Fanzine workshop: educommunication practices with House of Science students

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Abstract: Educommunicative practices aim to expand the communicative expression of young people. This article aims to present results of the House of Science fanzine workshop, as an educommunicative practice. The production of fanzines was conducted by means of workshops taught by journalists, in 2017 and 2018, as a supplement to the activities of the Adopt a Scientist program with elementary and secondary school students. Over 100 fanzines were produced, with themes based on lectures and undergraduate scientific research groups. Students had the opportunity to develop skills, including planning, involving choice of themes, production of texts, illustrations and finishing. As a result, the students have become authors of texts and illustrations, showing the learning of scientific concepts and of ways to share knowledge in a language suitable to the general public.

Keywords: educommunication; fanzine; House of Science of the Ribeirão Preto Blood Center; Adopt a Scientist; elementary and secondary education. Resumo: A prática educomunicativa visa ampliar a expressão comunicativa de jovens. O objetivo do presente artigo é apresentar resultados da oficina de fanzine da Casa da Ciência, como uma prática educomunicativa. A produção de fanzines foi realizada por meio de oficinas ministradas por jornalistas, durante os anos de 2017 e 2018, como complemento às atividades do Adote um Cientista, programa com alunos do ensino fundamental e médio. Foram produzidos mais de cem fanzines, com tema baseados em palestras e grupos de iniciação científica. Os alunos tiveram oportunidade de desenvolver habilidades, dentre elas o planejamento, envolvendo escolha de temas, produção de textos, ilustrações e finalização. Como resultado, os alunos se tornaram autores de textos e ilustrações, evidenciando aprendizagem de conceitos científicos e de formas de compartilhar conhecimento numa linguagem adequada ao público em geral.

Palavras-chave: educomunicação; fanzine; Casa da Ciência do Hemocentro de Ribeirão Preto; Adote um Cientista; ensino fundamental e médio.

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1. INTRODUCTION – EDUCOMMUNICATION PRACTICES

Educommunicative practices aim to expand the communicative expression of young people so as to engage them in the creation of new educational processes involving communication projects in school and non-school spaces. It works as a mechanism for production, circulation, and reception of knowledge and information, considering the core role of communication.

"To promote education is to make communication," in the words of Paulo Freire in the 1960s, showing that communication is part of the educational process. Founded on this principle, the House of Science promotes activities and workshops with elementary school students, so they share what they learn. And, thus, develop skills such as production of texts, comics, fanzines, and scripts. This article aims to present results of the House of Science fanzine workshop, as an educommunicative practice conducted with public school students of the Adopt a Scientist program.

Education as a form of appropriation of history and culture should be consistent with their current needs¹. Fanzines propose a shift from traditional communication processes, with producers of the production process, not only as receivers of messages.

Fanzines provide an approach to a small-scale handmade form of communication, which can also be produced in computers and the internet, in a proposal held in schools.

To work with fanzines in school two areas of intervention were proposed: communicative expression through the arts using an artistic instrument, the fanzine, which brings to education issues of the everyday life of people, making students realize in this context ways to think in their daily lives about ways to communicate through artistic languages².

The production of fanzines was conducted by means of workshops taught by journalists, in two instances in 2017 and 2018, as a supplement to the activities of the Adopt a Scientist program, with elementary and secondary school students, most from public schools located in Ribeirão Preto and region. Approximately 100 fanzines were produced in the two instances, with themes based on lectures and undergraduate scientific research groups, in which students participate each semester. The topics studied are part of the research of the researchers, most from the University of São Paulo (USP) campus in Ribeirão Preto, in the areas of Health, Molecular Biology, Neuroscience, Physical Education, Evolution, among others. The contents are often exclusive, resulting from research in progress, still unpublished.

With the purpose of developing the creativity of students, the workshop works with fanzines as pedagogical tools, with a format for sharing content as author. The student becomes a disseminator of what is learned, based on current knowledge, the result of ongoing research, first hand. The objective is to approach the community that is away from the scientific literature.

