**Execução Parcial do MSL**

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***Abstract.*** *This article reports the partial execution of a systematic mapping of the literature.*

***Resumo.*** *Este artigo relata a execução parcial de um mapeamento sistemático da literatura.*

1. **Execução da busca**A aplicação da string de busca na ferramenta do Scopus resultou num total de 89 publicações.

( "Deaf Children" OR "Children with auditory impairments" OR "Hearing impairments" ) AND ( "Educative Game" OR "Elearning" OR "Game guidelines" OR "Game tool" OR " Mobile game" OR "Computer Game" OR "Video Game" ) AND ( "Social Inclusion" OR "Assistive Technology" OR "Computer aided learning" OR “Child Education” OR “Computer Learning” OR “Teaching Platform” OR “Learning Technology” OR “Computer Assisted Learning” ) AND ( LIMIT-TO ( SUBJAREA , "COMP" )

**1.1 Listagem dos primeiros 30 artigos**

Primeiros 30 artigos encontrados pela ferramenta do Scopus ao filtrar por “relevância”:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Nome do Artigo** | **Ano** | **Autores** | **Local** |
| 1 | Designing collaborative strategies supporting literacy skills in children with cochlear implants using serious games | 2018 | Cano, S., Collazos, C.A., Aristizabal, L.F., (...), Peñeñory, V.M., Agredo, V. | Advances in Intelligent Systems and Computing 746, pp. 1317-1326 |
| 2 | Video games in education of Deaf children: A set of pratical design guideliness | 2015 | Dos Passos Canteri, R., García, L.S., De Souza, T.A.F., Iatskiu, C.E.A. | ICEIS 2015 - 17th International Conference on Enterprise Information Systems, Proceedings 3, pp. 122-129 |
| 3 | An evaluation method of educational computer games for deaf children based on design guidelines | 2015 | dos Passos Canteri, R., García, L.S., Felipe, T.A., Antunes, D.R., Iatskiu, C.E. | Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) 9177, pp. 409-419 |
| 4 | Games for education of deaf students: A systematic literature review | 2019 | Costa, C., Marcelino, L., Neves, J., Sousa, C. | Proceedings of the European Conference on Games-based Learning 2019-October, pp. 170-181 |
| 5 | Designing a game generator as an educational technology for the deaf learners | 2016 | Bouzid, Y., Khenissi, M.A., Jemni, M. | 2015 5th International Conference on Information and Communication Technology and Accessibility, ICTA 2015 7426914 |
| 6 | Design and development of an educational Arabic sign language mobile application: Collective impact with Tawasol | 2015 | Al-Nafjan, A., Al-Arifi, B., Al-Wabil, A. | Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) 9176, pp. 319-326 |
| 7 | Exploring the effects of motivational videos for hearing-impaired children | 2015 | Lin, X.-F., Deng, C.-L., He, J.-Y., Zhang, Y.-N., Hue, Q.-T. | Proceedings of the 23rd International Conference on Computers in Education, ICCE 2015 pp. 413-418 |
| 8 | Proposal of a model for the analysis of requirements and activities for the design of interactive experiences aimed at the psychomotor rehabilitation of children with hearing impairments | 2017 | Peñeñory, V.M., Manresa-Yee, C., Cano, S.P., Fardoun, H.M. | ACM International Conference Proceeding Series Part F131194,39 |
| 9 | Robostar: An interaction game with humanoid robots for learning sign language | 2014 | Özkul, A., Köse, H., Yorganci, R., Ince, G. | 2014 IEEE International Conference on Robotics and Biomimetics, IEEE ROBIO 2014 7090384, pp. 522-527 |
| 10 | The impacts of deaf culture on designing with deaf children | 2017 | Korte, J., Potter, L.E., Nielsen, S. | ACM International Conference Proceeding Series pp. 135-142 |
| 11 | Experience Analysis for the Use of Desafiate Serious Game for the Self-assessment of Students | 2020 | Archuby, F.H., Sanz, C., Pesado, P. | Communications in Computer and Information Science 1184 CCIS, pp. 110-123 |
| 12 | Building an Interactive E-Learning Tool for Deaf Children:Interaction Design Process Framework | 2019 | Alshammari, A., Alsumait, A., Faisal, M. | 2018 IEEE Conference on e-Learning, e-Management and e-Services, IC3e 2018 8632629, pp. 85-90 |
