

## The Grammar of Visual Design as a tool to read images: a reading experience with pre-service teachers

### A Gramática do Design Visual como uma ferramenta para ler imagens: uma experiência com professores em formação

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**Abstract:** Advances in digital technologies have made us immerse in an increasing world of images, turning us not only consumers, but also producers of multimodal texts. Consequently, communication has become more and more visual, and conceptions on what is to be literate in the 21<sup>st</sup> Century need to be rethought to prepare its citizens to read, interpret and express themselves through those texts. How to achieve it and what are the gains and losses from this achievement is a concern educators have, especially those in teaching training. This paper is part of a study that aimed at investigating the viability of teaching categories from the Grammar of Visual Design (Kress and van Leeuwen, 2006), as a tool to promote visual literacy when reading and viewing skills are integrated (Barbosa, 2017). In this part of the study, we discuss the meaning eight pre-services teachers made when reading an advertisement, and its implication to their visual literacy according to Callow's model (2005). The results showed the rise of a reader-viewer (Serafini, 2014; Barbosa, 2017), who makes meaning on the verbal and the visual, more conscious, and aware of the importance of integrating those modes, but also more critical and structuralist, and less affective.

**Keywords:** the grammar of visual design; visual literacy; teacher education.

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**Resumo:** Avanços nas tecnologias digitais levam-nos a mergulhar em um crescente mundo de imagens, transformando-nos, além de consumidores, em produtores de textos multimodais. Consequentemente, a comunicação tem se tornado cada vez mais visual e concepções sobre ser letrado no Século 21 precisam ser repensadas visando um melhor preparo do cidadão contemporâneo para ler, interpretar e se expressar por meio desses textos. Como conseguir isso, e quais ganhos e perdas dessa conquista, é uma preocupação de educadores, especialmente aqueles atuantes na formação docente. Este artigo apresenta parte de um estudo que investigou a viabilidade do ensino de categorias da Gramática do Design Visual (Kress; van Leeuwen, 2006) como ferramenta para a promoção do letramento visual, quando as habilidades de ler e ver são integradas (Barbosa, 2017). Na parte aqui apresentada, discutimos os significados produzidos por oito professores em formação ao lerem um anúncio publicitário e a implicação dessa leitura para o letramento visual, observada de acordo com o modelo de Callow (2005). Os resultados mostraram a ascensão de um leitor-*olhante* (Serafini, 2014; Barbosa, 2017), que atribui sentido aos modos verbal e visual, mais consciente, portanto, menos intuitivo, da importância de integrar esses modos, porém, mais crítico e estruturalista e menos afetivo.

**Palavras-chave:** gramática do design visual; letramento visual, formação de professores.

## Introduction

Advances in communication and information technologies impact on educational practices have been widely discussed by educators over the last twenty years. Besides their use as a tool to teach and learn languages, for instance, those technologies have also facilitated the production, consumption and spread of texts in which different modes have been brought together and thus turning communication more and more multimodal. Multimodality, in this sense, is understood as the integrated use of different modes, such as language, (moving and still) images, sounds, among others, in communicative events (van Leeuwen, 2011) in which language itself is only one, but not the dominant mode of communication (Kress, 2010). Consequently, special attention has been given to the understanding of how those modes can be integrated, particularly the verbal and the visual, which also implies that conceptions on what means to be literate in the 21st Century need to be rethought to adequate pedagogical practices in this scenario.

By adopting the Grammar of Visual Design (GVD), by Kress and van Leeuwen (2006), different studies have analyzed a variety of texts, such as advertisements (Lim, O'Halloran, Tan, and Marissa, 2015), newspapers (Kress and van Leeuwen, 1998) and teaching material (Barbosa, Araújo, and Aragão, 2016), among others, to show the grammar's potential to enhance reading images and, thus,

promote visual literacy. However, fewer studies have focused on the meaning-making production of its users while reading and viewing those texts and their visual literacy (VL) development. The aim of this paper is to discuss those aspects by analyzing pre-service teachers' responses to a Lancôme® advertisement, before and after they had been introduced to the Grammar, based on Callow's (2005, 2008) visual literacy model, to highlight possible implications for promoting visual literacy in a teaching language context.