The House of Science understand the skills and interests of students as a form of assessment and adherence by the activities. It is believed that the 1. SOARES, Ismar de Oliveira. Educomunicação: um campo de mediações. **Comunicação &** Educação, São Paulo, n. 19, p. 12-24, 2000, p. 23

2. BEZERRA, Júlio César Oliveira; OLIVEIRA, Thascilla Emanuelly da Silva; ALMEIDA, Ligia Beatriz Carvalho de. Fanzine como ferramenta pedagógica educomunicativa. *In*: CONGRESSO DE CIÊNCIAS DA COMUNICAÇÃO NA REGIÃO NORDESTE, 19., 2017, Fortaleza: Estácio FIC, 2017, p. 1-10, p. 6. material produced brings evidence of learning, that confirms and indicates changes in the program of the House, including the rigor for its dissemination on the website and social networks.

Making a fanzine is fantastic because, as it has no rules, it enables experimentation, the combination of various styles in the same publication. Thus, collective work is crucial to create a dynamic vehicle, with different perspectives. In literature, as in comics, fanzines are essential to showcase the work of new authors. There is no need to have an editorial structure to release what you draw or write. You just need to make and show your work to everybody³.

2. EDUCOMMUNICATION: FIELD OF INTERVENTION

It is necessary to interact with the concepts of communication and review its performance in schools. Communication is then seen as a relationship between subjects, a "mode of dialogic interaction of the communicative action"⁴. In contrast to the increasing detachment from school, whose result appears on the low yield in international evaluations⁵. The school remains outdated and unattractive to most students, compared with social networks, which allow searches, news in real time and the interface with videos and audios. The world of communication is increasingly valued socially, compared with a denial of the world of traditional education, based on the local area, on the neighborhood school and on the city. While the world of communication covers nations, with no defined territory: its main mission is leisure, and goods offered for consumption.

This approach highlights the urgent need for new teaching and learning methods, which could rescue the youth and include them in formal or informal school environments, because, in times of information society, young people need motivating environments, in which learning can happen in a more inspiring, enjoyable, and less imposing manner⁶.

As educommunication manager, there are three main goals: (1) integrating the systematic study of communication systems into educational practices, including fulfilling what is required by the National Curricular Parameters (PCN) with regard to observing how the media act in society; (2) improving the expressive and communicative coefficient of educative initiatives, with the use of media such as radio, print and digital media, both as facilitators in the learning process and as a resource for expression of students, teachers, and members of the community; (3) creating and strengthening communicative ecosystems in educational spaces, in order to establish communication relationships at school, among management, teachers, and students, as well as from the school to the community, always fostering open and democratic environments⁷.

3. PAUDA, Jucimara. Angelo Davanço semeia o amor pelo Fanzine há 26 anos. **Blog Livro Sem Frescura**, [s.l.], 1º jun. 2017. Available from: http:// blogs.acidadeon.com/ blogs/livrosemfrescura/2017/06/01/angelo-davanco-semeia-o-amor-pelo-fanzine-ha-26-anos/. Access on: May 20, 2018.

4. SOARES, op. cit., p. 23.

5. MORENO, Ana Carolina. Brasil cai em ranking mundial de educação em ciências, leitura e matemática. **G1 Educação**, São Paulo, 6 dez. 2016. Available from: https:// g1.globo.com/educacao/ noticia/brasil-cai-emranking-mundial-deeducacao-em-cienciasleitura-e-matematica. ghtml. Access on: June 19, 2018.

6. SANTOS, Roberto Elísio dos; SANTOS, José Luiz dos. Educomunicação: histórias em quadrinhos no ensino de Artes. Comunicação & Educação, São Paulo, v. 22, n. 1, p. 31-42, 2017.

7. SOARES, op. cit.

3. FANZINE: THE NEW BOOST

Fanzine are handmade publications, with short print runs, restricted circulation, and a readership often composed of other producers of fanzines and people interested in culture in general. The name fanzine comes from the contraction of two English words and means, literally, "fan magazine" (FANatic magaZINE). Fanzines are defined as:

Independent and amateur publications, almost always with short print runs, printed in mimeographs, photocopiers or small offset printers. To publish them we rely on isolated fans, groups and associations of fans or fan clubs of a particular art, character, personality, hobby or genre of artistic expression, for a direct public, and may address a single theme or a mixture of several themes⁸.

