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Online Learning for Children and Youth with Brain-based Disabilities

A Rapid Overview of Reviews

Date: 09/30/21

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Suggested Citation:

Dugas M., Stéfan T., Blouin P., Lépine J., Skidmore B. and LeBlanc A. (2021). Online learning for children and youth with brain-based disabilities: A rapid overview of reviews. SPOR Evidence Alliance.



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Acknowledgements

We would like to thank the members of our knowledge users' panel for their support and collaboration throughout this review:

Carrie Costello	Family-partner (CHILD-BRIGHT Network)
Rachel Martens	Family-partner (CHILD-BRIGHT Network)
Brenda Agnew	Family-partner (CHILD-BRIGHT Network)
Pierre Zwiegiers	Content expert (CHILD-BRIGHT Network)
Dan Goldowitz	Content expert (CHILD-BRIGHT Network)

We would like to thank Kaitryn Campbell, MLIS, MSc (St. Joseph's Healthcare Hamilton/McMaster University) for peer review of the MEDLINE search strategy.

Funding

This review was funded by the CHILD-BRIGHT Network and the SPOR Evidence Alliance. Both Networks are supported by the Canadian Institutes of Health Research (CIHR) under Canada's Strategy for Patient-Oriented Research (SPOR) Initiative.

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Abbreviations

ADHD	Attention-Deficit / Hyperactivity Disorder
AB	Alberta
BC	British Columbia
CADDAC	Centre For ADHD Awareness Canada
CDC	Centers for Disease Control and Prevention (U.S.)
CHILD-BRIGHT	Child Health Innovations Limiting Disability – Brain Research Improving Growth Health Trajectories (Pan-Canadian network)
CIHR	Canadian Institutes of Health Research
COVID-19	Coronavirus disease 2019
CPCN	Cerebral Palsy Canada Network
DDA	Developmental Disabilities Association (British Columbia, Canada)
IEC	Inclusive Education Canada
K-12	Kindergarten (K) and the 1st through the 12th grade (1-12), prior college
LMS	Learning Management System
MB	Manitoba
N	Number
NB	New Brunswick
NL	Newfoundland Labrador
NR	Not reported
NS	Nova Scotia
NT	Northwest Territories
ON	Ontario
OoSRS	Overview of systematic reviews
RCT	Randomized controlled trial
ROB	Risk of bias
SPOR	Strategy for Patient-Oriented Research (Canada)
PRIO	Preferred Reporting Items for OoSRS
REACH	Reach Canada – Equality and Justice For People With Disabilities
UDL	Universal Design for Learning
VLE	Virtual Learning Environment
YK	Yukon



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Key definitions

Brain-based disability: According to the Centers for Disease Control and Prevention (2020), “developmental disabilities are a group of conditions due to an impairment in physical, learning, language, or behavior areas. These conditions begin during the developmental period, may impact day-to-day functioning, and usually last throughout a person’s lifetime”¹.

Online learning: According to Singh et al. (2019) “online education is defined as education being delivered in an online environment through the use of the internet for teaching and learning. This includes online learning on the part of the students that is not dependent on their physical or virtual co-location. The teaching content is delivered online, and the instructors develop teaching modules that enhance learning and interactivity in the synchronous or asynchronous environment”².

Overview of reviews: According to Pollock et al. (2021) “the use of explicit and systematic methods to search for and identify systematic reviews on related research questions in the same topic area for the purpose of extracting and analyzing their results across important outcomes”³.



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Summary

Context: The health crisis imposed by the COVID-19 pandemic has resulted in unprecedented measures, including in education, where schools are experiencing temporary closures and classes are being moved to online teaching and learning. This poses challenges for children and youth with brain-based disabilities who may have difficulties engaging with online activities. It is critical to highlight these challenges so that policies and procedures can be put in place to adequately meet the needs of these children and their families.

Objectives: What are the impact, best practices, gaps, and challenges of online learning for children and youth with brain-based disabilities?

Methods: We conducted a rapid overview of reviews using search strategies iteratively developed and tested by an experienced medical information specialist in consultation with the review team. All searches were performed on July 5 and 6, 2021. We included systematic reviews, guidelines, and policy scans studies regarding online learning interventions for school-aged children and youth (5-18 years old) with brain-based disabilities. We searched grey literature to identify Canadian online learning programs and guidelines.

Results: Evidence about the impact and advantages of online learning is scarce. Challenges, such as added burden on parents and teachers, and programs not suited for children with disabilities were identified. Best practices have been proposed, from policy, school district, program, teacher, parents to student level, but evidence to support impact of these practices is lacking.

Conclusion: Evidence of the impact and best practices is scarce. High quality studies are needed to ensure the equality and access of learning in Canada for all children.

Context

The health crisis imposed by the COVID-19 pandemic has resulted in unprecedented measures, including in education. Indeed, in the last 18 months, the pandemic has forced schools to close over long periods of time, therefore forcing an important and unexpected shift toward online learning. Schools with different levels of preparedness and resources had to implement different solutions to keep going forward with the curriculum and maintain contact with students and their parents. This raised challenges, as many teachers reported feeling underprepared for online teaching, lacked the required resources to teach effectively and were concerned by their ability to reach and motivate their students^{4,5}.

Online learning has transformed our education system, but its implementation and impact remain uneven. Approximately 6% of K-12 students in Canada are engaged in online learning, and this number has generally increased over the last 5 years⁶. The increasing popularity of online education may be explained by some of its perceived advantages such as the opportunity for self-paced learning and greater flexibility in space and time⁷. However, it has its own demands and challenges and its successful implementation requires careful planning, adequate training resources, and adapted educational design⁸.

The rapid shift toward online learning has impacted students with disabilities^{9,10}. Different studies conducted since the pandemic report that this rapid reorganization of the education system have negatively impacted students' learning¹¹⁻¹³. It is also acknowledged that the crisis importantly affected school-aged children with disabilities, since they often rely on schools to obtain the services needed from specialized educators and adapted learning approaches¹⁴. Moreover, online learning may pose additional challenges to students with disabilities because of the lack of accessibility of the material¹⁵. It is critical to highlight these challenges so that policies and procedures can be put in place to adequately meet the needs of these children and their families.

Objectives

This rapid overview of reviews was commissioned by the Strategy for Patient-Oriented Research (SPOR) funded CHILD-BRIGHT Network, an innovative pan-Canadian network that aims to improve life outcomes for children with brain-based developmental disabilities and their families (<https://www.child-bright.ca>). Concerned with the potential impact and challenges of online learning on children with brain-based developmental disabilities, CHILD-BRIGHT requested support from the SPOR Evidence Alliance to conduct a rapid review on the topic. Thus, this review aimed to answer the following question:

What are the impact, best practices, gaps, and challenges of online learning for children and youth with brain-based disabilities?

Online learning for children and youth with brain-based disabilities

Knowledge Users Engagement

We engaged with a panel of knowledge users from the CHILD-BRIGHT Network (family partners and content experts) who actively participated in all stages of this review, from question development, literature search, interpretation, writing of results, to dissemination of findings.

Methods

We conducted a rapid overview of reviews based on the proposed methodology of the Joanna Briggs Institute Guidelines for umbrella reviews¹⁶. We report our results based on the PRIO-harms Checklist¹⁷.

Literature Search

The literature search strategies were developed and tested by an experienced medical information specialist through an iterative process, in consultation with the review team and our knowledge users. Another information specialist peer reviewed the MEDLINE strategy using the PRESS Checklist and resulting suggestions were reviewed and incorporated where appropriate¹⁸.

We searched Ovid MEDLINE®, including Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Embase Classic + Embase, and APA PsycINFO using the multifile option and the deduping tool in Ovid. We also searched Cochrane Library (Wiley), CINAHL (Ebsco), Web of Science Core Collection databases, and ERIC (Ovid). We executed all but the ERIC search on July 5, 2021. We searched ERIC on July 6, 2021 (See Appendix 1 for the search strategies as executed).

The searches contained a mixture of controlled vocabulary (e.g., “Learning Disabilities”, “Disabled Children”) and free-text terms (e.g., “dyslexia”, “K-12”, “online”). We limited results to the publication years 2010 to the present, and the English and French languages. Where possible, animal-only records were removed from the results. We downloaded and deduped the records using EndNote 9.3.3 (Clarivate) and uploaded the references to Distiller SR software (Evidence Partners Inc.) to manage the workflow of the review.

We scanned the grey literature using specific key strategies to identify Canadian online learning initiatives or guidelines for children and youth with brain-based disabilities. We conducted our searches between August 19 and 25, 2021 on websites of the 13 Ministries of Education of Canada and 11 Canadian organizations focusing on inclusive education and/or brain-based disabilities. To identify provincial online learning platforms, we also based our information on the report entitled “State of the Nation K-12 e-Learning in Canada” from the Canadian eLearning Network⁶.

Online learning for children and youth with brain-based disabilities

Eligibility Criteria

Inclusion criteria were as follow (Table 1):

Table 1. Inclusion Criteria

Participants	<p>School-aged children and youth (5-18 years old) with brain-based disabilities.</p> <p><i>Brain-based disabilities included:</i></p> <ul style="list-style-type: none"> • Attention deficit disorder; attention deficit hyperactivity disorder (ADHD) • Autism; Autistic spectrum disorder • Cerebral palsy • Childhood/developmental disability; neurodevelopmental disability • Developmental delay; global delay • Intellectual disability; Down syndrome; Trisomy 21 • Learning disability • Specific language impairment
Intervention	<p>Online learning as defined by any form of education conducted partly or fully, synchronous or asynchronous, through an online environment (e.g., internet) (definition is based on Singh 2019²).</p> <p><i>Examples included:</i></p> <ul style="list-style-type: none"> • Web-based courses or telecourses (e.g., virtual classrooms) • Game elements delivered through an online platform (e.g., educative games, gamification tools, serious games) • Learning Management System (LMS) • Virtual Learning Environment (VLE)
Comparator	Any or none
Outcomes	<ul style="list-style-type: none"> • Impact, • Best practices, • Gaps, • and challenges of online learning for children and youth with brain-based disabilities
Study design	<ul style="list-style-type: none"> • Reviews (e.g., systematic, scoping, narrative) • Guidelines • Policy scans

Study Selection and Extraction

Pairs of reviewers independently screened titles and abstracts, and then full-texts using pilot-tested forms. We resolved discrepancies through discussions or with a third reviewer (senior).

Pairs of reviewers conducted data extraction, one extracting and the other reviewing the extraction, using a standardized, pilot-tested form. We resolved discrepancies through discussions or with a third reviewer (senior). We extracted the characteristics of the review (e.g., year of publication, review type), Online learning for children and youth with brain-based disabilities

populations (e.g., number of participants, age of participants), interventions (e.g., learning components), and outcomes (e.g., impact on learning, challenges).

Quality Assessment

Two independent reviewers assessed the quality of included reviews using the AMSTAR-2 grid. We resolved discrepancies by discussion or by a third senior reviewer. We did not evaluate items 11 (appropriate meta-analysis), 12 (risk of bias accounted in meta-analysis) and 15 (publication bias assessment) as none of the included reviews performed meta-analyses. Also, the two included policy scans^{19,20} were not assessed with this grid as they are not reviews.

Synthesis

We present our findings using a narrative approach, including descriptive statistics for study characteristics (e.g., study design, sample size) and content analysis for qualitative outcomes (e.g., gaps, best practices). We focused on providing information to our knowledge users about online learning for children and youth with brain-based disabilities, contextualized for the Canadian context.

Results

Literature Search

The search strategies identified 1371 records after deduplication (Figure 1). Following the review of titles and abstracts, 1275 records were excluded and an additional 58 records following full-text assessment. A total of 11 reviews and 26 grey literature documents were analyzed^{15,19-29}.

Characteristics of the Included Reviews

Of the reviews included, 45% (5/11) were narrative reviews, 27% (3/11) systematic reviews, 18% (2/11) policy scans and 9% (1/11) were non-systematic review (Table 2). These reviews were primarily published in or prior to 2016 (81%, 9/11) and few (36%, 4/11) reported on the number of primary studies included in their review. In the majority of the reviews (82%, 9/11), the types of disabilities were not specified, thus we grouped them under the category 'Brain-based disabilities (in general)'. When a disability diagnosis was specified, learning disabilities were the most frequent (45%, 5/11) followed by autism spectrum disorder (27%, 3/11), language impairments (18%, 2/11), developmental disabilities (9%, 1/11), intellectual disabilities (9%, 1/11) and attention-deficit/hyperactivity disorder (ADHD) (9%, 1/11).

