


## COMICS AS A TECHNOLOGICAL TOOL FOR DISSEMINATING INDIGENOUS DEAF CULTURE

HISTÓRIA EM QUADRINHOS COMO FERRAMENTA TECNOLÓGICA PARA DIVULGAÇÃO DA CULTURA ÍNDIGENA SURDA

LAS HISTORIAS DE CÓMIC COMO HERRAMIENTA TECNOLÓGICA PARA LA PROMOCIÓN DE LA CULTURA INDÍGENA SORDA


### Anderson da Costa Lacerda

PhD student in the Postgraduate Program in Science, Technology and Inclusion, (PGCTIn-UFF) Fluminense Federal University. Master in Science and Biotechnology (PPBI-UFF) Niterói, RJ and Graduated in Information Technology Management, (UNESA) [costa\\_lacerda@id.uff.br](mailto:costa_lacerda@id.uff.br).

 0000-0002-1862-2743

### Francisco Gilson Rebouças Porto Junior

PhD in Contemporary Communication and Culture from the Faculty of Communication of the Federal University of Bahia (FACOM-UFBA). Master in Education from the Faculty of Education (PPGE-UnB) and Graduated in Social Communication/Journalism, Pedagogy, History and Letters. [gilsonporto@uft.edu.br](mailto:gilsonporto@uft.edu.br).

 0000-0002-5335-6428

Received: 04/01/2024

Accepted: 09/01/2024

Published: 11/30/2024

### ABSTRACT:

The article, through the National Curriculum Parameters that include comics, highlights their importance in the classroom. The aim of this work is to use comics as a technological teaching tool to disseminate some Indigenous Sign Languages that are currently being studied and catalogued. We understand that it is of fundamental importance to use information and communication technologies to create comic strips, as well as writing that respects the knowledge of traditional communities. In this way, there is intercultural learning, using comics as an instrument that makes it possible to keep memory alive through indigenous literature with the use of this technology.

**KEYWORDS:** Information and communication technology; Comics; Indigenous community.

## Introduction

Medicine, industry and other fields are being changed by new technologies, but communication and information technologies (ICTs) are defined as all the technical means used to process information and aid communication (Oliveira et. al, 2015). Society is constantly undergoing renovations and these changes also appear in the school space, so this article addresses the use of comics as a pedagogical practice in the education scenario.

Vygotsky (1998) points out that language does not depend on the nature of the material medium it uses, but on the effective use of signs (signals), in any form of realization that can assume a role corresponding to that of speech. An understanding of deafness based on a historical and cultural perspective emphasizes different ways of experiencing hearing differences.

Cardoso (2016) presents a more appropriate terminology. The deaf, or 'Deaf' with a capital letter, are people who do not consider themselves disabled, use sign

language and value their history, art and literature, and propose their own pedagogy for the education of deaf children. The "Deaf" are not deficient in the communicative linguistic sphere, or in the construction of the social identity in which they constitute themselves as people.

Thus, contrary to what many may assume, the 'Deaf' who identify with sign language and the Deaf community do not like to be called hearing impaired. Deaf people are proud to be deaf and don't consider themselves disabled. Being deaf is not a problem for them; it's just part of who they are. They don't identify themselves by what they hear or don't hear. They are considered to be "culturally Deaf", in that they tend to feel more at ease with people who speak the same language (Strobel, 2008).

Article 4 of Federal Law No. 10.436 (Brazil, 2002) states that: "The Federal Educational System and the State, Municipal and Federal District Educational Systems must guarantee the inclusion in Special Education, Speech Therapy and Magisterial training courses, at their medium and higher levels, of the teaching of the Brazilian Sign Language - LIBRAS, as an integral part of the curricular parameters, in accordance with current legislation".

## **Methodology**

To prepare the article, we used qualitative bibliographical research, documentary research, with the aim of producing reading, analysis and scientific dissemination material, using articles found on database platforms such as Google Scholar, Scielo, Researchgate, among others (Brito, Oliveira & Silva, 2021).

