Educational videos on breastfeeding: online health education



Vídeos educativos sobre aleitamento materno: educação em saúde online

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ABSTRACT

Breastfeeding stands out as one of the primary health promotion practices, offering numerous benefits for both mother and child, particularly in reducing infant morbidity and mortality. All knowledge regarding breastfeeding relies on health education, through which information is disseminated to the population by healthcare professionals, aiming to mitigate early weaning. Nurses play a pivotal role in health education, and Information and Communication Technology (ICT) can serve as a facilitator of teaching and learning. The aim was to develop educational videos on breastfeeding using technological resources and to apply an evaluation instrument based on Pasquali's criteria to assess the functionality of the educational videos on the subject. This descriptive study employed a quantitative and social approach. Data collection involved 4 specialists in Women's Health and 38 Bachelor of Nursing students from the 1st, 2nd, and 3rd years at the State University of Ponta Grossa, during March and April 2018, through structured questionnaires aimed at the preliminary assessment of educational videos hosted on the YouTube® platform and disseminated through Facebook®, utilizing Pasquali's criteria and Likert Scale. Data analysis employed descriptive statistics based on simple frequency. The results were satisfactory, with ≥60% accuracy, indicating that the educational tool facilitates the teaching and learning process.

Keywords: breastfeeding, health education, nursing, information Technology.

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RESUMO

O aleitamento materno é uma das principais práticas de promoção à saúde, a qual proporciona inúmeros benefícios para mãe e filho, atuando principalmente na redução da morbimortalidade infantil. Todo conhecimento acerca do aleitamento materno tem como ferramenta facilitadora a educação em saúde, no qual a informação chega à população por meio dos profissionais de saúde, visando reduzir o desmame precoce. O enfermeiro é um dos profissionais responsáveis pela educação em saúde, ainda, a Tecnologia de Informação e Comunicação (TIC) pode ser uma ferramenta facilitadora do ensino-aprendizagem. Objetivou estruturar vídeos educativos sobre Aleitamento Materno utilizando recursos das tecnologias e aplicar instrumento de avaliação segundo critérios de Pasqualiperante à funcionalidade dos vídeos educativos acerca da temática abordada. Estudo descritivo, de abordagem quantitativa e social. A coleta de dados aconteceu com 4 profissionais especialistas em Saúde da Mulher e 38 acadêmicos do curso de Bacharelado em Enfermagem da 1ª, 2ª e 3ª séries pela Universidade Estadual de Ponta Grossa, nos meses de março e abril de 2018, a partir de questionários estruturais visando a avaliação preliminar dos vídeos educativos inseridos no website YouTube® e divulgados por meio do Facebook®, tendo se apropriado de Pasquali e Escala de Likert. A análise dos dados foi desenvolvida pela estatística descritiva, a partir de frequência simples. Os resultados foram satisfatórios, atingindo ≥60% acertos evidenciando que a ferramenta educativa facilita o processo ensino-aprendizagem.

Palavras-chave: aleitamento materno, educação em saúde, enfermagem, tecnologia de Informação.

INTRODUCTION

Breastfeeding is one of the key health-promoting practices, offering numerous benefits for both mother and child, primarily in reducing infant morbidity and mortality. It impacts the child's physiological system and aids in the mother's recovery during the postpartum period (BRASIL, 2015).

Therefore, breastfeeding contributes to better cognitive development in children, prevents the onset of diarrhea and respiratory infections, and reduces the risk of allergies, hypertension, diabetes, high cholesterol, and obesity (BRASIL, 2015). It's important to note that for the postpartum woman, this practice primarily aids in postpartum recovery, as oxytocin levels rise, assisting in uterine involution and preventing hemorrhage (AZEVEDO et al., 2015).

In this context, the World Health Organization (WHO), the United Nations Children's Fund (UNICEF), and the Ministry of Health (MOH) recommend exclusive breastfeeding during the first six months of life, followed by complementary feeding up to two years or beyond (BRASIL, 2015).

Given the outlined scenario, comprehensive knowledge about breastfeeding relies on health education as a facilitating tool, with information disseminated to the population through healthcare professionals to mitigate early weaning. Among these professionals, nurses stand out across primary, secondary, and tertiary spheres due to their extensive involvement throughout the woman's pregnancy and postpartum journey, thereby playing a pivotal role as health educators (ALVES; OLIVEIRA; RITO, 2018).