Figure 1. Study Flow Diagram

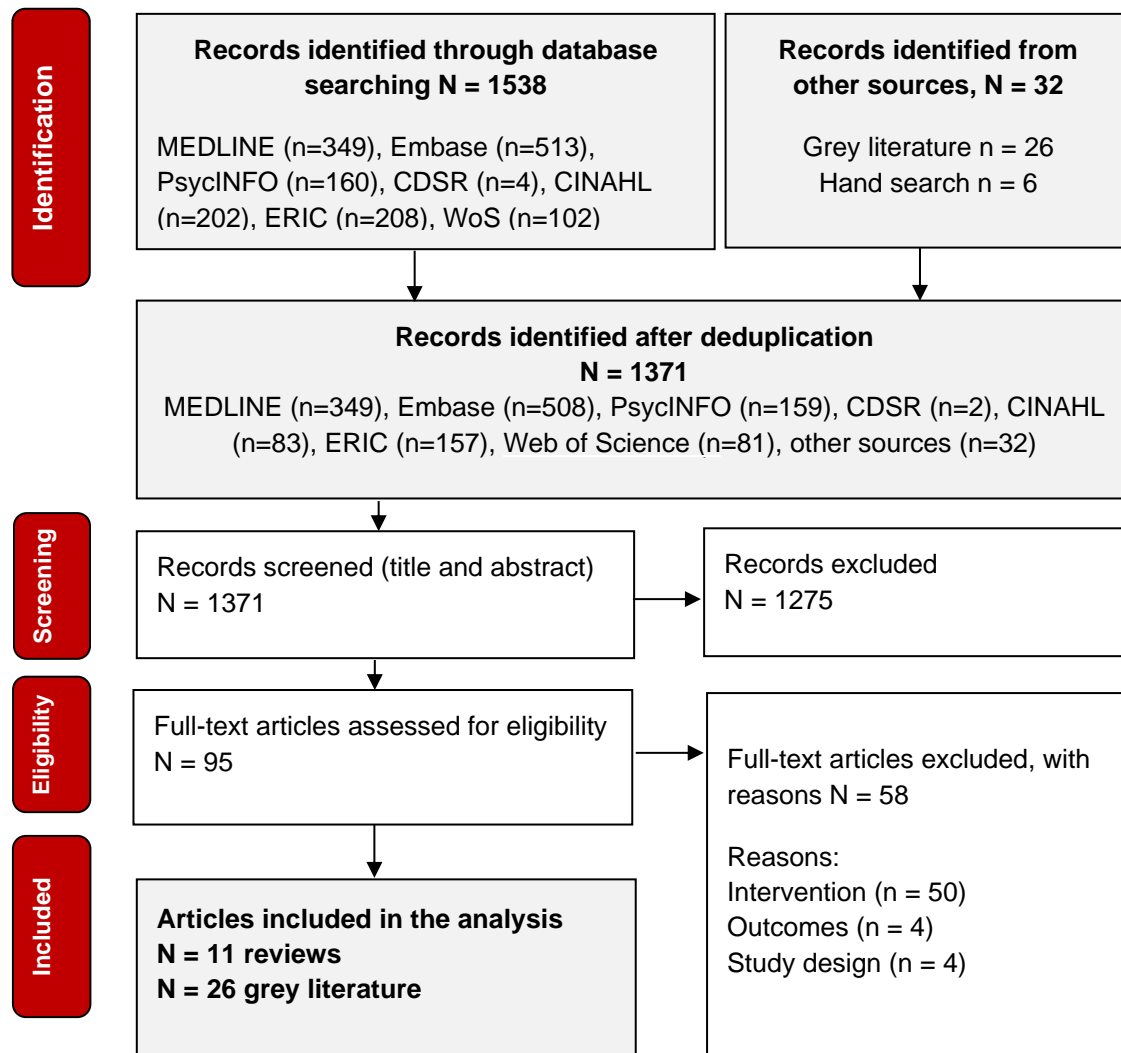


Table 2. Description of the Included Reviews

Author (Year)	Review Design	Research Question	Type of Brain-Based Disabilities	N Total Primary Studies¹	N Included Primary Studies²
Basham (2016) ¹⁹	Policy scan	Online learning policies across the U.S.	-Brain-based disabilities (in general)	NR	NR
Burgstahler (2015) ¹⁵	Narrative	Online learning practices for social inclusion	-Brain-based disabilities (in general) -Learning disabilities	NR	NR
Cavanaugh (2013) ²²	Narrative	Strategies to retain students in online coursework	-Brain-based disabilities (in general)	NR	NR
Cinquin (2019) ²³	Systematic	Accessibility and benefits of online learning technologies	-Learning disabilities -Autism -Language impairment	29	9
Fletcher-Watson (2014) ²⁴	Non-systematic	Best-practice of Computer-Assisted Learning	-Autism -Developmental disability	52	4
Greer (2014) ²⁵	Narrative	Implications for teachers and parents in blended and virtual learning	-Brain-based disabilities (in general)	NR	NR
Hashey (2014) ²⁶	Narrative	Explore the growth on online learning	-Brain-based disabilities (in general)	NR	NR
Liu (2013) ²⁷	Systematic	Implementation of learning technology in special education	-Brain-based disabilities (in general) -Learning disabilities -Intellectual disabilities	26	4
Smith (2014) ²⁸	Narrative	Understanding the availability of blended and fully online K–12 content	-Brain-based disabilities (in general)	NR	NR
Vasquez (2016) ²⁹	Systematic	Research base and concerns about students receiving online instruction	-Brain-based disabilities (in general) -Learning disabilities -Language impairment	4	3
Young (2020) ²⁰	Policy scan	Shifting students to online learning in the COVID-19 spring	-Brain-based disabilities (in general) -Learning disabilities -Autism -ADHD	NR	NR

¹ Total number of studies included in each review (not all met our eligibility criteria listed in Table 1).

² Number of primary studies in each review meeting our eligibility criteria listed in Table 1.

N: Number; NR: Not reported; ADHD: Attention-deficit/hyperactivity disorder.

Characteristics of the Included Primary Studies

Three systematic reviews^{23,27,29} and one non-systematic review²⁴ included in this work were based on different primary studies (N=111). Of these primary studies, 20 unique ones met our specific inclusion criteria and were included in this report (18%, 20/111, Table 3). Studies were mostly experimental (30%, 6/20), descriptive (15%, 3/20) or mixed-methods (10%, 2/20). Publication year varied between 2005 and 2017. Studies were primarily from the U.S. (25%, 5/20), United Kingdom (15%, 3/20), Canada (10%, 2/20) and Malaysia (10%, 2/20).

Table 3. Characteristics of the Primary Studies Included

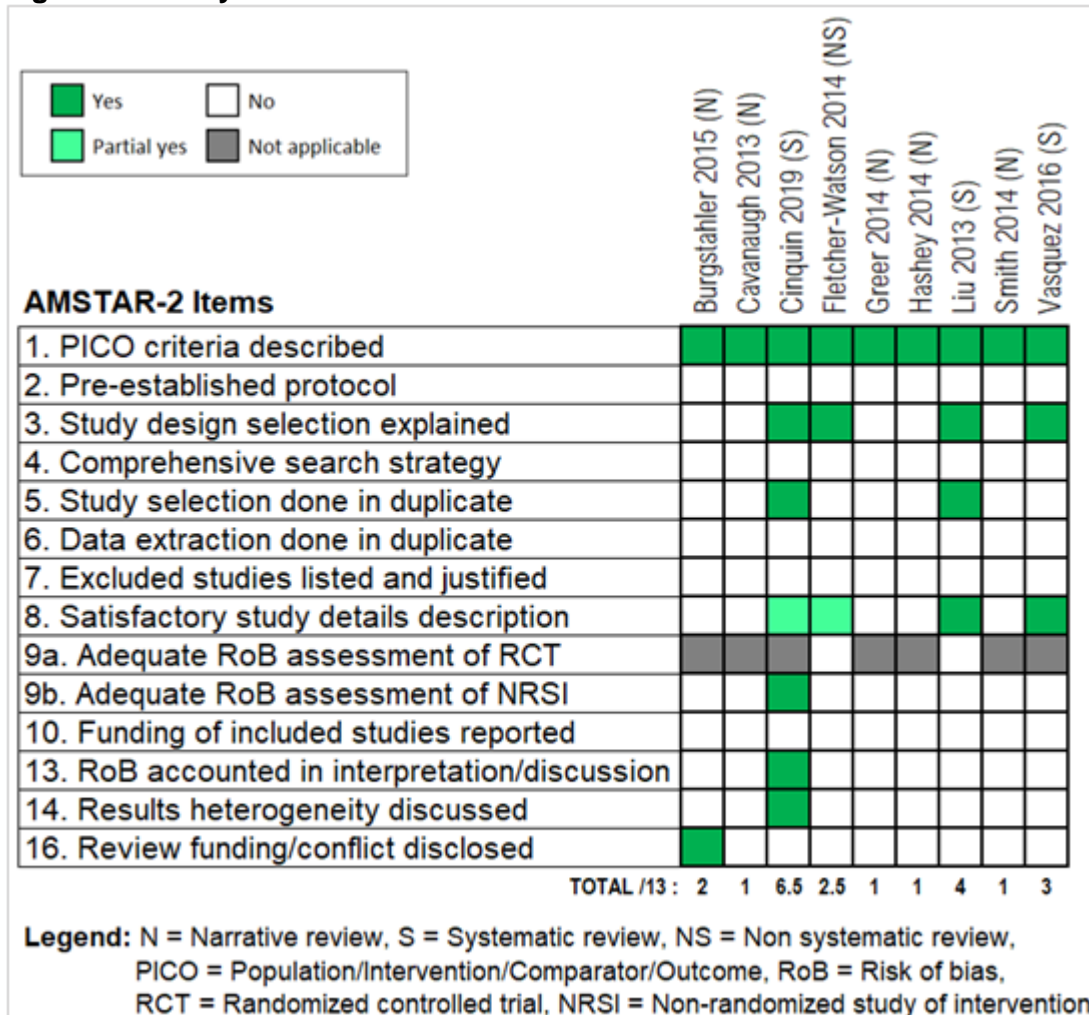
Review Author (Year)	Primary Study Author (Year)	Design of Primary Studies	Country	Number of Participants ¹	Interventions
Liu (2013) ²⁷	Aziz (2012) ³⁰	Observational study	Malaysia	NR	Cloud computing
	Topaloglu (2009) ³¹	Literature review	Turkey	NR	Distance learning application
	Woodfine (2008) ³²	Experimental study	U.K.	NR	Computer for online text
	Chu (2009) ³³	Descriptive study	Taiwan	NR	Problem-based e-learning
Cinquin (2019) ²³	Alghabban (2017) ³⁴	Descriptive study	Saudi Arabia	NR	Cloud-based mobile tool
	Andruseac (2013) ³⁵	Descriptive study	Romania	NR	Online learning platform
	Pirani (2015) ³⁶	Conference paper	India	NR	Assistive learning environment
	Bakker(2016) ³⁷	Experimental study	U.K.	81	Web-based mathematics computer games
	Hulusic (2015) ³⁸	Conference paper	Bosnia and Herzegovina	NR	Web-based interactive eBook
	Siti Iradah (2011) ³⁹	Conference paper	Malaysia	5	Web-based cognitive rehabilitation tool
	Sitra (2017) ⁴⁰	Mixed-methods	Australia	NR	Badge-based gamification through a Learning Management System
	Fryia (2009) ⁴¹	Conference paper	Canada	1	Online course
Fletcher-Watson (2014) ²⁴	Harrison (2008) ⁴²	Conference paper	U.K.	NR	Adaptable virtual learning environment
	De Leo (2011) ⁴³	Experimental study	U.S.	3	Smartphone application and website
	LaCava (2010) ⁴⁴	Case study	U.S.	4	Assistive technology
	Sugasawara (2007) ⁴⁵	Experimental study	Japan	1	Computer-based word construction and reading
Vasquez (2016) ²⁹	Tanaka (2010) ⁴⁶	RCT	Canada	79	Computerized games
	Igo (2006) ⁴⁷	Mixed-methods	U.S.	13	Web-based note writing
	Englert (2005) ⁴⁸	Experimental study	U.S.	12	Web-based scaffolding
	Englert (2007) ⁴⁹	Experimental study	U.S.	35	Web-based scaffolding

¹Data extracted from the included reviews. US: United States; UK: United Kingdom; NR: Not reported; RCT: Randomized controlled trial.

Quality Assessment

Overall, the included reviews have a low quality score (6.5 or below out of 13, Figure 2). In addition, the two critical domains of this grid, namely item 4 (comprehensive search strategy) and item 9 (adequate RoB assessment), are not met, except for one review for item 9b (adequate RoB assessment of NRSI)²³. Included systematic reviews have better overall scores (n=3, scores of 3, 4 and 6.5) than non-systematic (n=1, score of 2.5) and narrative reviews (n=5, scores of 1 or 2). None of the included reviews had a pre-established protocol (item 2), performed comprehensive literature searches (item 4), extracted data in duplicate (item 6), provided a list of excluded studies with reasons for exclusion (item 7), and disclosed included studies' funding sources (item 10).

Figure 2. Quality Assessment of Included Reviews



Impact of Online Learning

Evaluation of the impact of online learning for children and youth with disabilities is lacking. We identified only three reviews that reported on studies examining learning skills as outcomes of online learning interventions (27%, 3/11)^{23,27,29}. Most were pilot studies with a low number of participants. While most showed positive impact on learning outcomes and opinions about the interventions, no study compared online learning programs to in-person learning programs. In most cases, the impact or feasibility of the interventions was measured in relation to the technology itself rather than the setting where it was used. Thus, the impact of online learning is unclear.

Advantages of Online Learning

Perceived advantages of online learning were reported but not assessed. Online learning offers the opportunity to use different technology options that are not possible to use in in-person learning^{19,22,26,29}. Online learning makes the use of innovative learning strategies possible, such as using more complex scaffolding techniques, or the combination of media to facilitate learning (e.g., audio, video, text). Online learning provides greater access to courses or experienced teachers that otherwise would not be accessible because of geographic barriers¹⁹. It also facilitates student monitoring in terms of progression and performance^{19,26}.

Challenges of Online Learning

Despite these advantages, online learning is not without its challenges. In the U.S., private companies are providing as much as 85% of all K-12 online learning content^{19,20,25,28}. In most cases, standards of online courses are based on pre-determined grade-level standards and may not be suited for children with varied learning needs²⁸. Also, the educational content is not linked to local school districts and follows the curriculum established by the company who developed the content²⁵. Most of online learning programs also follow a competency-based approach, which may not be appropriate for student with learning disabilities^{19,25,28}. Moreover, in the U.S., there is a lack of continuity in online learning systems used between States, which could make the learning experience unequal¹⁹.

Online learning can pose a significant burden on parents of children with disabilities, who have to play the role of teacher^{19,20,25,26}. Additionally, accessibility issues of online learning are often overlooked²⁶. These include a lack in program development practices and the seldom use of existing accessibility standards and best practices in special education^{19,23}.

Best Practices of Online Learning

Best practices have been proposed in the literature to build upon the advantages and overcome the challenges associated with online learning for children and youth with brain-based disabilities.

Online learning for children and youth with brain-based disabilities

Policy and School District Level

► **Follow policies and regulations that protect children’s right for access to online education:** On the policy and school district level, there is a need to review policies and regulations that aim to protect children’s right for access to online education^{19,28,29}. Even though many accessibility standards and guidelines exist for online learning (e.g., National Standards for Quality Online Courses, Web Content Accessibility Guidelines, Web Accessibility Initiative), they are not always followed^{15,23,28}. Three reviews stressed the importance of reviewing policies and regulations to ensure that they protect children’s right for access to online education^{19,28,29}.

► **Adapt school district policies for children with learning difficulties:** School district policies should be adapted for children with learning difficulties enrolled in online programs in order to be equitable²². Two reviews further emphasized the importance of monitoring the accessibility of online learning interventions and programs over time^{15,19}.

Program Development-level

► **Develop online learning interventions or programs that are evidence-based:** Three reviews stated the importance for online educational programs to be evidence-based^{19,22,29}.

► **Apply the principles of Universal Design for Learning:** To develop an educational program that is accessible and effective to a diverse range of learners, it is recommended to apply the principles of Universal Design for Learning (UDL)^{15,22,28}. A well-designed program can better support the engagement of students by reinforcing their motivation and prevent dropout²³.

Teacher-level

► **Offer better guidance and training for teachers:** Finding appropriate and accessible online content for children with disabilities can be challenging^{25,28}. Five reviews stated that offering better guidance and training for teachers was essential^{19,20,22,25,26}.

Parent-Level

► **Use of a classification system and an accreditation program:** In order to help parents find schools that provide accessible online education, the use of a classification system and the development of an accreditation program were options suggested^{19,23}.

► **Offer support and guidance to parents:** Other best practices targeting parents included developing supports and guidance (e.g., written guides, instructional videos), reviewing the individualized education plan with the parents and maintaining good communications with the parents^{19,20}.

Online learning for children and youth with brain-based disabilities

Student-level

► **Use adaptive and assisting technology:** The use of adaptive and assistive technology (e.g., wearable sensor, screen reader, machine learning) enables better access to the online setting and facilitate learning^{15,20,23,25}.

► **Provide structured and personalized learning:** Providing structure to the student (e.g., daily list of activities, frequent video calls), offering personalized learning that takes the student' needs into account were other best practices mentioned in the literature^{20,22,25}. Further helpful strategies include using accessible materials and alternative options (e.g., image captions, instructions in a video format), minimizing distraction, and creating a safe place to learn with a sense of belonging^{15,20,22,25}.

Lack of Research in Online Learning

Several reviews reported an overall lack of research in online education, more so for children with disabilities^{19,22-24,29}. In addition to being low in number, current primary studies do not use rigorous research designs to evaluate the impact of online education programs. Moreover, we found no information on the number of students with disabilities who participate in online education in Canada. While such numbers are available in the U.S., data dissemination issues subsist^{19,22}.

Grey Literature

We found no Canadian guideline or shared standards for online learning for children with disabilities. While all provinces have policies and regulations on education for children with disabilities, online learning in special education seems to be managed locally by school districts. Few provinces have a provincial program overseeing online learning, and most have their online or blended learning provided in silos through virtual schools.

However, after the start of the COVID-19 pandemic in 2020, several provinces have reviewed their online learning program offerings entirely. For example, the government of British Columbia will be implementing a new online learning model in 2022 (Table 4). They also recently introduced a new policy for online learning for students with special needs. Alberta and Manitoba are also developing a new model for their online education.

