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CHAPTER 005

DEVELOPMENT AND INCLUSION OF PEOPLE WITH DOWN SYNDROME THROUGH TECHNOLOGY

DESENVOLVIMENTO E INCLUSÃO DE PESSOAS COM SÍNDROME DE DOWN ATRAVÉS DA TECNOLOGIA

DESARROLLO E INCLUSIÓN DE LAS PERSONAS CON SÍNDROME DE DOWN A TRAVÉS DE LA TECNOLOGÍA

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ABSTRACT

Technology has been an essential resource in the development and inclusion of people with Down's Syndrome, enabling greater autonomy and active participation in society. Through digital devices, applications and accessible educational tools, communication and learning barriers have been overcome, promoting advances in cognitive and social development. This paper aims to investigate the influence of digital and assistive technologies on the development and inclusion of people with Down's Syndrome, focusing on the identification of effective methodologies and the challenges faced in their implementation in Brazil. The research is based on bibliographical studies, using consolidated theoretical references to understand the impact of these tools in different contexts. Among the main results, it stands out that the use of personalized apps and augmentative communication devices favors the expression of ideas and emotions, facilitating interaction in inclusive school environments. In addition, educational games and adaptive learning platforms have proven effective in stimulating skills such as memory, attention and logical reasoning, contributing to the development of autonomy in daily activities. Another relevant point is the positive impact of assistive technologies on inclusion in the job market, with tools that help with task management and continuous training, promoting greater integration in the professional environment. However, the study also points to significant challenges, such as the need for public policies to guarantee universal access to these technologies and the training of professionals to apply them effectively. Cultural and structural barriers, such as the lack of specific training for educators and the absence of adequate infrastructure in schools and workplaces, still hinder the widespread implementation of these resources. We conclude that digital and assistive technologies have transformative potential in the process of including people with Down's Syndrome, but their effectiveness depends on an integrated approach involving pedagogical adaptations, professional training and investments in infrastructure. The development of inclusive policies that take into account the particularities of these people is essential for creating more equitable and accessible environments, promoting their full participation in society.

Keywords: Inclusion. Assistive technology. Down's syndrome. Cognitive development. Inclusive education.

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RESUMO
A tecnologia tem sido um recurso essencial no desenvolvimento e inclusão de pessoas com Síndrome de Down, possibilitando maior autonomia e participação ativa na sociedade. Por meio de dispositivos digitais, aplicativos e ferramentas educacionais acessíveis, têm sido superadas barreiras de comunicação e aprendizado, promovendo avanços no desenvolvimento cognitivo e social. Este trabalho tem como objetivo investigar a influência das tecnologias digitais e assistivas no desenvolvimento e inclusão de pessoas com Síndrome de Down, com enfoque na identificação de metodologias eficazes e nos desafios enfrentados em sua implementação no Brasil. A pesquisa baseia-se em estudos bibliográficos, utilizando referências teóricas consolidadas para compreender o impacto dessas ferramentas em diferentes contextos. Entre os principais resultados, destaca-se que o uso de aplicativos personalizados e dispositivos de comunicação aumentativa favorece a expressão de ideias e emoções, facilitando a interação em ambientes escolares inclusivos. Além disso, jogos educativos e plataformas de aprendizado adaptativo demonstram eficácia no estímulo a habilidades como memória, atenção e raciocínio lógico, contribuindo para o desenvolvimento da autonomia nas atividades diárias. Outro ponto relevante é o impacto positivo das tecnologias assistivas na inclusão no mercado de trabalho, com ferramentas que auxiliam na gestão de tarefas e capacitação contínua, promovendo maior integração no ambiente profissional. No entanto, o estudo também aponta desafios significativos, como a necessidade de políticas públicas que garantam o acesso universal a essas tecnologias e a capacitação de profissionais para sua aplicação efetiva. Barreiras culturais e estruturais, como a falta de treinamento específico para educadores e a ausência de infraestrutura adequada em escolas e ambientes de trabalho, ainda dificultam a ampla implementação desses recursos. Conclui-se que as tecnologias digitais e assistivas têm potencial transformador no processo de inclusão de pessoas com Síndrome de Down, mas sua eficácia depende de uma abordagem integrada, que envolva adaptações pedagógicas, formação profissional e investimentos em infraestrutura. O desenvolvimento de políticas inclusivas que considerem as particularidades dessas pessoas é essencial para a criação de ambientes mais equitativos e acessíveis, promovendo sua plena participação na sociedade.