Based on the aforementioned works, we can make analyses and comparisons, drinking in and talking about comics in the light of what has been deliberated at the School of Communication and Arts (ECA) - USP, where its studies focus on art, cinema and television (Brito, Oliveira & Silva, 2021).

## **Comics as a teaching-learning tool**

The use of comics in education is well highlighted in Alves (2017) and in the PCNs - "Parâmetros Curriculares Nacionais" of the Art curriculum component; comics are mentioned alongside other forms of visual language, thus showing their relevance in education.

Therefore, due to the lack of literature on the subject of Indigenous Sign Language to guide teachers and students, "Deaf people", we thought we would contribute to the dissemination of a brief timeline of Comic Books (Comics).

Comics have been around for more than 100 years, and have always been successfully used as an instrument for disseminating ideas. Comics uniquely combine two very rich forms of cultural expression - literature and the visual arts, which makes them a very effective teaching tool. When fully exploited, words and illustrations have enormous power to tell stories and convey messages (MacCloud & Do Nascimento Paro, 1993).

The first known comic book was "The Yellow kid" from 1896 (figure 1) by Richard Fenton Outcalt (Schneider, 2017). This author inserted the famous balloons into the figures. Initially, *comics* were only humorous, hence the English name, *comics* (Schneider, 2017).

**Figure 1** - First comic book: Magazine n.2 vol. 1 "The Yellow kid" by Richard Fenton Outcalt



Source: <https://library.syr.edu/digital/exhibits/c/cartoonists/outcalt1.htm>

With regard to Brazil, a brief historical account is given by Tanino (2011):

[...] The first comic book of expression was O Tico-tico, in Rio de Janeiro, in 1905. It is believed that this was the beginning of children's comics, as it included short stories, curiosities, poetry, historical dates and informative texts, as Penteado (2008) points out. The publications were not entirely dedicated to one character, like today's comics, but brought together various cultural expressions, emphasizing literature. In addition, it had a section that provided information related to morals and civics, the arts, geography, mathematics and scientific information (Magalhães, 2005) [...].

**Figure 2 - Tico-Tico - First issue of comics for children, October 11, 1905**



Source: <https://bndigital.bn.gov.br/artigos/o-tico-tico/>

The use of comics in education is well highlighted in Alves, (2017):

[...] The educational potential of comics began to be explored as early as the 1940s, with the publication of magazines that "brought anthologies of comic strips about famous characters from history, literary figures and historical events." (Rama & Vergueiro, 2012, p. 17) As well as adaptations of literary classics. Also in this period, comic book artist Will Eisner produced instruction manuals for the US army in the language of comics and Mao Zedong's communist regime published educational comics as a way of making the population aware of the new society resulting from the revolution. [...] Based on this observation, guiding documents, such as the National Curriculum

Parameters (PCN) and the National Curriculum Framework for Early Childhood Education (RCNEI), cite comics as a language that can be used in pedagogical practices in the classroom [...].

In the National Curriculum Parameters (1998) for art, comics are mentioned alongside other forms of visual language:

Knowledge and competence in reading visual forms in various means of image communication: photography, posters, television, video, **comics** (emphasis added), computer screens, publications, advertising, design, cartoons, etc. (National Curricular Parameters, 1998, p. 67).

For the selection and acquisition of comics in school libraries, Brazil has authors such as Maurício de Sousa, Ziraldo and others, who have even deepened the commitment to society in relation to the use of paradidactics and Brazilian cultural and social contemplation (Bari & Vergueiro, 2011, p. 7).

**Figure 3** - Ziraldo's Pererê gang and "O Menino Maluquinho"



Source: <http://www.guiadosquadrinhos.com/artista/ziraldo/3587>

Source: <http://www.universohq.com/noticias/a-turma-do-perere-completa-55-anos/>

In 1957 the character "Pererê" (figure 3) appeared in the magazine "O Cruzeiro", and in 1960 he got his own comic book. In this comic, Ziraldo shows a political tendency. In 1980 he launched "O Menino Maluquinho", which was adapted for various media. Ziraldo tells the story of a mischievous boy. As the website Guia dos Cominhos (<http://www.guiadosquadrinhos.com/artista/ziraldo/3587>) adds:

[...] He was sympathetic to labor nationalism and communism. The cartoonist himself would later admit: "My saci was red and hypernationalist". This inclination became more explicit in 1969 when, together with Millôr, Jaguar and other cartoonists, he founded the socialist humor newspaper "O Pasquim" (Diogo, 2008).

