

# **Action Research in the Methodological Process of the Triangular Approach and in the Stop Motion Technological Process**

**Vivian Cristina Belter Lunardi, Maria Aparecida Santana Camargo.**

Rio Grande do Sul

## **Abstract**

*with a qualitative approach, theoretical and empirical, the investigation sought to understand how the subjects read and interpret the different types of images that appear in their daily experiences. As a methodological path, action-research was chosen, as it is considered opportune for the research in question, in which various activities were promoted that exercised the perception and knowledge about the imagery representations analyzed. In order to achieve these goals, image reading was proposed as the theme, being delimited by the construction of citizenship based on image literacy.*

**Keywords:** art; culture; image; literacy; technology.

## **1. Initial considerations**

This reflection is part of the Post-Graduate Program in Sociocultural Practices and Social Development / Master's Degree, from the University of Cruz Alta (UNICRUZ / RS), being linked to the Research Line "Language, Communication and Society", whose focus is to discuss aspects interdisciplinary issues related to issues involving language and its multiple facets. With a qualitative approach, theoretical and empirical, the investigation sought to understand how the subjects read and interpret the different types of images that appear in their daily experiences. As a methodological path, action-research was chosen, as it is considered opportune for the research in question, in which various activities were promoted that exercised the perception and knowledge about the imagery representations analyzed.

In order to achieve these goals, reading of image was proposed as the theme, being delimited by the construction of citizenship based on imagetic literacy. The problem was thus circumscribed: How can Art Teaching contribute to an image literacy aiming at the citizen education of elementary school students? As a general objective, we sought to analyze, through action research, art as a social and educational practice that contributes to a group of 23 students in the 9th grade of elementary school, from an institution in the city of Ijuí / RS, take ownership of visual literacy with a more critical, participatory and open view to dialogue, encouraging different readings of the world and fostering citizen formation. At the same time, it was aimed through the specific objectives: a) To deepen knowledge about contemporary image reading; b) Investigate how adolescents appreciate, produce and interpret different types of images, using the stop motion technique; and, c) Identify, mediate and propose ways of image literacy to foster citizen education. To support the corpus of the research, scholars are brought in to guide the understanding of this subject, including: Barbier (2002) and Thiollent (2011) from the perspective of action research, Purves (2011) on the issue of Stop Motion and, in education, Freire (2003). Regarding art and visuality, Barbosa (1998; 2002;

2005; 2008) and Hernández (2000) stand out, for making a parallel between art and image, considering that these scholars give a vision of the multiplicity of possible paths to substantiate this activity.

The research corpus is anchored in these two methodological categories: the Triangular Approach and the Stop Motion Technology, which support this part of the investigation. Thus, the study has as a reference a sociocultural scenario dominated by images, in order to raise information that can assist in the understanding of image literacy as an educational action aimed at citizen education.

## **2. Action research**

Research as a field of knowledge search brings with it a methodological path relating the subject to his object through a complementary study formation, leading him to inquire about the meaning of some practices. Regardless of the type of research, we must keep in mind that we will continue to ask questions and seek solutions, as this cycle does not end, it is always remade, referring to a set of actions aimed at discovering new knowledge and, with them, to the construction of human knowledge.

According to Gil (2002, p. 17), “research can be defined as the rational and systematic procedure that aims to provide answers to the problems that are exposed [...] developing over a process that involves numerous phases, from the proper formulation of the problem to the satisfactory presentation results”.

In this perspective, it is assumed that the world is much more imagetic than written and that the image, being a dynamic resource, exerts a lot of influence on the way of thinking and acting. For this reason, it is believed that this study is relevant, since it allows adolescents the ability to develop reasoning and, consequently, a critical view in the face of the countless images and languages present in their daily lives. Studies on the theme suggest new attitudes that, in fact, are of interest in this research, which addresses Art Teaching. In turn, when it comes to methodology, there are approaches to teaching and learning art, showing a commitment to the social.

As a methodological path, action research was chosen, as it is a type of participatory, engaged research, as opposed to traditional research, which is more objective and independent. Thiollent (2011, p. 20) states that “action research is a type of social research with an empirical basis that is conceived and carried out in close association with an action [...] in a cooperative and participatory way”. As its name already states, action research seeks to combine research with action and practice, wishing to improve its understanding. It arose with the purpose of overcoming the gap between theory and practice, being eminently pedagogical, as it contributes to the development of attitudes and ways to explore human potential.

For Thiollent (2011, p. 21), “a research can be qualified as action research when there is really an action on the part of the people or groups involved in the problem under observation”, in which researchers play an active role with the purpose basic way of providing change in a practice or context, being the central subjects in the action-research process.

