

Mobile Digital Technologies in the Visual Literacy Process: an experience with the PicsArt app

Sandra Virgínia Correia de Andrade **SANTOS***

Anne Alilma Silva Souza **FERRETE****

Derli Machado de **OLIVEIRA*****

* PhD student in Education at the Universidade Federal de Sergipe (UFS). Master (2015) in Portuguese Language at the UFS. Basic education teacher. Member of the Research Groups Education and Digital Cultures-Ecult and Studies in Higher Education-GEES. Contact: sanlitera@yahoo.com.br.

** PhD (2007) in Education at the Universidade Federal do Rio Grande do Norte (UFRN). Master (2002) in Education at the Universidade Federal de Sergipe (UFS). Professor at the Universidade Federal de Sergipe (UFS). Permanent professor of the Graduate Program in Education (UFS). Contact: aferrete21@gmail.com.

*** PhD (2013) in Language Studies at the Universidade Federal do Rio Grande do Norte (UFRN). Master's (2010) at the Universidade Federal de Sergipe (UFS). Adjunct Professor at Universidade Federal de Sergipe, Department of Language and Literature. Contact: derli_machado@hotmail.com.

Abstract:

This article brings reflections on the presence of mobile digital technologies and mobile apps used pedagogically, from a work developed in a public school of Sergipe. In order to develop the reader competence of the multimodal elements present in the magazine cover genre, the didactic-pedagogical proposal departed from the activities carried out from the use of the cell phone, in order to promote and consolidate the visual literacy. For the reach of the results, the PicsArt app was used, which allowed the appropriation of the students in front of the elements that make up the qualitative approach, the research in addition to addressing and analyzing the experience, also signals the challenges faced by introducing such resources in the educational context, as well as the possibilities and importance of working the multiple languages using digital technology and mobile apps.

Keywords:

Mobile devices. Visual literacy. PicsArt.

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Sandra Virgínia Correia de Andrade Santos; Anne Alilma Silva Souza Ferrete;
Derli Machado de Oliveira

INTRODUCTION

In the contemporary textual composition, the presence of multiple languages is something remarkable, being highlighted, in particular, those used from technological innovations, which increasingly drive the use of a multimodal and, even including, multimedia repertoire. In the texts that the reader is currently faced with, it is easy to find, in addition to verbal language, a visual language that has influenced and modified both reading and writing ways, constituting new possibilities in school daily life. In this scenario, research on language points to visual reading as a significant process during classes, since digital culture makes available to the individual several semiotic resources, which dynamize the contemporary textual composition and constitute meanings. On the other hand, even in the face of the active presence of the image in socio-communicative relations, it is noticed that, in basic education, the interaction between the written text and the image is little explored, a reality observed through the initial results of this study¹. For students, subjects of this research, the image only illustrates what is written, therefore there is no dialogue that interacts and complements. In addition, for these same students, the visual language is associated only with the main image, without realizing that there is a multimodality and that their choices make up the meaning of the text, whether from the position it occupies, whether from the colors, shapes, characters present etc.

In view of this reality, the present study was developed with eighth grade elementary school students, in a public school located in Tobias Barreto, town of Sergipe state, using the research method of the Case Study, which, according to Gil (1999), is a method that allows investigating a group, organization or phenomenon with a qualitative approach. This proposal involved 38 students, who actively participated in the entire process, either discussing, exercising or producing. The instruments chosen for data production were the application of a questionnaire, the spontaneous, systematic and participatory observation of Portuguese classes, as well as the activities done by the students. In order to ensure the non-identification of the participants, the individual reference was made through initials suggested by the students themselves and, for the collective reference, the initial P, followed by the number corresponding to the pair, since the proposal involved both individual and collective practices. In this context, materials, strategies and resources were elaborated, which were part of the planning to be developed in the class about the textual genre magazine cover, in view of its multimodal composition full of semiosis that mix and connect to a coherent whole. This proposal started from the need to develop with the students the reader competence in the face of multimodal texts, with the support of their smartphones, since these devices enable and enhance the active participation of students both in the process of producing multimodal texts and in reading and comprehension. For this, the PicsArt application was chosen

¹ This article is an excerpt from the master's research developed from a pedagogical project involving the textual genre of magazine cover in the process of visual literacy. This research is available in: <https://bit.ly/3pn8Mc5>.

and installed on the students' smartphones, with which they were able to enhance, from their own visual construction, both technological and reading skills.

To dialogue with these issues, the discussions of Kress and van Leeuwen (1996), Moreira and Massini (2001), Aquino and Souza (2008), Bamford (2009), Dionísio (2011) and Costa (2013), among others, were used as theoretical contributions. This paper, therefore, brings reflections on visual literacy and the use of mobile digital technologies in this process, thus provoking important discussions in the class' context.

THE GRAMMAR OF VISUAL DESIGN IN THE VISUAL LITERACY PROCESS

In Western culture, verbal language has always been considered a dominant way of communication, however the changes in socio-communicative relations have placed nonverbal language (that one which does not use words) in an equally significant position. While verbal language, whether oral or written, was considered the main semiotic way in the communicative process, in the contemporary world non-verbal language has highlighted its discursive and determining role in the construction of meaning.

Given the density of images that permeate today's society, both in print and digital media, understanding their representativeness and the effects of meaning caused by visual choices enables cultural practitioners to observe and interpret the world.

Since the most remote history, known by man, the image marks its presence in an undeniable way, and through it the human being expresses himself since long before the written word. Their culture has been strengthened through the meaning that these images have established along the way in the most diverse times. And, currently, the world in the fence of images all the time, visual messages that are being studied and investigated by several research disciplines (SPENGLER, 2010, p. 1).