| 13 | Seek and sign: An early experience of the joys and challenges of software design with young deaf children | 2011 | Potter, L.E., Korte, J., Nielsen, S. | Proceedings of the 23rd Australian Computer-Human Interaction Conference, OzCHI 2011 pp. 257-260 |
| 14 | Conceptual framework to support a web authoring tool of educational games for deaf children | 2019 | Dos Passos Canteri, R., García, L.S., Felipe, T.A., Oliveira Galvão, L.F., Antunes, D.R. | CSEDU 2019 - Proceedings of the 11th International Conference on Computer Supported Education 2, pp. 226-235 |
| 15 | Design, implementation and evaluation of SELEDE. A collection of serious games for training sequence learning skills in deaf children | 2019 | Mich, O., Armellini, E., Fastelli, A., Arfè, B. | ACM International Conference Proceeding Series a15 |
| 16 | Vocational training and the workforce - Disability policy adapted for vocational training and work integration | 2007 | Muscan, M., Hamburg, I. | CEUR Workshop Proceedings 357, pp. 17-27 |
| 17 | Integrated Coding and Design in SoftwareProduction | 2019 | Carlos, G., Jose, S., Giovanni, B. | IEEE Latin America Transactions 17(7),8931202, pp. 1138-1145 |
| 18 | How design involvement impacts Deaf children | 2017 | Korte, J., Potter, L.E., Nielsen, S. | International Conference on Research and Innovation in Information Systems, ICRIIS 8002527 |
| 19 | Tools and methods applied in interactive systems to evaluate the user experience with deaf/hard of hearing children | 2017 | Aristizábal, L.F., Cano, S., Collazos, C.A., (...), Alghazzawi, D.M., Fardoun, H. | ACM International Conference Proceeding Series Part F132203,18 |
| 20 | An approach to Inclusive Education in Electronic Engineering Through Serious Games | 2018 | Jaramillo-Alcazar, A., Guaita, C., Rosero, J.L., Lujan-Mora, S. | Proceedings of 2018 Technologies Applied to Electronics Teaching, TAEE 2018 8476110 |
| 21 | Sign language support system for viewing sports programs | 2017 | Uchida, T., Miyazaki, T., Azuma, M., (...), Yamanouchi, Y., Hiruma, N. | ASSETS 2017 - Proceedings of the 19th International ACM SIGACCESS Conference on Computers and Accessibility pp. 339-340 |
| 22 | Videogame to support the teaching of reading to deaf children using gamification | 2019 | Ramos-Ramirez, R., Mauricio, D. | RISTI - Revista Iberica de Sistemas e Tecnologias de Informacao 2019(E23), pp. 145-157 |
| 23 | Application based on peruvian sign language for the literacy of parents of deaf children | 2019 | Asto, L., Ibarra, M., Jiménez, W., (...), Ponce, Y., Navarro, A. | Proceedings - 14th Latin American Conference on Learning Technologies, LACLO 2019 8995038, pp. 278-283 |
| 24 | Accessibility, disability and deaf: A review | 2018 | Nathan, S.S., Berahim, M., Ramle, R., (...), Hashim, N.L., Qurat-Ul-Ain, A. | International Journal of Engineering and Technology(UAE) 7(4.19 Special Issue 19), pp. 369-373 |
| 25 | Teaching Math to Deaf/Hard-of-Hearing (DHH) Children Using Mobile Games: Outcomes with Student and Teacher Perspectives | 2016 | Shelton, B.E., Parlin, M.A. | International Journal of Mobile and Blended Learning 8(1), pp. 1-17 |
| 26 | Socially inclusive elearning models in companies | 2018 | Ionescu, A., Hamburg, I., Puklus, Z., Kürtösi, A. | CEUR Workshop Proceedings 415 |
| 27 | Serious games for the rehabilitation of disabled people: Results of a multilingual survey | 2019 | Hersh, M., Leporini, B. | Communications in Computer and Information Science 1002, pp. 98-115 |
| 28 | Intercultural learning and collaboration aspects in communities of Practice | 2011 | Hamburg, I. | WEBIST 2011 - Proceedings of the 7th International Conference on Web Information Systems and Technologies pp. 503-506 |
| 29 | A management model for effective team communication in business simulation games | 2018 | Palyga, A., Wardaszko, M. | Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) 10711 LNCS, pp. 43-57 |
| 30 | Proposal of a Conceptual Model for Serious Games Design: A Case Study in Children with Learning Disabilities | 2019 | Avila-Pesantez, D., Delgadillo, R., Rivera, L.A | IEEE Access 7,8890810, pp. 161017-161033 |

Tabela 1 - 30 primeiras publicações resgatadas.