Table 4. Grey Literature Searches

Key Organizations or Canadian Ministries Websites	Documents Found and Short Description
13 Ministries of Education of Canada	
<p>Alberta https://www.alberta.ca/education.asp x</p>	<p>The government of Alberta funded a new online education model in 2021 but nothing specific was found for children with disabilities. Currently, Alberta has no provincial online learning platform.</p> <ol style="list-style-type: none"> 1) AB_Digital Textbook Repository for Students with Disabilities (from LearnAlberta.ca) 2) AB_Online learning – Student and Family Guide 3) AB_Online learning – School authority leader Guide
<p>British Columbia https://www2.gov.bc.ca/gov/content/governments/organizational-structure/ministries-organizations/ministries/education and https://www2.gov.bc.ca/gov/content/governments/organizational-structure/ministries-organizations/ministries/children-and-family-development</p>	<p>British Columbia will be implementing a new online learning model in 2022. There is a new policy for online learning for students with special needs that was established 2021. A new Learning Management System is also being implemented.</p> <ol style="list-style-type: none"> 1) BC_Online Learning Policy - Students with Special Needs 2) BC_ Special Education Services Guidelines 3) BC_New Online Learning Model
<p>Manitoba https://www.edu.gov.mb.ca/</p>	<p>Manitoba is currently developing a provincial online learning platform. No information was found for children with disabilities.</p> <ol style="list-style-type: none"> 1) MB_Remote Learning Framework 2) MB_Remote Learning Support Centre 3) MB_Kindergarten to Grade 8 Remote Learning Guidance 4) MB_Remote learning scenarios 5) MB_Alternate Format Collection Catalogue
<p>New Brunswick https://www2.gnb.ca/content/gnb/bili ng/eecd-edpe.html</p>	<p>New Brunswick has a provincial online learning platform, but no information was found for children with disabilities.</p> <ol style="list-style-type: none"> 1) NB_New Brunswick Virtual Learning Centre
<p>Newfoundland Labrador https://www.gov.nl.ca/education/</p>	<p>Newfoundland and Labrador has a provincial online learning platform, but no information was found for children with disabilities.</p> <ol style="list-style-type: none"> 1) NL_Centre for Distance Learning & Innovation
<p>Nova Scotia http://www.ednet.ns.ca</p>	<p>Nova scotia has a provincial online learning platform, but no information was found for children with disabilities.</p> <ol style="list-style-type: none"> 1) NS_ NSVS Launch pad (Nova Scotia Virtual School) <p>The government of Nova Scotia invested \$15 million in support for student with special needs. However, nothing specific was mentioned for online learning.</p> <ol style="list-style-type: none"> 2) NS_Inclusive Education Supports 3) NS_inclusive_education_supports_-_fact_sheet



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Northwest Territories
<https://www.ece.gov.nt.ca>

The Northwest Territories has a provincial online learning platform, but no information was found for children with disabilities.

- 1) NT_Northern Distance Learning (NDL)

Nunavut
<https://www.gov.nu.ca/education/>

Nunavut has no provincial online learning platform. No information was found for children with disabilities.

Ontario
<https://www.ontario.ca/page/ministry-education>

Ontario has a provincial online learning platform, but no information was found for children with disabilities

- 1) ON_e-Learning Ontario_Online courses

Prince Edward Island
<https://www.princeedwardisland.ca/en/topic/education-and-lifelong-learning>

Prince Edward Island has no provincial online learning platform.

Québec
<http://www.education.gouv.qc.ca>

Quebec has no provincial online learning platform. No information was found for children with disabilities.

Saskatchewan
<http://www.saskatchewan.ca/government/government-structure/ministries/education>

Saskatchewan has no provincial online learning platform. No information was found for children with disabilities.

Yukon
<http://www.education.gov.yk.ca>

Yukon has one online learning school. No information was found for children with disabilities.

- 1) YK_Aurora Virtual School

Key organisations working in the field of children with disabilities

Inclusive Education Canada
<https://inclusiveeducation.ca/>

They have a short guide on effective inclusive education practices in the classroom. There is a section about quality and inclusion in distance learning.

- 1) IEC_Achieving inclusive and quality education for all

Inclusion Support Program / Inclusion Support Services
https://www.gov.mb.ca/fs/childcare/families/family_info/inclusion.html
and
<https://www.afchildrensservices.ca/support-and-services/childrens-inclusion-support-services/>

On the Manitoba website, they have a section about online learning, but not targeting children with disabilities. By opposition, they also have a guideline for teaching children with disabilities, but nothing about online learning.

- 1) MB_My learning at Home

SNOW – The Floe Project Inclusive Design Research Center OCAD University (Toronto)
<https://snow.idrc.ocadu.ca>

They provide many links to online resources for self-learning and how to design effective online materials. However, they have no guidelines about online teaching for children with disabilities.

<p>Learning Disabilities Association of Canada https://www.ldac-acta.ca/</p>	<p>Nothing found</p>
<p>Autism Canada https://autismcanada.org/</p>	<p>Nothing found</p>
<p>Canadian Down Syndrome Society https://cdss.ca/</p>	<p>Many educational resources to assist educators and parents in their journey toward an inclusive classroom, but nothing about online learning.</p>
<p>Developmental Disabilities Association https://www.develop.bc.ca/</p>	<p>They provide links to online resources to help bridge the learning gap during school closure or quarantine. Here they provide a link to the British Columbia (BC) online learning website (see BC section above):</p>
<p>Cerebral Palsy Canada Network https://www.cpcanadanetwork.com/</p>	<p>1) DDA - Back to School 2021</p> <p>Here is a program offered by a company helping children with disabilities to address their needs at school by supplying assistive technologies (computer, software, web based, etc.)</p>
<p>Centre For ADHD Awareness Canada https://caddac.ca/</p>	<p>1) PPL_Plan_Assistive_technology</p> <p>They have a document about benefits, difficulties, home strategies, tips for teachers and learners, and resources for educators about online learning for kids with ADHD.</p>
<p>Canadian Research Center on Inclusive Education https://www.inclusiveeducationresearch.ca/</p>	<p>They suggest a letter template that parents can send to teachers/educators to initiate a plan for successful online learning for their kids with ADHD</p> <p>2) CADDAC Covid Return to School – Letter Template</p>
<p>Canadian Research Center on Inclusive Education https://www.inclusiveeducationresearch.ca/</p>	<p>Nothing found</p>
<p>Reach Canada – Equality and Justice For People With Disabilities https://www.reach.ca/english/news/remote-learning-for-students-with-disabilities.htm</p>	<p>Talk about challenges, difficulties, benefits, recommendations for remote learning for students with disabilities. They include links to other resources.</p> <p>1) REACH - Remote learning for students with disabilities.</p>

Discussion

The shift to online learning forced by the COVID-19 pandemic brought challenges for children and youth with brain-based disabilities who may have difficulties engaging with online activities. With this rapid overview of reviews, we aimed to identify the impact, best practices, gaps and challenges of online learning for children and youth with brain-based disabilities, so that policies and procedures can be put in place to adequately meet the needs of children and their families.

Our results showed that the evidence for the impact of online learning for children with disabilities is scarce. More so, current primary studies do not use rigorous research design to evaluate the impact of such interventions. Thus, we could not evaluate the impact of online learning for this specific population.

Several challenges were reported in the literature, before the COVID-19 pandemic. For example, online learning can bring a significant burden for parents and teachers and they are lacking supports, resources, and training. Moreover, a majority of online programs are competency-based and require extensive adaptations to be accessible for students with varying learning needs. While accessibility standards and guidelines exist, they are not always followed and accessible programs can be difficult to find.

We found no Canadian guidelines or shared standards for online learning for children with disabilities. However, a number of best practices have been proposed in the literature. On the policy and school district level, a call was made to review existing policies and regulations to ensure equitable access to online education for students with disabilities. On the program development level, authors stated the importance to provide evidence-based content and follow the principles of Universal Design for Learning. On the parent and teacher level, best practices included developing supports and training, the use of a classification system and the development of an accreditation program. Finally, on the student level, many best practices were proposed, such as the use of adaptive and assistive technology, providing structured and personalized learning to meet the student's specific needs.

Through our grey literature searches, we found that there is a lack of continuity for online education models used in Canada, which may pose the risk of unequal learning experiences for these children.

The quality of included reviews was low overall, especially for two critical quality domains (comprehensive search strategy and risk of bias assessment of primary studies). Thus, results of this review should be interpreted with caution.

Limitations

Our review has several limitations. There was a lack in the reporting of included reviews and their overall quality was low. Most reviews did not provide detailed information on the studies they included. While we are able to identify primary studies from four of the review (4/11), most reviews did not provide a description of included studies, nor their review methods. Of the 20 primary studies identified, none was overlapping in more than one review at a time. Finally, because our searches were limited to English or French references published from 2010, some may have been missed.

Implications for practice and policy

In the midst of the pandemic, a vast majority of children were sent home and remote learning was used as a public health prevention measure. While challenges of online learning for children with disabilities were already present, they may have been exacerbated during the pandemic. In a fast and unexpected way, the education of many children was put in the hands of teachers and parents with little to no resources and guidance.

School districts across Canada are implementing strategies for online learning independently, without access to evidence-based guidelines. Thus, there is a need for the development and use of standards and guidelines for online learning in order to preserve the equality and access of learning in Canada for all children.



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Appendix 1: Search strategies

Ovid Multifile 2021 Jul 5

Database: Ovid MEDLINE: Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE® Daily and Ovid MEDLINE® <1946-Present>, Embase Classic+Embase <1947 to 2021 July 02> , APA PsycInfo <1806 to June Week 4 2021>

Search Strategy:

-
- 1 Neurodevelopmental Disorders/ (215465)
 - 2 Developmental Disabilities/ (46399)
 - 3 (development* adj2 (abnormal* or atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or handicap* or impair*)).tw,kf. (201887)
 - 4 ((neurodevelopment* or neuro-development*) adj2 (abnormal* or atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or handicap* or impair*)).tw,kf. (50206)
 - 5 (global* adj2 delay*).tw,kf. (5125)
 - 6 exp Child Development Disorders, Pervasive/ (116501)
 - 7 (autis* or asperger*).tw,kf. (184421)
 - 8 Attention Deficit Disorder with Hyperactivity/ (83945)
 - 9 attention deficit*.tw,kf. (107400)
 - 10 ADHD.tw,kf. (96411)
 - 11 hyperkinetic syndrome*.tw,kf. (1104)
 - 12 (kanner* adj syndrome?).tw,kf. (89)
 - 13 exp Learning Disabilities/ (89772)
 - 14 ((learning or scholastic*) adj3 (atypical* or a-typical* or deficit* or delay* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,kf. (105123)
 - 15 (alexia* or alexic* or dyslexia* or dyslexic* or reading disab* or word blindness or (verbal* adj1 agnosi*)).tw,kf. (31244)
 - 16 (dyscalculi* or acalculi*).tw,kf. (2528)
 - 17 exp Language Development Disorders/ (11715)
 - 18 ((language or auditor* or semantic* or speech or speak* or talk* or verbal*) adj3 (atypical* or a-typical* or deficit* or delay* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,kf. (123608)
 - 19 Cerebral Palsy/ (70683)
 - 20 ((cerebral adj1 palsy) or (diplegia* adj1 spastic) or (little\$2 adj1 disease)).tw,kf. (71681)
 - 21 ((brain? or central*) adj1 palsy).tw,kf. (244)
 - 22 ((brain? or central* or cerebral*) adj1 (paralys* or pares#s)).tw,kf. (1798)
 - 23 encephalopathia infantilis.tw,kf. (0)
 - 24 exp Malformations of Cortical Development/ (20124)
 - 25 Intellectual Disability/ (66242)
 - 26 (intellectual* adj2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,kf. (77261)
 - 27 (brain* adj2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,kf. (68371)

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- 28 (cognitiv* adj2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,kf. (371627)
- 29 (cognition* adj2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,kf. (17698)
- 30 (mental* adj2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,kf. (345743)
- 31 Down Syndrome/ (70323)
- 32 (Down* adj2 syndrome*).tw,kf. (62229)
- 33 (mongolism* or mongoloid*).tw,kf. (7465)
- 34 ("trisomy 21" or "trisomy G1" or "trisomy (G)1" or "trisomy G-1" or "trisomy GM" or "trisomy G" or "21 trisomy" or "G1 trisomy" or "G(1) trisomy" or "G-1 trisomy" or "GM trisomy" or "G trisomy").tw,kf. (16312)
- 35 "Chromosomes, Human, Pair 21"/ (10578)
- 36 (translocat* adj1 DS).tw,kf. (11)
- 37 Fetal Alcohol Spectrum Disorders/ (9293)
- 38 ((f?etal or f?etus*) adj2 alcohol syndrome*).tw,kf. (6977)
- 39 FASD.tw,kf. (5143)
- 40 (alcohol-related adj3 (birth defect* or birth disorder*)).tw,kf. (306)
- 41 (alcohol-related adj3 (neurodevelopment* or neuro-development*) adj2 (deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or handicap* or impair*)).tw,kf. (387)
- 42 Neonatal Abstinence Syndrome/ (2584)
- 43 ((neonat* or newborn*) adj2 (abstinen* or addiction* or withdrawal*)).tw,kf. (4179)
- 44 Fragile X Syndrome/ (16056)
- 45 "Fragile X".tw,kf. (18944)
- 46 (FRAXA or FRAXE or "Fra(X)").tw,kf. (1645)
- 47 ("Mar (X)" or "Marker X" or "Martin-Bell").tw,kf. (614)
- 48 ("X-Linked" adj2 mental retardation).tw,kf. (2872)
- 49 Angelman Syndrome/ (3653)
- 50 (angelman* or "happy puppet" or puppet child*).tw,kf. (4867)
- 51 exp Brain Injuries/ (295686)
- 52 (brain* adj3 (injur* or commotio* or concuss* or damag* or trauma*)).tw,kf. (306550)
- 53 concussion*.tw,kf. (27045)
- 54 commotio.tw,kf. (1101)
- 55 ((brain or cerebral) adj2 insult\$2).tw,kf. (5693)
- 56 or/1-55 [BRAIN-BASED DISABILITIES] (2259616)
- 57 Disabled Children/ (15886)
- 58 exp Child/ (5157500)
- 59 Adolescent/ (3843256)
- 60 (adolescen* or child* or pre-adolescen* or preteen* or pre-teen* or school-age* or teen or teens or teenage* or teen-age* or youth*).tw,kf. (4964271)
- 61 exp Pediatrics/ (217738)
- 62 p?ediatric*.tw,kf. (1047165)
- 63 "K-12".tw,kf. (22990)
- 64 Schools/ (140695)
- 65 ((primary or elementary or middle or public or secondary or high) adj school*).tw,kf. (351617)
- 66 highschool*.tw,kf. (322)
- 67 ((grade or grades) adj ("1" or "2" or "3" or "4" or "5" or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13)).tw,kf. (268157)