### **Multimodality and visual literacy: an approach for the 21<sup>st</sup> Century Education**

As the digital technologies evolve, so does the world of communication and it has brought challenges to contemporary society which now has to break with long-lasting traditional ways, such as the realm of verbal language as the main mode to make meaning. Communication has always been multimodal (Kress et al, 2014). From the paintings on the caves (Figure 1) to nowadays environment (Figure 2), it has always been the result of multiple uses of semiotic resources. However, that use has significantly increased and how to better understand it turns to be another challenge we must face in order to be an agent of that process and not only a consumer of all the visual that surrounds us.

**Figure 1.** Serra da Capivara-Piauí-Brazil



Photo: Conceição Lages

**Figure 2.** Times Square – NYC-USA



Photo: Author

That agency, thus, requires “a step outside the long tradition of seeing ‘language’ as a full means of making meaning, seeing it instead as one means among others...” (Kress, 2010: 15), which is how multimodality can be understood in the field of representation and communication. To exemplify that process, let's consider what may have been in action in Figure 3.

**Figure 3:** A poetry exhibition – Teresina-Piauí-Brazil



Photo: author

The setting in Figure 3 was part of a poetry exhibition in a shopping mall. Taking that step mentioned by Kress (2010), means understanding that the meaning is not only on the words on the frames, instead, it is the result of those words being integrated to other modes such as its typography (color, sizes, styles), the layout of the pages and colors background in the frames, the layout of the wall (how the frames are displayed), and also the furniture, the leaves on the floor and the effects they cause when a person steps on them (smelling and sounds, for example). In this perspective, multimodality says which modes have been used, but not what they mean or why they have been chosen. To achieve that, one must count on social semiotics (Kress, 2010) in which meaning is the result of the meaning-maker interest in a social context at the moment the communicative event takes place.

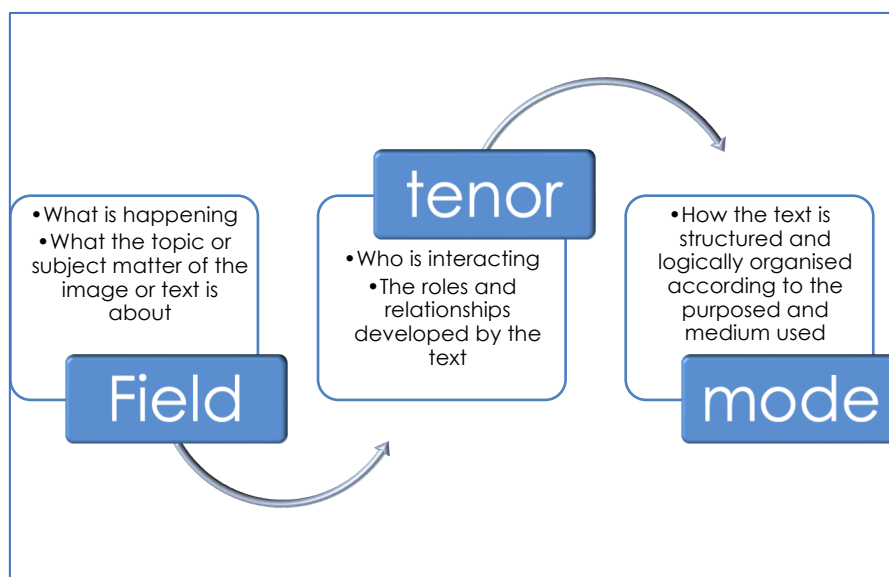
As a communicative event, we may consider any kind of situation in which communication represents the main purpose. Taking a multimodal approach, Kress (2010) explains the difference between representation and communication by saying that the former is the “me part” while the last one, by contrast, is “me with the others” (p. 51). In other words, the participants of a communicative event (producer and audience) need to share the same interest in others to have the message understood. As such, it is part of an educator's role to help students give that step mentioned, which means that multimodal literacy, defined by Walsh (2011, p.12) as referring to "meaning-making that occurs through the reading, viewing, understanding, responding to, producing, and interacting with written

[and oral] text combined with other modes, particularly with screen-based texts", is required to be an agent of representation and communication in the 21st Century.