It is worth remembering the great contribution of one of the pioneers of this research approach, the German psychologist Kurt Lewin, who gained repercussions with the idea that the social scientist should leave his isolation, assuming the consequences of the results of his research and placing them in practice, to interfere with the course of events. Lewin (1978) in basing this method, conceptually highlights that action research deals with two types of problems, considered inseparable: the broad study of society and the analysis of

the specific situation. The peculiar character of the situation under study is determined by a scientific analysis of the facts, called diagnosis. The knowledge produced there guides the solution of the problem through an action planned and conducted by the group. Action research is based on a cycle of analysis, fact found, conception, planning, execution and more fact finding or evaluation. It is, then, a repetition of this entire circle of activities, really a spiral.

Likewise, Barbier (2002, p. 117) points out that the true spirit of action research is its "spiral approach". It means that "[...] every advance in action research implies the recursive effect due to a permanent reflection on the action". This permanent reflection is the essence of the pedagogical character of this research work, whose process of continuous reflection on the action makes it eminently collective, opening space to form research subjects. This modality encourages the teacher to reflect on his practice, in order to change the quality of his educational action and, consequently, the learning of his students.

According to Kemmis and McTaggart (1988), doing action research consists of planning, observing, acting and reflecting in a more conscious and rigorous way what is done in daily experience. In general, two ideas define a good research work: that it can be claimed that the methodology used is adequate to the situation and that it can be guaranteed in a certain way an addition to the knowledge that exists on the subject treated. According to Lewin (1978, p. 216), it is "a type of action research, a comparative research about the conditions and results of different forms of social action and research that leads to social action". The idea anchored in Lewin (1978) is composed of a cycle in four stages: data collection, diagnosis, implementation and evaluation. In the first phase, the field is explored, recording the relevant data on the problems presented by the client organization. These obstacles are not questioned in depth, the discussion is more on the way to enunciate them in a clear way, constituting them as the starting point to collect the data and make the diagnosis.

In this sense, it is essential to understand reading as a social practice and not just as an act of decoding. The images carry information, which makes it easier to get to know a society, since it constitutes another alternative for analysis and an imperative of contemporaneity, allowing the development of artistic practice and thinking with sensitivity and criticality. Thus, it is reaffirmed that action research can and should function as a research methodology, pedagogically structured, enabling both the production of new knowledge for the area of education, as well as forming research subjects, critical and reflective, extremely favorable in improving people's participation and bring about changes in social conditions.

Freire (2003, p. 20) already addressed the need to learn to do "the reading of the world preceding the reading of the word", not mechanically, but linking language and reality when referring to this widening of the gaze. In this context, it is clear that reading is not just decoding signs and codes, it is going much further. To read is to reflect, to think, to analyze, to dialogue with the other. It is by reading that one's own life story is resized and rethought. In the opinion of Pillar (2014, p. 14), "the first world we seek to understand is [...] where we live", that is, this which occurs in different spaces, with different subjects, in general. In addition, the aforementioned author (2014, p. 14) emphasizes that when we try to understand it, "we are doing readings of this world", a reading that, depending on the circumstances, can be "critical, pleasant, engaging, meaningful and challenging".

In the opinion of Gadotti (1991, p. 155), for Freire, "praxis is the union that must be established between what is done (practice) and what is thought about what is done (theory)". In turn, Zitkoski (2006, p. 11)

states that, "for Freire, education requires the dialectic unit theory-practice, which must be transformed into social praxis". Thus, the study investigated a project in the space in which the researcher teacher acts as a mediator in the discipline Art Teaching, with collaborative work, where an action research was carried out through collective deliberation, with students from the 9th grade of Elementary School in a school in Ijuí / RS. Classes took place once a week, in two periods of 50 minutes each, for three school months. The participants are teenagers of different age groups and the class consists of 23 students. The collected data were recorded through photos, videos and a field diary, in order to discuss, analyze and contextualize them in the light of the theories studied.

When it comes to children and adolescents, access to culture is guaranteed both in Articles 215 and 216 of the 1988 Federal Constitution, and in Article 58 of the Child and Adolescent Statute, Law no. 8.069 / 1990. According to Santos (2004), culture means a lot. It can be synonymous with refinement, sophistication and a person's elaborate education. But culture also includes the ways in which knowledge is expressed by a society, as is the case with its art, religion, sports and games, technology, science, politics. There are many ways to define and study culture, other cuts to make, other emphases to make. For Morin (2000, p. 52), "man is a fully biological being, but, if he did not have full culture, he would be a primate at the lowest level. Culture accumulates in itself what is preserved, transmitted, learned ... Man is only fully realized as a human being by culture and culture! ".