Hence the need to understand such visual choices, what their real meaning are and even to promote their resignification, since there is no random presence of elements. What we find is an architecture produced to reach a coherent and meaningful whole, since, nowadays, communicating through images is something so common that the integration between the verbal text and the images in several discursive spheres, professional and/or personal, is common.

In view of this, to understand the imagery composition present in various communicative situations, it is possible to take a look at the Grammar of Visual Design, the GVD, which analyzes linguistically and structurally visual texts and their semiotic codes from a triad: the representation of the world, the interaction between reader and text and the meaning of their visual choices or, rather, the images, which, according to the GVD, juxtapose three perspectives: representation, interaction and meaning.

Recognizing that images are not only structured, but, above all, have meaning, enables the creation of more critical readers in the face of the discursive manifestations and new social identities that the technological universe has awakened. The multifunctional vision of verbal and visual language choices allows us to understand the ways in which language is used for different purposes and for functionality in different contexts.

Kress and van Leeuwen (2006) point to the need to promote visual literacy based on more effective pedagogical practices regarding the development of the learner in the capacities of questioning, interpreting and criticizing. For this, the recognition of visual structures must be part of this new look, because the combination between the verbal and non-verbal is responsible for the construction of global meaning of the text. Or rather, the integrated reading of semiotic codes that enable the construction of contemporary and multimodal statements focuses on ways, means and communicative and discursive practices, preparing society for new skills.

As a possibility for a better understanding of this imagery process, Kress and van Leeuwen (1996) describe and discuss three metafunctions. The first of them is called representative. Its meaning is in the reader, when contacting the visual text, to observe that in the imagery composition there are represented participants, be they people, objects or places “connected by a vector, [which] determines who does and the one to whom the action is directed” (FERNANDES; ALMEIDA, 2008, p. 13). In it, the nature of the events, objects, participants involved and circumstances are constructed, in other words, “it emphasizes the representation of aspects of the world – physical, mental, social” (OTTONI; LIMA, 2014, p. 31). This metafunction is related to the content of the images and, in view of this, can present two possible structures – the narrative and the conceptual –, being differentiated by the presence or absence of actions.

The second is the interactive metafunction, which establishes strategies of approach or distance between the producer of the text and its interlocutor, because through it we notice the level of involvement present in its construction. In this construction of meaning, the observer’s gaze engages in a relationship of connection or not between the participants of the process, meaning what “underlies the relationship between the images and the target audience” (OUVERNEY, 2008, p. 50).

Finally, there is the compositional metafunction, responsible for organizing and combining the previous metafunctions. By analyzing the first two, one identifies what is present in the imagery composition, its representation and effect in front of the reader. In this, one begins to understand the construction of meaning of such elements, observing their choices and structure. Therefore:

The reading of the image is not a dive into the unknown, for the author has organized his work so that it can be read by the observer: he has created a cutout; he has hierarchized the figures; with the light he has put certain aspects in evidence, covering up others; he has brought certain elements closer to the public, while leaving others in the background. He guides the observer by means of gestures borrowed from the figures and of lines and movements through which our gaze sneaks (COSTA, 2013, p. 63).

Therefore, it is evident that visual language clearly presents norms and structures that contribute to its construction of meaning. Like all the others, visual language is structured for the construction of meaning, corroborating for the presence of a new text. However, for a meaningful understanding of the visual text, it is necessary to identify the elements that build their meaning, as well as to understand their norms and semiotic structures, increasingly enabling their observer for new visual readings and enabling the individual as to the linguistic aspects of a text, whether verbal or visual.

Thus, by deepening the Grammar of Visual Design, it is possible to make real the new literacy in question today: the visual literacy, because with GVD the reader will not look at the image without focusing on the elements responsible for the communicative situation and its various meanings. In this sense, by realizing that contemporary reading practices are marked by the abundance of texts on offer and by the diversity of their forms of reproduction, supports and textual, graphic and visual organization, it is understood that education has the direct responsibility of encouraging its students to new readings, showing them the subtleties and between the lines of texts in order to reach the mastery of the linguistic diversity circulating in society.

The Visual Reading of the Magazine Cover under the GVD View

The *Mundo Estranho*² magazine was a periodical whose goal was to pique the curiosity of its readers. Published from 2001 to 2018, it gradually conquered readers due to its themes being related to scientific and

² For this study, some magazine covers were worked on both printed and digital. One of them was *Mundo Estranho*, which had been selected for this discussion.

cultural curiosities. Focusing on the young public, it was concerned with bringing up answers to the various questions asked by this target audience, through the question section. Produced monthly, it featured not only on the cover, but throughout its interior, in each edition, a remarkable multimodality, often with bizarre elements that defined the magazine's surprising style. Besides acquiring it through magazine stands or by subscription, the reader could also get in touch through the website, a virtual place where any Internet user has access to the current and previous editions, allowing for an active and even attractive interaction. Nowadays, the magazine is available on the website of the magazine Superinteressante^{3,4}.

Recognizing, therefore, the magazine *Mundo Estranho* as a support full of multimodality, the analysis of its cover will approach the metafunctions, which reflect on the meanings that each visual and verbal choice present, as seen in the figure below.



Source: *Mundo Estranho* magazine, edition 154, Jul. 2014

Figure 1 – Cover of *Mundo Estranho* magazine

Beginning with the representative metafunction, the reader starts the observation by identifying if there is action represented or not and who is the participant represented. In the case of the cover of *Mundo Estranho* magazine, chosen for this analysis, the reader identifies that, through the represented participant, there is an action being performed, therefore, the narrative process is found. From then on, new inferences are initiated. At this moment, the presence of the vector that connects the gaze of the represented participant to that of the interactive participant – the observer – is also identified. The vector is a trace that indicates the directionality of the look – pointing linearly to its interlocutor. The lines and the tips of the arrows, representing

³ *Mundo Estranho*, which was published monthly, was discontinued in 2018.