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- 68 kindergarten?.tw,kf. (34199)
- 69 (special need? or special ed or special education).tw,kf. (48727)
- 70 student*.tw,kf. (1329511)
- 71 or/57-70 [INFANTS/CHILDREN/ADOLESCENTS, INCL SCHOOLING] (10708252)
- 72 56 and 71 [BRAIN-BASED DISABILITIES - INFANTS/CHILDREN/ADOLESCENTS/SCHOOLING] (830609)
- 73 Education of Intellectually Disabled/mt, td [methods, trends] (459)
- 74 Education, Distance/ (469697)
- 75 ((blended or cyber* or digital* or distan* or online or internet or on-demand* or remote* or video* or virtual* or web or web-based) adj3 (class* or course? or curricul* or educat* or instruct* or learn* or school* or highschool* or study* or syllabi or syllabus\$2 or teach*)).tw,kf. (150452)
- 76 (eclass* or e-class* or ecourse? or e-course? or ecurricul* or e-curricul* or eenvironment* or e-environment* or einstruct* or e-instruct* or elearn* or e-learn* or eschool* or e-school* or estudy* or e-study* or esyllab* or e-syllab* or eteach* or e-teach*).tw,kf. (14185)
- 77 (cyberclass* or cyber-class* or cybercourse* or cyber-course* or cyberinstruct* or cyber-instruct* or cyberlearn* or cyber-learn* or cyberschool* or cyber-school* or cyberstud* or cyber-stud* or cyberteach* or cyber-teach*).tw,kf. (131)
- 78 (teleclass* or tele-class* or telecourse* or tele-course* or teleinstruct* or tele-instruct* or telelearn* or tele-learn* or teleschool* or tele-school* or telestudy* or tele-study* or teleteach* or tele-teach*).tw,kf. (292)
- 79 Computer-Assisted Instruction/ (119712)
- 80 (computer* adj3 (educat* or instruct* or learn*)).tw,kf. (18794)
- 81 Learning Management System?.tw,kf. (1651)
- 82 (LMS or LMSs).tw,kf. (9542)
- 83 ((game or game-based or games or games-based or gaming) adj3 (class* or course? or educat* or instruct* or learn* or school* or highschool* or serious or study* or syllabi or syllabus\$2 or teach*)).tw,kf. (14300)
- 84 google class*.tw,kf. (64)
- 85 gamification*.tw,kf. (2276)
- 86 Video Games/ (18444)
- 87 (videogam* or video-gam* or computergam* or computer gam*).tw,kf. (22476)
- 88 Virtual Reality/ (32010)
- 89 ((virtual or augmented) adj realit*).tw,kf. (39407)
- 90 virtual environment*.tw,kf. (12175)
- 91 or/73-90 [ONLINE LEARNING] (797232)
- 92 72 and 91 [BRAIN-BASED DISABILITIES - INFANTS/CHILDREN/ADOLESCENTS] (24867)
- 93 exp Animals/ not Humans/ (17285917)
- 94 92 not 93 [ANIMAL-ONLY REMOVED] (20443)
- 95 Systematic Review.pt. (160437)
- 96 exp Systematic Reviews as Topic/ (32893)
- 97 Meta Analysis.pt. (136805)
- 98 exp Meta-Analysis as Topic/ (68620)
- 99 (meta-analy* or metanaly* or metaanaly* or met analy* or integrative research or integrative review* or integrative overview* or research integration or research overview* or collaborative review*).tw,kf. (529804)
- 100 (systematic review* or systematic overview* or evidence-based review* or evidence-based overview* or (evidence adj3 (review* or overview*)) or meta-review* or meta-overview* or meta-

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synthes* or rapid review* or "review of reviews" or scoping review* or umbrella review? or technology assessment* or HTA or HTAs).tw,kf. (657718)
101 exp Technology Assessment, Biomedical/ (26515)
102 (cochrane or health technology assessment or evidence report or systematic reviews).jw. (52132)
103 (network adj (MA or MAs)).tw,kf. (34)
104 (NMA or NMAs or MTC or MTCs or MAIC or MAICs).tw,kf. (20416)
105 indirect* compar*.tw,kf. (6481)
106 (indirect treatment* adj1 compar*).tw,kf. (1130)
107 (mixed treatment* adj1 compar*).tw,kf. (1433)
108 (multiple treatment* adj1 compar*).tw,kf. (458)
109 (multi-treatment* adj1 compar*).tw,kf. (9)
110 simultaneous* compar*.tw,kf. (2819)
111 mixed comparison?.tw,kf. (96)
112 or/95-111 [SR FILTER] (1084635)
113 94 and 112 [SYSTEMATIC REVIEWS ETC] (557)
114 Review.pt. (5623285)
115 narrative review?.tw,kf. (34248)
116 review.ti. (1355186)
117 or/114-116 [NARRATIVE REVIEW FILTER] (6368185)
118 94 and 117 [NARRATIVE REVIEWS] (1502)
119 exp Guidelines as Topic/ (770636)
120 Guideline.pt. (16411)
121 standards.fs. (750531)
122 Consensus Development Conference.pt. (12053)
123 Consensus Development Conference, NIH.pt. (794)
124 (consensus or guideline* or guidance? or standards or recommendation*).ti,kf. (475331)
125 (expert consensus or consensus statement* or consensus conference* or practice parameter* or position statement* or policy statement*).tw,kf. (63601)
126 ((curricul* or educat* or instruct* or learn* or school* or high-school* or highschool* or study* or syllabi or syllabus\$2 or teach*) adj2 (standard or standards or path or paths or pathway or pathways or map or maps or plan or plans or protocol?)).tw,kf. (133247)
127 best practice?.tw,kf. (91257)
128 or/119-127 [GUIDELINE FILTER] (1964009)
129 94 and 128 [GUIDELINES] (877)
130 Policy/ (96794)
131 exp Policy Making/ (1340662)
132 (policy or policies or policymak* or policy-mak*).tw,kf. (830487)
133 or/130-132 [POLICY FILTER] (2101636)
134 94 and 133 [POLICIES] (1026)
135 113 or 118 or 129 or 134 [ALL REVIEW TYPES] (3231)
136 limit 135 to english (3049)
137 limit 135 to french (49)
138 136 or 137 [ENGLISH OR FRENCH] (3095)
139 limit 138 to yr="2010-current" (1745)
140 139 use ppez [MEDLINE RECORDS] (349)
141 exp developmental disorder/ (49967)



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- 142 (development* adj2 (abnormal* or atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or handicap* or impair*)).tw,kw. (203433)
- 143 ((neurodevelopment* or neuro-development*) adj2 (abnormal* or atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or handicap* or impair*)).tw,kw. (50406)
- 144 (global* adj2 delay*).tw,kw. (5159)
- 145 exp autism/ (146135)
- 146 (autis* or asperger*).tw,kw. (186221)
- 147 attention deficit disorder/ (98596)
- 148 attention deficit*.tw,kw. (108664)
- 149 ADHD.tw,kw. (97512)
- 150 hyperkinetic syndrome*.tw,kw. (1120)
- 151 (kanner* adj syndrome?).tw,kw. (90)
- 152 exp learning disorder/ (96371)
- 153 ((learning or scholastic*) adj3 (atypical* or a-typical* or deficit* or delay* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,kw. (105475)
- 154 (alexia* or alexic* or dyslexia* or dyslexic* or reading disab* or word blindness or (verbal* adj1 agnosi*)).tw,kw. (31720)
- 155 (dyscalculi* or acalculi*).tw,kw. (2635)
- 156 exp developmental language disorder/ (11715)
- 157 ((language or auditor* or semantic* or speech or speak* or talk* or verbal*) adj3 (atypical* or a-typical* or deficit* or delay* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,kw. (123043)
- 158 cerebral palsy/ (70683)
- 159 ((cerebral adj1 palsy) or (diplegia* adj1 spastic) or (little\$2 adj1 disease)).tw,kw. (71644)
- 160 ((brain? or central*) adj1 palsy).tw,kw. (245)
- 161 ((brain? or central* or cerebral*) adj1 (paralys* or pares#s)).tw,kw. (1899)
- 162 encephalopathia infantilis.tw,kw. (0)
- 163 exp cortical dysplasia/ (20124)
- 164 exp intellectual impairment/ (569266)
- 165 (intellectual* adj2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,kw. (77765)
- 166 (brain* adj2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,kw. (68954)
- 167 (cognitiv* adj2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,kw. (374101)
- 168 (cognition* adj2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,kw. (18516)
- 169 (mental* adj2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,kw. (341561)
- 170 Down syndrome/ (70323)
- 171 (Down* adj2 syndrome*).tw,kw. (62775)
- 172 (mongolism* or mongoloid*).tw,kw. (7586)
- 173 trisomy 21/ (40499)
- 174 ("trisomy 21" or "trisomy G1" or "trisomy (G)1" or "trisomy G-1" or "trisomy GM" or "trisomy G" or "21 trisomy" or "G1 trisomy" or "G(1) trisomy" or "G-1 trisomy" or "GM trisomy" or "G trisomy").tw,kw. (16908)
- 175 chromosome 21/ (10578)

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- 176 (translocat* adj1 DS).tw,kw. (11)
- 177 fetal alcohol syndrome/ (13184)
- 178 ((f?etal or f?etus*) adj2 alcohol syndrome*).tw,kw. (7529)
- 179 FASD.tw,kw. (5245)
- 180 (alcohol-related adj3 (birth defect* or birth disorder*).tw,kw. (312)
- 181 (alcohol-related adj3 (neurodevelopment* or neuro-development*) adj2 (deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or handicap* or impair*).tw,kw. (407)
- 182 neonatal abstinence syndrome/ (2584)
- 183 ((neonat* or newborn*) adj2 (abstinen* or addiction* or withdrawal*).tw,kw. (4239)
- 184 fragile X syndrome/ (16056)
- 185 "Fragile X".tw,kw. (19126)
- 186 (FRAXA or FRAXE or "Fra(X)").tw,kw. (1669)
- 187 ("Mar (X)" or "Marker X" or "Martin-Bell").tw,kw. (628)
- 188 ("X-Linked" adj2 mental retardation).tw,kw. (3023)
- 189 happy puppet syndrome/ (4156)
- 190 (angelman* or "happy puppet" or puppet child*).tw,kw. (4947)
- 191 exp brain injury/ (295095)
- 192 (brain* adj3 (injur* or commotio* or concuss* or damag* or trauma*).tw,kw. (307559)
- 193 concussion*.tw,kw. (28265)
- 194 commotio.tw,kw. (1127)
- 195 ((brain or cerebral) adj2 insult\$2).tw,kw. (5715)
- 196 or/141-195 [BRAIN-BASED DISABILITIES] (2439627)
- 197 exp child/ (5157500)
- 198 exp adolescent/ (3843479)
- 199 juvenile/ (54687)
- 200 (adolescen* or child* or pre-adolescenc* or preteen* or pre-teen* or school-age* or teen or teens or teenage* or teen-age* or youth*).tw,kw. (4974732)
- 201 exp pediatrics/ (217738)
- 202 p?ediatric*.tw,kw. (1076996)
- 203 "K-12".tw,kw. (23013)
- 204 school/ (120943)
- 205 high school/ (23236)
- 206 middle school/ (2046)
- 207 primary school/ (56820)
- 208 kindergarten/ (3684)
- 209 ((primary or elementary or middle or public or secondary or high) adj school*).tw,kw. (351723)
- 210 highschool*.tw,kw. (325)
- 211 ((grade or grades) adj ("1" or "2" or "3" or "4" or "5" or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13)).tw,kw. (268181)
- 212 kindergarten?.tw,kw. (34242)
- 213 (special need? or special ed or special education).tw,kw. (49042)
- 214 student*.tw,kw. (1330517)
- 215 or/197-214 [INFANTS/CHILDREN/ADOLESCENTS, INCL SCHOOLING] (10724563)
- 216 196 and 215 [BRAIN-BASED DISABILITIES - INFANTS/CHILDREN/ADOLESCENTS/SCHOOLING] (830328)
- 217 special education/ (38621)
- 218 education of intellectually disabled/ (5926)

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- 219 ((blended or cyber* or digital* or distan* or online or internet or on-demand* or remote* or video* or virtual* or web or web-based) adj3 (class* or course? or curricul* or educat* or instruct* or learn* or school* or highschool* or study* or syllabi or syllabus\$2 or teach*)).tw,kw. (151687)
- 220 (eclass* or e-class* or ecourse? or e-course? or ecurricul* or e-curricul* or eenvironment* or e-environment* or einstruct* or e-instruct* or elearn* or e-learn* or eschool* or e-school* or estudy* or e-study* or esyllab* or e-syllab* or eteach* or e-teach*).tw,kw. (14753)
- 221 (cyberclass* or cyber-class* or cybercourse* or cyber-course* or cyberinstruct* or cyber-instruct* or cyberlearn* or cyber-learn* or cyberschool* or cyber-school* or cyberstud* or cyber-stud* or cyber-teach* or cyber-teach*).tw,kw. (131)
- 222 (teleclass* or tele-class* or telecourse* or tele-course* or teleinstruct* or tele-instruct* or telelearn* or tele-learn* or teleschool* or tele-school* or telestudy* or tele-study* or teleteach* or tele-teach*).tw,kw. (304)
- 223 (computer* adj3 (educat* or instruct* or learn*)).tw,kw. (19346)
- 224 Learning Management System?.tw,kw. (1663)
- 225 (LMS or LMSs).tw,kw. (9577)
- 226 ((game or game-based or games or games-based or gaming) adj3 (class* or course? or educat* or instruct* or learn* or school* or highschool* or serious or study* or syllabi or syllabus\$2 or teach*)).tw,kw. (14287)
- 227 google class*.tw,kw. (64)
- 228 gamification*.tw,kw. (2386)
- 229 video game/ (18444)
- 230 (videogam* or video-gam* or computergam* or computer gam*).tw,kw. (22773)
- 231 virtual reality/ (32010)
- 232 ((virtual or augmented) adj realit*).tw,kw. (39893)
- 233 virtual environment*.tw,kw. (12316)
- 234 or/217-233 [ONLINE LEARNING] (317154)
- 235 216 and 234 [BRAIN-BASED DISABILITIES - INFANTS/CHILDREN/ADOLESCENTS] (24907)
- 236 exp animal/ or exp animal experimentation/ or exp animal model/ or exp animal experiment/ or nonhuman/ or exp vertebrate/ (55973340)
- 237 exp human/ or exp human experimentation/ or exp human experiment/ (43272292)
- 238 236 not 237 (12702918)
- 239 235 not 238 [ANIMAL-ONLY REMOVED] (24874)
- 240 "systematic review"/ (463906)
- 241 "systematic review (topic)"/ (26898)
- 242 meta-analysis/ (360957)
- 243 "meta analysis (topic)"/ (46149)
- 244 (meta-analy* or metanaly* or metaanaly* or met analy* or integrative research or integrative review* or integrative overview* or research integration or research overview* or collaborative review*).tw,kw. (533223)
- 245 (systematic review* or systematic overview* or evidence-based review* or evidence-based overview* or (evidence adj3 (review* or overview*)) or meta-review* or meta-overview* or meta-synthes* or rapid review* or "review of reviews" or scoping review* or umbrella review? or technology assessment* or HTA or HTAs).tw,kw. (662039)
- 246 biomedical technology assessment/ (25403)
- 247 (cochrane or health technology assessment or evidence report or systematic reviews).jw. (52132)
- 248 (network adj (MA or MAs)).tw,kw. (34)
- 249 (NMA or NMAs or MTC or MTCs or MAIC or MAICs).tw,kw. (20476)