From this perspective, the objective of the proposal was explained to the participants, the reasons that led to the choice of the theme, the importance of the research and how the group's participation would be. In addition, the concepts used to initiate this investigation were explained, emphasizing the meaning of image, visuality and its function as a builder of citizenship. According to Herbert (2010, p. 67), for Freire, citizenship:

"It is not something that comes from outside teaching, but something that is part of it. The fight in favor of the dignity of teaching practice is as much a part of it as it is part of the respect that the teacher must have to the identity of the student, to his person, to his right to be "(FREIRE, 2001, p. 74). There is no distinction between teaching practice and citizenship. It is a teaching practice with citizenship in respect for the student, recreating meanings through the programmatic content under debate. The option for the content and the form of appropriation of knowledge needs to be in accordance with the reality experienced by students. Citizenship will be exercised from, and in reality, where reflective debate takes place.

The referred author (2010, p. 67) continues to affirm that:

Citizenship, in Freire, has characteristics of collectivity. As "no one frees anyone, no one frees himself: men free themselves in communion" (FREIRE, 1981, p. 27); likewise, citizenship is not restricted to the individual. Citizenship manifests itself through social relationships, through the exercise of producing collectivity and the power of continued relationships in favor of experiencing the rights and duties of individuals in social groups. A shared and participatory relationship is a necessary condition for the exercise of citizenship.

Based on this understanding, the next step was taken, where the School's Multimedia Space, the Art Room, the Computer Laboratory and other environments and instruments were used, which were fundamental so that the images could be projected, observed and analyzed. From these moments, Art History was used, with an emphasis on Contemporary Art, emphasizing Pop Art and mass culture and, later, some of the new artistic languages of today, with the works of the artist Vik Muniz, since this learning concerns the essential contents of this year and level of education, whose importance is central to this artistic issue and new means of expression, establishing dynamic interaction between art, technology and life.

The aesthetic-visual elements were appreciated, contemplated, analyzed and discussed, thus having a better understanding so that the participants could debate themes such as sustainability in their relationship with ethnic, generational, class and gender issues, including, for through audiovisual creations. That is, through the works that were analyzed, socio-cultural practices that could result in social development and, as a result, in the construction of citizenship itself were focused. Equally, the participants' impressions, perceptions, speeches and comments were examined.

Continuing, the subjects were invited to watch the Documentary entitled “Extraordinary Garbage” (MUNIZ, 2009), so that, next, they could develop some practical proposals in different supports in which they created characters with scrap and other materials, exploring the three-dimensionality. At that time, the research participants were instructed on how to create, move and edit the images step by step. From then on, with the use of information technologies, they made use of computational and photographic art that culminated in short films made using the Stop Motion technique (translated as a stopped motion).

These audiovisual creations can have many meanings and, therefore, can be approached in different ways. What was hoped for was a reflection on the audiovisual language, verifying what experiences could be used in this modality. The audiovisual language, as the word itself, is made of the combination of elements of two natures: the sonorous and the visual. It is noteworthy that this communication language is expressed with the combined use of different visual (signs, images, drawings, graphics, etc.) and sound components (voice, music, noise, onomatopoeic effects etc.), that is, everything that it can be seen and heard at the same time.

Stop Motion is, then, an animation technique widely used with the resources of a camera or a computer. The technological process of Stop Motion, combined with the Triangular Approach process, were the two methodological categories that underwent the study, which will be better explained in the sequence, still in this reflection.

This research was committed to the applicability of image reading to the researched public, allowing subjects the opportunity to interact. Likewise, it sought to open paths, providing new ways of reading and interpreting the world in view of a pedagogical practice through visual literacy, aiming at the citizen formation of adolescents in the Final Years of Elementary School. Before starting the investigation and drawing attention to the images, research, studies and planning were necessary for this process to actually happen. It was of fundamental importance to get as familiar as possible with the images presented, making the discussion and promoting activities that exercised their reading and decoding.

Right at the beginning of the school year, the classes were contacted, and the public surveyed would be the 9th year of elementary school, as it was a class that was about to complete a teaching stage and that already had a certain aesthetic knowledge and empirical. In this sense, the proposal sought to investigate and analyze how these adolescents were enjoying, producing and interpreting the diversity of images to which they were exposed, considering that, as already emphasized, citizen literacy is full, broad literacy, with a view not only to for reading words, but also for reading and decoding images, contributing to other perceptions of the world.

Firstly, it was essential to clarify to the students about the objectives of the proposal, mainly the reasons for choosing the theme “image reading” and the importance of the group's role. At that moment, some concepts about the word image were exposed, its role in history, how it influenced and influences societies, using a clear and accessible language, emphasizing the relevance of images in contemporary times, since these encompass multiple languages in the imagery context.

Among the contents proposed for the class over the year was the resumption of Art History as a potentializer of the imagery process, from prehistory to the present. A timeline was produced and Contemporary Art started to be emphasized. The artists and their relations with the environment and with the use of different materials and artistic languages were also highlighted. Still in this stage, the students were invited to



research, in pairs, the life and work of a contemporary artist so that, later, they could socialize with the other colleagues the different ways of representing and illustrating their research, in order to understand how they would represent your ideas in the chosen productions.