⁴ The Superinteressante magazine, on its website, still publishes content from the magazine *Mundo Estranho*. Available in: bit.ly/2Y71MGx.

the vector, indicate the direction of the participants' movement, pointing to the one who does and the one for whom the action is intended. Besides the gaze, there is a volumetry highlighting the facial expression that favors the identification of the being represented. Thus, with the visual reading, the reader realizes that it is not just any clown, but Ronald McDonald, character of one of the biggest fast-food networks in the world.

When observing the cover of *Mundo Estranho*, edition 154, July 2014, the interlocutor feels trapped in the participant's gaze, because no matter what angle you look at it, the vector will follow you, promoting, therefore, a permanent interaction. In this case, the Semiotics points to an interactive participant since, besides being the subject of communication, it interacts with the reader. Therefore, in the interactive metafunction, we have the demand, the look directed to the reader, once the participant finds their goal: the reader. In this process, it is identified that the actor performs an imperative action at the moment he requests silence from his interlocutor. In the reaction process, the participant is called reactor, which finds their phenomenon, the observed participant, that is, the reader.

The visual elements that allow this observation are the ones responsible for attracting its observer not only to the reading of the cover, but also to the senses that are inferred. By looking at its phenomenon, the reactor provokes the sensation of intimidation. Although the symbol of silence is represented, the junction with the expression and other elements indicates a threatening power relation. This play of meaning is understandable when one observes the elements used to meet a discursive proposal. Still regarding the representative metafunction, the maintenance of its peculiar characteristics, such as physiognomy, colors and all other visual elements, allows us to recognize Ronald McDonald's figure in a mysterious situation when confronting the portrayed character, his expression and the place where he is. Moreover, when the visual elements analyzed so far and the verbal elements present in the headline and subtitle are crossed, it is noted that the represented participant dialogues with the verbal, thus building new and complementary senses.

The word SEGREDO (SECRET), written in uppercase letters, talks about the action performed by Ronald McDonald. If the action performed asks to be silent, there is a direct dialogue with the word chosen to center the headline. As for the subtitle, there is also a confluence with the participant represented. Therefore, we note that the McDonald's character is not there randomly, but to build a sense. When reading the subtitle, the interlocutor (or interactive participant) identifies the subject matter that will be inside the magazine, as well as the reason for the choice of the main image.

The interactive metafunction – the contact, the social distance, the perspective and the modality – is something well represented in the edition 154 of *Mundo Estranho*. The contact is present in the vector between the interactive participant and the reader, making what Kress and van Leeuwen (1996) call demand. The link between the participant Ronald McDonald and the reader is so strong that, regardless of the position of both, the vector remains directing the gaze between one and the other, demanding a response from its goal. In this case, the interactive participant is the subject of the act and waits for the reader's reaction of obedience and even fear, since the clown figure causes fear in many people. Presenting a social distance in the closed plane, the image proposes a direct approach, which means that they have an intimate relationship, representing, therefore, a situation that is close to the social context of the reader. As for the perspective, the angle used is the frontal one, which brings the actor even closer to his goal, allowing the identification of emotions of the person being represented and, therefore, making comprehensible the intentionality of his representation, in this case the power relation. Within the conception of the modality, there are the elements: color, contextualization, illumination, and brightness.

On the cover chosen, one can see that the colors white, red and yellow corroborate with the figure chosen. With this characterization it can be seen that the choice sought to approach McDonald's reality, since these are the company's own colors. The way the represented participant is contextualized indicates his real presence in front of a white wall that suggests a kitchen wall, from which one can see a clean place where

McDonald products are produced. If well observed, the image jumps from the paper, representing the reality of the individual. It is as if the image had life and was related with greater proximity to the reader. It is also observed that there is a shading behind Ronald McDonald provoked by the luminous focus of his face. Therefore, the interaction provoked between visual and verbal language is very evident and contributes to important inferences for the reading comprehension of magazine covers, which makes such a genre significant for classes' work.

Finally, there is the compositional metafunction, which organizes and combines the visual elements of the image integrating what has been discussed so far: the representative and interactive elements. Through it, the non-verbal components, their position and characterization are investigated. At this moment, we observe the parts that compose the totality, their presence and meaning. On the cover of the magazine *Mundo Estranho* analyzed, the positioning occupied by the image was the centralization, whose salience is used from a background that highlights the central image in view of the colors chosen and their proportionality. This positioning is called information value, with which one notices if the visual element is on the right/left, top/bottom or center/margin. On the cover chosen the centralization value can be found, in view of the nucleic occupation of the space, connoting its position of highlight and, consequently, of importance. Being also the most prominent element, Ronald McDonald is in the foreground and occupies practically all the space on the cover, making it very clear and strongly framed, directing all attention to its presence, making its structure connected between what is seen and read.

As seen, the analysis from the Grammar of Visual Design stimulates a process of interactive and broad visual reading through its interlocutor built from the verbal and non-verbal discourses present, in this specific case, on the magazine covers. By integrating verbal and non-verbal elements, GVD directs the reader's gaze to a perceptive reading of images, which actively dialogue with the verbal. Although there are other elements to be analyzed in the chosen image – edition 154 of *Mundo Estranho* magazine, it was possible to enter the world of the image, knowing its structure and understanding that the elements are there not only to “decorate”, but to present a logical and dialogical relationship between the verbal and the non-verbal. As the reading is done, interacting with the image and following towards the written text, the informational sense is noticed in its completeness, remembering that:

The look does not depend only on the ability of the organs of perception, but also on mental processes, and that both need adjustment, training and experimentation for their development. The pedagogical activities directed to this purpose concern the awareness of the act of seeing, of its complexity and partiality. They also concern the learning of a methodology of observation improvement (COSTA, 2013, p. 41).