Palavras-chave: Inclusão. Tecnologia assistiva. Síndrome de Down. Desenvolvimento cognitivo. Educação inclusiva.

RESUMEN
La tecnología ha sido un recurso esencial en el desarrollo e inclusión de las personas con Síndrome de Down, permitiendo una mayor autonomía y participación activa en la sociedad. A través de dispositivos digitales, aplicaciones y herramientas educativas accesibles, se han superado barreras de comunicación y aprendizaje, promoviendo avances en el desarrollo cognitivo y social. El objetivo de este estudio es investigar la influencia de las tecnologías digitales y de apoyo en el desarrollo y la inclusión de las personas con Síndrome de Down, con un enfoque en la identificación de metodologías eficaces y los desafíos enfrentados en su aplicación en Brasil. La investigación se basa en estudios bibliográficos, utilizando referencias teóricas consolidadas para comprender el impacto de estas herramientas en diferentes contextos. Entre los principales resultados, se destaca que el uso de apps personalizadas y dispositivos de comunicación aumentativa favorece la expresión de ideas y emociones, facilitando la interacción en ambientes escolares inclusivos. Además, los juegos educativos y las plataformas de aprendizaje adaptativo se han mostrado eficaces para estimular habilidades como la memoria, la atención y el razonamiento lógico, contribuyendo al desarrollo de la autonomía en las actividades cotidianas. Otro punto relevante es el impacto positivo de las tecnologías de apoyo en la inclusión en el mercado laboral, con herramientas que ayudan a la gestión de

tareas y a la formación continua, promoviendo una mayor integración en el entorno profesional. Sin embargo, el estudio también señala importantes retos, como la necesidad de políticas públicas que garanticen el acceso universal a estas tecnologías y la formación de los profesionales para aplicarlas eficazmente. Barreras culturales y estructurales, como la falta de formación específica para educadores y la ausencia de infraestructuras adecuadas en escuelas y centros de trabajo, siguen dificultando la implantación generalizada de estos recursos. Concluimos que las tecnologías digitales y de apoyo tienen un potencial transformador en el proceso de inclusión de las personas con síndrome de Down, pero su eficacia depende de un enfoque integrado que incluya adaptaciones pedagógicas, formación profesional e inversión en infraestructuras. El desarrollo de políticas inclusivas que tengan en cuenta las particularidades de estas personas es esencial para crear entornos más equitativos y accesibles, promoviendo su plena participación en la sociedad.

Palabras clave: Inclusión. Tecnología de apoyo. Síndrome de Down. Desarrollo cognitivo. Educación inclusiva.

INTRODUCTION

Technology has played a transformative role in the development and inclusion of people with Down Syndrome, expanding the possibilities of autonomy and active participation in society. With the advancement of digital devices, applications, and accessible educational platforms, barriers previously considered insurmountable, such as communication and learning difficulties, have been gradually overcome. These tools offer unique opportunities for individuals with Down Syndrome to enhance their cognitive, social, and emotional skills, creating more inclusive and personalized environments.

The use of assistive technologies, such as adaptive applications, augmentative communication devices, and interactive learning platforms, stands out as one of the key features in this scenario. These tools not only facilitate the expression of ideas and emotions, but also promote more meaningful interactions in educational and social contexts. Besio et al. (2016) point out that such technologies have played a fundamental role in school inclusion, allowing students with Down Syndrome to actively participate in activities, respecting their individual needs.