Then, they watched the documentary entitled “Who's afraid of contemporary art?”, Produced by Cocchiarale. This author (2006, p. 67) points out that “contemporary art can be in several places simultaneously, performing different functions, but the main thing about it is the new types of relationship that it makes us establish”. In this way, several artistic and conceptual approaches were presented and discussed, so that the subjects already had an idea of where it was intended to go, realizing that art is not restricted to museums, biennials and galleries, but can be everywhere, as well as inserting the image. In this context, Camargo (2005, s.p.) mentions that “images have always existed, but due to technological advances in no other time did humanity live so immersed in an avalanche of [...], information and texts [...] We are surrounded by certain images, of all types, [...] who have a very strong power, who say a lot and who speak for themselves”.

By being in contact with the image, the student ends up reflecting on his role and his insertion in the lived space. So that the next step was to develop the activities on photocopied sheet with support material explaining what an image is and the different possibilities of interpreting an image, analyzing them. Thus, they selected an “X image” and sought to examine, based on a proposed script, establishing their specific codes, that is, an integrated system of signs, passwords, symbols and messages.

With regard to the codes of art that surround the subjects, it can be pointed out that the individual who does not have access to them, finds it more difficult to read an image, for example, requiring greater effort to find his place in the world. From Camargo's point of view (2005, s.p.), “when trying to decode these signs, the student makes a reflection on the world in which he lives and acts on it, seeking to transform it. Understand the world in order to transform it and place yourself in it: this is one of the principles of building citizenship itself”. Thus, when the next meetings took place, questions about art were questioned, what were the new artistic languages that were presented and what has been drawing attention. The final result was made through drawings, on A3 bond paper, with a free choice technique.

### **3. The Triangular Approach in Developed Educational Action**

The triangular approach is, therefore, a reference, a concrete possibility of complex work in art / education; it is up to the art / educator to take into account the various possibilities of expression addressed by the scope of artistic objects and the educational specificities of training that are relevant (PIMENTEL, 2010, p. 212).

The Triangular Approach was systematized by Ana Mae Barbosa, in the 1980s, having taken on several dimensions, among them that of expanding the field of art / educating task in which it seeks to broaden to become acquainted with other fields of knowledge becoming art / experiences educational, liable to build teaching / learning methodologies in art, meaningful and consistent, giving rise to the expansion of limits and boundaries, both those of a cultural and interdisciplinary nature for the study of art, considering this a privileged moment to exercise artistic thought.

This approach to Teaching Art, according to Pimentel (2010), was known in Brazil initially as “Triangular Methodology”, a designation that was accepted by Barbosa herself in her book “A Imagem no Ensino da Arte” (1991). When realizing, however, that it would not be, nor would it have the rigor of a methodology, the author carried out, in the work “Topics Utopians” (1998), theoretical revisions starting to call it

"Triangular Proposal", considering then an approach that could be followed. Subsequently it became a "Triangular Approach", because in addition to understanding what methodology is the art / educator, he also realized that the proposal is a word worn by the thousand and one that is poured by the powers over the heads of the art / educators. By understanding that, in art and in education, semantic problems are never just semantic, as it involves conceptualization, Barbosa took the liberty to replace, whenever possible, the terms "Methodology" and "Proposal" with "Triangular Approach" in his last books.

The Triangular Approach referred to the improvement of Art Teaching, enabling different paths, based on an integrative pedagogical work, in which artistic making, analysis or reading of images (including the field of art meaning) and contextualization interact with the critical, reflective and dialogical development of the student in a socio-cultural contextual dynamic. It is important to emphasize and also be clear that the main actions of the triangular approach - to enjoy, contextualize and do (not necessarily in this order) are dynamically closely linked together. In his interface with the triangular approach, Pimentel (2017, p. 307) presents a close relationship between the three basic actions of this interface, making it happen - contextualizing:

Doing aims to provide a network for the construction of knowledge based on direct contact with aesthetic experiments, fruition aims to provide other perceptions of the object, that is, fruition presupposes knowledge and the consequent correlation of contextual elements, contextualizing aims to establish relationships through historical understanding, social and cultural aspects of Art in societies.