Therefore, the visual experiences go through several processes of reflection and analysis. It is important that students can recognize themselves as active readers of the various languages that the contemporary world makes available to them. For Solé (1998), reading is a procedure of interaction between the reader and the text, thus, with the language present in the multimodal texts, the reader will be able to dialogue, interact and effect new learning.

MOBILE DEVICES AND THEIR APPLICATIONS: POSSIBILITIES FOR VISUAL LITERACY

In times of digital mobility, the subjects interact constantly through their smartphones connected to the internet. By means of them, it is possible to read, to write, to rewrite, to draw, to exchange ideas, to agree, to disagree; at last, there are endless possibilities of usage in a world increasingly digital and virtual. Recognized as “smart phone” or, even, as “computers in the palm”, the smartphones are devices that, when connected to the global web of computers, optimize innumerable social practices, causing both individual and collective changes.

With the expansion of the smartphones, therefore, new contributions arise not only in social, but essentially in educational space, once the teaching and student class also make constant use of these technological artifacts. It is notorious that, in everyday practices, the utilization is made both with personal and professional purposes, since the uses are not only present in informality, but in several contexts and situations. For Pereira and Lucena (2018, p. 376), “the smartphone is a mobile device, convergent and ubiquitous accessible to teachers and students at different educational levels and that can enhance new pedagogical practices in which the student is the protagonist and co-author of knowledge and network productions”.

Therefore, it is understood that, in relationships established between people, the knowledge also builds and reframes itself. In the contemporary world, by means of mobile devices, one can maximize different educational practices, since, when using them, they seek new ways of teaching and learning, making them meaningful, since, in this perspective, these devices are used in a process “in which a new information relates with a relevant aspect of the knowledge structure of the individual” (MOREIRA; MASSINI, 2001, p. 17). In other words, when using these devices during classes, pedagogical movements are allowed which help the students involved to connect what they already know to new discoveries. That way, through the utilization of these devices, it is possible “to facilitate the capture of the conceptual structure of the content and its integration to the cognitive structure of the student, making the material significant” (p. 47).

When working with students the visual reading from mobile devices, as proposed in the research here presented, in which the students deepen their knowledge about the genre magazine cover, used for reading, understanding and producing, activities were intended to compare similar themes, to provoke reflection about the images displayed, as well as to make other provocations possible, thus allowing not only external dialogue, but also internal. Given this dynamic, students were able to infer the meaning of choices of each object, to understand the idea of composition and intentionality and, finally, to realize the focus for their readers. Thus, it is clear that provoking in the students a reflective look at the different texts that surround them contributes so that each one builds their own social view of language, starting from the sense relations noticed by their own vision and not absorbing only a single point of view: the teacher’s, ideal native of the expositive educational perspective.

Moreover, in the same way the mobile devices contribute for the sharing of texts and discussions, for example, said devices provide not only visual, but also productive involvement, once their applications allow an active movement, in which each decides the path to be taken and gives opportunity to the making of products potentially collaboratives and sharable. The PicsArt, app of (re)production of images used in the proposal, which will be detailed further up, has an intuitive usability that allows an active and easy handling, having interfaces that meet the interests of the students and the creativity that each one has, making the device attractive and capable of attending one’s expectative and/or necessities. By means of this application, therefore, it is possible to create images, crop, paste, drag and even compose a visual production that attends the interests and intentions of the one who is creating, which dynamize even more the possibilities of pedagogical usage of this resource. This construction takes place both individually and collectively, giving opportunity, then, to new paths and results.

Based upon this approach, it must be understood that the adoption of mobile technology and its applications, during educational practices, enables a constructive and interactive dynamic that allows dialogue reading and even practical experiences with multiple possibilities. Like the research presented here, the PicsArt, app installed on the smartphones of the students, contributed significantly for the achievement of the objectives set, such as: stimulating inferences, understanding the multimodal composition and its intentions, developing visual reading. Therefore, it should be noticed that the usage of these instruments is an alternative for the development of pedagogical exercises that seek, among other possibilities, the visual literacy, since they make the integration between the various languages (verbal, visual and audio-visual) possible, in addition to enabling the students’ involvement and participation in social events related to use and socio-communicative functions.

In this perspective, when viewing the magazine covers, the students were provoked to identify the explicit element and, posteriorly, infer the implicit, as well as to search the reasons and motivations for the viewed composition, there is an active and reflective involvement, in which the possibilities of understanding are broadened, that is, the student is cognitively provoked to build his own conception of what is being worked on. This was possible especially because of the processes that allowed the dialogue between student-teacher/student-student, which in a movement of Exchange of perceptions of life build their vision through reading.

I have never looked at a magazine cover that way. I thought it was really cool. It was interesting when AG⁵ noticed the difference of the word 'Secret' on both covers you showed us. I hadn't even though like that. For me they had the same meaning because it was the same word, but when we really look at the images with more attention and look at the word the meanings are different. [...] I really enjoyed learning each element that is on a cover (Speech of student JL⁶).

From this approach, it is understood that the act of reading is a social linguistic process and culturally constituted and comes from interactions in which life stories, communication contexts, expectations and generations dialogue with each other. This type of pedagogical approach allows the students to experience language and its functionality. Thus, it is possible to establish relations between the knowledge previously constituted and the new information, to do interferences, comparisons, question formulations and even processing, criticizing, contrasting and reviewing the information that is presented, making sense of what one reads. In other words, "one acts strategically, which allows directing and self-regulating the reading and production process itself" (KOCH; ELIAS, 2012, p. 18). In the regard of this methodological dynamic, it is seen that the teachers are able to take advantage of digital technologies in order to, through their use, develop new reading (and writing) practices, which should be stimulating, reflective, diverse, reinforcing that, even though they have not been designed for educational use, the immersion of digital resources in the school space provides other methodological paths and, consequently, the possibility of new learning.