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- 250 indirect* compar*.tw,kw. (6583)
- 251 (indirect treatment* adj1 compar*).tw,kw. (1135)
- 252 (mixed treatment* adj1 compar*).tw,kw. (1456)
- 253 (multiple treatment* adj1 compar*).tw,kw. (467)
- 254 (multi-treatment* adj1 compar*).tw,kw. (9)
- 255 simultaneous* compar*.tw,kw. (2819)
- 256 mixed comparison?.tw,kw. (97)
- 257 or/240-256 [SR FILTER] (1173840)
- 258 239 and 257 [SYSTEMATIC REVIEWS ETC] (609)
- 259 review/ (5516741)
- 260 narrative review?.tw,kw. (34351)
- 261 review.ti. (1355186)
- 262 or/259-261 [NARRATIVE REVIEW FILTER] (6282865)
- 263 239 and 262 [NARRATIVE REVIEWS] (1408)
- 264 exp practice guideline/ (630835)
- 265 (consensus or guideline* or guidance? or standards or recommendation*).ti,kw. (501240)
- 266 (expert consensus or consensus statement* or consensus conference* or practice parameter* or position statement* or policy statement*).tw,kw. (63869)
- 267 ((curricul* or educat* or instruct* or learn* or school* or high-school* or highschool* or study* or syllabi or syllabus\$2 or teach*) adj2 (standard or standards or path or paths or pathway or pathways or map or maps or plan or plans or protocol?)).tw,kw. (133611)
- 268 best practice?.tw,kw. (91745)
- 269 or/264-268 [GUIDELINE FILTER] (1222389)
- 270 239 and 269 [GUIDELINES] (904)
- 271 policy/ (96794)
- 272 management/ (66370)
- 273 (policy or policies or policymak* or policy-mak*).tw,kw. (835966)
- 274 or/271-273 [POLICY FILTER] (934523)
- 275 239 and 274 [POLICIES] (926)
- 276 258 or 263 or 270 or 275 [ALL REVIEW TYPES] (3239)
- 277 limit 276 to english (3091)
- 278 limit 276 to french (25)
- 279 277 or 278 [ENGLISH OR FRENCH] (3116)
- 280 limit 279 to yr="2010-current" (1795)
- 281 280 use emczd [EMBASE RECORDS] (701)
- 282 Neurodevelopmental Disorders/ (215465)
- 283 Developmental Disabilities/ (46399)
- 284 (development* adj2 (abnormal* or atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or handicap* or impair*).tw,id. (200719)
- 285 ((neurodevelopment* or neuro-development*) adj2 (abnormal* or atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or handicap* or impair*).tw,id. (49525)
- 286 (global* adj2 delay*).tw,id. (5073)
- 287 exp Autism Spectrum Disorders/ (80669)
- 288 (autis* or asperger*).tw,id. (183201)
- 289 exp Attention Deficit Disorder/ (125229)
- 290 attention deficit*.tw,id. (106789)
- 291 ADHD.tw,id. (95805)

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- 292 hyperkinetic syndrome*.tw,id. (1103)
- 293 (kanner* adj syndrome?).tw,id. (89)
- 294 exp Learning Disorders/ (96371)
- 295 ((learning or scholastic*) adj3 (atypical* or a-typical* or deficit* or delay* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,id. (104712)
- 296 (alexia* or alexic* or dyslexia* or dyslexic* or reading disab* or word blindness or (verbal* adj1 agnosi*)).tw,id. (30982)
- 297 (dyscalculi* or acalculi*).tw,id. (2473)
- 298 Communication Disorders/ (10478)
- 299 ((language or auditor* or semantic* or speech or speak* or talk* or verbal*) adj3 (atypical* or a-typical* or deficit* or delay* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,id. (121877)
- 300 Cerebral Palsy/ (70683)
- 301 ((cerebral adj1 palsy) or (diplegia* adj1 spastic) or (little\$2 adj1 disease)).tw,id. (70588)
- 302 ((brain? or central*) adj1 palsy).tw,id. (244)
- 303 ((brain? or central* or cerebral*) adj1 (paralys* or pares#s)).tw,id. (1617)
- 304 encephalopathia infantilis.tw,id. (0)
- 305 exp Intellectual Development Disorder/ (144580)
- 306 (intellectual* adj2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,id. (76341)
- 307 (brain* adj2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,id. (68172)
- 308 (cognitiv* adj2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,id. (368974)
- 309 (cognition* adj2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,id. (17425)
- 310 (mental* adj2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,id. (335220)
- 311 Down's Syndrome/ (70323)
- 312 (Down* adj2 syndrome*).tw,id. (61956)
- 313 (mongolism* or mongoloid*).tw,id. (6768)
- 314 ("trisomy 21" or "trisomy G1" or "trisomy (G)1" or "trisomy G-1" or "trisomy GM" or "trisomy G" or "21 trisomy" or "G1 trisomy" or "G(1) trisomy" or "G-1 trisomy" or "GM trisomy" or "G trisomy").tw,id. (16068)
- 315 (translocat* adj1 DS).tw,id. (11)
- 316 Fetal Alcohol Syndrome/ (13184)
- 317 ((f?etal or f?etus*) adj2 alcohol syndrome*).tw,id. (6801)
- 318 FASD.tw,id. (5059)
- 319 (alcohol-related adj3 (birth defect* or birth disorder*)).tw,id. (305)
- 320 (alcohol-related adj3 (neurodevelopment* or neuro-development*) adj2 (deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or handicap* or impair*)).tw,id. (377)
- 321 ((neonat* or newborn*) adj2 (abstinen* or addiction* or withdrawal*)).tw,id. (4122)
- 322 Fragile X Syndrome/ (16056)
- 323 "Fragile X".tw,id. (18830)
- 324 (FRAXA or FRAXE or "Fra(X)").tw,id. (1644)
- 325 ("Mar (X)" or "Marker X" or "Martin-Bell").tw,id. (610)
- 326 ("X-Linked" adj2 mental retardation).tw,id. (2853)
- 327 (angelman* or "happy puppet" or puppet child*).tw,id. (4841)

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- 328 exp Brain Injuries/ (295686)
 329 (brain* adj3 (injur* or commotio* or concuss* or damag* or trauma*)).tw,id. (301046)
 330 concussion*.tw,id. (26108)
 331 commotio.tw,id. (1084)
 332 ((brain or cerebral) adj2 insult\$2).tw,id. (5685)
 333 or/282-332 [BRAIN-BASED DISABILITIES] (2237548)
 334 (adolescen* or child* or pre-adolescen* or preteen* or pre-teen* or school-age* or teen or teens or teenage* or teen-age* or youth*).tw,id. (4909291)
 335 exp Pediatrics/ (217738)
 336 p?ediatric*.tw,id. (1028407)
 337 Special Education Students/ (7980)
 338 "K-12".tw,id. (22971)
 339 Schools/ (140695)
 340 Elementary Schools/ (8598)
 341 High Schools/ (7625)
 342 Junior High Schools/ (631)
 343 Middle Schools/ (4440)
 344 Kindertartens/ (3246)
 345 ((primary or elementary or middle or public or secondary or high) adj school*).tw,id. (351196)
 346 highschool*.tw,id. (321)
 347 ((grade or grades) adj ("1" or "2" or "3" or "4" or "5" or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13)).tw,id. (268134)
 348 kindergarten?.tw,id. (34158)
 349 (special need? or special ed or special education).tw,id. (48564)
 350 student*.tw,id. (1328228)
 351 or/334-350 [INFANTS/CHILDREN/ADOLESCENTS, INCL SCHOOLING] (6809357)
 352 333 and 351 [BRAIN-BASED DISABILITIES - INFANTS/CHILDREN/ADOLESCENTS/SCHOOLING] (638283)
 353 Distance Education/ (11058)
 354 ((blended or cyber* or digital* or distan* or online or internet or on-demand* or remote* or video* or virtual* or web or web-based) adj3 (class* or course? or curricul* or educat* or instruct* or learn* or school* or highschool* or study* or syllabi or syllabus\$2 or teach*)).tw,id. (149693)
 355 (eclass* or e-class* or ecourse? or e-course? or ecurricul* or e-curricul* or eenvironment* or e-environment* or einstruct* or e-instruct* or elearn* or e-learn* or eschool* or e-school* or estudy* or e-study* or esyllab* or e-syllab* or eteach* or e-teach*).tw,id. (13755)
 356 (cyberclass* or cyber-class* or cybercourse* or cyber-course* or cyberinstruct* or cyber-instruct* or cyberlearn* or cyber-learn* or cyberschool* or cyber-school* or cyberstud* or cyber-stud* or cyberteach* or cyber-teach*).tw,id. (131)
 357 (teleclass* or tele-class* or telecourse* or tele-course* or teleinstruct* or tele-instruct* or telelearn* or tele-learn* or teleschool* or tele-school* or telestudy* or tele-study* or teleteach* or tele-teach*).tw,id. (289)
 358 exp Computer-Assisted Instruction/ (138889)
 359 Mobile Learning/ (718)
 360 (computer* adj3 (educat* or instruct* or learn*)).tw,id. (18537)
 361 Learning Management Systems/ (489)
 362 Learning Management System?.tw,id. (1632)
 363 (LMS or LMSs).tw,id. (9497)



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- 364 ((game or game-based or games or games-based or gaming) adj3 (class* or course? or educat* or instruct* or learn* or school* or highschool* or serious or study* or syllabi or syllabus\$2 or teach*)).tw,id. (14120)
- 365 google class*.tw,id. (64)
- 366 Digital Game-Based Learning/ (235)
- 367 gamification*.tw,id. (2130)
- 368 Computer Games/ (14120)
- 369 (videogam* or video-gam* or computergam* or computer gam*).tw,id. (22131)
- 370 Virtual Classrooms/ (861)
- 371 Virtual Reality/ (32010)
- 372 ((virtual or augmented) adj realit*).tw,id. (38523)
- 373 virtual environment*.tw,id. (12066)
- 374 or/353-373 [ONLINE LEARNING] (381500)
- 375 352 and 374 [BRAIN-BASED DISABILITIES - INFANTS/CHILDREN/ADOLESCENTS] (10658)
- 376 exp Animals/ not Humans/ (17285917)
- 377 375 not 376 [ANIMAL-ONLY REMOVED] (9133)
- 378 Systematic Review/ (463906)
- 379 Meta Analysis/ (360957)
- 380 (meta-analy* or metanaly* or metaanaly* or met analy* or integrative research or integrative review* or integrative overview* or research integration or research overview* or collaborative review*).tw,id. (527999)
- 381 (systematic review* or systematic overview* or evidence-based review* or evidence-based overview* or (evidence adj3 (review* or overview*)) or meta-review* or meta-overview* or meta-synthes* or rapid review* or "review of reviews" or scoping review* or umbrella review? or technology assessment* or HTA or HTAs).tw,id. (655004)
- 382 (network adj (MA or MAs)).tw,id. (34)
- 383 (NMA or NMAs or MTC or MTCs or MAIC or MAICs).tw,id. (20351)
- 384 indirect* compar*.tw,id. (6446)
- 385 (indirect treatment* adj1 compar*).tw,id. (1096)
- 386 (mixed treatment* adj1 compar*).tw,id. (1368)
- 387 (multiple treatment* adj1 compar*).tw,id. (441)
- 388 (multi-treatment* adj1 compar*).tw,id. (9)
- 389 simultaneous* compar*.tw,id. (2819)
- 390 mixed comparison?.tw,id. (96)
- 391 or/378-390 [SR FILTER] (1103288)
- 392 377 and 391 [SYSTEMATIC REVIEWS ETC] (370)
- 393 Literature Review/ (24188)
- 394 narrative review?.tw,id. (34169)
- 395 review.ti. (1355186)
- 396 or/393-395 [NARRATIVE REVIEW FILTER] (1389670)
- 397 377 and 396 [NARRATIVE REVIEWS] (325)
- 398 Best Practices/ (129631)
- 399 Evidence Based Practice/ (100548)
- 400 exp Educational Standards/ (1584)
- 401 Management Methods/ (8947)
- 402 Management/ (66370)
- 403 (consensus or guideline* or guidance? or standards or recommendation*).ti,id. (485524)

Online learning for children and youth with brain-based disabilities



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- 404 (expert consensus or consensus statement* or consensus conference* or practice parameter* or position statement* or policy statement*).tw,id. (63391)
- 405 ((curricul* or educat* or instruct* or learn* or school* or high-school* or highschool* or study* or syllabi or syllabus\$2 or teach*) adj2 (standard or standards or path or paths or pathway or pathways or map or maps or plan or plans or protocol?)).tw,id. (133040)
- 406 best practice?.tw,id. (90891)
- 407 or/398-406 [GUIDELINE FILTER] (971315)
- 408 377 and 407 [GUIDELINES] (401)
- 409 Education Policy/ (1779)
- 410 Policy Making/ (90647)
- 411 (policy or policies or policymak* or policy-mak*).tw,id. (818635)
- 412 or/409-411 [POLICY FILTER] (870805)
- 413 377 and 412 [POLICIES] (165)
- 414 392 or 397 or 408 or 413 [ALL REVIEW TYPES] (992)
- 415 limit 414 to english (958)
- 416 limit 414 to french (8)
- 417 415 or 416 [ENGLISH OR FRENCH] (965)
- 418 limit 417 to yr="2010-current" (746)
- 419 418 use ppez,emczd (505)
- 420 418 not 419 [PSYCINFO RECORDS] (241)
- 421 140 or 281 or 420 [ALL DATABASES] (1291)
- 422 remove duplicates from 421 (1022) [TOTAL UNIQUE RECORDS]
- 423 422 use ppez [MEDLINE UNIQUE RECORDS] (349)
- 424 422 use emczd [EMBASE UNIQUE RECORDS] (513)
- 425 422 not (423 or 424) [PSYCINFO RECORDS] (160)

CINAHL
2021 Jul 5

#	Query	Limiters/Expanders	Last Run Via	Results
S128	S126 AND S127	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	202
S127	LA english OR LA french	Limiters - Published Date: 20100101-20211231 Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	4,844,141
S126	S106 OR S111 OR S117 OR S124	Limiters - Published Date: 20100101-20211231	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	204

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		Search modes - Boolean/Phrase		
S125	S106 OR S111 OR S117 OR S124	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	226
S124	S90 AND S123	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	36
S123	S118 OR S119 OR S120 OR S121 OR S122	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	172,335
S122	TI (policy or policies or policymak* or policy-mak*) OR AB (policy or policies or policymak* or policy-mak*)	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	152,256
S121	(MH "Policy Making")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	15,957
S120	(MH "Policy Studies")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	556
S119	(MH "Public Policy")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	22,359
S118	(MH "School Policies")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	2,070



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S117	S90 AND S116	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	72
S116	S112 OR S113 OR S114 OR S115	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	164,796
S115	TI ("best practice" or "best practices") OR AB ("best practice" or "best practices")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	21,427
S114	TI ((curricul* or educat* or instruct* or learn* or school* or high-school* or highschool* or study* or syllabi or syllabus* or teach*) N2 (standard or standards or path or paths or pathway or pathways or map or maps or plan or plans or protocol#)) OR AB ((curricul* or educat* or instruct* or learn* or school* or high-school* or highschool* or study* or syllabi or syllabus* or teach*) N2 (standard or standards or path or paths or pathway or pathways or map or maps or plan or plans or protocol#))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	27,245
S113	TI ("expert consensus" or (consensus W0 statement*) or (consensus W0 conference*) or (practice W0 parameter*) or (position W0 statement*) or (policy W0 statement*)) OR AB ("expert consensus" or (consensus W0 statement*) or (consensus W0	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	12,071

	conference*) or (practice W0 parameter*) or (position W0 statement*) or (policy W0 statement*))			
S112	TI (consensus or guideline* or guidance# or standards or recommendation*)	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	112,492
S111	S90 AND S110	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	86
S110	S107 OR S108 OR S109	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	260,404
S109	TI review	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	233,292
S108	TI ((literature or narrative) W0 review#) OR AB ((literature or narrative) W0 review#)	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	47,848
S107	(MH "Literature Review")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	8,393
S106	S90 AND S105	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	100
S105	S91 OR S92 OR S93 OR S94 OR S95 OR S96 OR S97 OR S98 OR S99 OR S100 OR S101 OR S102 OR S103 OR S104	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	211,560