The PCNs - Arte (1998) were based on Barbosa's assumptions, emphasizing that the teaching and learning of artistic content are based on three pillars: appreciating, making and reflecting. However, it is clear that, on many occasions, the study of art is only limited to doing. Art History is often seen in isolation from other events at the time of the creation of the artistic object, making it difficult to understand the discipline. In the present investigation, the three fundamental conceptual assumptions for the Triangular Approach were adopted. The proposal systematizes by Barbosa (2002, p. 70), composed of the interconnected teaching between History of Art, reading of the work of art and artistic making, at the same time, it is one of the main references of Art Teaching in Brazil, because, as it highlights Rizzi (2002, p. 70):

[...] allows a dynamic and multidimensional interaction, between the parts and the whole and vice versa, in the context of Art Teaching, that is, between the basic disciplines of the area, between the other disciplines, in the interrelationship of the three basic actions: reading, doing and contextualizing and in the interrelationship of the other three resulting actions: decoding / coding, experimenting, informing and reflecting.

This approach seeks to encompass several teaching-learning points at the same time, focusing teaching on three axes. That is to say, it maintains the artistic practice (experimentation and expression) and adds the reading of the work of art, combining these two disciplines, criticism and aesthetics, as well as contextualizing and promoting the intersection of experimentation with decoding and information artistic object.

Among the pleasures and troubles generated by the dissemination of this proposal at the end of the 1980s, what really matters is that, since then, Art Education in Brazil has changed and, at the same time, there are more researchers and teachers defending the importance of this idea (RAMALHO and OLIVEIRA, 1998). In Barbosa's view (2005), the construction of knowledge in Art happens when there is an interconnection between experimentation, coding and information.

Barbosa (2005) proposes that the Art Teaching program be developed based on three basic actions: - Reading Works of Art: it is based on the discovery of the students' critical capacity. Here, Art is not reduced to right or wrong, it considers pertinence, clarification and comprehensiveness. The object of interpretation is the work and not the artist; - Making Art: it is based on stimulating artistic making, working, among other actions, on rereading, not as a copy, but as interpretation, transformation and creation; and, - Contextualize: it consists of interrelating Art History with other areas of knowledge. According to this author (2005, p. 142), the contextualization of the work of art is not only historical, "[...] but also social, biological, psychological, ecological, anthropological [...]" because contextualizing is not just telling the history of the life of the artist who made the work, but also to establish relations of this or these works with the world around, is to think about the work of art in a broader way".

It is based on the principle that learning in art is not only what the subject knows about others and things, but an essential factor for knowing about himself, making it available for other people to experience the same process and thus contribute socially as information or even a challenge for other people. In this sense, the more each individual knows about himself and how he can contribute to society, the more it will benefit. The assumptions of the Triangular Approach in the Art Teaching process start to create links between these and the new contemporary technologies, so present in the life of the research participants. The experience in the students' lives includes experiences so that they can present themselves as important participants in social life and aware of their potential, given that art is still a social construction.

In this way, Art Teaching will make sense to the student if he knows and recognizes the importance he will have in his daily life, being urgent the need for a change in educational paradigms. This is so that people are literate not only with the mastery of verbal and written language, but also aesthetically, providing the chance to become less passive and more critical viewers in the face of the images that surround them.

In this regard, Fusari and Ferraz (2001, p. 80) emphasize that "knowing the images that surround us also means expanding the possibilities of contact with reality, it means seeing more and perceiving more". Thus, it becomes one of the strongest, most disturbing and eloquent ways of expressing and originality of a given culture at a given historical moment, providing the indispensability of more recent studies.

Interpreting images is fundamental for any type of current activity in which it expands the expressive, aesthetic, cognitive and perceptual world, extending the abilities to see, judge and interpret the historical, economic, social, political and cultural context. Contemporary society, with its scientific-technological research, brings countless opportunities in the field of images. It coexists with other visual and audiovisual languages that have their own specificities, but that integrate the universe of communication and the arts, being significant in the formation of the globalized subject.

#### **4. Art and Technology: Stop Motion**

One of the first forms of communication for man was through paintings and drawings made in the caves, extending to the present day. So, for thousands of years man has been telling his story through images and what has changed over the centuries has been the technology used for its execution.

To propose an Art Teaching with the use of computers in contemporary society is to create new forms of expression, expanding readings and artistic productions. In recent centuries, technologies have entered all



spheres of human life. Education has become one of the targets of this process of inserting these media in the dynamics of everyday life. The impact of technological means on artistic creation has been producing new forms of expression throughout the History of Art and the greatest challenge of education through art is found in the fact that it is no longer just another subject in the school curriculum and become “something incorporated into the subject's life, that makes him search for the presence of art as a necessity and a pleasure, as fruition or as production, because in both art it promotes the creative experience of awareness” (MEIRA, 2003, p. 131).

In this context, Information and Communication Technologies emerge, that is, ICT. As a result, it is clear that teachers need to be up-to-date in order to develop an articulation between art and technology in the classroom, which makes it possible to disseminate the knowledge of this event linked to a critical awareness of the values of citizenship. In this way, the educator will find in technology a favorable support for art classes, as well as the research of images and artists that explore social themes. Art at school is not just the performance of simple activities, but is an area of knowledge, a discipline with specific contents, which expands its meaning and meaning, and can contribute to the development of subjects and, mainly, to citizen education.