As for the "Menino Maluquinho" comic book (figure 3), the same website comments that:

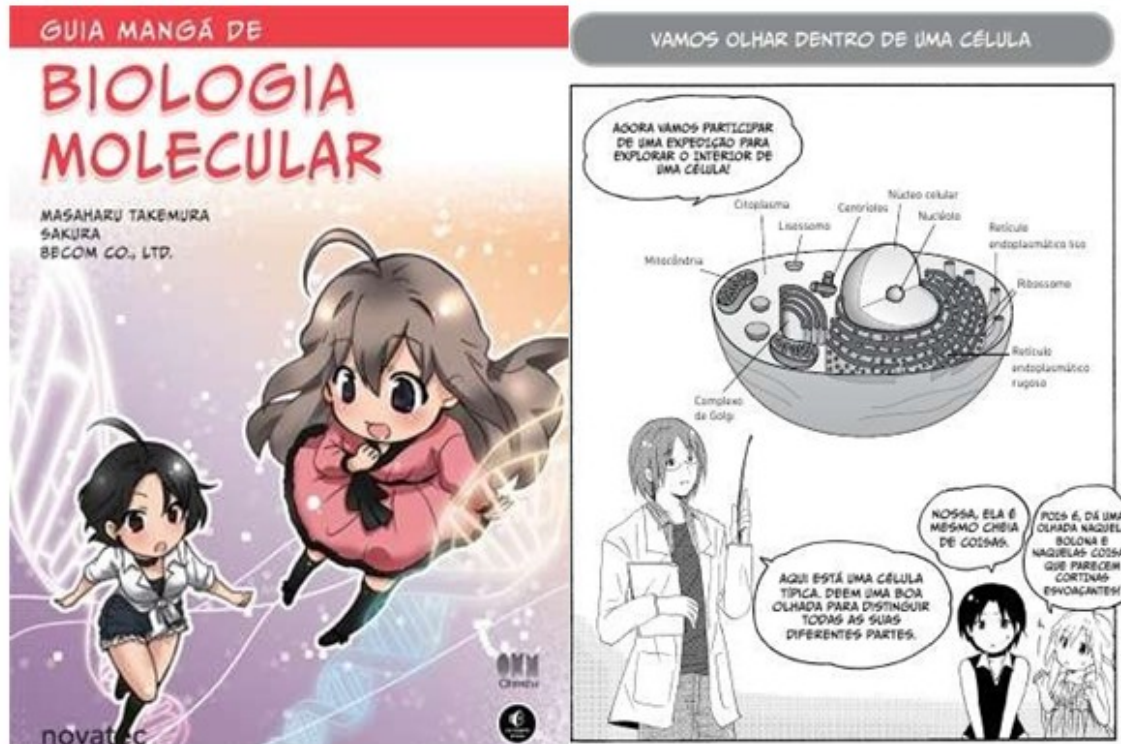
[...] Ziraldo tells the story of a boy who never stops. His mother, Naná, and his father, Carlinhos, have a lot of trouble with him, but they love him. Dona Naná is always asking him to tidy up the mess in his room, and Carlinhos has got used to lending him that blue jacket that Maluquinho likes to wear. But nobody knows why he likes to wear a saucepan on his head so much. You can hazard a guess. junim thinks it's magic, but he's never been able to prove it. [...] (Diogo, 2008).

A good example of the use of comics at university is the Manga (Japanese comics) - Guia Mangá by Novatec Editora (<https://novatec.com.br/manga.php>). On the website mentioned above, Novatec Editora explains the reasons for adopting comics as a form of teaching:

[...] Each guide is written by Japanese scientists or mathematicians with extensive knowledge in the field and illustrated by manga professionals. [...] Its teaching concept is based on comics and it has been widely adopted by various universities, schools and libraries as educational and reference material. [...] It is aimed at high school students, university students, teachers and anyone interested in the subjects covered by the guides (<https://novatec.com.br/manga.php>) (Novatec Editora, 2009).