The mobile devices were not planned for educational use, but they can be easily incorporated into lesson plans, allowing the accomplishment of study activities within and/or outside the school, for educational purposes. The insertion of devices in teaching practice becomes more of a pedagogical issue than a technological one (SONEGO; BEHAR, 2015, p. 532).

It is in this sense that the presence and use of mobile devices in the educational context, which make spaces more flexible and expand communication, are requirements that can be observed by teachers for the construction of new knowledge. For Araújo (2009), it is necessary to propose activities from the perspective of productive teaching, moment when the student will reflect on the phenomenon studied and, thus, build new ones, that is, promote significant learning in which new knowledge reconfigures what the individual already knows. It is necessary, therefore, to exclude actions in which the student is led to carry out structural and mechanized exercises, since this hinders the individual's cognitive modifications.

Thus, the hybrid language, so striking in current social communicative relations and promoted by access to digital devices, brings a diversity of interconnected linguistic and extralinguistic resources that emphasize important meanings in the construction of new literacies, which may bring contributions to the classes.

The cellphone is a support that is programed to receive different media (video, photo, audio recording) and

⁵ Initials of the quoted student, system chosen by the participants.

⁶ Idem.

allows the access to other media (radio, television, internet, etc.). Therefore, a cellphone can produce its own media – film, photograph, record sounds – as well as distribute them in different media and thus cause interactivity (BARRAL, 2012, p. 18).

In this perspective, reality is increasingly present, since, through mobile devices, each and every individual is inserted in a multimodal and producing world, thus allowing them to enter into something that “requires other linguistic skills from their interlocutors to produce and read texts” (AQUINO; SOUZA, 2008, p. 33). To know and recognize them is, therefore, to understand their representativeness and their effects of meaning. Regarding the work developed during classes, students were able to consider that the presence of verbal and non-verbal languages is remarkable and that the main image, when it directs the eye to the reader, holds their attention and, it is even the first to be looked at on a magazine cover, whose objective is to attract the reader. This conception was built up as the student got involved with the proposed activity, observing and handling the materials used and the route chosen to promote visual literacy, consolidating themselves when producing their own magazine cover, based on the acquired knowledge.

For Souza (2009, p. 203), making the students analyze and produce communicative events, “identifying their thematic, structural or stylistic features and relating them to the spheres of social activity, to the audience, to the conditions of production, among other relationships that can be established” implies a new look at teaching and learning.

Therefore, from the pedagogical point of view, it is necessary to understand not only that “the image awakens emotions and promotes reactions, impacting the observer” (COSTA, 2013, p. 37) but also why this happens and how it takes effect. Costa points out how the visual reflects and that “despite the immediacy and spontaneity of the visual image, it is the culture that enables a deeper and more accurate interpretation of the visual experience”. The author, when realizing the potential of visual culture, raises some pertinent questions about the use of images in educational contexts.

If reading images is so important for human culture, if it presents itself so spontaneously that we do not even realize that we are developing an important cognitive activity, if it is universal and brings cultures closer together, why formal education seeks to exclude visual language from pedagogical activities as soon as the child shows medium literacy? Why does the image become a secondary element in education as the student becomes literate? (COSTA, 2013, p. 36).

This leads to a multifunctional view of verbal and visual language choices, as well as to understand the ways how language is used to serve different purposes and for functionality in different contexts. That way, it is understood that multiple languages originating mainly from social relations, that is, from involvement with the other, are created from the experiences that seek to achieve certain objectives. Therefore, working both verbal and non-verbal languages in school contributes to the subjects’ understanding of the language’s flexibility, both in its format and in its functionality.

In this context, one can find in digital technologies resources that not only stimulate educational practices, or better, not only in the idea of motivating students to participate in the class, but in new ways of doing education and, consequently, in new ways of promoting knowledges. Thus, noting that virtual world is permeated by multiple languages, using its instruments is providing opportunities not only for processes, but for significant learning, in view of the cognitive provocation and movements provided by the devices, which act as a gateway to several paths; “[...] the mobile technologies can be used as a catalyst for change in the educational paradigm, that promotes learning instead of teaching, that put the control of the learning process in the hands of students” (OLIVEIRA; MERCADO, 2015, p. 211).

A priori, the teacher, when feeling the need to work with the multimodal language, making use of mobile devices, needs to go through the choice of an application that suit what they want to achieve. Therefore,

the choice of PicsArt, present in this proposal, was not unplanned, much less for the purpose of simply using their smartphones and creating images. This choice was part of a pedagogical dynamic involving reading, authorship, collaboration and sharing, connected actions for students to understanding, promoting, thus, visual literacy practices from the mobile devices so present in the lives of the students themselves.

THE APP PICSART IN EDUCATIONAL PRACTICES

PicsArt is an application that can be downloaded for free in mobile devices. Its main function is to edit images with various purposes, either to (re)build or to correct flaws. This app is available for Android, Windows Phone and IOS, which helps to be used on any mobile device, one just needs to have access to internet and, at least, 111MB of storage. The storage issue is one of the current concerns when intending to use applications for classroom activities, since student often have smartphones that do not have enough space available, not because they have too many applications installed by them, but because they already come from the factory and they are not allowed to uninstall them, which compromises the inclusion of new apps on their phones and, consequently, prevents the development of some proposals. The concern with such a reality intensified even more the need to know the situation of the school and the class involved, an indispensable process for planning and developing the proposal.