Adapting to new artistic languages and making use of contemporary culture, which explores many expressions and means of communication, associating images with sounds, given that many artists replaced the paint palette with a camera and, through it, sought to capture a poetic look at the world, the idea arose to explore the documentary “Lixo Extraordinário” using Stop Motion technology. Stop Motion was a proposal made by the researcher teacher to the subjects involved, which was enthusiastically accepted.

In the view of Purves (2011, p. 6), stop motion can be defined as “the technique of creating the illusion of movement or performance through recording, frame by frame, manipulation of a solid object, doll or clipping image in a physical spatial scenario”. According to Rodrigues (2015, p. 145), “it is an animation technique that, through the manipulation of an object, creates the illusion that it is moving by itself. The object is articulated in small movements and photographed”. For this, you can use a camcorder, camera or mount on a computer.

Complements Ciriaco (2009) that, scientifically speaking, Stop Motion is only understood as movement by the phenomenon of Retinal Persistence. It causes the illusion in the human brain that something moves continuously when there are more than 12 frames per second. In fact, the movement of this cinematographic technique is nothing more than an optical illusion. This is an animation technique widely used today, in which real models with different materials are used, such as, for example, modeling clay. Models are moved and photographed frame by frame and, later, mounted on a cinematographic film, creating the impression of movement. Sound effects such as voices, noise, music can be added. One of the most well-known films made with the technique was Henry Selick's “Strange World” (1993) and screenplay by Tim Burton.

Other techniques follow the same process, but with a succession of drawings or with images generated by the computer in 3D. The movement is created when the camera is immobilized and there is no real movement, which considers this to be an action of pure illusion. The image pauses for a fraction of a second in front of the projection beam until it is replaced by a subsequent image (PURVES, 2011, p. 7). The animation of Stop Motion is slow and quite laborious, since a very short film requires an enormous amount of resources, in addition to patience and persistence. The fact that there are characters ends up being one

of the greatest satisfactions, in addition to the fascination of seeing them in movement and reflecting on the best way to use the technique with the different subjects. For the short film to become a video, some steps are indicated, namely: a) Premise - It would be the first spark in history; b) Storyline - The story in a paragraph; c) Argument - Telling the story in detail; d) Script of history - Written history with the camera in mind; e) Filming Script - Organizes the scenes, places, frames; and, f) Storyboard - These are quick drawings, narrating the main scenes of the script.

In addition to keeping in mind that a good story is told with sounds and images, many cinema directors have also used this animation in the past decades, combining the relatively modern world with the ancient tradition of puppetry, that is, the act of moving puppets / dolls . What makes it different is the fact that it is not made or filmed in real time, nor executed in front of the audience, but programmers are not seen, making use of other more innovative techniques with successful creations. “What people like about the Stop Motion animation is that it is real. It is a magic trick, taking real things, real scenarios and making them come alive with movement” (PURVES, 2011, p. 44).

Rodrigues (2015, p. 145-146) states that, at least, four phases take place to constitute the Stop Motion film: Phase 01: Character - Constructed with some type of material (clay, sustainable materials, ready-made objects. ..); Phase 02: Scenario - A scenario is built that will be preferably static; Phase 03: Image capture - Using a digital or cellular camera, one position is recorded at a time, the character is moved (one leg at a time, for example); Phase 04: Editing - Using video editing software, the various photos are placed in sequence. This is the sequence that will constitute the film.

Everyday this animation is appreciated for its own unique merits, no longer needing to compete with the sophistication of computers. Many programs can be used, such as: explorer, movie maker, filmmaker, Vegas and many others. The genres used can be countless, including animation itself, fiction and even documentaries. The audience that contemplates it, undoubtedly, likes to see, appreciate and understand the trick, being that it is still an art form and, as such, many films prefer to focus on a visual idea or technique and not on one. narrative itself. It is essential that there is a harmony between aesthetics and technology.

In this process, it is possible to explore all materials and elements, such as texture, lighting, color, depth, detail and character, among others. Each aspect ends up working in harmony with the others. The aim of all this is to ensure that everyone involved has a clear and shared understanding of the main elements required for the production and completion of the film. As it is necessary to create absolutely everything, it is important to make the most of each element, allowing them to contribute to its realization. “Animation is more than mobile characters, it is about narrative, and each element can help to tell this story” (PURVES, 2011, p. 134).

In this way, digital technology has brought countless possibilities and with the use of technological resources, it is observed that the image has replaced, numerous times, the word and writing as a means of communication, thus emphasizing what has been called culture visual. However, Hernández (2000, p. 54) highlights that the “primary importance of visual culture is to mediate the process of how we look, and to contribute to the production of worlds, that is, so that human beings know much more than they have personally experienced ”. Upon completion of the short film through Stop Motion, an exhibition of these works was held so that the other classes of the school, other students and the school community could appreciate and contextualize, as well as disseminate on social networks. The final result was socialized in

public spaces of the institution, through the exhibition of the short films produced.