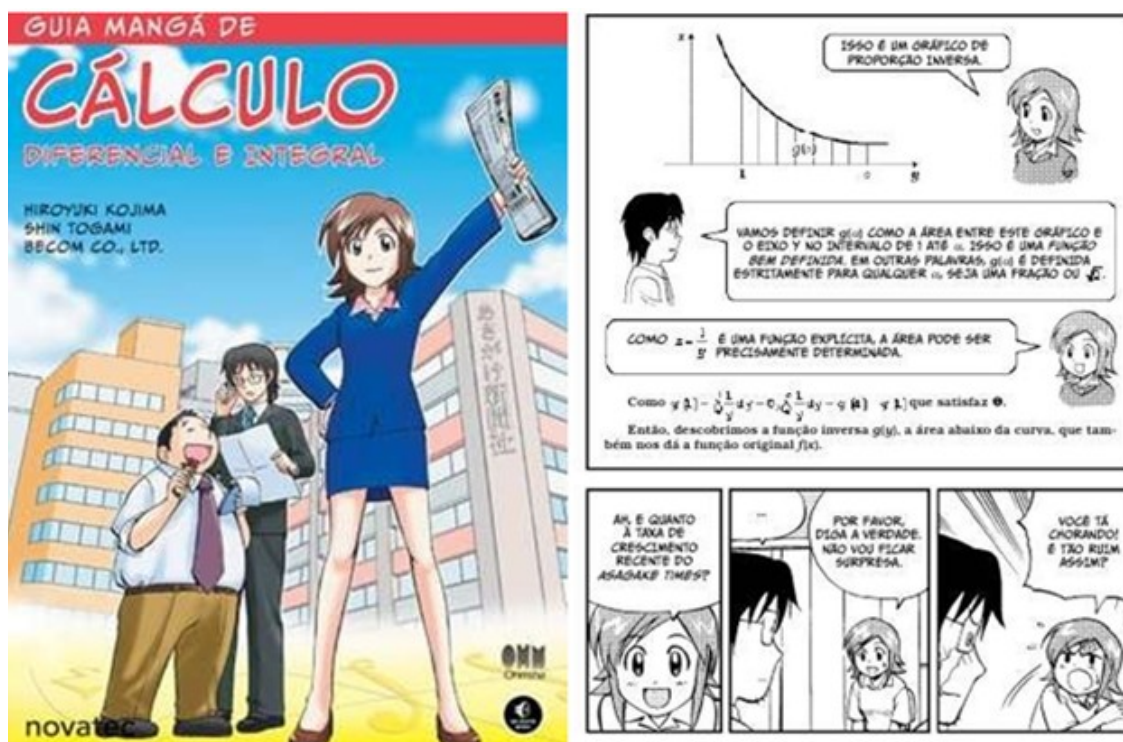
Similarly, our aim is to delve deeper into this context and, in the future, develop comics based on some of Novatec Editora's aforementioned parameters.

**Figure 4** - Manga Guide to Molecular Biology by Masaharu Takemura - Cover (2010)



Source: Novatec Publishing.

**Figure 5** - Manga Guide to Differential and Integral Calculus by Hiroyuki Kojima - Cover (2010)



Source: Novatec Publishing.

In Figures 4 and 5 above, we can see that the magazines are used as strategies to teach various concepts such as molecular biology, integral differential calculus, among others presented on the publisher's website. We can see that complex concepts are conveyed through drawings, where the characters have pronounced expressions and the visual presentation of the pictures suggests movements, actions and events. In this way, visual communication can be used to teach a particular concept.

**Figure 6** - Comic strip 'O Jabuti resiste - resistance of the Mundurucu people'





Source: <https://www.ecycle.com.br/grenpeace-transforma-em-quadrinhos-luta-de-povo-indigena-contra-hidreletrica/>

In 2016, the NGO Greenpeace published a comic book (figure 6) in the fourth edition of its magazine about the Mundurucu people, who live on the banks of the Tapajós River, with the aim of giving visibility and joining forces to guarantee the survival of these people, which could be jeopardized by a large hydroelectric dam that was planned to be built on the river (Povos Indígenas no Brasil, 2003); (Paz Verde, 2016).