1. **Realização do 1° filtro**Os 30 artigos foram submetidos ao critérios de inclusão e exclusão previamente definidos, a análise foi feita através da leitura do abstract:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Nome do Artigo** | **Critério de Inclusão** | **Critério de Exclusão** | **Status** |
| 1 | Designing collaborative strategies supporting literacy skills in children with cochlear implants using serious games | CI1 CI3 | - | Selecionado |
| 2 | Video games in education of Deaf children: A set of pratical design guideliness | CI1 CI2 CI3 | - | Selecionado |
| 3 | An evaluation method of educational computer games for deaf children based on design guidelines | CI2 | - | Selecionado |
| 4 | Games for education of deaf students: A systematic literature review | CI2 | - | Selecionado |
| 5 | Designing a game generator as an educational technology for the deaf learners | CI1 | - | Selecionado |
| 6 | Design and development of an educational Arabic sign language mobile application: Collective impact with Tawasol | CI1 CI3 | CE3 | Excluído |
| 7 | Exploring the effects of motivational videos for hearing-impaired children | - | CE1 | Excluído |
| 8 | Proposal of a model for the analysis of requirements and activities for the design of interactive experiences aimed at the psychomotor rehabilitation of children with hearing impairments | - | CE1 | Excluído |
| 9 | Robostar: An interaction game with humanoid robots for learning sign language | CIE | - | Selecionado |
| 10 | The impacts of deaf culture on designing with deaf children | - | CE1 | Excluído |
| 11 | Experience Analysis for the Use of Desafiate Serious Game for the Self-assessment of Students | - | CE1 | Excluído |
| 12 | Building an Interactive E-Learning Tool for Deaf Children:Interaction Design Process Framework | - | CE1 | Excluído |
| 13 | Seek and sign: An early experience of the joys and challenges of software design with young deaf children | - | CE1 | Excluído |
| 14 | Conceptual framework to support a web authoring tool of educational games for deaf children | CI1 | - | Selecionado |
| 15 | Design, implementation and evaluation of SELEDE. A collection of serious games for training sequence learning skills in deaf children | CI3 | - | Selecionado |
| 16 | Vocational training and the workforce - Disability policy adapted for vocational training and work integration | - | CE1. | Excluído |
| 17 | Integrated Coding and Design in SoftwareProduction | - | CE1. | Excluído |
| 18 | How design involvement impacts Deaf children | - | CE1. | Excluído |
| 19 | Tools and methods applied in interactive systems to evaluate the user experience with deaf/hard of hearing children | - | CE1 | Excluído |
| 20 | An approach to Inclusive Education in Electronic Engineering Through Serious Games | - | CE1. | Excluído |
| 21 | Sign language support system for viewing sports programs | - | CE1 | Excluído |
| 22 | Videogame to support the teaching of reading to deaf children using gamification | CI3 | - | Selecionado |
| 23 | Application based on peruvian sign language for the literacy of parents of deaf children | - | CE1 | Excluído |
| 24 | Accessibility, disability and deaf: A review | - | CE1 | Excluído |
| 25 | Teaching Math to Deaf/Hard-of-Hearing (DHH) Children Using Mobile Games: Outcomes with Student and Teacher Perspectives | CI2 | - | Selecionado |
| 26 | Socially inclusive elearning models in companies | - | CE1 | Excluído |
| 27 | Serious games for the rehabilitation of disabled people: Results of a multilingual survey | - | CE1 | Excluído |
| 28 | Intercultural learning and collaboration aspects in communities of Practice | - | CE1 | Excluído |
| 29 | A management model for effective team communication in business simulation games | - | CE1 | Excluído |
| 30 | Proposal of a Conceptual Model for Serious Games Design: A Case Study in Children with Learning Disabilities | CI1 CI2 | - | Selecionado |

Tabela 2 - Resultado do primeiro filtro.

A aplicação do primeiro filtro resultou na exclusão de 19 publicações. As 11 publicações restantes seguiram para o segundo filtro.