The complexity of photographic records and film montages makes interpretation essential, active reading incorporating different technologies and discourses, performing a cultural function through their narratives, for those who make / produce and for the audience / appreciators, who go beyond the pleasure of composing history and entertainment. In addition, the subjects' perception of everyday social issues gains new perspectives, with a different look, broadening horizons.

These reflections are valid for photography and other languages, whether visual or audiovisual, being intermediated by its actors, technological means and spectators, since cinema, as art of moving images, maintains close ties with photography. As already mentioned, even a very short film requires an enormous amount of resources, patience and inexhaustible energy to handle the visual tricks, for example, the illusion of movement, the details of the plan, framing, scenery, lighting, special effects. Its most visible and uplifting use is in fully animated films, when each accessory, costume, character is created on a miniature scale.

With all the pre-production completed, you are ready to animate. Most films will have the dialogue recorded and many are superimposed on the images extracted from the picture frame by frame, or when filmed it has already been heard several times before starting, to make the sequence more feasible. According to Purves (2011, p. 187), "Stop Motion requires a particular way of looking at things - not everyone is able to look at an inanimate object and see a character or a dramatic situation. Not everyone can see a simple object and ask what if? ". The recommendations are equally private, but it is something you should love to do or, otherwise, what could be very special will seem full of sound and fury, which means nothing.

In this sense, the school, as a space for reflective educational practices, can relate art to everyday life, contributing to this awareness, aiming at expanding the capacity for understanding and criticizing the reading of the world in which we live. It is worth mentioning that there could be discomfort and a minimal risk for the participants when the activity was given, since they could be led to reflect on their social praxis regarding the theme of sustainability in their relationship with ethnic, class, gender and generational. However, from the moment when there was more knowledge on the subject, it was possible to reconstruct thoughts, actions and reader and discursive praxis, which, consequently, meant that there was no room for discomfort or risk.

## **5. Final considerations**

It is noticed that society has been undergoing major changes in its social, cultural, economic and political structure, establishing new standards. Citizen education stands out as necessary and beneficial, since one of the reasons why image reading does not occur, is, perhaps, due to the lack of knowledge in art, or to the impossibility of visual literacy, being that this was a of the factors that aroused the interest for the investigation. Barbosa (2008, p. 18) states that the need for visual literacy has confirmed the importance of the role of art in school. The reading of the visual discourse, which is not limited to the analysis of shape, color, line, volume, balance, movement, rhythm, but mainly is centered on the meaning that these attributes, in different contexts, give to the image is an imperative of contemporaneity .

According to the author (2008), visual literacy is of great significance, as it expands knowledge of the world and cultural development, thus understanding itself as an education favorable to social integration.

Citizen education is, therefore, one of the aspects that contribute to inclusion and active participation in the social space. From the point of view of education, it means the formation of an autonomous subject, who knows how to preserve distance and the ability to judge from criteria referenced in its human sense. Education for citizenship is to encourage openness to the ethical sense of existence in society, legitimizing its social function and contributing to the conscious development of its citizen formation. Mitchell (2017, p. 29) warns of the following: "What do you want images? It has some kind of meaning, it must be because we assume that the images are like forms of life, driven by the desire and the appetites ... Why should there be a question that is apparently useless, frivolous, does it mean that we need our attention for a moment?". In view of these findings, Art Teaching is of fundamental importance, since it greatly contributes to building the bases for human beings to develop the potential that will accompany them throughout their lives. As Barbosa (1998, p. 31) argues, "[...] more than 25% of the professions in this country are directly or indirectly linked to the arts, and their best performance depends on the individual's knowledge of art". The author (1998, p. 20-21) points out that "it is proven that 82% of our informal knowledge comes through images".

It is, therefore, a dialectical relationship, historically dynamic and constituting, by definition, the individual and society in the process of citizen formation. It is essential that the subject is prepared for this autonomy of thought and choice, since he is bombarded by information that must be filtered, analyzed and criticized, so as not to become a repeater manipulated by the mass media.

Thus, the pedagogical intervention helps to transform this attitude into conscious action, so that, afterwards, it can elaborate its own processes. It is a vision that, if properly developed, can lead to a more effective use by each citizen, since when someone approaches the experiences of other people, or from other points of view, the experiences themselves acquire a greater perspective and the understanding of the social context ends up being enriched. The role of interpretation is the central part of a curriculum based on understanding the world.