Usually with no intention of profit, fanzines are characterized by publishing diverse texts and comics. The themes vary widely and range from science fiction, music, cinema, literature and politics, through video games, esotericism, vegetarianism, among other specialties, to the preferred area of young people eager to show their talent: comics (comic books, cartoons, political cartoons, illustration in general)⁹.

The first publications appeared in the United States, in the 1930s, produced by readers of science fiction magazines, which gathered in clubs to discuss the subject. The term fanzine only appeared later, in 1941, through the American Russ Chauvenet.

In Brazil, the first zines, as they may be called, also emerged from the initiative of science fiction fans. The first known one is *Ficção*, published in 1965 by Edson Rontani, in Piracicaba (SP). The name used for these publications at that time was bulletin. The term fanzine only appeared here in the 1970s. The boom of the Brazilian fanzines occurred from the mid-1980s and especially in the 1990s, with numerous titles popping up everywhere in the country, dealing with different subjects. "This decade represented a real transformation in the editorial process of fanzines in Brazil and meant the new boost of their production in a more robust and innovative manner"¹⁰.

At the end of the 1990s, with the worsening of the economic crisis under the Collor de Mello government and later, with the emergence of the personal computer and, especially, of the internet, paper fanzines had a significant drop in production.

The crisis of the fanzines followed the economic crisis of the country. Production costs became prohibitive, with raised prices of photocopying and postal rates, which are the two pillars for publishing fanzines: the mode of production and the medium of circulation¹¹. Currently, many resist, but not with the force of the past. Some have migrated to other platforms, such as websites, blogs, and PDF files. Others have disappeared and many others have emerged from these new media. A determining factor for the change in the course of fanzines was that which we may call technological revolution, with the spread of computers, the emergence of the Internet and other computer resources¹².

8. MAGALHÃES, Henrique. A mutação radical dos fanzines. João Pessoa: Marca de Fantasia, 2005, p. 27.

9. NEGRI, Ana Camilla. Quarenta anos de fanzine no Brasil: o pioneirismo de Edson Rontani. *In*: ENCONTRO DOS NÚ-CLEOS DE PESQUISA DA INTERCOM, 5., 2005, Rio de Janeiro. **Anais** [...]. Rio de Janeiro: UERJ, 2005.

10. MAGALHÃES, Henrique. **A nova onda dos fanzines**. João Pessoa: Marca de Fantasia, 2004, p. 10.

11. MAGALHÃES, Henrique. O rebuliço apaixonante dos fanzines. João Pessoa: Marca de Fantasia, 2003, p. 77.

12. Idem, 2004, p. 26.

4. HOUSE OF SCIENCE: LEARNING AND DISSEMINATION

Activities involving artistic productions made by students are present in the House of Science since its entry into operation in 2001¹³. Booklets and comics have already been produced by students, as well as scripts and theater presentations, texts and flyers.

Scientific dissemination activities are carried out jointly by the House team, including biologists, teachers, graduate students, elementary school students, journalists and experts in dissemination, who produce scientific dissemination materials for the website about topics of Biology, Health, Science, and Education.

The House of Science¹⁴ develops direct actions to approach researchers (researching professors and graduate students), teachers and students of the elementary education network in different educational programs for scientific diffusion and dissemination. This condition is possible thanks to the inclusion of Home in a space that works also as Research Center (Hemocentro de Ribeirão Preto/SP)¹⁵.

The Adopt a Scientist program is its main program with half-yearly activities with elementary school students, during school period. Students - mostly from public elementary schools, with their teachers, from the 6th grade, usually aged 12 years - participate in lectures given mainly by researching professors from different units of the USP/Ribeirão Preto. The dynamics of the Adopt a Scientist program, since 2005, is the result of the continuous partnership of the House with researchers and graduate students in their research environments, which brings the aspect of innovation and originality of the project. In addition, students participate in workshops for production of texts, fanzines, comics and play scripts, which are later evaluated and published on the website. This program also includes undergraduate scientific research groups with weekly meetings at the Little Scientist activity, which lasts ten weeks in which advisors (graduate students from the USP/RP campus) develop a scientific research project with the students. At the end of the semester there is the Mural, an event open to the public for presentation of results of the Little Scientist groups, similar to a scientific congress, with participation of a group of evaluators that are also graduate students from the USP/RP.