Literacy, in this perspective, can no longer be related to knowing how to write and read verbal language only, it must encompass the ability to read, understand, interpret, and use different semiotic resources in social communicative events – the visual literacy, which also includes integrating text and images in these events (Barbosa, 2017). Burmark (2008) supports this idea when the author says that visual literacy is the primary literacy of this century and, to be visually literate, students “must learn to ‘read’ (consume/interpret) images and ‘write’ (produce/use) visually rich communications” (p. 5). As part of visual literacy, “viewing is more than just enjoying the pictures, although this is an integral aspect. As with reading, it involves decoding, comprehending, and questioning all types of texts” (Callow, 2013, p.3). In an educational field, viewing can be seen as a skill to be integrated to reading and writing, which means including pedagogical practices to help students understand, interpret, evaluate, and express themselves through visual language, not verbal language only (Barbosa, 2017). An implication from that would be the arising of a reader-viewer (Serafini, 2014), “who do not only focus on the verbal mode but constructs meanings by integrating verbal and visual information to consolidate them into communicative events (Barbosa, 2017). However, differently from the verbal language to which for many years a variety of studies have theorized about its features and how it can be developed as a skill, particularly reading and writing, and apart from arts, fewer studies have been developed on the visual and how teachers can include those skills in their teaching practices.

Regarding reading, pedagogical practices with Grade School and High School students, and teaching material, such as the ones investigated by Ruppert (2004), Pinheiro (2016) and Holanda (2013), respectively, among others, have adopted Kress and van Leeuwen’s (2006) Grammar of Visual Design (GVD) as a useful tool to read images. The Grammar, which is an attempt to explain the syntax in which the element in a visual structure is organized to fulfill three metafunctions - ideational, interpersonal, and textual, called by the GVD’s authors as representational, interactive, and compositional meanings, respectively, is based on Halliday’s Systemic-Functional Linguistics (1985) whose functional semiotic framework is extended to other modes, not language only, and summarized as following (Figure 4).

Figure 4: Halliday's functional semiotic framework, adapted from Callow (2013)



Source: Authors' adaptation from Callow (2013)

The representational meanings are related to field, and it means that "any semiotic mode has to be able to represent aspects of the world as it is experienced by humans" (Kress and van Leeuwen, 2006, p. 42) which include the participants, processes, and circumstances in the communicative event.

The interactive meanings are related to tenor. According to the authors, "any mode has to be able to represent a particular social relation between the producer, the viewer and the object represented." In an image, this social relation can be represented by the (eye) contact established by the participants in the image and the viewer, the social distance (open, medium, or close shot) and the perspective those participants are depicted.

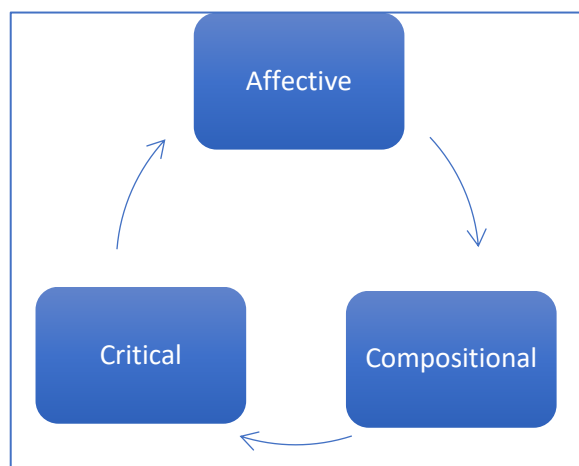
Finally, the compositional meanings are related to the mode and, thus, each semiotic mode has to be able to represent "different compositional arrangements to allow the realization of different textual meanings" (Kress and van Leeuwen, 2006, p. 43). Those meanings are made when considering the value of information (ideal/real, given/new), the salience (shots, sizes, color saturation) and framing (or how (non) structured the elements are organized).

Those ideas resulted from a systematic analysis Kress and van Leeuwen conducted of a series of visual communication in Western cultures, especially advertisements. However, as the authors claim, although being a grammar of the visual, it does not mean it is a set of rules or correctness, rather, it is a descriptive grammar to help the first excursions into semiotics. Unsworth (2001) says that "as well as recognizing that all texts need to be read multimodally, we need to understand how these different modalities separately and interactively construct different dimensions [ideational, interpersonal and textual] of meanings" (p. 10).

Taking it into the educational field, to better understand teaching and learning in the multimodal environment of the contemporary classroom, it is essential to explore the ways in which representations in every mode is presented in the classroom. It is important to examine how the image, the word, and the design in other ways are used and understood as resources available for learning and making meanings in the classroom.