## 7. References

- A. C. Gil. How to design research projects. 4. ed. São Paulo: Atlas, 2002.
- A. D. Pillar (Org.). The Education of the View of Teaching Arts. 8. ed. Porto Alegre: Mediação, 2014.
- A. M. Barbosa. Utopian Topics. Belo Horizonte: Com Arte, 1998.
- A. M. Barbosa. Concerns and changes in art education. São Paulo: Cortez: 2002.
- A. M. Barbosa. The image in art education. São Paulo: Perspectiva, 2008.
- A. A. Barbosa. Rereading, quotation, appropriation or what? In: BARBOSA, A M. Barbosa (Org.). Contemporary Art / Education: international consonances. São Paulo: Cortez, 2005. pp. 143-149.
- B. Purves. *Stop-Motion*. Porto Alegre: Boockman, 2011.
- Brasil. National Curriculum Parameters - Art. 3. ed. Brasília/DF: Ministry of Education / Secretariat of Fundamental Education, 1998.
- D. Ciriano. O que é *Stop Motion*? 15 Jun. 2009. Available in: <<http://www.tecmundo.com.br/2247-o-que-e-stop-motion-.htm#ixzz1IgD0xwmX>>. Access in: 2 dez. 2020.
- E. Morin. Science with Conscience. 4. ed. Rio de Janeiro: Bertrand Brasil, 2000.

- F. C. Rodrigues. Art: context and production - Elementary School: 6th to 9th grade. 1. ed. São Paulo: Leya, 2015.
- F. Cocchiarale. Who's Afraid of Contemporary Art? Fundação Joaquim Nabuco, Recife: Massangana, 2006.
- Movie Jack's Strange World. Direction: Henry Selick. Production: Tim Burton and Denise Di Novi. 1 DVD (76 min), color, fantasy / musical film. Walt Disney Pictures, 1993.
- F. Hernández. Visual Culture, Educational Change and Work Projects. Porto Alegre: Artmed, 2000.
- J. J. Zitkoski. Paulo Freire and Education. Belo Horizonte: Autêntica, 2006.
- J. L. Santos. What is Culture? São Paulo: Brasiliense, 2004.
- K. Lewin. Group Dynamics Problems. São Paulo: Cultrix, 1978.
- L. G. Pimentel. Triangular approach and self-narratives: autobiography and learning in Art. Magazine GEARTE, Porto Alegre, v. 4, n. 2, pp. 307-316, may/aug. 2017.
- L. G. Pimentel. Enjoy, contextualize and experiment as a possible basic strategy for research and the possibility of diversity in Art Teaching: the twenty-year-old contemporary. In: A. M. Barbosa, and F. P. Cunha (Orgs.). Triangular Approach in the Teaching of Visual Arts and Cultures. 1. ed. São Paulo: Cortez, 2010, pp. 211-228.
- M. A. S. Camargo. Imagetive Literacy: a way of building citizenship itself. 2005. Available in: <<http://livrozilla.com/doc/1046636/maria-aparecida-santana-camargo>>. Access in: 17 set. 2016.
- M. C. S. Rizzi. Methodological Paths - Chapter 5. In: A. M. Barbosa (Org.). Concerns and changes in art education. São Paulo: Cortez: 2002. pp. 63-70.
- M. F. Fusari, and M. F. Ferraz. Art Teaching Methodology. São Paulo: Cortez, 2001.
- M. Gadotti. Invitation to Reading by Paulo Freire. 2. ed. São Paulo: Scipione, 1991. (Series Thinking and Action in Teaching).
- M. Meira. Creation Philosophy. Porto Alegre: Mediação, 2003.
- M. Thiollent. Action Research Methodology. 18. ed. São Paulo: Cortez, 2011.
- P. Freire. The Importance of the Act of Reading: in three articles that are completed. 22. ed. São Paulo: Cortez, 2003.
- R. Barbier. Action Research. Brasília: Plano, 2002.
- S. Kemmis, and R. McTaggart. *The Action Research Planner*. 3. ed. Victoria: Deakin University, 1988.
- S. P. Herbert. Citizenship. In: D. R. Streck, E. Redin, and J. J. Zitkoski (Orgs.). Paulo Freire Dictionary. 2. ed. Belo Horizonte: Autêntica, 2010. pp. 67-68.
- S. R. Ramalho e Oliveira. Reading Images for Education. Thesis (Doctorate in Communication and Semiotics) – Pontifical Catholic University of São Paulo, São Paulo, 1998.
- V. Muniz. Extraordinary Garbage. Direction: Lucy Walker. Co-direction: João Jardim and Karen Harley. 1 DVD (99 min), NTSC, color, documentary. [S.I.]: Paris Movies, 2009.
- W. J. T. Mitchell What Do Images Want?: A Critique of Visual Culture. 1. ed. Autonomous City of Buenos Aires: Sans Soleil Ediciones Argentina, 2017.

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