Learning in science is the main goal of the House of Science. Additionally, students are encouraged to write about what they learn. This is a way to value the practice of writing and consolidate the learning. The process begins with the notebook, old-fashioned according to young people used to typing on mobile phones. It is believed that the note-taking technique requires training and diverse skills. Among them, paying attention to what the professor says in lectures, register doubts and questions. It is not a matter of copying content from slides, but rather what was understood from them. At that time, they are processing the contents and registering important keywords to apprehend the concepts. That notebook will be their faithful companion when they need to remember a lesson or concept which that researcher transmitted and which they would hardly find in a textbook or website.

13. The House of Science is part of the educational project of the Cell Therapy Center (CTC) headquartered in the Ribeirão Preto Blood Center (USP/RP). Coordinated by professor Marisa Ramos Barbieri, it was installed in 2001 on the occasion of the creation of state Innovation and Dissemination Research Centers (Cepids), funded by the São Paulo Research Foundation (Fapesp).

14. Website: www.casada ciencia.com.br, includes the social networks Facebook, YouTube, and Instagram.

15. SANTOS, Rosemary Conceição dos; BARBIERI, Marisa Ramos; SANCHEZ, Roberto Galetti. Alfabetização científica e iniciação científica: da assimilação de conceitos ao comportamento científico. **RBPG**, Brasília, DF, v. 14, 2017.

They not only use the notebook, but are already writing. The objective is: can they express themselves in writing? This is the last step in undergraduate research. It is the result of a proposal that wants to observe their capacity to write what they learned and select what they will write. This is a very difficult process¹⁶.

5. DESCRIPTION OF THE ACCOUNT: FANZINE WORKSHOPS

The workshops presented were offered to the students by the journalist¹⁷ collaborating with the House of Science in 2017 and 2018, along with journalist Angelo Davanço. There were 90–100 students participating, most from public schools located in Ribeirão Preto, Dumont, Luiz Antônio, Cravinhos, and Pradópolis.

Initial aspects of journalistic texts were presented, such as the lead construction, for production of short texts on the lectures of the Adopt a Scientist program. The choice of producing a fanzine was due to the possibility of creating and planning a handmade publication, made entirely by students. It was also due to its practical distribution, using copies made from the original. During the whole process, teachers monitored the text production and preparation in parallel meetings with students.

The issue of respecting the space for drawing and writing. Teamwork, deciding together and respecting one another's skills, some "blooming" during the making of the fanzine. They have freedom to create, paste, in a fixed space and time that ends up showing the capacity by the greater or smaller involvement, which is not the same for everyone¹⁸.

The second workshop was led by Angelo Davanço, editor-in-chief of the newspaper *A Cidade*, in Ribeirão Preto, who had already conducted a fanzine workshop in the House of Science in 2016, with production of the "Adopt a fanzine" by students. In 2018, he conducted the lecture "Make Zine: the creative world of fanzines," in which he explained their origin and the possibilities of creation to students¹⁹ (Figure 1). To complete the first semester, the students presented the fanzines on the 23rd Mural, at the Institute of Advanced Studies at the Ribeirão Preto campus of USP. The material was exposed to the visitors (Figure 2).

In fanzines you have control of the whole process, which in print journalism involves the journalist that decides the subject to be addressed, the reporter, the editor, the photographer, the graphic designer, the printer, and the distributor. You do all these steps alone and learn to prepare a communication medium. If you wait to have an ideal condition to make a publication, this condition is never going to happen. In the workshops, if we have paper, pencil, scissors, glue and magazines, we use these materials. If we have a computer, we use it. If not, we write by hand. We cannot keep waiting for the ideal condition. Every school has these revolutionary materials: paper, scissors, and glue. You just need to have creativity and make it a publication²⁰.