In addition, digital technologies have been boosting the cognitive development of people with Down Syndrome through educational games and customizable learning platforms. These resources are capable of stimulating skills such as memory, logical reasoning and attention, essential aspects for daily life and for inclusion in the labor market. According to the American Down Syndrome Association (2021), these tools not only contribute to academic development, but also to the formation of greater independence in the performance of day-to-day tasks.

The investigation presented in this work seeks to understand how these technologies have influenced the cognitive development and inclusion of people with Down Syndrome in Brazil. Through the analysis of case studies and an exploratory approach, the benefits of assistive technologies, the most effective methodologies, and the challenges faced in their implementation are examined.

The results showed that the use of adaptive applications, learning platforms and augmentative communication devices promotes significant advances in areas such as memory, attention, logical reasoning and social interaction. In addition, the positive impacts on inclusion in the labor market were highlighted, with tools that help in task management and continuous training. On the other hand, the need for more robust and inclusive public policies was identified, which guarantee universal access to technologies and the training of professionals for their effective implementation.

It was concluded that digital and assistive technologies have a crucial role in the development and inclusion of people with Down Syndrome, as long as they are integrated with pedagogical strategies and structural policies that promote equity and accessibility. This work contributes to the debate on the importance of coordinated actions that ensure real opportunities for development, autonomy and full participation in society.

THEORETICAL FRAMEWORK

The theoretical foundation of this work seeks to support the investigation on the impact of digital and assistive technologies on the development and inclusion of people with Down Syndrome. To this end, the contribution of recognized authors in the area of inclusive education, assistive technologies and human development is explored. Fundamental concepts related to Down Syndrome are presented, such as its specific characteristics and challenges, as well as the transformative role of technology in overcoming barriers. This section also discusses recent studies on the application of pedagogical methodologies and technological tools that promote autonomy and learning, as well as analyzes the challenges faced in implementing these practices in inclusive educational contexts, especially in Brazil.

DEFINITION AND CHARACTERISTICS

Down syndrome is a genetic condition resulting from the presence of an extra copy of chromosome 21, a phenomenon known as trisomy 21. First identified by Jerome Lejeune in 1959, this alteration is one of the most frequent chromosomal abnormalities, with an incidence of approximately 1 in every 700 births in Brazil (SCHWARTZMAN, 2018). The relevance of the study of Down Syndrome is not limited to genetics; It covers areas such as cognitive and social development and inclusion, which makes it a topic of interest for multidisciplinary research.

From a clinical point of view, Down Syndrome has common physical characteristics, such as reduced muscle tone, almond-shaped eyes, and small hands. In addition, there is a significant impact on motor and cognitive development, with delays in learning to speak and challenges related to working memory and logical reasoning (ARAÚJO; PAIVA, 2020). Although these limitations are common, it is important to highlight that each individual with Down Syndrome has a unique profile, with specific potentialities and challenges. According to Gorgatti (2017), with adequate support, these people can overcome many of the difficulties associated with the condition, demonstrating a remarkable ability to adapt and learn.

Another relevant aspect is the social dimension of Down Syndrome. Recent studies highlight that inclusion in regular teaching environments plays a crucial role in developing social skills and promoting greater autonomy. Mendes and Almeida (2019) point out that living in inclusive schools not only improves learning, but also contributes to the construction of interpersonal relationships, strengthening self-esteem and active participation in different social contexts.

The use of assistive technologies has been shown to be particularly effective in overcoming communication and learning barriers. According to Pereira et al. (2021), tools such as alternative communication applications and personalized digital resources can expand the possibilities of expression and interaction, favoring cognitive and social development. In addition, teacher training initiatives aimed at implementing inclusive pedagogical strategies have the potential to transform the educational environment, as highlighted by Rodrigues (2022).

Therefore, understanding the characteristics of Down Syndrome is essential for the development of inclusive practices. The construction of public policies and educational approaches based on the individuality and rights of people with disabilities is a fundamental step to ensure their full and equal participation in society.