Another historic milestone in the production of comics is the story that portrays, in a pioneering way, the indigenous sign language used by the deaf Terena people. The pedagogical material aims to strengthen the recognition and preservation of indigenous sign languages and is presented in a plurilingual format, also signaled in the Brazilian Sign Language (Libras) (Fundação Nacional dos Povos Indígenas, 2021).

**Figure 7** - Comic strip 'Sol: the deaf shaman'



Source: <https://www.gov.br/funai/pt-br/assuntos/noticias/2021/historia-em-quadrinhos-plurilingue-retrata-lingua-indigena-de-sinais>

The Terena Sign Language is used by deaf people belonging to this indigenous people, located mainly in the state of Mato Grosso do Sul. The comic book (figure 7) produced by Ivan de Souza with the title '*Sol: a pajé sur da ou Séno Mókere Káxe Koixómuneti*' (*Sun: the deaf shaman or Séno Mókere Káxe Koixómuneti*), in the Terena language, tells the story:

The story of an elderly deaf indigenous woman called Káxe who performs the religious function of shaman (Koixómuneti) in her community. When she is asked to help with a birth and after asking for the blessing of the ancestors for the newborn, the future of the Terena people is revealed and transmitted to her in signs (Fundação Nacional dos Povos Indígenas, 2021).

Ivan Souza explains that the above-mentioned comic book was the conclusion of a course in Libras Languages at the Federal University of Paraná (UFPR):

The whole process was accompanied by researchers who were already carrying out activities with the deaf Terena, users of the

Terena sign language. The indigenous community also played an active role in developing and then validating the work with their people (Fundação Nacional dos Povos Indígenas, 2021).

Materials like this disseminate the culture and customs of these traditional indigenous peoples to deaf and hearing people, and ICTs can help develop these signposted comics that are presented through videos, drawings, illustrations and other strategies that ICTs can present in order to develop a final product of excellent quality.

## Conclusions

According to Soares and Fargetti (2022) in their survey of possible indigenous sign languages found in Brazil. In addition to the Brazilian Sign Language, Libras:

Brazil has at least two indigenous sign languages, which have already been minimally analyzed in their structures: the Ka'apor sign language (Kakumasu 1968; Ferreira-Brito 1984) and the Terena sign language (Sumaio 2014; Fargetti, Soares 2016; Soares 2018). [...] Possible indigenous sign languages, Sateré-Mawé signs, Guarani signs, Kaingang village signs (SKA), Paiter-Suruí signs, Akwe-Xerente signs, Pataxó deaf sign languages from the south of Bahia, signs used by students living in outlying areas of Belém (Amazon region) and Ororubá (Soares & Farguetti, 2022).

Therefore, we can see the potential of comics to disseminate the customs, culture and signs developed by each indigenous group, which in the future could contribute to the cultural enrichment of students about the indigenous peoples of Brazil.

Santos and Real (2018) report that:

Before the 1990s, comics were viewed with prejudice in pedagogical practice because they were considered childish and lacked cultural and educational content (Verguera & Ramos, 2009). Nowadays, comics are tools that can be used to work with narrative genres, with creativity and a critical view of everyday life (Santos & Real, 2018).

Even with the emergence and competition of other means of communication, comics continue to attract a large number of readers. An example of this is manga, which uses visual presentation to stimulate curiosity, interest and interaction with various sciences, and this fact encouraged us to initially invest in this article to publicize the fact that Libras is not the only sign language available in Brazil, for both deaf and hearing people.

As a form of accessibility and inclusion for a greater proportion of students, visual communication in comics is enhanced by the 'Deaf' individual. This is an extremely

important characteristic in deaf people and can be used as a potential to stimulate the transmission of visual information to deaf students.

