a file with the teacher's assistance
- Created a song for the advertisement (lyrics and melody)
- Made the invitation for the audience to buy the product
- Organized and arranged all the semiotic elements according to the place and time of appearance in the ad
- Rehearsed the advertisement several times and videotaped it after making necessary alterations and adjustments

Figure 2. Students collaborated on both designing the background of the T.V. ad and deciding the content of the advertisement's script

Figure 3. Students worked on a T.V. screen craft and they also used the available semiotic resources in order to produce their own advertisement video

3.3.5. Lesson five: Assessment of the multimodal product

During this lesson, the students watched the videotaped advertisement they had produced during the previous lesson on a P.C. screen and commented on it. Their comments were based on certain criteria (quality indicators) (Wyatt-Smith and Kimber 2009). As quality indicators of their production served notes of their observation that the teacher had kept while students dictated to her, and the answers to guiding questions posed by the teacher. The video served as documentation of the students' multimodal literacy both for the student and the teacher and as a data source for the researcher (Wessel-Powell et al. 2016). It provided the teacher with insight into the students' learning process, complementary to his observations while students worked on creating their advertisement and the grid analysis that had been transformed into a rubric for assessment purposes. Students presented their work to others. During this presentation, students assessed themselves (self-assessment), were assessed by the others (peer-feedback) and also reflected on their work as they explained to others how they had reached the learning outcome, how they had used the available semiotic modes and resources, how they felt and cooperated, what might change in case of future repetition of a similar task, which elements of visual design were included in their product, etc.

4. Discussion

According to research aims, it was indicated that multimodal literacy could be explicitly taught in Early Childhood Educational settings. T.V. commercial advertisements could serve as an appropriate teaching material – according to the aforementioned criteria of teaching materials appropriateness (p. 10) for teaching multimodality and promoting the critical skills of small children as well, which stimulates their interest to deal with them. So they become willing to participate in tasks that entail T.V. ads in order to reach learning outcomes concerning multimodal literacy.

The present article provides an insight into how multimodal literacy could be applied in educational settings in order to promote preschoolers' critical viewing of multimodal texts and particularly T.V. commercial video texts.

A benefit of the intervention in teaching multimodality described in this article is that teachers are provided with a paradigm of how curriculum demands on teaching multimodal literacy could be transformed into teaching practice. Teachers could draw from this paradigm to develop their own instructional plans in order to expand their students' literacy competencies. In addition, teachers are thought to feel confident to deal with curriculum demands and to overcome their anxiety stemming from negative feelings of inadequacy because of their lack of familiarization with the multimodal theory and practice as this is thought of as a 'domain in which they have little expertise' (Liu 2014: 4). In the long run, this could help teachers to increase their professional development and to reduce 'the implementation gap' that was previously mentioned between theory, curriculum requirements and teaching practice (Lim and Yin 2017).

Preschoolers who participated in the project were enthusiastic about being involved in a task that included T.V. commercial advertisements and also they were fascinated by the option of being actively engaged in creating their own T.V. commercial ad. It was found that, apart from the inclusion of challenging teaching material in an instructional plan, the key to the further engagement of the students and the maintenance of their interest in the task was the active role assigned to them during the project. In turn, the whole project was student- centered as it was designed upon previous knowledge of students on multimodal texts which derived from data resources collected during the initial evaluation process that was conducted.

It is held that both students' and teachers' role are redefined in a multimodal approach. During the project, students were encouraged to problem solve and investigative learning methods were adopted so that they could explore the topic with the use of text evidence-based reasoning and creative problem-solving to reach a conclusion concerning meaning making in multimodal texts. The teacher's role, according to multimodal pedagogy principles, was to scaffold the students' viewing process (Sofkova Hashemi 2018). Therefore, carefully selected questions were posed by the teacher to guide the students' approach to the structure and the elements in the video, while students were challenged to make justified assumptions about different affordances of modes and advertisers' choices concerning arrangements of the elements on video screen, the semiotic use of color, actors' gestures, written text and other semiotic resources. Along with an explicit teaching of the visual grammar and relevant vocabulary, students were encouraged to explain their assumptions on how multimodal texts make meaning. Explanations were given with the use of particular metalanguage which was gained through explicit and systematic teaching. Gradually, students managed to provide interpretations of the video content based on elaborate reasoning.

It is claimed that this approach can raise students' awareness of the complexity of com-

munication process (Chan et al. 2017) and that they can gain a deeper appreciation of how meaning is produced in multimodal texts. As long as guiding questions prompt students' thoughtful arguments based on evidence cited in text and students are engaged in tasks to explore meaning construction in T.V. commercial ads and demonstrate their appreciation of how modes make meaning individually and in combination, it is maintained that students' critical thinking is challenged and reasoning skills are developed. In conclusion, students become more discerning and evaluative of media messages and less intuitive interpretations are made. So there is a potential for change in literacy practice concerning students' systematic, active engagement with multimodal texts.

The purpose of this article was to establish a framework for teaching multimodal literacy in early childhood education. For that reason, a proposal for assessing preschoolers' multimodal products such as their own video ads was also included. We maintain that skills related to the comprehension of multimodal texts' meaning, structure and effects could be assessed through conventional tools such as grid analysis tools. However, critical literacy skills require more updated and open multimodal forms of assessment (Jewitt 2003; Wyatt-Smith and Kimber 2009) along with long-term instructional plans. Students should be provided with adequate time to encounter a wide range of authentic multimodal texts constantly (Chan et al. 2017) in order to understand and evaluate meaning critically.

In this article, as already mentioned, a multimodal teaching framework and the preliminary outcomes of an on-going exploratory research are described and presented. Therefore, both the framework and the outcomes are subject to improvement since instructional implementation was indicative of alterations that need to be made. It is believed that in future more elaborate instructional plans will be generated from knowledge gained from current implementations that provide researchers with a valid strong feedback for improvement.

Overall, despite the rather short implementation and the continuing nature of the research, it was made clear by the current article that preschoolers' multimodal literacy could be enhanced through systematic teaching plans and explicit instruction of multimodal language and design of multimodal texts (Sofkova Hashemi 2018). Critical literacy is the result of understanding the grammar of multimodal texts and meaning making strategies employed by them. It could be claimed that students initially became acquainted with the structure of multimodal texts and visual analysis tools and the proper vocabulary for describing the strategies of meaning making employed by them. Subsequently, students became quite capable of making elaborate remarks on the inferred meaning in multimodal texts based on previous analysis approach to the semiotic resources in the text. In addition, new knowledge on semiotic function of elements in the text that students gained by instruction and metalanguage allowed students to successfully unfold the layers of meaning in text and incorporate new knowledge into their own productions.

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