Thus, it falls upon the nurse to incentivize and support breastfeeding, discussing its benefits and addressing any challenges faced by the mother-child duo during this process. It's important to emphasize that women should receive guidance starting from prenatal care so that their understanding extends into the postpartum period and fosters commitment to breastfeeding (BAPTISTA et al., 2015).

From this standpoint, there are several public policies aimed at boosting breastfeeding rates, including the National Program for Breastfeeding Promotion, the Baby-Friendly Hospital Initiative, Human Milk Banks, and the Breastfeeding and Feeding Brazil Strategy. These initiatives are closely linked to community interventions across Primary, Secondary, and Tertiary Care settings, involving home visits by healthcare professionals, counseling, support, and active involvement in breastfeeding practices (VENANCIO et al., 2016).

It's important to emphasize that health education is integral to all stages of the pregnancy-postpartum cycle, as it contributes to promoting the health and quality of life of the mother-child pair. Nurses are tasked with developing initiatives that empower pregnant women regarding prenatal care, childbirth, newborn care, postpartum recovery, and breastfeeding (SILVA et al., 2017).

To develop educational practices, a variety of health promotion actions can be employed, including guidance offered in prenatal groups, waiting rooms, and home visits, among others. Technological innovations also serve as notable facilitators in the teaching-learning process, as they can dynamically disseminate knowledge, thereby sparking increased interest in learning (SILVA et al., 2016).

In order to encourage breastfeeding practice, several technologies have been utilized as tools to facilitate learning for postpartum women. A study conducted identified technologies that facilitate the learning process, including serial albums, educational manuals, tele-breastfeeding, CD-ROMs, video conferencing, and literature in verse (SILVA et al., 2016).

It's worth noting that Information and Communication Technology (ICT) allows for an expansion of teaching and learning by extending educational reach, serving as an ally in the process of social inclusion (MARTINS, 2013). Thus, educational technologies aim to aid in the teaching-learning process and to conduct educational practices within the community or with specific individuals (ALVES; OLIVEIRA; RITO, 2018).

In this study, the central question revolves around how the use of ICT (Web 2.0) contributes to promoting health education, particularly in facilitating teaching and learning about breastfeeding, leveraging the internet and its tools. ICT's influence extends to the healthcare domain, as it serves as a vehicle for managing and disseminating information online, thereby enhancing the promotion of care through online platforms (SANTOS, 2017).

Therefore, with the aim of conducting health education in an engaging and differentiated manner, this study sought to structure educational videos on breastfeeding using ICT resources. It also aimed to apply an assessment instrument based on Pasquali's criteria to evaluate the functionality of the educational videos on the topic. The specific objectives were: to create a YouTube® channel to host the educational breastfeeding videos and to share and promote them on the CEPP Project (Nursing Consultation in Prenatal and Postpartum Care) Facebook® page for the entire population with internet access.

METHODS

Descriptive and quantitative social study. Data collection was carried out with 42 participants, including: 4 nurses specializing in Women's Health/Obstetrics, and 38 students from the Bachelor of Nursing program at the State University of Ponta Grossa, PR. These comprised 8 first-year students, 15 second-year students, and 15 third-year students, during the months of March and April 2018.

This study is anchored in the Nursing Consultation in Prenatal and Postpartum project, which carries out health education initiatives during the postpartum period and breastfeeding. The nursing consultation involves the participation of nursing students from the 4th and 5th years of the Bachelor of Nursing program, who provide clear and accessible explanations for maternal inquiries. In this study, Information and Communication Technologies (ICT) were employed to facilitate online health education. It's important to note that the mentioned project has a page on the social network Facebook® (Figure 1) available at the web address https://www.facebook.com/ceppuepg.



Figure 1 - CEPP Project on the Facebook® webpage

Source: authors (2018).

The creation and editing of the videos were the outcome of a collaboration with the Center for Technology and Open and Distance Education (NUTEAD) at the State University of Ponta Grossa. The information technologies employed in distance learning are overseen by the Video and Conferencing Center (NUVC), which features studios for recording video lectures and innovative equipment like teleprompters, along with appropriate sound and lighting.