As mentioned in the introduction, some studies have adopted the Grammar to understand how the semiotic elements are organized in different multimodal texts. However, going beyond that, fewer studies have investigated the meaning made by their users to those texts and its relation to their visual literacy development. A possible reason for that is the lack of models that can evaluate students' visual literacy, or something similar to the proficiency tests that evaluate language skills. An example of such a model can be found in Callow's work (2005, 2008) in which the author proposes an interdisciplinary approach to image understanding. His semiotic and pedagogical model and framework (2005, 2008) to enhance reading images and assess students' visual literacy consists of three dimensions that act simultaneously, as shown in Figure 5:

**Figure 5:** Callow's visual literacy model



Source: Authors' adaptation from Callow (2008)

The Affective dimension refers to expressions of appreciation when examining images, as well as responses and personal interpretation to a multimodal image or text based on one's own experience or aesthetic preferences as signs of affective engagement, either positively or negatively.

The Compositional dimension considers concepts such as actions, symbols, angles, look, colors, layout, salience, lines, and vectors that reflect a metalinguistic language about visual texts. It also considers cultural, structural, and semiotic features of texts. In this dimension, we can include the teaching and application of grammar of visual design by analyzing three aspects: What is happening



in the image? (actions), How do we react to people or other participants in an image? (interpersonal) and how is the page organized? (composition, structure).

The Critical dimension is related to the reader's awareness of the producers' choices and possibilities when representing the participants in the images. It refers to the relations of power presented in any type of text, recognizing the choices or perspectives presented and taking into consideration the most comprehensive critical analyzes around discourses such as power, gender, or social issues.

These three dimensions can be analyzed both to visual and written text. Although the visual aspect is important, ideological criticism is perhaps the biggest challenge for students and teachers. Teachers, then, should be prepared to provoke discussions with students around those issues as well as the semiotic modes that represent them and are part of that image.

To each of those three dimensions and based on the GVD, Callow (2008) also proposes a VL assessment framework<sup>3</sup> to be used in three school levels of the Australian National Curriculum. Despite its audience, Callow's model and framework can also be extended to different contexts of education, including teacher training in Higher Education, which allowed us to adopt it in the analysis of the participants' meaning-made when reading a variety of multimodal texts, particularly the advertisement that is the scope of this paper. The model provided a students' visual literacy X-Ray, metaphorically speaking, by indicating which of the three dimensions was more or less impacted by the use of the GVD as a tool to read images.

## Research goals and methodological procedures

Grounded on multimodality (Kress, 2010; van Leeuwen, 2011) and Visual Literacy (Callow, 2005, 2008, 2013; Barbosa, 2017), this paper discusses visual literacy in a Brazilian teaching educational context, by analyzing, according to Callow's visual literacy model (2005, 2008), the meanings made by eight preservice teachers of English, while reading an advertisement (Figure 6) before and after being exposed to the Grammar of Visual Design (Kress and van Leeuwen, 2006). This reading session was part of a 44-hour workshop<sup>4</sup>, presented by one of the researchers and attended by college students from a Brazilian public university. In a combination of theory and practice, the main ideas of the Grammar were introduced, followed by reading activities in which the participants would share their understanding and interpretation of a variety of multimodal texts. The advertisement

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<sup>3</sup> The framework can be accessed at

[https://www.researchgate.net/publication/239593608\\_Show\\_Me\\_Principles\\_for\\_Assessing\\_Students'\\_Visual\\_Literacy](https://www.researchgate.net/publication/239593608_Show_Me_Principles_for_Assessing_Students'_Visual_Literacy)

<sup>4</sup> The workshop was the main source for collecting data for the research project, which was approved by UFPI Research Ethics Committee, and registered at the Brazilian Platform with the CAAE number 47893215.0.0000.5214. More details in Barbosa (2017).



(Figure 6) was one of the fourteen texts which were selected by the researcher, according to their genre and meaning-making potential, to compose the workshop reading activities.

**Figure 6.** Lancôme® advertisement



Source: Adapted from Oprah Magazine (May 2015) by Gustavo Rocha

The advertisement<sup>5</sup> shows the African American actress Lupita Nyong'o on a pink background, and wearing a bright yellow party dress, to present, and represent, Lancôme Shine Lover® lipstick new collection. The vibrant colors and the actress's facial expressions and gaze suggest feelings of self-confidence, happiness, and power that can be understood as being associated with the use of the product. By applying the GVD categories, we may say the image on the advertisement fulfills the three metafunctions, which means both, text and toll (GVD) were suitable for the analysis.