One pedagogical practice is the use of digital comics as a tool for reading and writing. Santos and Real (2018) add that:

Information and Communication Technologies have arrived in education with the possibility of breaking down the pedagogical practices of traditional teachers whose teaching is based on content [...] if Information and Communication Technology at school fails, something doesn't work, they look for other virtual controls (Santos & Real, 2018, pp. 4-5).

Comics have contributed in many ways to reading, writing, interpretation, knowledge of other languages for easy understanding of a scientific, political or religious subject, and allow a variety of possibilities for criticism, praise or suggestions (Santos & Real, 2018).

However, it is necessary that this tool is used for concrete student learning when possible linked to information and communication technologies for greater accessibility and inclusion allowing the diversity of people and knowledge not the repetition of archaic and inefficient teaching methods.

## References

- Alves, B. F. (2017). *Anais da 4.a Jornada - Escola de Comunicação e Artes*. São Paulo: Universidade Federal Rural de Pernambuco. Retrieved from [https://anais2ajornada.eca.usp.br/anais4asjornadas/q\\_e\\_letramentos/bruno\\_fernandes\\_alves.pdf](https://anais2ajornada.eca.usp.br/anais4asjornadas/q_e_letramentos/bruno_fernandes_alves.pdf).
- Bari, V. A., & Vergueiro, W. (2011). *Emoção e rebeldia: Formação de gibitecas na biblioteca escolar*. In Anais do Congresso Brasileiro de Biblioteconomia, Documentação e Ciência da Informação: Sistemas de Informação, Multiculturalidade e Inclusão Social. Maceió: UFAL. Retrieved from <http://enancib.ibict.br/index.php/enancib/xenancib/paper/viewFile/3207/2333>.
- Brazil, República Federativa do. (2002). *Dispõe sobre a Língua Brasileira de Sinais - Libras e dá outras providências*. Retrieved from [https://www.planalto.gov.br/ccivil\\_03/leis/2002/l10436.htm](https://www.planalto.gov.br/ccivil_03/leis/2002/l10436.htm)
- Brazil, República Federativa do. (s.d.). *Parâmetros Curriculares Nacionais*. Retrieved from <http://portal.mec.gov.br/seb/arquivos/pdf/arte.pdf>.
- Brito, A. P. G., Oliveira, G. S., & Silva, B. A. da. (2021). *A importância da pesquisa bibliográfica no desenvolvimento de pesquisas qualitativas na área de educação*. Cadernos da FUCAMP. Retrieved from <https://revistas.fucamp.edu.br/index.php/cadernos/article/view/2354>.
- Cardoso, I. G. (2016). *Surdo-Mudo ou Mudo, Deficiente Auditivo ou Surdo: Qual? Dessas terminologias pode-se adotar?* Revista Virtual de Cultura Surda.
- Diogo, E. (n.d.). *Ziraldo*. Guia dos Quadrinhos. Retrieved from [www.guiadosquadrinhos.com](http://www.guiadosquadrinhos.com)