Five videos, each approximately 3 minutes long, were produced. They cover topics related to breastfeeding, featuring recommendations based on guidelines from the Ministry of Health. The themes addressed include: exclusive breastfeeding (benefits for both mother and child, definitions, recommendations), types of milk (colostrum, transitional milk, mature milk, differences in composition), proper latch (correct positioning, adequate latch, and improper latch), nipple fissures (definition, causes, prevention, and treatment), and breast engorgement (definition, causes, prevention, and management) (BRASIL, 2015).

Data collection was conducted through 2 structured questionnaires aimed at validating the educational videos uploaded to the YouTube® website (Figure 2) and disseminated via Facebook®. The Pasquali and Likert Scale were utilized based on statements categorized as: Totally Agree (TA), Partially Agree (PA), and Disagree (D). This scale is used to measure subjects' agreement with specific statements (JÚNIOR & COSTA, 2014; DALMOLIN et al., 2016).

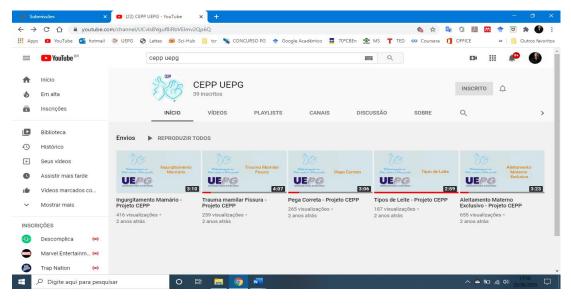


Figure 2 - Educational videos on the YouTube® platform

Source: authors (2018).

The questionnaire for specialist nurses comprised 14 statements, subdivided into the following Pasquali criteria: Interactivity, Objectives, Relevance/Effectiveness, and Clarity. For the students, the questionnaire included 17 statements, subdivided into the criteria: Objectives, Accessibility, Clarity, Structure/Presentation, Relevance/Effectiveness, and Interactivity.

The study's inclusion criteria comprised healthcare professionals specializing in women's health or obstetrics, and students enrolled in the Bachelor of Nursing program who were in the 1st, 2nd, and 3rd years in 2018 and had no prior exposure to the Women's Health discipline covering breastfeeding content. Conversely, the exclusion criteria encompassed other professionals specializing in various fields of knowledge and other students enrolled in the Bachelor of Nursing program.

Data analysis was conducted using descriptive statistics, based on simple frequency according to Pasquali's criteria and Likert scale concepts. All participants were invited and signed the Informed Consent Form in accordance with Resolution 466 of 2012. This research has been approved by the Research Ethics Committee of the State University of Ponta Grossa, under approval number 3,234,262 dated March 29, 2019.

RESULTS AND DISCUSSION

The questionnaire administered to specialist nurses yielded the following data according to criteria (Interactivity, Objectives, Relevance/Effectiveness, and Clarity) and the Likert scale, offering a specialized technical perspective on the content and technological tool, as depicted in Table 1.

Table 1. Percentage of responses from specialists according to Pasquali's criteria (1997) regarding the educational technology instrument, Ponta Grossa, Paraná, Brazil, 2018. (N=4)

CRITERIA	STATEMENTS ABOUT THE VIDEOS	TA	PA	D
INTERACTIVITY	The breastfeeding content is appropriate, and the material (video) provides interactivity	100% (4)	0	0
	Offers interaction and engagement in the educational process	100% (4)	0	0
	Facilitates understanding of the content	100% (4)	0	0
	Provides user autonomy in its operation	25% (1)	75% (3)	0
OBJECTIVES	Stimulates learning about the covered content	100% (4)	0	0
	Encourages learning of new concepts	75% (3)	25% (1)	0
	Allows for easy information retrieval	75% (3)	25% (1)	0
	Has an attractive presentation strategy	100% (4)	0	0
RELEVANCE AND EFFECTIVENESS	Provides easy usability and viewing	75% (3)	25% (1)	0
	Engages interest upon viewing	100% (4)	0	0

	Encourages behavior change	75% (3)	25% (1)	0
	Reproduces the covered content in different online contexts	100% (4)	0	0
CLARITY	Presents information in a simple manner	100% (4)	0	0
	Allows for reflection on the presented content	100% (4)	0	0

Source: authors (2018).