In the analysis, we searched for answers to questions such as: How did the participants become consciously aware of their own visual literacy? How do they evaluate the Grammar and the workshop experience? And, finally, which of the three dimensions is highly identified in their responses to the reading activities proposed and/or was more or less impacted by the student's knowledge of the GVD? That reading performance was part of a multimodal reading workshop, in the Brazilian English as a foreign language (EFL) teaching training context, in which the students were introduced to some GVD categories and engaged in visual analysis of different multimodal texts, followed by their sharing of interpretations. In the end, the participants were asked to evaluate the Grammar as both a tool to read

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<sup>5</sup> Due to copyrights, the original advertisement cannot be shown in this paper. Part of it, without the verbal text, can be reached at <http://howwomen.com/beauty/lupita-nyong'o-in-new-lancome-lipstick-ad/>

images and to be used in EFL classes. They were also asked to evaluate the workshop experience and indicate their intentions to adopt the ideas presented in their future teaching practice. For this article, parts of the written answers given by the participants to the reading activity with the advertisement in Figure 6, as well as their evaluation of the Grammar, were selected as a support for the discussion of the results achieved as a whole. Those parts were selected according to their potential to represent the answers we were searching for.

## Analyses and Discussion

### *From intuitive to consciously visual literate*

Since mass culture is part of our daily lives, and so are multimodal compositions, some knowledge on how to read images were expected from the participants. Thus, it was not a surprise that they could express the meaning they made while reading the advertisement. In general, the meaning they made was related to the dark shine as changing stereotypes and colors representing youth, happiness, and self-confidence, as it can be seen in the following answer from one of the participants (P4):

*This image is obviously an advertisement. I could not understand if the advertisement was about lipstick or make up [...] The name of the brand is bigger than the other written words in the text and is in a bold letter so you would recognize right way. This image gives me a happy feeling. First because of the colors [...] and second because they chose a black actress to be the model [...]* (P4)

From this answer, we can infer that the participant was able to recognize different modes, such as typography and colors, and correlate those colors to the feelings mentioned, as well as the dark shining of the actress understood as a changing in the stereotypes on advertisements. But also, that recognizing the textual genre, and not the meanings on it, seemed to be the main purpose of their reading. It suggests an intuitive skill to read images based on previous school experiences whose focus is generally on the description and textual genre identification.

After discussing the importance of being visual literate and as they were exposed to the ideas presented at the GVD, that intuitive meaning-made started to become a conscious action. The results showed that students became aware of their visual literacy as they started adopting the GVD metalinguistic language to talk about multimodal texts, as it can be noticed on P2's (participant 2) and P6's (participant 6) meanings made to the same advertisement at the end of the workshop:

*The model is using the lipstick on the advertisement on the **right side** and on the **left side** is the item constructing the relation between the **real** and **ideal** [...]. The name of the brand is on the left side over part of the model, to empower the name of the brand.* (P2).

*I feel close to her because she is **looking at me** and smiling in order to **demand** interaction with the **viewer**. The lipsticks work like **vectors** to the texts.* (P6)

Although the meaning made was maintained, the words highlighted indicate that a proper metalinguistic language was used since those words are part of some GVD categories. Most importantly, though, is that the students started to include the viewer as a participant in that communicative event, in other words, they recognized themselves as part of that communicative event, which leads us to understand it as the arising of a reader-viewer.

## Evaluating the Grammar

When asked to evaluate the Grammar and the workshop itself, they evaluated both positively and, since they were pre-service teachers, they asserted their intentions to adopt it as a tool to be used to teach their future students to read images, as asserted by P4 (participant 4) and P5 (participant 5):

*Besides increasing my perception of multimodal texts, this workshop helped me clearly see that this kind of literacy is necessary for young and adults. I started this workshop with no knowledge about the GVD and now I know it better and I am enjoying my new critical skill, I wish I can share it as a teacher and learn more about it so that I can turn my future students into literate too. (P4).*

*Much more interesting, [...] I will never look at an ad (or any other image) the same way I used to, I will always try to analyze, and try to understand what the author is really trying to say... (P5)*

Their answers validate the shift from intuitive to conscious reading and, as a result, the arising of a reader-viewer, also noticed on P3's (participant 3) answer:

*It does have influence since it increased my knowledge and made me understand the importance of understanding the meaning in images and what they represent. (P3)*

Finally, P2's (participant 2) evaluation of the Grammar also highlights its effectiveness and the need to include multimodality and visual literacy in the curricula of any teacher education context:

*At first, it looks like something quite alien as for what we know about language, but then this idea turned to be like any other one regarding language: in order to be understood, it needs to be studied. (P2)*