CHALLENGES FACED BY PEOPLE WITH DOWN SYNDROME

The challenges experienced by people with Down Syndrome encompass cognitive, social, educational, and health aspects, reflecting the complexity of their specific needs. These barriers not only hinder the full development of these individuals, but also require a multidimensional approach to promoting inclusion and autonomy.

In the cognitive field, intellectual limitations represent one of the greatest obstacles. Alves and Santos (2019) highlight that these limitations range from moderate to severe, affecting skills such as memory, attention, and logical reasoning, making it difficult to learn abstract concepts. These difficulties are closely linked to brain functioning, requiring adaptive pedagogical strategies to ensure educational advancement.

Communication barriers also have a significant impact, especially in the social and school context. Goulart and Figueiredo (2017) point out that many individuals with Down Syndrome have speech and language delays, making it difficult to interact in collective environments. This limitation compromises the exchange of information and the formation of bonds, requiring the educational environment to adapt with resources such as alternative communication and assistive technologies.

In the labor market, difficulties persist, even with advances in inclusive policies. Oliveira and Braga (2020) show that the gap between market demands and the preparation of people with Down Syndrome continues to be a challenge. The absence of specific training and the lack of adequacy of work environments limit labor inclusion, restricting opportunities for personal and professional growth.

Additionally, the health conditions often faced by these individuals, such as congenital heart problems, immune disorders, and muscle hypotonia, pose additional challenges. According to Pereira and Melo (2021), these problems can delay motor and cognitive development, in addition to requiring constant medical care, directly affecting quality of life and educational performance.

Thus, the challenges faced by people with Down Syndrome are diverse and require collaborative interventions, encompassing inclusive public policies, specific pedagogical strategies, and actions that promote social awareness. Only in this way will it be possible to create environments that value the potential of these people and minimize the barriers that limit their active participation in society.

THE INFLUENCE OF TECHNOLOGIES ON THE DEVELOPMENT AND INCLUSION OF PEOPLE WITH DOWN SYNDROME

Several studies carried out in Brazil have investigated the contribution of digital and assistive technologies to the development and inclusion of people with Down Syndrome, highlighting their impacts on quality of life, autonomy and social participation. An important example is the study by Mendes and Damasceno (2019), who analyze the use of assistive technologies in the school environment. According to the authors, devices such as tablets and augmentative communication software have favored the inclusion of students with Down Syndrome, allowing for more personalized learning adapted to their needs. These technologies are key to overcoming cognitive and communicational barriers, helping to develop cognitive and social skills more effectively.

Another relevant study is that of Santos and Oliveira (2020), which addresses the use of digital educational games as tools to stimulate the cognitive development of children with Down Syndrome. The authors note that games adapted to this population have been shown to be effective in stimulating memory, logical reasoning, and attention. Additionally, these technologies promote social interaction, as games are often used in collaborative activities, allowing children to communicate and interact with their peers more efficiently.

Regarding inclusion in the labor market, Lima and Pereira (2021) investigate how technologies have helped in the integration of people with Down Syndrome in work

environments. The study highlights the use of task management apps and adaptive training platforms, which provide greater autonomy to these individuals and facilitate their adaptation to the professional environment. Continuous training through these technologies allows them to overcome cognitive limitations, developing important skills for job performance.

Costa and Souza (2018) emphasize the importance of assistive technologies in the social inclusion of people with Down Syndrome. The authors discuss how technological innovations favor social interaction, promoting more effective communication both in the school environment and in everyday life. In addition to the cognitive benefits, technologies have a positive impact on the self-esteem and confidence of these individuals, reinforcing the need for public policies that guarantee access to these tools.

These studies demonstrate that technology plays a crucial role in the inclusion of people with Down Syndrome, both in the educational and social and professional contexts, contributing significantly to the development of their cognitive and social skills and autonomy.

METHODOLOGY

In this section, the methodological foundations and procedures adopted in this study are presented, whose objective was to analyze the influence of technologies on the development and inclusion of people with Down Syndrome. The study followed a qualitative approach, based on a bibliographic survey of previously published works and studies related to the theme.