S104	TI mixed W0 comparison# OR AB mixed W0 comparison#	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	9
S103	TI simultaneous* W0 compar* OR AB simultaneous* W0 compar*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	167
S102	TI multi-treatment* N1 compar* OR AB multi- treatment* N1 compar*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	2
S101	TI multiple treatment* N1 compar* OR AB multiple treatment* N1 compar*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	79
S100	TI mixed treatment* N1 compar* OR AB mixed treatment* N1 compar*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	214
S99	TI indirect treatment* N1 compar* OR AB indirect treatment* N1 compar*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	116
S98	TI indirect* W0 compar* OR AB indirect* W0 compar*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	858
S97	TI (NMA or NMAs or MTC or MTCs or MAIC or MAICs) OR AB (NMA or NMAs or MTC or MTCs or MAIC or MAICs)	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	1,195
S96	TI (network W0 (MA or MAs)) OR AB (network W0 (MA or MAs))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search	5



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			Database - CINAHL Plus with Full Text	
S95	TI ((systematic W0 review# or (systematic W0 overview#) or ("evidence-based" W0 review#) or ("evidence-based" W0 overview#) or (evidence N3 (review# or overview#)) or (meta W0 review#) or (meta W0 overview#) or (meta W0 synthes*) or (rapid W0 review#) or "review of reviews" or (scoping W0 review#) or (umbrella W0 review#) or (technology W0 assessment*) or HTA or HTAs) OR AB ((systematic W0 review# or (systematic W0 overview#) or ("evidence-based" W0 review#) or ("evidence-based" W0 overview#) or (evidence N3 (review# or overview#)) or (meta W0 review#) or (meta W0 overview#) or (meta W0 synthes*) or (rapid W0 review#) or "review of reviews" or (scoping W0 review#) or (umbrella W0 review#) or (technology W0 assessment*) or HTA or HTAs)	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	133,300
S94	TI ((meta W0 analy* or metanaly* or metaanaly* or (met W0 analy*) or (integrative W0 research) or (integrative W0 review*) or (integrative W0 overview*) or "research integration" or (research W0 overview*) or (collaborative W0 review*)) OR AB ((meta W0 analy* or metanaly* or metaanaly* or (met W0 analy*) or	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	87,647

	(integrative W0 research) or (integrative W0 review*) or (integrative W0 overview*) or "research integration" or (research W0 overview*) or (collaborative W0 review*))			
S93	(MH "Meta Analysis") OR (MH "Meta Synthesis")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	56,265
S92	(MH "Scoping Review")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	2,998
S91	(MH "Systematic Review")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	93,920
S90	S71 AND S89	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	1,970
S89	S72 OR S73 OR S74 OR S75 OR S76 OR S77 OR S78 OR S79 OR S80 OR S81 OR S82 OR S83 OR S84 OR S85 OR S86 OR S87 OR S88	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	61,541
S88	TI ("virtual environment" or "virtual environments") OR AB ("virtual environment" or "virtual environments")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	1,117
S87	TI ((virtual or augmented) W0 realit*) OR AB ((virtual or augmented) W0 realit*)	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	5,224
S86	(MH "Virtual Reality")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases	5,681

			Search Screen - Advanced Search Database - CINAHL Plus with Full Text	
S85	TI (videogam* or (video W0 gam*) or computergam* or (computer W0 gam*)) OR AB (videogam* or videogam* or computergam* or computer gam*)	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	3,238
S84	(MH "Video Games+")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	5,154
S83	TI gamification* OR AB gamification*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	385
S82	TI google W0 class* OR AB google W0 class*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	7
S81	TI ((game or "game-based" or games or "games-based" or gaming) N3 (class* or course# or educat* or instruct* or learn* or school* or highschool* or serious or study* or syllabi or syllabus* or teach*)) OR AB ((game or "game-based" or games or "games-based" or gaming) N3 (class* or course# or educat* or instruct* or learn* or school* or highschool* or serious or study* or syllabi or syllabus* or teach*))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	2,380
S80	TI (LMS or LMSs) OR AB (LMS or LMSs)	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search	720

			Database - CINAHL Plus with Full Text	
S79	TI ("Learning Management System" or "Learning Management Systems") OR AB ("Learning Management System" or "Learning Management Systems")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	268
S78	TI (computer* N3 (educat* or instruct* or learn*)) OR AB (computer* N3 (educat* or instruct* or learn*))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	2,476
S77	(MH "Computer Assisted Instruction")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	8,056
S76	TI (teleclass* or (tele W0 class*) or telecourse* or (tele W0 course*) or teleinstruct* or (tele W0 instruct*) or telelearn* or (tele W0 learn*) or teleschool* or (tele W0 school*) or telestudy* or (tele W0 study*) or teleteach* or (tele W0 teach*)) OR AB (teleclass* or (tele W0 class*) or telecourse* or (tele W0 course*) or teleinstruct* or (tele W0 instruct*) or telelearn* or (tele W0 learn*) or teleschool* or (tele W0 school*) or telestudy* or (tele W0 study*) or teleteach* or (tele W0 teach*))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	28
S75	TI (cyberclass* or (cyber W0 class*) or cybercourse* or (cyber W0 course*) or cyberinstruct* or (cyber W0 instruct*) or cyberlearn* or	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	30



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	(cyber W0 learn*) or cyberschool* or (cyber W0 school*) or cyberstud* or (cyber W0 stud*) or cyberlearn* or (cyber W0 learn*) or cyberschool* or (cyber W0 school*) or cyberstud* or (cyber W0 stud*) or cyberlearn* or (cyber W0 learn*) or cyberschool* or (cyber W0 school*) or cyberstud* or (cyber W0 stud*) or cyberlearn* or (cyber W0 learn*)) OR AB (cyberclass* or (cyber W0 class*) or cybercourse* or (cyber W0 course*) or cyberinstruct* or (cyber W0 instruct*) or cyberlearn* or (cyber W0 learn*) or cyberschool* or (cyber W0 school*) or cyberstud* or (cyber W0 stud*) or cyberlearn* or (cyber W0 learn*))			
S74	TI (eclass* or (e W0 class*) or ecourse# or (e W0 course#) or ecurricul* or (e W0 curricul*) or eenvironment* or (e W0 environment*) or einstruct* or (e W0 instruct*) or elearn* or (e W0 learn*) or eschool* or (e W0 school*) or estudy* or (e W0 study*) or esyllab* or (e W0 syllab*) or eteach* or (e W0 teach*)) OR AB (eclass* or (e W0 class*) or ecourse# or (e W0 course#) or ecurricul* or (e W0 curricul*) or eenvironment* or (e W0 environment*) or einstruct* or (e W0 instruct*) or elearn* or (e W0 learn*) or eschool* or (e W0 school*) or estudy* or (e W0 study*) or esyllab* or (e W0 syllab*) or eteach* or (e W0 teach*))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	2,868
S73	TI ((blended or cyber* or digital* or distan* or online or internet or "on-demand" or remote* or video* or	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search	32,530

	virtual* or web or "web-based") N3 (class* or course# or curricul* or educat* or instruct* or learn* or school* or highschool* or study* or syllabi or syllabus* or teach*) OR AB ((blended or cyber* or digital* or distan* or online or internet or "on-demand" or remote* or video* or virtual* or web or "web-based") N3 (class* or course# or curricul* or educat* or instruct* or learn* or school* or highschool* or study* or syllabi or syllabus* or teach*))		Database - CINAHL Plus with Full Text	
S72	(MH "Education, Non-Traditional")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	10,555
S71	S55 AND S70	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	121,944
S70	S56 OR S57 OR S58 OR S59 OR S60 OR S61 OR S62 OR S63 OR S64 OR S65 OR S66 OR S67 OR S68 OR S69	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	1,403,842
S69	TI student* OR AB student*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	184,300
S68	TI (special W0 (need# or ed or education)) OR AB (special W0 (need# or ed or education))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	7,269

S67	TI kindergarten# OR AB kindergarten#	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	2,954
S66	TI ((grade or grades) W0 ("1" or "2" or "3" or "4" or "5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13")) OR AB ((grade or grades) W0 ("1" or "2" or "3" or "4" or "5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13"))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	17,950
S65	TI highschool* OR AB highschool*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	21
S64	TI ((primary or elementary or middle or public or secondary or high) W0 school*) OR AB ((primary or elementary or middle or public or secondary or high) W0 school*)	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	41,282
S63	(MH "Schools") OR (MH "Schools, Middle") OR (MH "Schools, Secondary") OR (MH "Schools, Elementary") OR (MH "Schools, Special")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	26,202
S62	TI "K-12" OR AB "K-12"	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	534
S61	TI p#ediatic* OR AB p#ediatic*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	147,931
S60	(MH "Pediatrics")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search	20,737

			Database - CINAHL Plus with Full Text	
S59	TI (adolescen* or child* or pre-adolescenc* or preteen* or pre-teen* or school-age* or teen or teens or teenage* or teen-age* or youth*) OR AB (adolescen* or child* or pre-adolescenc* or preteen* or pre-teen* or school-age* or teen or teens or teenage* or teen-age* or youth*)	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	644,301
S58	(MH "Adolescence+")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	554,376
S57	(MH "Child+")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	700,682
S56	(MH "Child, Disabled") OR (MH "Students, Disabled")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	16,821
S55	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32 OR S33 OR S34 OR S35 OR S36 OR S37 OR S38 OR S39 OR S40 OR S41 OR S42 OR S43 OR S44 OR S45 OR S46 OR S47 OR S48 OR S49 OR S50 OR S51 OR S52 OR S53 OR S54	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	268,971



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S54	TI ((brain or cerebral) N2 insult*) OR AB ((brain or cerebral) N2 insult*)	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	428
S53	TI commotio OR AB commotio	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	127
S52	TI concussion* OR AB concussion*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	5,344
S51	TI (brain* N3 (injur* or commotio* or concuss* or damag* or trauma*)) OR AB (brain* N3 (injur* or commotio* or concuss* or damag* or trauma*))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	32,286
S50	(MH "Brain Injuries+")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	30,675
S49	TI (angelman* or "happy puppet" or (puppet W0 child*)) OR AB (angelman* or "happy puppet" or (puppet W0 child*))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	283
S48	(MH "Angelman Syndrome")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	234
S47	TI "X-Linked" N2 "mental retardation" OR AB "X-Linked" N2 "mental retardation"	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	53
S46	TI ("Mar (X)" or "Marker X" or "Martin-Bell") OR AB (Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search	6

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	"Mar (X)" or "Marker X" or "Martin-Bell")		Database - CINAHL Plus with Full Text	
S45	TI (FRAXA or FRAXE or "Fra(X)") OR AB (FRAXA or FRAXE or "Fra(X)")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	14
S44	TI "Fragile X" OR AB "Fragile X"	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	1,097
S43	(MH "Fragile X Syndrome")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	1,016
S42	TI ((neonat* or newborn*) N2 (abstinen* or addiction* or withdrawal*)) OR AB ((neonat* or newborn*) N2 (abstinen* or addiction* or withdrawal*))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	1,049
S41	(MH "Neonatal Abstinence Syndrome")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	1,181
S40	TI ("alcohol-related" N3 (neurodevelopment* or neuro-development*) N2 (deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or handicap* or impair*)) OR AB ("alcohol-related" N3 (neurodevelopment* or neuro-development*) N2 (deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or handicap* or impair*))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	46



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S39	TI ("alcohol-related" N3 (birth W0 (defect* or disorder*))) OR AB ("alcohol-related" N3 (birth W0 (defect* or disorder*)))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	29
S38	TI FASD OR AB FASD	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	642
S37	TI ((f#etal or f#etus*) N2 (alcohol W0 syndrome*)) OR AB ((f#etal or f#etus*) N2 (alcohol W0 syndrome*))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	574
S36	(MH "Fetal Alcohol Syndrome")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	1,901
S35	TI translocat* N1 DS OR AB translocat* N1 DS	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	1
S34	TI ("trisomy 21" or "trisomy G1" or "trisomy (G)1" or "trisomy G-1" or "trisomy GM" or "trisomy G" or "21 trisomy" or "G1 trisomy" or "G(1) trisomy" or "G-1 trisomy" or "GM trisomy" or "G trisomy") OR AB ("trisomy 21" or "trisomy G1" or "trisomy (G)1" or "trisomy G-1" or "trisomy GM" or "trisomy G" or "21 trisomy" or "G1 trisomy" or "G(1) trisomy" or "G-1 trisomy" or "GM trisomy" or "G trisomy")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	1,192
S33	TI (mongolism* or mongoloid*) OR AB (mongolism* or mongoloid*)	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search	49



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			Database - CINAHL Plus with Full Text	
S32	TI Down* N2 syndrome* OR AB Down* N2 syndrome*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	6,724
S31	(MH "Down Syndrome")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	7,636
S30	TI (mental* N2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)) OR AB (mental* N2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	27,633
S29	TI (cognition* N2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)) OR AB (cognition* N2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	2,323
S28	TI (cognitive* N2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	40,330



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	dysfunction* or handicap* or impair* or retard*)) OR AB (cognitive* N2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*))			
S27	TI (brain* N2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)) OR AB (brain* N2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	5,728
S26	TI (intellectual* N2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)) OR AB (intellectual* N2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	13,796
S25	(MH "Intellectual Disability+")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	33,984
S24	(MH "Malformations of Cortical Development")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases	288

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			Search Screen - Advanced Search Database - CINAHL Plus with Full Text	
S23	TI "encephalopathia infantilis" OR AB "encephalopathia infantilis"	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	0
S22	TI ((brain# or central* or cerebral*) N1 (paralys* or pares?s)) OR AB ((brain# or central* or cerebral*) N1 (paralys* or pares?s))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	96
S21	TI ((brain* or central*) N1 palsy) OR AB ((brain* or central*) N1 palsy)	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	85
S20	TI ((cerebral N1 palsy) or (diplegia* N1 spastic) or (little* N1 disease)) OR AB ((cerebral N1 palsy) or (diplegia* N1 spastic) or (little* N1 disease))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	14,077
S19	(MH "Cerebral Palsy")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	12,757
S18	TI ((language or auditor* or semantic* or speech or speak* or talk* or verbal*) N3 (atypical* or a-typical* or deficit* or delay* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)) OR AB ((language or auditor* or semantic* or speech or speak* or talk* or verbal*) N3 (atypical* or a-typical* or deficit* or delay* or disabil* or disabled or disorder* or	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	15,634



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	disturb* or dysfunction* or handicap* or impair* or retard*)			
S17	(MH "Language Disorders+")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	22,936
S16	TI (dyscalculi* or acalculi*) OR AB (dyscalculi* or acalculi*)	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	164
S15	TI (alexia* or alexic* or dyslexia* or dyslexic* or (reading W0 disab*) or "word blindness" or (verbal* N1 agnosi*)) OR AB (alexia* or alexic* or dyslexia* or dyslexic* or (reading W0 disab*) or "word blindness" or (verbal* N1 agnosi*))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	2,738
S14	TI ((learning or scholastic*) N3 (atypical* or a-typical* or deficit* or delay* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)) OR AB ((learning or scholastic*) N3 (atypical* or a-typical* or deficit* or delay* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	13,460
S13	(MH "Learning Disorders+")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	10,393
S12	TI kanner* W0 syndrome* OR AB kanner* W0 syndrome*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search	0