As in several public schools in Brazil, the school where the research was developed did not have mobile devices available for the student to use during the classes. There was only one notebook for the teachers to use in their classes with projector, but this feature would not be sufficient for the active involvement of the students. In addition, although the Wi-Fi network was available, the connection did not always work, due to its instability, representing another problem. Because of this reality in the school, a survey was made with the student to find out which ones had access to internet, since, based on their reality, it would be possible to better plan. In this process, the following result was reached:

Table 1 – Survey with the student on mobile devices

Number of student participants of the proposal	Number of students with smartphones	Number of students with access to internet	Number of students' available storage on the smartphone for installing PicsArt
38	32	27	27

Source: Prepared by the authors.

Like shown in Table 1, not all the 38 students had a cellphone and internet access was even lower, only 27. In contrast, these 27 students presented all the necessary prerequisites for development of the proposal, since there was both space on the device to download the new application, and they also had access to the internet, either through mobile data, through home Wi-Fi or in other spaces. The modes of access to the internet were not specified since the characterization of the type of access would not interfere in the development of the proposal.

On the other hand, although there was the concerns about the prerequisites of the smartphone involved in the work, whose reason was not related to the complexity of the application, but to the infrastructure issues, it was realized with the survey that it would be possible to develop the proposal, but with some adjustments, since not everyone had the mobile device. In the light of this issue, the student themselves suggested that the proposal should be performed in pairs. Another suggestion given and accepted was that

they downloaded some images that could be used on their covers in advance in their houses. This dialogue was of utmost importance, because the students felt connected with the proposal and were mobilized to make the work happen without any setbacks. It is inferred then that establishing a dialogue, allowing negotiations, choices, and suggestions constitutes a methodology that makes classroom practices not only engaging, but also enhancing plural learning. The fact that the production did not happen individually did not hinder or prevent its realization, but it did stimulate the creation of a product from more than one voice, emerging cooperation and collaboration between them.

The next step was organizing the pairs and introducing the PicsArt, explaining its functionality and the possibilities of use. The choice for this app was also done through the interaction with the students. Firstly, a search on the internet was done about applications that promote the production of images and that have a good acceptance from its users, a situation that is directly related to the ease of handling and meeting the interests, in addition to meeting the objectives of the discipline's content. After this survey, five applications were presented to the students. When presenting, they themselves were able to give an opinion on the best for the work to be developed, establishing, therefore, a negotiation process, an important practice in the context of the classroom, since it not only promotes the connection of students with the teaching proposal, but it puts them in an active movement of dialogue and collective and collaborative construction.

At that moment, one of the students highlighted the ease of use of PicsArt and, for already knowing and using the app in his daily life, he could also help anyone who had difficulty in performing the task. Based on the collective discussion, it is emphasized that PicsArt was chosen not only for its simple interface, but also for perceiving it as a digital resource that allows the use in a pedagogical way, involving multimodality and its meanings, in view of the possibility that the user has to go through a series of functionalities, through the diversified tools available in its interface. From the use of the application, therefore, the cultural practitioners are invited to make their own decisions, promoting the individual's autonomy and encouraging the construction of the new, configuring its importance in the educational context.

Given this possibility, the study presented and discussed here continued with the purpose of working with multimodality, especially regarding the visual language and its relations with other linguistic elements, from the textual genre magazine cover, a genre worked in Portuguese classes, according to the curriculum of the discipline. Understood as the composition that presents more than one mode of representation, multimodality is something that has existed for a long time, since in any communicative situation more than one semiotic element is used, be it verbal or non-verbal, although it has stood out in contemporary times with a view to the active presence of digital technologies. For Dionísio (2011, p. 139),

If social actions are multimodal phenomena, consequently, spoken and written textual genres are also multimodal because, when we speak or write a text, we are using at least two modes of representation: words and gestures, words and intonations, words and images, word and typography, words and smiles, words and animations etc.

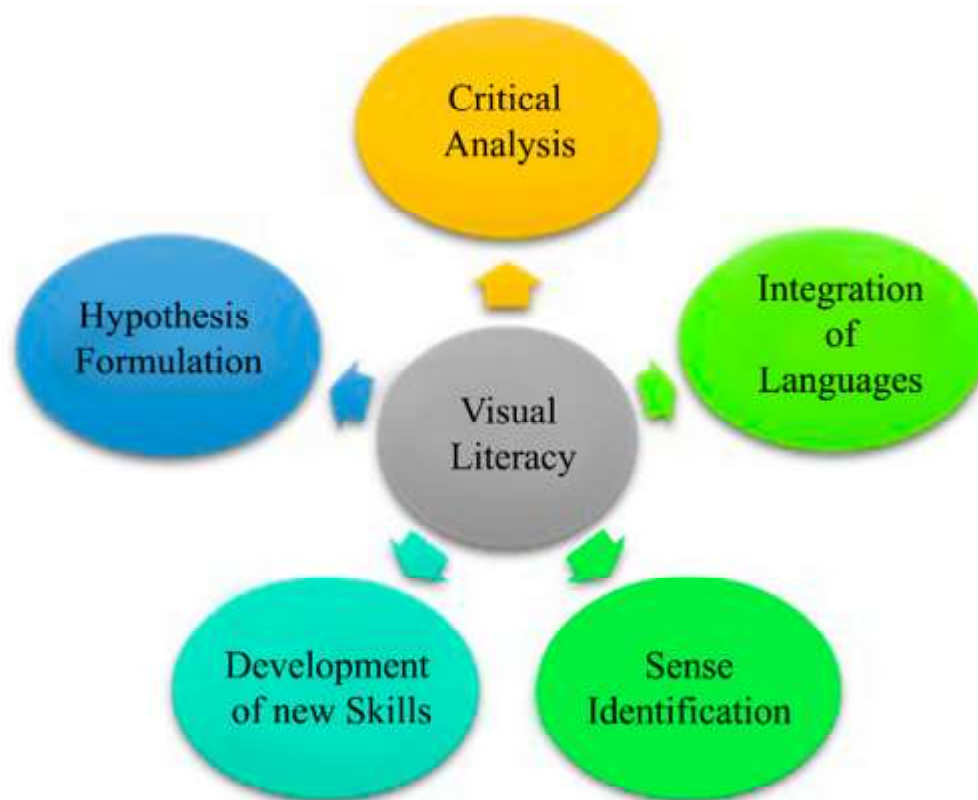
According to Bamford (2009), it is understood that when a project involving the visual language is developed, it is possible to develop the reading capacity of the students in view of the linguistic multimodality. In this context, the author states that, to reach the visual literacy in education, it is necessary:

- to develop the critical thinking of the students in relation to images;
- to improve oral and writing skills from reading images;
- to introduce the production of images through techniques and software;
- to integrate the visual literacy in a transversal way for all areas of the curriculum;
- to ensure the balancing between visual and textual during the classes;
- to know the principles of visual literacy;

- to provoke students to create hypotheses about the meaning of the images;
- to encourage student to critically investigate, analyze and evaluate the values contained in the images (p. 5).

At this point, Bamford (2009) calls attention to the development of critical readers regarding multimodal language, in view of being a discursive manifestation whose elements bring significant information and, therefore, possible to be analyzed and understood. The intertwining between verbal and visual language choices is made in order to meet different contexts and purposes, which has generated, especially in the contemporary digital universe, the characterization of new social identities, calling attention to the need for a critical and comprehensive reading.

In the same discussion, Kress and van Leeuwen (1996) punctuate visual literacy through classroom practices that develop the skills of the students for critical analysis of multiple languages. Therefore, with imagery reading, one learns to integrate the semiotic codes of contemporary utterances, for example, understanding their communicative and discursive modes, means and practices. Thus, based on Bamford (2009) and Kress and van Leeuwen (1996), it is possible to synthesize some important cognitive operations for the process of visual literacy, as can be seen in the following illustration:



Source: Prepared by the authors.

Figure 2 – Cognitive operations for visual literacy

When developing visual literacy with student, the cognitive operations illustrated in Figure 2 constitute a process that involves a movement aimed at multiple skills, which can (and should) be enhanced by the provocations and directions of teachers during their classes. Reading images, relating them to the social and linguistic context requires a critical posture capable of providing understanding of their explicit and implicit meanings. Thus, the act of reading requires other skills from the reader since linguistic multimodality is part of the composition of the written text beyond the illustration. Dionísio (2005) suggested the term *multiliteracy* to

designate the ability to assign and produce meanings to multimodal messages. In the author's conception, a literate person must be a person "capable of attributing meanings to messages from multiple sources of language" (2005, p. 131). The author also says that "verbal and pictorial aspects are completed in such a way that the absence of one of them, even with the lowest incidence, affects the unity of the text" (2005, p. 134). Hence, words and images should not be read in isolation, since such semiosis are interrelated in the construction of the senses, which places the practice of visual literacy as something indispensable in contemporary society.

Thus, understanding the cover as a genre permeated by multiple languages whose composition is connected in itself to produce meanings, the proposal developed in the eighth grade in a public school in Tobias Barreto, Sergipe state, sought to promote readings of diversified covers, presenting how such composition works and the reason for the visual choices, having as final product the elaboration of fictitious magazine covers, created by the students themselves, using the PicsArt application for this purpose. Despite the proposal using other learning objects such as magazines, slides, animation, DLO⁷ (Digital Learning Objects), videos, printed and virtual activities, this analysis will focus on the authorial and collaborative production made on PicsArt in which students were involved.

In this sense, after recognizing the multimodal composition of magazine covers and understanding its structural elements and functionality, students were invited to produce their own covers, creating a hypothetical situation, not forgetting that the choices should serve the target audience of the magazine. This stage of the proposal, that is, the production of the cover, was developed in two Portuguese classes, when the students took their smartphones to class.

Outlined the production class for students' magazine covers and, subsequently, put into execution, 19 covers were built. At the end, the pairs were able to present their final product as well as explain the meanings attributed by them at the time of composition, emphasizing the need to, before producing, think about their target audience and, thus, generate interest in reading the magazine. In this context, it is important to point out that the four covers that will be presented here are only a representation of the students' productions, since there was no way to approach them all in this analysis. It is also worth noting that the selection criteria for these covers was due to the involvement of the pairs, the fulfillment of the proposal and the explanation of the constructed meanings. In this stage, each student had the possibility, with the other, to interact, reflect and choose the texts and non-verbal symbolic resources that interested him, as can be seen in the selected covers below, which are indicated as P1, P2, P3 and P4, corresponding to pairs 1, 2, 3 and 4:

⁷ For Tarouco (2003), digital educational objects are any resource, supplementary to the learning process, which can be reused to support learning. The term *educational object (learning object)* generally applies to educational materials designed and built in small sets to maximize the learning situations where the resource can be used.



Source: Prepared by P1.

Figure 3 – Cover produced by P1



Source: Prepared by P2.

Figure 4 – Cover produced by P2



Source: Prepared by P3.

Figure 5 – Cover produced by P3



Source: Prepared by P4.

Figure 6 – Cover produced by P4

As seen, Figures 3 and 4 focused on the issue of fashion, beauty and body care, relevant to the pairs involved, in view of their female composition. This conclusion had been pointed out by the students themselves at the time when there was a dialogue about their production. Thus, the choices that made up the covers of pairs 3 and 4 demarcated the woman's gaze, demonstrating that the female audience searches in magazines themes alluding to beauty both in the idea of aesthetics as well as in health.