The research was developed from the selection of recognized bibliographic references in the areas of inclusive education, assistive technology and human development. The materials were obtained through consultations with books, technical reports and articles published in academic journals, prioritizing those that had direct relevance to the objectives of the work. The focus was on works that discuss the use of digital and assistive technologies to promote cognitive development, educational inclusion and social participation of people with Down Syndrome.

To ensure the coherence and comprehensiveness of the analysis, criteria were established for the selection of sources:

- Relevance and timeliness of the topics covered, with emphasis on recent publications.
- Academic recognition of the authors or institutions responsible for the works.

- Direct relevance to the use of assistive and digital technologies in the context of Down Syndrome.

The bibliographic survey prioritized materials accessible in widely recognized physical and digital collections, such as reports from international associations and works by renowned authors. Unlike a systematic review based on articles returned from specific databases, the research focused on materials that offered a consolidated and applied view on the subject.

After collecting the works, a detailed analysis of the contents was carried out, seeking to identify key points about the contributions, limitations and challenges of the technologies in the analyzed context. The extracted data were organized and synthesized in order to provide a broad and critical understanding of the advances and gaps identified in the use of assistive technologies for the development and inclusion of people with Down Syndrome.

This methodological approach allowed the construction of a robust theoretical framework, which supports the discussions and conclusions presented in the study. Although the method was based on bibliographic sources, its application was sufficient to offer relevant insights on the topic addressed.

RESULTS AND DISCUSSION

The results obtained through this bibliographic research show the growing importance of technology in the development and inclusion of people with Down Syndrome, especially in the educational and social context. Assistive technologies, such as adapted educational apps, augmentative communication devices, and digital platforms, are highlighted as essential tools for overcoming the cognitive and communication barriers faced by these people. According to Mendes and Damasceno (2019), devices such as tablets and augmentative communication software have promoted more effective inclusion, allowing personalized learning and adaptation to the needs of individuals.

Among the main findings, the use of personalized applications, which allow learning at the student's pace, stands out as an effective solution to promote greater autonomy and independence. According to Santos and Oliveira (2020), adapted educational games have been shown to be effective in stimulating skills such as memory, logical reasoning, and attention, while promoting meaningful social interactions in collaborative contexts. In addition, augmentative communication devices, such as tablets and specific software, have been fundamental in facilitating the expression of ideas and emotions, creating a more

efficient communication channel for individuals, which favors both learning and social integration. These devices expand the autonomy of users and, consequently, their active participation in the educational environment (Costa and Souza, 2018).

In addition to the contributions in the educational context, the results also point to significant impacts of assistive technologies on the development of social skills of people with Down Syndrome. According to Costa and Souza (2018), tools such as social interaction apps and collaborative platforms have facilitated the construction of interpersonal bonds, promoting greater integration in group activities and social events. This aspect reinforces the users' self-esteem and confidence, creating favorable conditions for the development of healthy and meaningful relationships in different contexts of daily life.

Another point that deserves to be highlighted is the role of assistive technologies in the inclusion of these people in the labor market. According to Lima and Pereira (2021), task management applications and adaptive training platforms have offered essential support for workers with Down Syndrome to perform their duties autonomously and efficiently. These tools not only assist in the execution of specific activities, but also provide a continuous learning environment, enabling individuals to face professional challenges and adapt to the demands of the labor market. However, the authors warn of the need for greater commitment on the part of companies to invest in technological accessibility and team training to create a truly inclusive environment.

However, the results also indicate that the implementation of these technologies faces significant challenges. Many studies point to the lack of specialized training for educators as one of the main barriers, hindering the proper use of digital tools in the teaching-learning process (Goulart and Figueiredo, 2017). Another limiting factor identified is unequal access to technological resources, especially in poorer regions, which creates a discrepancy in the effectiveness of digital inclusion and in the development of skills of students with Down Syndrome (Mendes and Almeida, 2019).