## From affective to critical view

If studying the GVD caused a shift from an intuitive reader to a conscious one, Callow's visual literacy model (2005, 2008) provided the participants' interpretation X-ray, metaphorically speaking, that reveals that that shift resulted in another one: from a more affective to a more critical and technical (compositional) point of view after they had been taught how to read images. By considering what is expected in each of the three dimensions, we may say that when reading the advertisement for the first

time, four, out of the eight, students expressed some engagement with the text, either positively (P1 and P4), neutral (P7) or negatively (P6), as noticed in their answers:

*This image makes me feel good and sophisticated. (P1)*

*This image makes me happy. Somehow I feel good finding a very beautiful black actress as a symbol of beauty. (P4)*

*I don't like the dress (P6)*

*I don't feel anything because I don't want to buy the dress. (P7)*

Reading the advertisement again at the end of the workshop, a reader's affective engagement with the text could be identified only in P1's (participant 1) answer:

*Everything involves me when I see it. (P1)*

As for the compositional dimension, since the first reading activities, that dimension could be identified in the students' answers as it was previously presented in this paper when we considered the meaning the participants attributed to the colors, typography, and the actress chosen to represent the product and the brand in the advertisement. However, although not so many changes could be identified, it is important to notice that the semiotic work they made became somehow more technical as the students started using a proper metalinguistic language, like right side/left side, real/ideal, among others highlighted on some of the previous comments present in this article. Nevertheless, the other semiotic modes recognized by the participants as being a potential for meaning make, such as the layout and the background, and the inclusion of the viewer as a participant in the communicative event, are some aspects that can help us understanding that, based on this dimension, being taught the GVD contributed to the participants reading images in the workshop.

Finally, the impact of the GVD on the students' visual literacy can be clearly identified according to the critical dimension, not when considering the numbers of answers in which that dimension was presented, four, in the beginning, five at the end, but the focus of that critical point of view. In the beginning, two out of the four students who critically read the image understood that the producer's choice represented a purpose and the other two only expressed their surprise for such choice, as in P3's and P4's answers, respectively.

*The woman is to change the stereotype that only white people can be in a magazine [...] It is a strategy to make people interested in the product. (P3)*

*They chose a black actress to be the model. It's very difficult to find commercials with black people as a model. (P4)*

At the end of the workshop, the producer's choices were not only highlighted by the participants, but also understood and linked to the purpose of convincing the reader to buy the product, as again in P3's and P4's answers.

*I think the producer used her on the advertisement because she is really famous [...] He is trying to convince women to buy the lipstick by showing that it can make a woman feel better and happy with herself. (P3)*

*Now I can see clearly that everything in this image urges to sell the product. (P4)*

Based on the results achieved when applying Callow's visual literacy model to the analysis of students' responses to the Lancôme advertisement, we can infer that, although the Grammar can be an effective tool to understand the multiples semiotic resources on visual texts, as shown when considering the compositional and the critical dimensions, it can also banish or lessen the affectivity that should be part of any reading and viewing images.

### **Conclusion and implications**

As final considerations, we can say that, after being exposed to the GVD, the participants showed to be more conscious and less intuitive when reading the visual, and also willing to include viewing as a skill in their future teaching practice. The results showed that a reader-viewer aroused as the participants started using a proper metalinguistic language to talk about images in a less intuitive and more conscious and critical ways and as they became aware of their role as both, a participant in the communicative event and a teacher to be who will need to teach his/her students how to read images so that they can become visually literate and, thus, able to be an agent of communication in contemporary society.

On the other hand, when considering the three dimensions according to Callow's visual literacy model, the results also showed that, in this process, a more critical point of view and a lack of affectivity may represent the gains and the losses of being taught how to read images, respectively. An ideal reader-viewer then would be the one who can have the three dimensions – affective, compositional, and critical – working simultaneously in the act of reading and viewing a multimodal text. Teaching students to become this ideal reader-viewer constitutes another 21<sup>st</sup> Century challenge, especially when the teacher himself/herself has not been taught how to produce and understand visual communication properly.

Consequently, a change in the teaching training curricula by including tools to promote visual literacy, such as the GVD and Callow's visual literacy model, seems to be an implication to help us face the 21<sup>st</sup> Century challenges. To teach those born in this digital age, teachers need to become aware of their own visual literacy first and then how to integrate those tools in their pedagogical practices.

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