We chose this image because diet is a word that we women always say, but nobody is happy with it, despite knowing that it is for our good, it is not just a matter of aesthetics, but of health. So, we thought about addressing this on the cover of our magazine (P2).

In the speech of P2, it is observed that the choice was made due to the female universe having the diet as something very present. On the other hand, there is a diet, from the students' perspective, with a negative charge, reinforced by the contrast between the main title – FIQUE BEM (STAY WELL) – and the centralized image, since the protruding figure does not show happiness. This choice brings up the conflicts experienced by women brought about by the need for diet, so present in their lives.

In the same line of reflection, figures 5 and 6 bring curiosity about themes related to sexuality and cinema. In this production, it is evident that such themes circulate routinely and explicitly in the universe of boys, especially at the age at which the students in question are now. It is noteworthy that this inference occurs from the reality experienced in the class and present in the speech of the students themselves, however it does not reflect the universal view of all boys and girls, representing the point of view of the participants. Furthermore, the dynamics that each pair used to compose the figures also stands out, demonstrating familiarity not only with PicsArt, but also with the multimodal language that the textual genre worked presents, as well as in the objective of this genre which is to attract attention of readers, a remarkable feature for the composition of magazine covers. On their covers, the relation between the headline and the central image is clear, highlighting the main content of the magazine, as well as its functionality and the target audience. It is also possible to notice diverse compositions, but which present a relation of thematic similarity: all configure themes directed to the young audience: beauty, sensuality, fashion, cinema and dating, which were chosen by the students, according to their interests. Thus, the chosen theme and the composition produced by the students represent a significant understanding of the studied genre.

In this scenario, when using the PicsArt app, students used the multimodal resources present and emphasized, for example, what society itself imposes on women: fashion, on the one hand, and suffering, on the other. In addition, the colors chosen corroborated with the visual senses, including social and cultural behaviors, since girls chose the lightest color tones and boys the darkest. Thus, it is noted that the students, when participating in all referrals of the proposal, were able to notice that the presence of verbal and non-verbal languages is remarkable. When they realized that the main image, when looking at the reader, captures their attention and, even, is the first to be looked at on a magazine cover, they understood why certain multimodal texts stimulate their reading and others do not. In summary, the production of magazine covers made by students, through PicsArt, demonstrates learning in relation to visual language, since its composition marks the presence of linguistic understandings, which guided the choices for their final product.

For Mendonça e Cavalcante (2006), textual genres at school must be read, analyzed and produced, taking care to propose a didactic organization that guarantees the integration of the different axes of language (reading, production and linguistic analysis) and the involvement of student in real communicative situations. Thus, with the completion of this study, it is possible to perceive the achievement of the proposed objectives, both in the context of research and in Portuguese classes, given that it was able to “provide collaborative and cooperative learning, encourage research and critical thinking, offering activities to stimulate a higher level cognitive area requiring reflection, analysis, synthesis and evaluation” (ABAR; BARBOSA, 2008, p. 13).

Hence the importance of students' participation as producers, as it puts them in the condition of authors of their own knowledge, which is enhanced by technological devices, since "the different resources offered by new digital technologies have not only enabled, but mainly encouraged teaching proposals less centered on the teacher and more focused on interaction and dialogue" (BRAGA, 2009, p. 184). In this perspective, the path taken in order to develop students' reading competence in face of the multimodal elements that make up the magazine cover, textual genre under study, provided an opportunity for the direct involvement of the student with verbal and non-verbal languages, contributing significantly to the effective learning, materialized in the activities/discussions and in the final production of the students. In addition, the provocations were also important for this process, since they made possible the building of the students own conceptions regarding gender, in an investigative and collaborative movement, considering that definitions and/or characterizations were not presented to students, but instigated to understanding and comprehending together, enhanced by the use of the PicsArt app.

FINAL REMARKS

Digital mobile technologies, especially smartphones, from their applications, promote interaction not only between students, but also between them and the content worked on, thus contributing to significant learning. This is possible because of being able to teach and learn non abstract practices, since the student not only hears or sees, but relates directly to the concepts.

With the use of the PicsArt app, therefore, the development of visual reading has become evident, leading the student to understand the process that involves the linguistic multimodality present in magazine covers and that this composition meets one objective: to attract the reader. This understanding had been perceived from the students' involvement from the first contact with the genre worked, the knowledge of the elements that compose it and the reasons of its composition. Along the way, students, when questioning or positioning themselves, exemplified ways of learning assets so necessary for the learning to happen in an effective and consistent way, since it is possible to promote cognitive and collective changes that are indispensable in the educational process.

However, it is important to reaffirm the challenges raised both by the lack of internet at school or its limited connection, and by the configuration of students' smartphones, since these are situations that often difficult the development of activities that seek to make use of mobile devices. Moreover, it is important to reaffirm that using digital mobile technologies in educational spaces and objectives is not simply about knowing how to handle them. The challenge lies in the appropriation of their functionality, their scope and their limits. Thus, it is realized that it is especially in this aspect that much can still be done, highlighting the need for teacher training for the appropriation of pedagogical practices that, in fact, enhance teaching and, thereby, consolidate learning.

In this way, it is understood that the experience analyzed here, by engaging with the reading of multimodality, contributed to the student developing a critical look at the visual elements that make up the textual genre worked on, in view not only of the selection of images that they made use of, but also of the dialogues that exist in the discussions and organization of their product, capacitating them to new looks in the face of the languages that make up the textual composition. In addition, it enabled a differentiated work in the Portuguese classes, which used the technology as a didactic-pedagogical resource capable of producing learning.

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