The impact of technologies in expanding access to education in remote and less favored areas is highlighted. Mendes and Almeida (2019) point out that adapted digital platforms have been used to bring personalized educational content to students with Down Syndrome who live in regions with limited infrastructure. Despite difficulties in accessing the internet and technology in certain locations, initiatives that combine digital resources and face-to-face strategies have shown promising results, allowing a growing number of people to benefit from the educational opportunities offered by technology. This hybrid approach highlights the transformative potential of assistive technologies, even in adverse contexts.

Based on the findings, several possibilities arise for future investigations. One promising area is the study of the effectiveness of new emerging technologies, such as artificial intelligence and augmented reality, in the process of personalizing learning for people with Down Syndrome. According to Scherer and Craddock (2002), these technologies could adapt educational content in a more individualized way, allowing for more effective and engaging learning. In addition, the development of educational applications that consider the cognitive and emotional specificities of these individuals could promote a more inclusive and participatory experience.

Another relevant line of research would be the investigation into the training of educators and health professionals for the use of assistive technologies. Continuous and specialized training for these professionals is essential to ensure that the tools are employed appropriately and effectively (Mendes and Damasceno, 2019). Case studies in diverse contexts could provide valuable data on successful practices and the challenges faced in the use of these technologies (Santos, 2021).

In addition, the perception of family members and caregivers about the impact of technologies on the lives of people with Down Syndrome could offer a broader overview of the needs and expectations of these groups, contributing to the direction of technological and pedagogical developments in a more assertive way (Pereira and Melo, 2021).

These research directions would broaden the understanding of the intersection between technology and inclusion and could lead to the development of new practices and resources that improve the quality of life for people with Down syndrome and their families. However, for these advances to materialize, there needs to be a collective effort between researchers, educators, health professionals, and technological developers, with the aim of creating a more inclusive and accessible environment for all.

FINAL CONSIDERATIONS

The conclusion of this work reaffirms the crucial importance of technology as a facilitator in the development and inclusion of people with Down Syndrome. The study aimed to investigate the technological methodologies used and evaluate the impact of technologies in promoting the social and educational inclusion of these people, and the findings obtained through literature research broadly addressed these issues.

The results indicated that assistive and digital technologies play a key role in overcoming the cognitive and communication barriers faced by individuals with Down Syndrome, providing them with greater autonomy and allowing for active and meaningful participation in educational and social settings. The use of adaptive apps and augmentative

communication devices has been shown to be especially effective in developing cognitive skills such as memory, logical reasoning, and attention, as well as favoring social interaction. These technologies promote greater inclusion and help create a more equitable environment for all.

However, the hypotheses raised in this study also point to significant challenges in the implementation of these methodologies, such as the need for continuous and specialized training for educators and the expansion of access to adequate technological resources. The lack of training of education professionals can limit the effectiveness of these tools, and inequality in access to technological resources can create additional barriers, hindering the effective inclusion of people with Down Syndrome. These challenges highlight the urgency of public policies that encourage digital inclusion and promote the training of educators.

In terms of suggestions for future research, the study suggests that it is essential to explore new emerging technologies, such as artificial intelligence and augmented reality, that can offer even more personalized and effective solutions for learning and inclusion. In addition, it is important to investigate how the use of these technologies can be better implemented and evaluated in different educational and social contexts, especially in areas with less access to resources. The continuous training of educators on the use of assistive technologies is another crucial point, and more studies need to be carried out to understand how this training can be optimized.

In short, this study reinforces that, although assistive and digital technologies are promising for the inclusion of people with Down Syndrome, the construction of a truly inclusive society goes beyond technological advancement. It depends on the collective effort to overcome existing barriers, ensuring that everyone, regardless of their abilities, has full access to education, social participation and citizenship. The implications of this work suggest that, for inclusion to be full, a continuous commitment to the implementation of effective educational practices and public policies that guarantee equal opportunities for all is necessary.

REFERENCES

1. Alves, L. R.; Santos, T. A. Cognitive Challenges In The Education Of People With Down Syndrome. Brazilian Journal Of Psychopedagogy, São Paulo, V. 26, N. 2, P. 37-49, 2019.