Caption: BF = breastfeeding, TA = totally agree, PA = partially agree, and D = disagree. Source:

Research data obtained from the CEPP project database.

The criterion of Interactivity is noteworthy, divided into four affirmative questions, of which three reached 100% Total Agreement (TA), while only one statement had 75% Partial Agreement (PA), indicating participants' uncertainty regarding user autonomy regarding the operation of the educational material.

The subsequent criteria Objectives, Relevance/Effectiveness, and Clarity yielded satisfactory results, as they reached ≥75% TA. It is noteworthy that, according to specialist nurses in Women's Health, the educational material achieved its objectives, arousing user interest by conveying information clearly.

Regarding the evaluation conducted with the students using Pasquali's criteria (Objectives, Accessibility, Clarity, Structure/Presentation, Relevance/Effectiveness, and Interactivity), it became evident that they had a limited understanding of the breastfeeding topic due to their lack of exposure to the Women's Health discipline. This can be likened to the community, for whom the videos are intended.

Therefore, all criteria were deemed satisfactory (\geq 60%), with a total agreement rate, indicating that the proposed educational material serves as a tool to facilitate the teaching-learning process on the topic, as depicted in Table 2.

Table 2 - Percentage of responses from Nursing students according to Pasquali's criteria (1997) regarding the educational technology instrument, Ponta Grossa, Paraná, Brazil, 2018. (N=38)

CRITERIA	STATEMENTS ABOUT THE VIDEOS:	TA	PA	D
OBJECTIVES	Relates content addressed in your day-to- day life	68,4% (26)	28,9 % (11)	2,6% (1)
	Clarifies doubts about the content addressed	100% (38)	0	0
	Stimulates learning about the content addressed	84,2% (32)	10,5 % (4)	2,6% (1)
	Stimulates learning of new concepts or facts	81,6% (31)	18,4 % (7)	0
ACCESS	Allows you to search for information without difficulty	81,6% (31)	18,4 % (7)	0
	Provides adequate and necessary resources for its use	63,2% (24)	34,2 % (13)	0
CLARITY	Presents necessary information for better understanding of the content	97,4% (37)	2,6%	0
	Content of information is adequate	100% (38)	0	0
	Presents information in a simple way	76,3% (29)	23,7 % (9)	0
STRUCTURE AND PRESENTATION	Presents content in an organized way	100% (38)	0	0
	Has an attractive presentation strategy	65,8% (25)	31,6 % (12)	2,6% (1)

RELEVANCE AND EFFECTIVENESS	Allows you to reflect on the presented content	84,2% (32)	15,8 % (6)	0
	Awakens your interest to use it	71,1% (27)	28,9 % (11)	0
	Stimulates behavior change in you	71,1% (27)	26,3 % (10)	2,6% (1)
	Reproduces the content addressed in different contexts	60,5% (23)	36,8 % (14)	0
INTERACTIVITY	Offers interaction, active involvement in the educational process	78,9% (30)	21,1 % (8)	0
	Provides autonomy to the user in relation to its operation	78,9% (30)	21,1 % (8)	0
TOTAL (n):		100% (38)	100 % (38)	100% (38)

Source: authors (2018)

Caption: TA = Totally agree, PA = Partially agree, and D = Disagree. Source: Data from the research collected through the CEPP project database.

Health education can leverage technological resources, known as information and communication technologies, as they aid in the teaching-learning process by facilitating communication and understanding among users. Therefore, the educational video can serve as a tool as it fosters knowledge acquisition, enhances viewer's critical consciousness, and enables health promotion (DALMOLIN et al., 2016).

The technologies used in the educational process should be interactive, meaning they should promote user engagement with the technological tool through clear language, enabling interaction and the learning process (NUNES & BEZERRA, 2015).

Therefore, interactivity is defined as the characteristic of a digital interface that enables exchanges between the user and the tool (VALLE & BOHADANA, 2012). Regarding the interactivity of the educational material, 100% (4) of the nurses believed that the content covered is suitable and that the tool provides interactivity, agreeing that the video offers interaction and engagement in the teaching-learning process.

On the other hand, 75% (3) of them partially agreed that the material provides user autonomy in its operation, and only 25% (1) fully agreed, indicating doubts about autonomy. However, according to the literature, interactive technology in the educational process is associated with the development of autonomy and critical thinking, fostering increasing user autonomy in accessing information through the network (OLIVEIRA, 1999; PEDRO & CHACON, 2017).