- Fundação Nacional dos Povos Indígenas. (n.d.). *História em quadrinhos plurilíngue retrata língua indígena de sinais*. Retrieved from <https://www.gov.br/funai/pt-br/assuntos/noticias/2021/historia-em-quadrinhos-plurilingue-retrata-lingua-indigena-de-sinais>.
- Greenpeace. (n.d.). *Greenpeace transforma em quadrinhos luta de povo indígena contra hidrelétrica*. Retrieved from <https://www.ecycle.com.br/greenpeace-transforma-em-quadrinhos-luta-de-povo-indigena-contra-hidreletrica/>.
- Magalhães, H. (2005). *O Tico-Tico, 100 anos de encantamento*. Universo HQ.
- McCloud, S., & Do Nascimento Paro, M. (1993). *Desvendando os quadrinhos*. Retrieved from [http://orson.ufpel.edu.br/content/01/artigos/orson\\_full\\_finalok.pdf#page=156](http://orson.ufpel.edu.br/content/01/artigos/orson_full_finalok.pdf#page=156).
- Novatec Editora. (2009). *Estude Matemática e Ciências com História em Quadrinhos!* Retrieved from <https://novatec.com.br/manga.php>.
- Oliveira, C. de, Moura, S. P., & Sousa, E. R. de. (2015). *TIC's na educação: A utilização das tecnologias da informação e comunicação na aprendizagem do aluno*. *Pedagogia Em Ação*, 7. Retrieved from <http://seer.pucminas.br/index.php/pedagogiacao/issue/view/741>.
- Povos Indígenas no Brasil. (n.d.). *Munduruku*. Retrieved from <https://pib.socioambiental.org/pt/Povo:Munduruku>
- Santos, M. F. dos, & Real, L. M. (2018). *HQs digitais: Uma ferramenta para leitura e escrita*. Congresso Internacional de Educação e Tecnologias. Retrieved from <https://cietenped.ufscar.br/submissao/index.php/2018/article/view/643>.
- Schneider, A. M. M. de M. (2017). *História em quadrinhos uma reposição a leitura*. Retrieved from [https://repositorio.ufsm.br/bitstream/handle/1/12247/TCCE\\_ME\\_EaD\\_2017\\_SCHNEIDER\\_ARETUZA.pdf?sequence=1&isAllowed=y](https://repositorio.ufsm.br/bitstream/handle/1/12247/TCCE_ME_EaD_2017_SCHNEIDER_ARETUZA.pdf?sequence=1&isAllowed=y).
- Soares, P. A. S., & Fargetti, C. M. (2022). *Línguas indígenas de sinais: Pesquisas no Brasil*. *Periódico SBU UNICAMP*, 22. Retrieved from <https://periodicos.sbu.unicamp.br/ojs/index.php/liames/article/view/8667592>.
- Strobel, K. L. (2008). *Surdos: Vestígios culturais não registrados na história*. Retrieved from <https://repositorio.ufsc.br/handle/123456789/91978>.
- Tanino, S. (2011). *Histórias em quadrinhos como recurso metodológico para os processos de ensinar*. Universidade Estadual de Londrina. Retrieved from <http://www.uel.br/ceca/pedagogia/pages/arquivos/2011%20SONIA%20TANINO.pdf>.
- Vygotsky, L. (n.d.). *Pensamento e linguagem*. Retrieved from [https://www.academia.edu/22833147/PENSAMENTO\\_E\\_LINGUAGEM\\_VYGOTSKY](https://www.academia.edu/22833147/PENSAMENTO_E_LINGUAGEM_VYGOTSKY)

**RESUMO:**

O artigo através dos Parâmetros Curriculares Nacionais que contemplam as histórias em quadrinhos destaca a sua importância em sala de aula. O objetivo desse trabalho é usar as histórias em quadrinhos, como ferramenta tecnológica de ensino para divulgação de algumas Línguas Indígenas de Sinais que até o presente momento estão em estudos e catalogação. Compreendendo que é de fundamental importância o uso das tecnologias da informação e comunicação para a elaboração de registros de histórias em quadrinhos como também uma escrita que respeite os saberes das comunidades tradicionais. Assim há uma aprendizagem intercultural, usando as histórias em quadrinhos como um instrumento que possibilita manter viva a memória pela literatura indígena com o uso dessa tecnologia.

**PALAVRAS-CHAVE:** Tecnologia da informação e comunicação; História em quadrinhos; Comunidade indígena.

**RESUMEN:**

El artículo, a través de los Parámetros Curriculares Nacionales que incluyen el cómic, destaca su importancia en el aula. El objetivo de este trabajo es utilizar el cómic como herramienta tecnológica de enseñanza para divulgar algunas Lenguas de Signos Indígenas que actualmente están siendo estudiadas y catalogadas. Tomando en cuenta que es de fundamental importancia utilizar las tecnologías de la información y la comunicación para crear registros de historietas, así como una escritura que respete los conocimientos de las comunidades tradicionales. De esta manera, se da un aprendizaje intercultural, utilizando la historieta como un instrumento que permite mantener viva la memoria a través de la literatura indígena con el uso de esta tecnología.

**PALABRAS CLAVE:** Tecnología de la información y la comunicación; Cómics; Comunidad indígena.