The workshops were conducted in five steps during the semester:

16. ZAUITH, Gabriella. Escrevendo e aprendendo. **Casa da Ciência**, Ribeirão Preto, 13 abr. 2017. Available from: http:// www.casadaciencia. com.br/escrevendo-eaprendendo/. Access on: May 20, 2018.

17. Gabriella Zauith.

18. ZAUITH, op. cit.

19. DAVANÇO, Ângelo. **Faça Zine:** o mundo criativo dos fanzines. Ribeirão Preto: Casa da Ciência, 2017. 1 video (28 min). Published by the Casa da Ciência channel. Available from: https:// www.youtube.com/watch ?v=dg4jSl3tSSg&list=PLD DdpAkj09-S7vuIMMI273M dpnNYz8GIG&index=49. Access on: June 20, 2018.

20. Ibidem.

- (1) Planning students gathered in groups, organized by the schools and monitored by the teachers. Considering the skills of each one, they are chosen by the group as writers, illustrators and publishers, with the function of creating the cover and the name of the fanzine;
- Subjects choice of theme for the production of texts and drawings, based on what they learned in lectures and undergraduate research groups;
- (3) Production drafting of texts and design of illustrations;
- (4) Finishing editing and pagination;
- (5) Publishing and distribution.



Figure 1: Students during the lecture "Make Zine: the creative world of fanzines"



21. Department of Psychology, Graduate Program in Psychobiology, USP Ribeirão Preto School of Sciences and Letters. $\label{eq:Fanzine} \ensuremath{\mathsf{Fanzine}}\xspace \ensuremath{\mathsf{workshop}}\xspace: \ensuremath{\mathsf{educommunication}}\xspace \ensuremath{\mathsf{panzine}}\xspace \ensuremath{\mathsf{workshop}}\xspace: \ensuremath{\mathsf{educommunication}}\xspace \ensuremath{\mathsf{panzine}}\xspace \ensuremath{\mathsf{educommunication}}\xspace \ensuremath{\mathsf{panzine}}\xspace \ensuremat$

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6. IN PRODUCTION

The material produced comprised over 100 fanzines, evaluated and disseminated on the House of Science website, based on the criteria of use of concepts, creativity, and coherence of texts. The most addressed themes were: Parkinson's disease; the influence of video games on the youth; memory and nervous system; food; physical activity; and prejudice (Chart 1).

Chart 1: List of themes addressed in the fanzines

Year	Themes
2018	Parkinson (10); Food (8); Physical activity (5); Prejudice (4); Drugs and brain; Food chain top animals (3); DNA and molecular biology; Crispi technique (2); Dopamine; Chemical agents; Multiverse; HIV; Scientific method; Chagas disease; Mirror neuron; Brain and emotions; Ethology; Birds and evolution (1).
2017	Videogames and neuroscience; Science – various themes (10); Memory and emotions (9); Brain and nervous system (4); Diabetes (3); Blood; Neurons (2); Bacteria; High blood pressure; Cannabinoids; Dreams; Parasites; Flowers and pollinators; Cigarettes and pregnancy; Ethology; Immune system; Receptors and ligands; Leukemia; DNA; Evolution (1).

The theme Parkinson's resulted from the lecture given by Fernando Eduardo Padovan Neto²¹, held in March 2018, "A brief history about dopamine and its implications for Parkinson's disease." In the fanzines (Figures 3, 4, and 5) students produced texts and drawings based on their notebooks, explaining concepts about the disease, possibilities of treatment with dopamine, still in experimentation. This set of information, suitable to the language of dissemination, expresses the students' learning and how they managed to transfer it to the paper, considering the production steps: content selection, text writing, cover and titles and illustrations production.