The utilization of videos for educational purposes enables a varied exploration of the covered content, leading to a deeper comprehension of the information. This tool sparks curiosity and interest in seeking out new information, provided it is employed in accordance with the objectives of the learning process (MOREIRA et al., 2013).

From this standpoint, audiovisual resources can serve as facilitative tools in the teaching-learning process, as they engage the audience's attention and ignite interest in the discussed topic (CAVALCANTI et al., 2017).

In terms of the Clarity of the educational videos, the information was delivered in a straightforward manner, allowing for reflection on the presented content. The combination of audio and visual elements facilitates better comprehension of the information, aiding in the learning process. Thus, educational videos offer an enhanced capacity to represent what has been learned through the acquired knowledge from educational technology (MOREIRA et al., 2013; QUADROS & LOPEZ, 2014).

On the other hand, in Table 2, concerning the Objective criterion, the material links the content to daily life and addresses doubts regarding the topics covered, thereby stimulating the learning process. It's noteworthy that educational videos serve as tools to promote education, as audio and visuals, when combined, can align content with the reality of the population, thus arousing greater interest and facilitating learning (LIMA et al., 2017).

In terms of the Accessibility of educational videos, literature suggests that internet access has gradually become more accessible to the population, serving as an informative and enlightening resource for users seeking health-related information. Additionally, there has been an increase in internet and social media usage, leading to the widespread dissemination of information within a short timeframe (SANTOS et al., 2017).

From the students' viewpoint, in terms of Clarity, the material presented necessary information for a better understanding of the content, as the information provided is appropriate and presented in a straightforward manner. In this context, it is highlighted the importance of educational technologies and their materials being tailored to the educational level of the target audience, as education level directly influences the comprehension of the content covered (LIMA et al., 2017).

In terms of the Structure/Presentation Criterion related to the educational videos, the students perceived that the content was organized and had an appealing presentation strategy. According to the literature, videos should be well-designed to make learning engaging and effective for the intended purpose (CAVALCANTI et al., 2017; RAZERA et al., 2014).

The need for educational videos to be engaging in order to capture the viewer's attention and maintain their interest is emphasized. To achieve this, various elements such as images, text, and sound should be incorporated into the educational content (DALMOLIN et al., 2016; ITAKUSSU et al., 2014).

Therefore, educational videos have a positive impact on promoting education, and when properly developed, they enable effective reflection and understanding of the topic at hand. However, this requires greater dedication to the structure and organization of the material (RAZERA et al., 2014).

Therefore, interactivity should be prioritized as it is necessary to create a dialogue with the viewer, drawing them in to reflect on the topic being addressed (CAVALCANTI et al., 2017).

In relation to Interactivity, as perceived by the students, the educational tool provided interaction and active engagement in the educational process and offers autonomy to the user regarding its operation. Various technological resources can be used as facilitators of the teaching-learning process, enhancing user empowerment and autonomous learning, represented through ICT (DALMOLIN et al., 2016).

CONCLUSIONS

The study adopted ICTs, considering them to be facilitating tools in the teaching-learning process. The structuring of the educational videos in this research revealed that technologies integrated into facilitative instruments for the teaching-learning process in health education, specifically on the topic of breastfeeding, contributed to the development of user autonomy.

It is believed that educational technology in the form of video enhances the nursing professional's engagement in educational initiatives within the community through health education practices. It is worth noting that there is limited literature on information and communication technologies in the healthcare sector, and further research is needed to better illustrate the contribution of communication and information technologies to the teaching-learning process.

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REFERENCES

ALVES, J.S.; OLIVEIRA, M.I.C. de; RITO, R.V.V.F. **Orientações sobre amamentação na atenção básica de saúde e associação com o aleitamento materno exclusivo**. Ciência & Saúde Coletiva, Vol. 23, no. 4, pp. 1077-88, 2018. Available at: http://www.scielo.br/scielo.php?script=sci_abstract&pid=S1413-81232018000401077&lng=pt&nrm=iso&tlng=pt. Accessed on October 8, 2018.