2. Araújo, L. F.; Paiva, M. R. A. School Inclusion And Cognitive Development Of Children With Down Syndrome. São Paulo: Edições Acadêmicas, 2020.

3. American Down Syndrome Association. Report On The Use Of Digital Technologies For Cognitive Development And Social Inclusion. Down Syndrome International, 2021.

4. Besio, C.; Hassall, C.; Wilson, D. Assistive Technologies: Promoting Educational Inclusion And The Development Of Cognitive Skills. Brazilian Journal Of Special Education, V. 22, N. 4, P. 613-628, 2016.

5. Costa, L. A.; Souza, M. R. Assistive Technologies And Social Inclusion Of People With Down Syndrome. Brazilian Journal Of Inclusion, São Paulo, V. 15, N. 2, P. 89-103, 2018.

6. Goulart, P. R.; Figueiredo, M. P. Barreiras Comunicacionais E A Inclusão De Estudantes Com Síndrome De Down. Educação E Sociedade, Campinas, V. 38, N. 4, P. 1012-1025, 2017.

7. Lima, G. F.; Pereira, R. N. Technology And Inclusion In The Labor Market: The Experience Of People With Down Syndrome. Journal Of Work And Inclusion, Rio De Janeiro, V. 22, N. 1, P. 47-63, 2021.

8. Mendes, F. P.; Damasceno, A. M. Inclusive Education And Assistive Technology: Paths To The Autonomy Of People With Intellectual Disabilities. Educação E Pesquisa, V. 45, N. 2, P. 271-288, 2019.

9. Mendes, J. P.; Almeida, R. A. A Inclusão E O Papel Da Escola Na Formação De Pessoas Com Síndrome De Down. Brazilian Journal Of Special Education, São Paulo, V. 25, N. 3, P. 48-62, 2019.

10. Mendes, L. C.; Damasceno, A. B. Assistive Technology In The School Context And The Inclusion Of Students With Down Syndrome. Brazilian Journal Of Special Education, Brasília, V. 25, N. 3, P. 211-227, 2019.

11. Oliveira, R. S.; Braga, F. M. Inclusion Of People With Down Syndrome In The Labor Market: Advances And Challenges. Journal Of Special Education, Porto Alegre, V. 33, N. 1, P. 88-99, 2020.

12. Pereira, V. S.; Melo, L. M. The Health Of Children With Down Syndrome: Conditions And Care. Medical Journal Of Pediatrics, Rio De Janeiro, V. 27, N. 3, P. 122-131, 2021.

13. Rodrigues, M. E. The Role Of Teacher Training In The Digital Inclusion Of Students With Down Syndrome. Inclusive Education Journal, V. 19, N. 4, P. 311-325, 2022.

14. Santos, J. P.; Oliveira, T. R. Digital Educational Games In The Cognitive Development Of Children With Down Syndrome. Education And Technology Journal, Porto Alegre, V. 29, N. 4, P. 332-348, 2020.

15. Santos, L. A. Technological Innovations And The Construction Of An Inclusive Society: Perspectives For The Future. Brazilian Journal Of Educational Technology, V. 15, N. 2, P. 55-68, 2021.

16. Santos, M. R. Technology And Inclusion: Challenges And Advances In The Education Of People With Down Syndrome. Educação & Sociedade, V. 42, N. 3, P. 123-140, 2021.

17. Scherer, D. M.; Craddock, G. The Impact Of Assistive Technologies On The Creation Of Inclusive Environments: A Literature Review. Journal Of Special Education Technology, V. 17, N. 1, P. 41-54, 2002.

18. Schwartzman, J. S. Down Syndrome: Reflections On Genetics And Inclusion. Rio De Janeiro: Fiocruz, 2018.

19. Silva, R. F.; Oliveira, M. B. The Impact Of Assistive Technologies On The Quality Of Life Of People With Down Syndrome. Brazilian Journal Of Health And Technology, V. 12, N. 2, P. 103-116, 2020.