O que & Parkinson? Parkinson e'uma dança neurologica degenerativa, Causada pela fotta de salstância regro. O Parkinson não tem cura. Os sintanos são Rigidez, Bradicinesia. Tremon de repouso e instabilidade pos-tural. DOE / ÇA Trotomento A pessoa que tem essa dánça, faz o tratamento con usa de medicamentos. Quando ela faz o tratamen. To tem mois 20 anos de vida. A doenga de Parkinson re chama assim por course de seu deschrider que se chamasa James Parkinson. esthirmy endades Prodondis Depamina é importante para o con-trole motor! Qual molécula participa do controle motor? 1.0 que « Dopamino? E um reurstronsmissor monominérge-HO 2. Qual e papel da depamina no neurônio? WH. dentrito Transmitis informaçãos de um reurão HO is as outro. 3. Como corre a libração de depomina? potencial de ação, esse potencial de ação que vai informar ao neurônio que ele dopomina e filerar a donamin

Figure 3: Fanzine about Parkinson's disease, produced in 2018

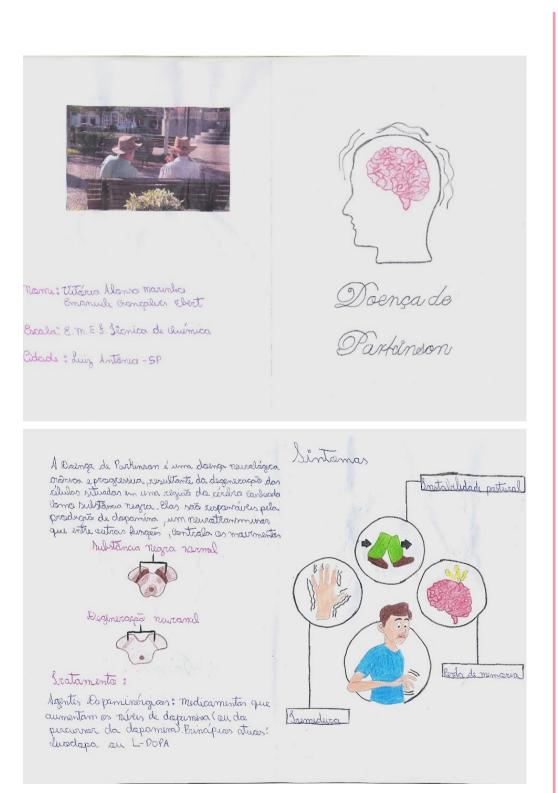


Figure 4: Fanzine produced by students during the workshop

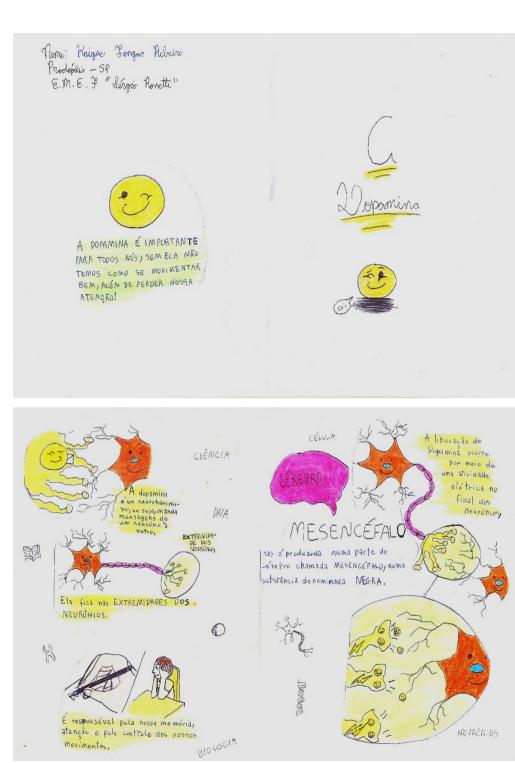


Figure 5: Production of fanzine about dopamine, produced by students

7. FINAL CONSIDERATIONS

Communication brought to education ceases to being merely related to media and to having an instrumental function to then acquire training dynamics, involving plans for learning, conducting audiovisual programs, understanding the dynamics of the production of messages by vehicles and positioning before a world strongly mediated by technology, by the communication in smartphones, and by internet coverage.

Fanzines as part of a communicative ecosystem provide environmental organization, availability of resources, *modus facendi* of the subjects involved, and the set of actions that characterize a type of communicational action²². Accordingly, the House of Science is situated as part of an educommunicative ecosystem, as its actors – researchers, students and teachers – engage in learning practices and develop them in diverse communicative formats, by disseminating the activities on the website or by means of the workshops.