AZEVEDO, A.R.R. et al. Clinical management of breastfeeding: knowledge of nurses. Escola Anna Nery, Rio de Janeiro vol. 19, no. 3, pp. 439-45, Jul./Sept. 2015. Available at:

http://www.scielo.br/scielo.php?pid=S1414-81452015000300439&script=sci_arttext&tlng=em. Accessed on October 8, 2018.

BAPTISTA, S. S., et al. Manejo clínico da amamentação: atuação do enfermeiro na Unidade de Terapia Intensiva Neonatal. Enfermagem da UFSM, vol. 5, vo. 1, pp. 23-31, Jan./Mar., 2015. Available at: https://periodicos.ufsm.br/reufsm/article/view/14687>. Accessed on October 8, 2018.

BRASIL. Ministry of Health. Saúde da criança: aleitamento materno e alimentação complementar. Brasília, DF, 2015. 84p.

CAVALCANTI, R.J. Construção De Vídeo Educativo Para a Promoção Da Saúde Ocular Em Escolares. Texto Contexto Enfermagem, Florianópolis, vol. 26, no. 2, pp. 1-11, Jul.

2017. Available at: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-07072017 000200334&lng=en&tlng=en>. Accessed on October 8, 2018.

DALMOLIN A., et al. Vídeo educativo como recurso para educação em saúde a pessoas com colostomia e familiares. Revista Gaúcha de Enfermagem Online, vol. 37, no. (spe: e68373), pp. 1-9, Apr. 2016. Available at: http://www.scielo.br/scielo.php?pid=S1983-14472016000500408&script=sci_abstract>. Accessed on October 8, 2018.

ITAKUSSU, E.Y., et al. Elaboração de vídeo educativo sobre uso da malha compressiva após queimadura. Revista Brasileira de Queimaduras, vol. 13, no. 4, pp. 236–9, 2014. Available at: < http://www.rbqueimaduras.com.br/export-pdf/225/v13n4a05.pdf>. Accessed on October 8, 2018.

JÚNIOR, S.D. da S.; & COSTA, F.J. Measurement and Verification Scales: a Comparative Analysis between the Likert and Phrase Completion Scales. PMKT – Brazilian Journal of Marketing, Opinion, and Media Research, São Paulo, vol. 15, pp. 1-15, Oct., 2014. Available at: http://www.revistapmkt.com.br/Portals/9/Volumes/15/en-GB/1_Measurement%20and %20Verification%20Scales%20a%20Comparative%20An alysis%20between%20the%20Likert%20and%20Phrase%20Completion%20Scales.pdf. Accessed on October 8, 2018.

LIMA, M.B. de, et al. Construção e validação de vídeo educativo para orientação de pais de crianças em cateterismo intermitente limpo. Escola de Enfermagem da USP, São Paulo, vol. 51, no. 1, pp. 1-7, Dec. 2017. Available at: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0080-62342017000100462&lng=pt&tlng=pt. Accessed on October 8, 2018.

MARTINS, M. Capacitação a distância dos profissionais em saúde em aleitamento materno [monograph]. Curitiba: Distance Education, Federal University of Paraná; 2013.

MOREIRA, C.B., et al. Construção de um Vídeo Educativo sobre Detecção Precoce do Câncer de Mama. Revista Brasileira de Cancerologia, vol. 59, no. 3, pp. 401-7, May 2013. Available at: http://www1.inca.gov.br/rbc/n_59/v03/pdf/10-artigo-construcao-video-educativo-sobre-deteccao-precoce-cancer-mama.pdf. Accessed on October 8, 2018.

NUNES, C.H.F.; BEZERRA A.C.R. Fundamentos da interação no contexto da educação a distância: uma análise dos processos interativos na faculdade Estácio - Polo Arapiraca.

In: Anais 10° Encontro Internacional de Formação de Professores e 11° Fórum Permanente de Inovação Educacional; 2017, May 15-19; Aracaju, Sergipe, Brasil. Aracaju: University Tiradentes - Sergipe; 2015. pp. 1–17.

OLIVEIRA, M.R.N.S. Tecnologias interativas e Educação. Educação em debate, Fortaleza, no. 37, pp. 150-6, 1999. Available at: http://www.repositorio.ufc.br/bitstream/riufc/14332/3/1999_art_mrnoliveira.pdf>. Accessed on October 8, 2018.