1. **Realização do 2° filtro**Os 11 artigos restantes submetidos ao critérios de inclusão e exclusão previamente definidos, a análise foi feita através da leitura completa.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Nome do Artigo** | **Critério de Inclusão** | **Critério de Exclusão** | **Status** |
| 1 | Designing collaborative strategies supporting literacy skills in children with cochlear implants using serious games | CI1 CI3 | CE5 | Excluído |
| 2 | Video games in education of Deaf children: A set of pratical design guideliness | CI1 CI2 CI3 | - | Selecionado |
| 3 | An evaluation method of educational computer games for deaf children based on design guidelines | CI2 | - | Selecionado |
| 4 | Games for education of deaf students: A systematic literature review | CI2 | - | Selecionado |
| 5 | Designing a game generator as an educational technology for the deaf learners | CI1 | CE5 | Excluído |
| 9 | Robostar: An interaction game with humanoid robots for learning sign language | CIE | CE5 | Excluído |
| 14 | Conceptual framework to support a web authoring tool of educational games for deaf children | CI1 | - | Selecionado |
| 15 | Design, implementation and evaluation of SELEDE. A collection of serious games for training sequence learning skills in deaf children | CI3 | CE4 | Excluído |
| 22 | Videogame to support the teaching of reading to deaf children using gamification | CI3 | CE5 | Excluído |
| 25 | Teaching Math to Deaf/Hard-of-Hearing (DHH) Children Using Mobile Games: Outcomes with Student and Teacher Perspectives | CI2 | CE5 | Excluído |
| 30 | Proposal of a Conceptual Model for Serious Games Design: A Case Study in Children with Learning Disabilities | CI1 CI2 | CE5 | Excluído |

Tabela 3 - Resultado do segundo filtro.

O resultado final dos dois filtros selecionou um total de 4 publicações, das 30 iniciais.

1. **Extração de Dados**

Extração de dados dos 3 primeiros artigos selecionados no filtro final, seguindo o formulário para extração de dados definido anteriormente.

Tabela de Extração: #2 Video games in education of Deaf children: A set of pratical design guideliness

|  |  |
| --- | --- |
| **Questão** | **Resposta** |
| Objetivo | Apresentação de guidelines para criação auxiliar desenvolvedores na criação de jogos educacionais para crianças surdas |
| Qual (ou quais) metodologia foi utilizada? | Guidelines (Korte et al., 2012) (Song and Zhang, 2008)  Estrutura de (Felipe, 2000) |
| Qual a faixa etária do público que utilizaria o jogo? | Crianças (não especificado) |
| Qual o contexto de aplicação do jogo? | Aberto |
| Quais as linguagens utilizadas pelo jogo? | Português e libras |
| Qual conteúdo educativo o jogo aborda? | Letramento |
| Para qual (ou quais) plataforma o jogo foi desenvolvido? | Desktop |
| Qual o estilo de jogo? | Puzzle (quebra cabeças) |

Tabela de Extração: #3 An evaluation method of educational computer games for deaf children based on design guidelines

|  |  |
| --- | --- |
| **Questão** | **Resposta** |
| Objetivo | Método de avaliação da qualidade de jogos educacionais para crianças surdas |
| Qual (ou quais) metodologia foi utilizada? | - |
| Qual a faixa etária do público que utilizaria o jogo? | Crianças (não especificado) |
| Qual o contexto de aplicação do jogo? | Aberto |
| Quais as linguagens utilizadas pelo jogo? | Português e Libras |
| Qual conteúdo educativo o jogo aborda? | Letramento / Alimentos |
| Para qual (ou quais) plataforma o jogo foi desenvolvido? | Desktop |
| Qual o estilo de jogo? | Puzzle (quebra cabeças) |

Tabela de Extração: #14 Conceptual framework to support a web authoring tool of educational games for deaf children

|  |  |
| --- | --- |
| **Questão** | **Resposta** |
| Objetivo | Framework de design para jogos educacionais para crianças surdas |
| Qual (ou quais) metodologia foi utilizada? | Metodologias para ensino de crianças Cria o *Conceptual Framework* (CFW) |
| Qual a faixa etária do público que utilizaria o jogo? | Crianças (2 a 6 anos) |
| Qual o contexto de aplicação do jogo? | Aberto |
| Quais as linguagens utilizadas pelo jogo? | Português e Libras |
| Qual conteúdo educativo o jogo aborda? | Animais |
| Para qual (ou quais) plataforma o jogo foi desenvolvido? | Desktop |
| Qual o estilo de jogo? | Aventura (point-and-click) |