Students had the opportunity to develop skills, including planning, involving choice of themes, production of texts, illustrations, finishing, submission, and publishing of the material. In a pleasant manner, they found a way to communicate quickly and freely. As a result, they appropriated a printed material, becoming authors of texts and illustrations, by sharing their knowledge in a language suitable for the general public.

BIBLIOGRAPHICAL REFERENCES

BEZERRA, Júlio César Oliveira; OLIVEIRA, Thascilla Emanuelly da Silva; ALMEIDA, Ligia Beatriz Carvalho de. Fanzine como ferramenta pedagógica educomunicativa. *In*: CONGRESSO DE CIÊNCIAS DA COMUNICAÇÃO NA REGIÃO NORDESTE, 19., 2017, Fortaleza. **Anais** [...]. Fortaleza: Estácio FIC, 2017. p. 1-10.

DAVANÇO, Angelo. **Faça Zine**: o mundo criativo dos fanzines. Ribeirão Preto: Casa da Ciência, 2017. 1 video (28 min). Published by the Casa da Ciência channel. Available from: https://www.youtube.com/watch?v=dg4jSl3tSSg&list =PLDDdpAkj09-S7vuIMMI273MdpnNYz8GIG&index=49. Access on: June 20, 2018.

MAGALHÀES, Henrique. **O rebuliço apaixonante dos fanzines**. João Pessoa: Marca de Fantasia, 2003.

MAGALHÀES, Henrique. **A nova onda dos fanzines**. João Pessoa: Marca de Fantasia, 2004.

MAGALHAES, Henrique. A mutação radical dos fanzines. João Pessoa: Marca de Fantasia, 2005.

22. SOARES, op. cit., p. 27.

MORENO, Ana Carolina. Brasil cai em ranking mundial de educação em ciências, leitura e matemática. **G1 Educação**, São Paulo, 6 dez. 2016. Available from: https://g1.globo.com/educacao/noticia/brasil-cai-em-ranking-mundial-de-educacao-em-ciencias-leitura-e-matematica.ghtml. Access on: June 19, 2018.

NEGRI, Ana Camilla. Quarenta anos de fanzine no Brasil: o pioneirismo de Edson Rontani. *In*: ENCONTRO DOS NÚCLEOS DE PESQUISA DA INTERCOM, 5., 2005, Rio de Janeiro. **Anais** [...]. Rio de Janeiro: UERJ, 2005.

PAUDA, Jucimara. Angelo Davanço semeia o amor pelo Fanzine há 26 anos. **Blog Livro Sem Frescura**, [*s.l.*], 1º jun. 2017. Available from: http://blogs. acidadeon.com/blogs/livrosemfrescura/2017/06/01/angelo-davancosemeia-o-amor-pelo-fanzine-ha-26-anos/. Access on: May 20, 2018

SANTOS, Roberto Elísio dos; SANTOS, José Luiz dos. Educomunicação: histórias em quadrinhos no ensino de Artes. **Comunicação & Educação**, São Paulo, v. 22, n. 1, p. 31-42, 2017.

SANTOS, Rosemary Conceição dos; BARBIERI, Marisa Ramos; SANCHEZ, Roberto Galetti. Alfabetização científica e iniciação científica: da assimilação de conceitos ao comportamento científico. **RBPG**, Brasília, DF, v. 14, 2017.

SOARES, Ismar de Oliveira. Educomunicação: um campo de mediações. **Comunicação & Educação**, São Paulo, n. 19, p. 12-24, 2000.

TRIGO, Fernando Rossi; PRADO, Flávia Fulukava do; PERTICARRARI, André; BARBIERI, Marisa Ramos. Memória e divulgação: ações educacionais da Casa da Ciência do Hemocentro de Ribeirão Preto na difusão do conhecimento. **Revista Brasileira de Extensão Universitária**, Chapecó, v. 8, n. 2, p. 91-102, 2017.

ZAUITH, Gabriella. Escrevendo e aprendendo. **Casa da Ciência**, Ribeirão Preto, 13 abr. 2017. Available from: http://www.casadaciencia.com.br/escrevendo-e-aprendendo/. Access on: May 20, 2018.