PEDRO, K.M.; CHACON, M.C.M. Competências Digitais e Superdotação: uma Análise Comparativa sobre a Utilização de Tecnologias. Revista Brasileira Educação Especial, vol. 23, no. 4, pp. 517-30, 2017. Available at: http://www.scielo.br/scielo.php?script=sci_abstract&pid=S1413-65382017000400517&lng=pt&nrm=iso&tlng=pt. Accessed on October 8, 2018.

QUADROS, M.; LOPEZ, D.C. **As redes sociais como ferramentas de interatividade no radiojornalismo: uma proposta metodológica. Conexão, Comunicação e Cultura,** nol. 13, no. 26, pp. 37-52, Jul./Dec. 2014. Available at:http://www.ucs.br/etc/revistas/index.php/conexao/article/view/2725/1758. Accessed on October 8, 2018.

RAZERA, A.P.R., et al. Vídeo educativo: **estratégia de ensino-aprendizagem para pacientes em tratamento quimioterápico**. Ciência, Cuidado e Saúde, vol. 13, no. 1, pp. 173-8, Jan./Mar. 2014. Available at:http://www.periodicos.uem.br/ojs/index.php/CiencCuidSaude/article/view/19659/pd f 156>. Accessed on October 8, 2018.

SANTOS, G.S., et al. **Reflexões sobre o uso das redes sociais virtuais no cuidado às pessoas com doença crônica**. Revista de Enfermagem UFPE, Recife, vol. 11, no. 2, pp. 724-30, Feb. 2017. Available at:https://periodicos.ufpe.br/revistas/revistaenfermagem/article/download/11992/1455 8>. Accessed on October 8, 2018.

SANTOS, M.S.M. TICS com jogos educacionais na educação inclusiva para alunos com necessidade educacional especial em deficiência intelectual [Final paper]. Sant'Ana do Livramento: Specialization in Education Media, Federal University of Santa Maria; 2017.

SILVA, A.C., et al. **Tecnologias em aleitamento materno: revisão integrativa. Revista Brasileira de Promoção a Saúde,** Fortaleza, vol. 29, no. 3, pp. 439-46, Jul./Sept. 2016. Available at: < http://periodicos.unifor.br/RBPS/article/view/4812/pdf>. Accessed on October 8, 2018.

SILVA, D.S.S., et al. **Promoção do aleitamento materno: políticas públicas e atuação do enfermeiro**. Cadernos UniFOA, Volta Redonda, vol. 12, no. 35, pp. 135–40, dez. 2017. Available at: http://revistas.unifoa.edu.br/index.php/cadernos/article/view/483/1286. Accessed on October 8, 2018.

VALLE, L. do; BOHADANA E.D.B. **Interação e interatividade: por uma reantropolização da EaD online. Educação e Sociedade**, Campinas, vol. 33, no. 121, pp. 973–84, Oct./Dec. 2012. Available at: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0101-73302012000400003. Accessed on October 8, 2018.

VENANCIO, S.I., et al. **Associação entre o grau de implantação da Rede Amamenta Brasil e indicadores de amamentação. Cadernos de Saúde Pública, vol. 32**, no. 3, pp. 1–10, Mar. 2016. Available at: ">http://www.scielo.br/scielo.php?pid=S0102-311X2016000300704&script=sci_abstract&tlng=pt>">http://www.scielo.br/scielo.php?pid=S0102-311X2016000300704&script=sci_abstract&tlng=pt>">http://www.scielo.br/scielo.php?pid=S0102-311X2016000300704&script=sci_abstract&tlng=pt>">http://www.scielo.br/scielo.php?pid=S0102-311X2016000300704&script=sci_abstract&tlng=pt>">http://www.scielo.br/scielo.php?pid=S0102-311X2016000300704&script=sci_abstract&tlng=pt>">http://www.scielo.br/scielo.php?pid=S0102-311X2016000300704&script=sci_abstract&tlng=pt>">http://www.scielo.br/scielo.php?pid=S0102-311X2016000300704&script=sci_abstract&tlng=pt>">http://www.scielo.br/scielo.php?pid=S0102-311X2016000300704&script=sci_abstract&tlng=pt>">http://www.scielo.br/scielo.php?pid=S0102-311X2016000300704&script=sci_abstract&tlng=pt>">http://www.scielo.br/scielo.php?pid=sci

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