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			Database - CINAHL Plus with Full Text	
S11	TI hyperkinetic W0 syndrome* OR AB hyperkinetic W0 syndrome*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	20
S10	TI ADHD OR AB ADHD	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	13,533
S9	TI attention W0 deficit* OR AB attention W0 deficit*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	8,310
S8	(MH "Attention Deficit Hyperactivity Disorder")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	17,534
S7	TI (autis* or asperger*) OR AB (autis* or asperger*)	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	28,300
S6	(MH "Child Development Disorders, Pervasive+")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	28,060
S5	TI global* N2 delay* OR AB global* N2 delay*	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	426
S4	TI ((neurodevelopment* or neuro-development*) N2 (abnormal* or atypical* or atypical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or handicap* or	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	4,250

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	impair*) OR AB ((neurodevelopment* or neuro-development*) N2 (abnormal* or atypical* or atypical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or handicap* or impair*))			
S3	TI (development* N2 (abnormal* or atypical* or atypical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or handicap* or impair*)) OR AB (development* N2 (abnormal* or atypical* or atypical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or handicap* or impair*))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	21,944
S2	(MH "Developmental Disabilities")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	10,497
S1	(MH "Child Development Disorders")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text	2,496

Web of Science
2021 Jul 5

33 102 #30 OR #28 OR #27 OR #24
Refined by: PUBLICATION YEARS: (2021 OR 2016 OR 2012 OR 2020 OR 2015 OR 2011 OR 2019 OR 2014 OR 2010 OR 2018 OR 2013 OR 2017) AND LANGUAGES: (ENGLISH OR FRENCH)
Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=1900-2021

32 106 #30 OR #28 OR #27 OR #24



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Refined by: PUBLICATION YEARS: (2021 OR 2016 OR 2012 OR 2020 OR 2015 OR 2011 OR 2019 OR 2014 OR 2010 OR 2018 OR 2013 OR 2017)

Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=1900-2021

- # 31 117 #30 OR #28 OR #27 OR #24
Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=1900-2021
- # 30 11 #29 AND #22
Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=1900-2021
- # 29 1,206,122 TOPIC: (policy or policies or policymak* or (policy N/0 mak*)))
Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=1900-2021
- # 28 12 #26 AND #22
Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=1900-2021
- # 27 79 #25 AND #22
Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=1900-2021
- # 26 510,673 TITLE: (consensus or guideline* or guidance* or standards or recommendation*) OR TOPIC: ("expert consensus" or (consensus N/0 statement*) or (consensus N/0 conference*) or (practice N/0 parameter*) or (position N/0 statement*) or (policy N/0 statement*))) OR TOPIC: (standard N/2 (curricul* or educat* or instruct* or learn* or school* or high-school* or highschool* or study* or syllabi or syllabus* or teach*)) OR TOPIC: (standards N/2 (curricul* or educat* or instruct* or learn* or school* or high-school* or highschool* or study* or syllabi or syllabus* or teach*)) OR TOPIC: (path N/2 (curricul* or educat* or instruct* or learn* or school* or high-school* or highschool* or study* or syllabi or syllabus* or teach*)) OR TOPIC: (paths N/2 (curricul* or educat* or instruct* or learn* or school* or high-school* or highschool* or study* or syllabi or syllabus* or teach*)) OR TOPIC: (pathway* N/2 (curricul* or educat* or instruct* or learn* or school* or high-school* or highschool* or study* or syllabi or syllabus* or teach*)) OR TOPIC: (map N/2 (curricul* or educat* or instruct* or learn* or school* or high-school* or highschool* or study* or syllabi or syllabus* or teach*)) OR TOPIC: (maps N/2 (curricul* or educat* or instruct* or learn* or school* or high-school* or highschool* or study* or syllabi or syllabus* or teach*)) OR TOPIC: (plan N/2 (curricul* or educat* or instruct* or learn* or school* or high-school* or highschool* or study* or syllabi or syllabus* or teach*)) OR TOPIC: (plans N/2 (curricul* or educat* or instruct* or learn* or school* or high-school* or highschool* or study* or syllabi or syllabus* or teach*)) OR TOPIC: (protocol* N/2 (curricul* or educat* or instruct* or learn* or school* or high-school* or highschool* or study* or syllabi or syllabus* or teach*)) OR TOPIC: ("best practice" or "best practices")
Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=1900-2021
- # 25 805,335 TOPIC: (review* N/1 (literature or narrative)) OR TITLE: (review)

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Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=1900-2021

24 30

#23 AND #22

Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=1900-2021

23 207,915

TS=((meta N/0 analy*) or metanaly* or metaanaly* or (met N/0 analy*) or (integrative N/0 research) or (integrative N/0 review*) or (integrative N/0 overview*) or "research integration" or (research N/0 overview*) or (collaborative N/0 review*)) OR TS=((systematic N/0 review*) or (systematic N/0 overview*) or ("evidence-based" N/0 review*) or ("evidence-based" N/0 overview*) or (evidence N/3 (review or reviews or overview*)) or (meta N/0 review*) or (meta N/0 overview*) or (meta N/0 synthes*) or (rapid N/review*) or "review of reviews" or (scoping N/0 review*) or (umbrella N/0 review*) or (technology N/0 assessment*) or HTA or HTAs) OR TS=(network N/0 (MA or MAs)) OR TS=(NMA or NMAs or MTC or MTCs or MAIC or MAICs) OR T S=(indirect* N/0 compar*) OR TS=("indirect treatment" N/1 compar*) OR TS=("indirect treatments" N/1 compar*) OR TS=("mixed treatment" N/1 compar*) O R TS=("mixed treatments" N/1 compar*) OR TS=("multiple treatment" N/1 compar*) OR TS=("multiple treatments" N/1 compar*) OR TS=("multi-treatment" N/1 compar*) OR TS=("multi-treatments" N/1 compar*) OR TS=(simultaneous* N/1 compar*) OR TS=(mixed N/1 compar*)

Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=1900-2021

22 911

#21 AND #14

Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=1900-2021

21 124,012

#20 OR #19 OR #18 OR #17 OR #16 OR #15

Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=1900-2021

20 91,361

TOPIC: (google N/0 class*) OR TOPIC: (gamification*) OR TOPIC: (videogam* or (video N/0 gam*) or computergam* or (computer N/0 gam*))) OR TOPIC: ("virtual reality" or "virtual realities" or "augmented reality" or "augmented realities") OR TOPIC: ("virtual environment" or "virtual environments")

Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=1900-2021

19 227

TOPIC: (class* N/3 (game or "game-based" or games or "games-based" or gaming)) OR TOPIC: (course* N/3 (game or "game-based" or games or "games-based" or gaming)) OR TOPIC: (educat* N/3 (game or "game-based" or games or "games-based" or gaming)) OR TOPIC: (instruct* N/3 (game or "game-based" or games or "games-based" or gaming)) OR TOPIC: (learn* N/3 (game or "game-based" or games or "games-based" or gaming)) OR TOPIC: (school* N/3 (game or "game-based" or games or "games-based" or gaming)) OR TOPIC: (highschool* N/3 (game or "game-based" or games or

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"games-based" or gaming)) OR TOPIC: (serious N/3 (game or "game-based" or games or "games-based" or gaming)) OR TOPIC: (study* N/3 (game or "game-based" or games or "games-based" or gaming)) OR TOPIC: (syllabi* N/3 (game or "game-based" or games or "games-based" or gaming)) OR TOPIC: (syllabus* N/3 (game or "game-based" or games or "games-based" or gaming)) OR TOPIC: (teach* N/3 (game or "game-based" or games or "games-based" or gaming))
Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=1900-2021

18 22,159 TOPIC: (computer* N/3 (educat* or instruct* or learn*)) OR TOPIC: ("Learning Management System" or "Learning Management Systems") OR TOPIC: (LMS or LMSs)
Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=All years

17 578 TOPIC: (cyberclass* or (cyber N/0 class*) or cybercourse* or (cyber N/0 course*) or cyberinstruct* or (cyber N/0 instruct*) or cyberlearn* or (cyber N/0 learn*) or cyberschool* or (cyber N/0 school*) or cyberstud* or (cyber N/0 stud*) or cyberteach* or (cyber N/0 teach*)) OR TOPIC: (teleclass* or (tele N/0 class*) or telecourse* or (tele N/0 course*) or teleinstruct* or (tele N/0 instruct*) or telelearn* or (tele N/0 learn*) or teleschool* or (tele N/0 school*) or telestudy* or (tele N/0 study*) or teleteach* or (tele N/0 teach*))
Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=All years

16 6,431 TOPIC: (eclass* or (e N/0 class*) or ecourse* or (e N/0 course*) or ecurricul* or (e N/0 curricul*) or eenvvironment* or (e N/0 environment*) or einstruct* or (e N/0 instruct*) or elearn* or (e N/0 learn*) or eschool* or (e N/0 school*) or estudy* or (e N/0 study*) or esyllab* or (e N/0 syllab*) or eteach* or (e N/0 teach*))
Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=All years

15 4,263 TOPIC: (class* N/3 (blended or cyber* or digital* or distan* or online or internet or "on-demand" or remote* or video* or virtual* or web or "web-based")) OR TOPIC: (course* N/3 (blended or cyber* or digital* or distan* or online or internet or "on-demand" or remote* or video* or virtual* or web or "web-based")) OR TOPIC: (curricula* N/3 (blended or cyber* or digital* or distan* or online or internet or "on-demand" or remote* or video* or virtual* or web or "web-based")) OR TOPIC: (educat* N/3 (blended or cyber* or digital* or distan* or online or internet or "on-demand" or remote* or video* or virtual* or web or "web-based")) OR TOPIC: (instruct* N/3 (blended or cyber* or digital* or distan* or online or internet or "on-demand" or remote* or video* or virtual* or web or "web-based")) OR TOPIC: (learn* N/3 (blended or cyber* or digital* or distan* or online or internet or "on-demand" or remote* or video* or virtual* or web or "web-based")) OR TOPIC: (school* N/3 (blended or cyber* or digital* or distan* or online or internet or "on-demand" or remote* or video* or virtual* or web or "web-based")) OR TOPIC: (highschool* N/3 (blended or cyber* or digital* or distan* or online or internet or "on-demand" or remote* or video* or virtual* or web or "web-based")) OR TOPIC: (study* N/3 (blended or cyber* or digital* or distan* or online



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or internet or "on-demand" or remote* or video* or virtual* or web or "web-based") OR TOPIC: (syllabi* N/3 (blended or cyber* or digital* or distan* or online or internet or "on-demand" or remote* or video* or virtual* or web or "web-based") OR TOPIC: (syllabus* N/3 (blended or cyber* or digital* or distan* or online or internet or "on-demand" or remote* or video* or virtual* or web or "web-based") OR TOPIC: (teach* N/3 (blended or cyber* or digital* or distan* or online or internet or "on-demand" or remote* or video* or virtual* or web or "web-based")) Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=All years

14 104,236

#13 AND #12

Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=All years

13 3,494,411

TOPIC: (adolescen* or child* or pre-adolescen* or preteen* or pre-teen* or school-age* or teen or teens or teenage* or teen-age* or youth*) OR TOPIC: (paediatric*) OR TOPIC: (pediatric*) OR TOPIC: ("K-12") OR TOPIC: (school* N/1 (primary or elementary or middle or public or secondary or high)) OR TOPIC: (highschool*) OR TOPIC: (grade N/0 ("1" or "2" or "3" or "4" or "5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13") OR TOPIC: (grades N/0 ("1" or "2" or "3" or "4" or "5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13") OR TOPIC: (kindergarten*) OR TOPIC: (special N/0 (need or needs or ed or education)) OR TOPIC: (student or students)

Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=All years

12 188,048

#11 OR #10 OR #9 OR #8 OR #7 OR #6 OR #5 OR #4 OR #3 OR #2 OR #1

Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=All years

11 30,827

TS=(neonat* N/2 (abstinen* or addiction* or withdrawal*) OR TS=(newborn* N/2 (abstinen* or addiction* or withdrawal*) OR TS=("Fragile X") OR TS=(FRAXA or FRAXE or "Fra(X)") OR TS=("Mar (X) " or "Marker X" or "Martin-Bell") OR TS=("X-Linked" N/2 "mental retardation") OR TS=(angelman* or "happy puppet" or (puppet N/1 child*)) OR TS=(brain* N/3 (injur* or commotio* or concuss* or damag* or trauma*)) OR TS=(concussion*) OR TS=(commotio) OR TS=(insult* N/2 (brain or cerebral))

Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=All years

10 196

TOPIC: ("alcohol-related") AND TOPIC: (neurodevelopment* or neurodevelopment*) AND TOPIC: (deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or handicap* or impair*)

Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=All years

9 2,053

TOPIC: (fetal N/2 "alcohol syndrome") OR TOPIC: (foetal N/2 "alcohol syndrome") OR TOPIC: (fetus* N/2 "alcohol syndrome") OR TOPIC: (foetus* N/2 "alcohol syndrome") OR TOPIC: (FASD) OR TOPIC: ("alcohol-related" N/3 "birth defect") OR TOPIC: ("alcohol-related" N/3 "birth

Online learning for children and youth with brain-based disabilities

- defects") OR TOPIC: ("alcohol-related" N/3 "birth disorder") OR TOPIC: ("alcohol-related" N/3 "birth disorders")
Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=All years
- # 8 10,530 TOPIC: (Down* N/2 syndrome*) OR TOPIC: (mongolism* or mongoloid*) OR TOPIC: ("trisomy 21" or "trisomy G1" or "trisomy (G) 1" or "trisomy G-1" or "trisomy GM" or "trisomy G" or "21 trisomy" or "G1 trisomy" or "G(1) trisomy" or "G-1 trisomy" or "GM trisomy" or "G trisomy") OR TOPIC: (translocat* N/1 DS) OR TOPIC: (mental* N/2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*))
Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=All years
- # 7 2,976 TOPIC: (intellectual* N/2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)) OR TOPIC: (brain* N/2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)) OR TOPIC: (cognitive* N/2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)) OR TOPIC: (cognition* N/2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)) OR TOPIC: (mental* N/2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*))
Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=All years
- # 6 895 TOPIC: ((brain* or central*) NEAR/1 palsy) OR TOPIC: ((brain* or central* or cerebral*) NEAR/1 paralyt*) OR TOPIC: ((brain* or central* or cerebral*) NEAR/1 paresis) OR TOPIC: ((brain* or central* or cerebral*) NEAR/1 pareses) OR TOPIC: ("encephalopathia infantilis")
Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=All years
- # 5 689 TOPIC: ((cerebral N/1 palsy) or (diplegia* N/1 spastic) or (little* N/1 disease))
Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=All years
- # 4 1,951 TOPIC: (dyscalculi* or acalculi*) OR TOPIC: (language N/3 (atypical* or a-typical* or deficit* or delay* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)) OR TOPIC: (auditor* N/3 (atypical* or a-typical* or deficit* or delay* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)) OR TOPIC: (semantic* N/3 (atypical* or a-typical* or deficit* or delay* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)) OR TOPIC: (speech N/3 (atypical* or a-typical* or deficit* or delay* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*))



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or retard*)) OR TOPIC: (speak* N/3 (atypical* or a-typical* or deficit* or delay* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)) OR TOPIC: (talk* N/3 (atypical* or a-typical* or deficit* or delay* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)) OR TOPIC: (verbal* N/3 (atypical* or a-typical* or deficit* or delay* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*))

Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=All years

3 16,173

TOPIC: (alexia* or alexic* or dyslexia* or dyslexic* or (reading N/0 disab*) or "word blindness" or (verbal* N/1 agnosi*))

Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=All years

2 391

TOPIC: (learning N/3 (atypical* or a-typical* or deficit* or delay* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)) OR TOPIC: (scholastic* N/3 (atypical* or a-typical* or deficit* or delay* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*))

Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=All years

1 128,523

TOPIC: (development* N/2 (abnormal* or atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or handicap* or impair*)) OR TOPIC: (neurodevelopment* N/2 (abnormal* or atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or handicap* or impair*)) OR TOPIC: (neuro-development* N/2 (abnormal* or atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or handicap* or impair*)) OR TOPIC: (global* N/2 delay*) OR TOPIC: (autis* or asperger*) OR TOPIC: ((attention N/0 deficit*) or ADHD) OR TOPIC: ((hyperkinetic N/0 syndrome*) or (kanner* N/0 syndrome*))

Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI Timespan=All years

Cochrane
2021 Jul 5

			View fewer lines	Print	
<input type="checkbox"/>	<input type="checkbox"/>	#1	[mh "Neurodevelopmental Disorders"]	Limits	150
<input type="checkbox"/>	<input type="checkbox"/>	#2	[mh "Developmental Disabilities"]	Limits	655
<input type="checkbox"/>	<input type="checkbox"/>	#3	(development* NEAR/2 (abnormal* or atypical* or a-typical* or deficit* or delay* or deviation* or <u>disabil</u> * or disabled or disorder* or disturb* or handicap* or impair*)):ti,ab,kw	Limits	3869
<input type="checkbox"/>	<input type="checkbox"/>	#4	((neurodevelopment* or neuro-development*) NEAR/2 (abnormal* or atypical* or a-typical* or deficit* or delay* or deviation* or <u>disabil</u> * or disabled or disorder* or disturb* or handicap* or impair*)):ti,ab,kw	Limits	1065
<input type="checkbox"/>	<input type="checkbox"/>	#5	(global* NEAR/2 delay*):ti,ab,kw	Limits	38
<input type="checkbox"/>	<input type="checkbox"/>	#6	[mh "Child Development Disorders, Pervasive"]	Limits	1759
<input type="checkbox"/>	<input type="checkbox"/>	#7	(autis* or <u>asperger</u> *):ti,ab,kw	Limits	4021
<input type="checkbox"/>	<input type="checkbox"/>	#8	[mh "Attention Deficit Disorder with Hyperactivity"]	Limits	2862
<input type="checkbox"/>	<input type="checkbox"/>	#9	(attention NEXT deficit*):ti,ab,kw	Limits	6118
<input type="checkbox"/>	<input type="checkbox"/>	#10	<u>ADHD</u> :ti,ab,kw	Limits	4932
<input type="checkbox"/>	<input type="checkbox"/>	#11	(<u>hyperkinetic</u> NEXT syndrome*):ti,ab,kw	Limits	36
<input type="checkbox"/>	<input type="checkbox"/>	#12	(<u>kanner</u> * NEXT syndrome*?):ti,ab,kw	Limits	0
<input type="checkbox"/>	<input type="checkbox"/>	#13	[mh "Learning Disabilities"]	Limits	602
<input type="checkbox"/>	<input type="checkbox"/>	#14	((learning or scholastic*) NEXT/3 (atypical* or a-typical* or deficit* or delay* or <u>disabil</u> * or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or	Limits	1372
<input type="checkbox"/>	<input type="checkbox"/>	#15	(alexia* or alexic* or dyslexia* or dyslexic* or (reading NEXT <u>disab</u> *) or "word blindness" or (verbal* NEAR/1 <u>agnosi</u> *)):ti,ab,kw	Limits	517
<input type="checkbox"/>	<input type="checkbox"/>	#16	(<u>dyscalculi</u> * or <u>acalculi</u> *):ti,ab,kw	Limits	30
<input type="checkbox"/>	<input type="checkbox"/>	#17	[mh "Language Development Disorders"]	Limits	211

-	+	#18	((language or auditor* or semantic* or speech or speak* or talk* or verbal*) NEAR/3 (atypical* or a-typical* or deficit* or delay* or <u>disabili</u> * or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)):ti.ab.kw	Limits	3010
-	+	#19	[mh "Cerebral Palsy"]	Limits	1485
-	+	#20	((cerebral NEAR/1 palsy) or (<u>diplegia</u> * NEAR/1 spastic) or (little* NEXT disease)):ti.ab.kw	Limits	3818
-	+	#21	((brain* or central*) NEXT palsy):ti.ab.kw	Limits	0
-	+	#22	((brain* or central* or cerebral*) NEXT (<u>paralys</u> * or paresis or pareses)):ti.ab.kw	Limits	24
-	+	#23	" <u>encephalopathia infantilis</u> ":ti.ab.kw	Limits	0
-	+	#24	[mh "Malformations of Cortical Development"]	Limits	70
-	+	#25	[mh "Intellectual Disability"]	Limits	1452
-	+	#26	(intellectual* NEAR/2 (atypical* or a-typical* or deficit* or delay* or deviation* or <u>disabili</u> * or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)):ti.ab.kw	Limits	1743
-	+	#27	(brain* NEAR/2 (atypical* or a-typical* or deficit* or delay* or deviation* or <u>disabili</u> * or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or	Limits	1519
-	+	#28	(cognitive* NEAR/2 (atypical* or a-typical* or deficit* or delay* or deviation* or <u>disabili</u> * or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or	Limits	15794
-	+	#29	(cognition* NEAR/2 (atypical* or a-typical* or deficit* or delay* or deviation* or <u>disabili</u> * or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or	Limits	4324
-	+	#30	(mental* NEAR/2 (atypical* or a-typical* or deficit* or delay* or deviation* or <u>disabili</u> * or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or	Limits	13824
-	+	#31	[mh "Down Syndrome"]	Limits	373
-	+	#32	(Down* NEAR/2 syndrome*):ti.ab.kw	Limits	842
-	+	#33	(mongolism* or mongoloid*):ti.ab.kw	Limits	7
-	+	#34	("trisomy 21" or " <u>trisomy</u> G1" or " <u>trisomy</u> (G)1" or " <u>trisomy</u> G-1" or " <u>trisomy</u> GM" or " <u>trisomy</u> G" or "21 <u>trisomy</u> " or "G1 <u>trisomy</u> " or "G(1) <u>trisomy</u> " or "G-1 <u>trisomy</u> " or "GM <u>trisomy</u> " or "G <u>trisomy</u> "):ti.ab.kw	Limits	108
-	+	#35	[mh "Chromosomes, Human, Pair 21"]	Limits	24
-	+	#36	(<u>translocat</u> * NEAR/1 <u>DS</u>):ti.ab.kw	Limits	0
-	+	#37	[mh "Fetal Alcohol Spectrum Disorders"]	Limits	72
-	+	#38	((fetal or foetal) or fetus* or foetus) NEAR/2 alcohol syndrome*):ti.ab.kw	Limits	89
-	+	#39	<u>FASD</u> :ti.ab.kw	Limits	92
-	+	#40	("alcohol-related" NEAR/3 (birth NEXT (defect* or disorder*)):ti.ab.kw	Limits	2
-	+	#41	("alcohol-related" NEAR/3 (<u>neurodevelopment</u> * or <u>neuro-development</u> *) NEAR/2 (deficit* or delay* or deviation* or <u>disabili</u> * or disabled or disorder* or disturb* or handicap* or impair*)):ti.ab.kw	Limits	3
-	+	#42	[mh "Neonatal Abstinence Syndrome"]	Limits	97
-	+	#43	((neonat* or newborn*) NEAR/2 (<u>abstinen</u> * or addiction* or withdrawal*)):ti.ab.kw	Limits	236
-	+	#44	[mh "Fragile X Syndrome"]	Limits	95
-	+	#45	"Fragile X":ti.ab.kw	Limits	182
-	+	#46	(<u>FRAXA</u> or <u>FRAXE</u> or " <u>Fra(X)</u> "):ti.ab.kw	Limits	19
-	+	#47	("Mar (X)" or "Marker X" or "Martin-Bell"):ti.ab.kw	Limits	3
-	+	#48	("X-Linked" NEAR/2 "mental retardation"):ti.ab.kw	Limits	3
-	+	#49	[mh " <u>Angelman</u> Syndrome"]	Limits	16
-	+	#50	(<u>angelman</u> * or "happy puppet" or puppet child*):ti.ab.kw	Limits	76
-	+	#51	[mh "Brain Injuries"]	Limits	2458
-	+	#52	(brain* NEAR/3 (<u>injur</u> * or <u>commotio</u> * or concuss* or <u>damag</u> * or trauma*)):ti.ab.kw	Limits	8435
-	+	#53	concussion*):ti.ab.kw	Limits	848
-	+	#54	<u>commotio</u> :ti.ab.kw	Limits	10

-	+	#55	((brain or cerebral) NEAR/2 insult*).ti,ab,kw	Limits	58
-	+	#56	{or #1-#55}	Limits	59759
-	+	#57	[mh "Disabled Children"]	Limits	117
-	+	#58	[mh Child]	Limits	57709
-	+	#59	[mh Adolescent]	Limits	106203
-	+	#60	(<u>adolescen*</u> or <u>child*</u> or <u>pre-adolescen*</u> or <u>preteen*</u> or <u>pre-teen*</u> or <u>school-age*</u> or <u>teen</u> or <u>teens</u> or <u>teenage*</u> or <u>teen-age*</u> or <u>youth*</u>).ti,ab,kw	Limits	258943
-	+	#61	[mh Pediatrics]	Limits	699
-	+	#62	(<u>paediatric*</u> or <u>pediatric*</u>).ti,ab,kw	Limits	36393
-	+	#63	"K-12".ti,ab,kw	Limits	50
-	+	#64	[mh Schools]	Limits	3226
-	+	#65	((primary or elementary or middle or public or secondary or high) NEXT school*).ti,ab,kw	Limits	9994
-	+	#66	<u>highschool*</u> .ti,ab,kw	Limits	179
-	+	#67	((grade or grades) NEXT ("1" or "2" or "3" or "4" or "5" or "6" or "7" or "8" or "9" or "10" or "11" or "12" or "13")).ti,ab,kw	Limits	28056
-	+	#68	kindergarten*.ti,ab,kw	Limits	754
-	+	#69	(special NEXT (need or needs or ed or education)).ti,ab,kw	Limits	517
-	+	#70	student*.ti,ab,kw	Limits	38612
-	+	#71	{or #57-#70}	Limits	319573
-	+	#72	#56 and #71	Limits	23180
-	+	#73	[mh "Education of Intellectually Disabled"/MT,TD]	Limits	23

-	+	#74	[mh "Education, Distance"]	Limits	172
-	+	#75	((blended or cyber* or digital* or <u>distan*</u> or online or internet or "on-demand" or remote* or video* or virtual* or web or "web-based") NEAR/3 (class* or course or courses or <u>curricul*</u> or <u>educat*</u> or instruct* or learn* or school* or <u>highschool*</u> or study* or syllabi or syllabus* or teach*).ti,ab,kw	Limits	12638
-	+	#76	(<u>eclass*</u> or (e NEXT class*) or <u>ecourse*</u> or (e NEXT <u>cours*</u>) or <u>ecurricul*</u> or (e NEXT <u>curricul*</u>) or <u>environment*</u> or (e NEXT environment*) or <u>einstruct*</u> or (e NEXT instruct*) or <u>elearn*</u> or (e NEXT learn*) or <u>eschool*</u> or (e NEXT school*) or <u>estudy*</u> or (e NEXT study*) or <u>esyllab*</u> or (e NEXT <u>syllab*</u>) or <u>eteach*</u> or (e NEXT teach*).ti,ab,kw	Limits	1126
-	+	#77	(<u>cyberclass*</u> or (cyber NEXT class*) or <u>cybercourse*</u> or (cyber NEXT course*) or <u>cyberinstruct*</u> or (cyber NEXT instruct*) or <u>cyberlearn*</u> or (cyber NEXT learn*) or <u>cyberschool*</u> or (cyber NEXT school*) or <u>cyberstud*</u> or (cyber NEXT stud*) or <u>cyberteach*</u> or (cyber NEXT teach*).ti,ab,kw	Limits	0
-	+	#78	(<u>teleclass*</u> or (tele NEXT class*) or <u>telecourse*</u> or (tele NEXT course*) or <u>teleinstruct*</u> or (tele NEXT instruct*) or <u>telelearn*</u> or (tele NEXT learn*) or <u>teleschool*</u> or (tele NEXT school*) or <u>telestudy*</u> or (tele NEXT study*) or <u>teleteach*</u> or (tele NEXT teach*).ti,ab,kw	Limits	1
-	+	#79	[mh "Computer-Assisted Instruction"]	Limits	1239
-	+	#80	(computer* NEAR/3 (<u>educat*</u> or instruct* or learn*).ti,ab,kw	Limits	2038
-	+	#81	("Learning Management System" or "Learning Management Systems").ti,ab,kw	Limits	37
-	+	#82	(LMS or LMSs).ti,ab,kw	Limits	214
-	+	#83	((game or "game-based" or games or "games-based" or gaming) NEAR/3 (class* or course or courses or <u>educat*</u> or instruct* or learn* or school* or <u>highschool*</u> or serious* or study* or syllabi or syllabus* or teach*).ti,ab,kw	Limits	877
-	+	#84	(google NEXT class*).ti,ab,kw	Limits	2
-	+	#85	gamification*.ti,ab,kw	Limits	210
-	+	#86	[mh "Video Games"]	Limits	729
-	+	#87	(<u>videogam*</u> or (video NEXT <u>gam*</u>) or <u>computergam*</u> or (computer NEXT <u>gam*</u>).ti,ab,kw	Limits	2390
-	+	#88	[mh "Virtual Reality"]	Limits	299
-	+	#89	((virtual or augmented) NEXT <u>reall*</u>).ti,ab,kw	Limits	4066
-	+	#90	(virtual NEXT environment*).ti,ab,kw	Limits	503

-	+	#91	(or #73-#90)	Limits	21245
-	+	#92	#72 and #91	Limits	995
-	+	#93	#92	Limits	4

with Cochrane Library publication date from Jan 2010 to Jan 2021, in Cochrane Reviews and Cochrane Protocols

CDSR – Limited to 2010-present – 4 records

ERIC
2021 Jul 6

Database: ERIC <1965 to May 2021>

Search Strategy:

-
- 1 developmental disabilities/ (5446)
 - 2 (development* adj2 (abnormal* or atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or handicap* or impair*).tw,id. (19415)
 - 3 ((neurodevelopment* or neuro-development*) adj2 (abnormal* or atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or handicap* or impair*).tw,id. (432)
 - 4 (global* adj2 delay*).tw,id. (35)
 - 5 exp pervasive developmental disorders/ (16693)
 - 6 (autis* or asperger*).tw,id. (17216)
 - 7 exp attention deficit disorders/ (5706)
 - 8 attention deficit*.tw,id. (6099)
 - 9 ADHD.tw,id. (3734)
 - 10 hyperkinetic syndrome*.tw,id. (8)
 - 11 (kanner* adj syndrome?).tw,id. (3)
 - 12 learning disabilities/ (18919)
 - 13 dyslexia/ (2966)
 - 14 reading difficulties/ (7807)
 - 15 ((learning or scholastic*) adj3 (atypical* or a-typical* or deficit* or delay* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*).tw,id. (23521)
 - 16 (alexia* or alexic* or dyslexia* or dyslexic* or reading disab* or word blindness or (verbal* adj1 agnosi*).tw,id. (4800)
 - 17 (dyscalculi* or acalculi*).tw,id. (152)
 - 18 exp language impairments/ (7773)
 - 19 ((language or auditor* or semantic* or speech or speak* or talk* or verbal*) adj3 (atypical* or a-typical* or deficit* or delay* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*).tw,id. (10764)
 - 20 cerebral palsy/ (1175)
 - 21 ((cerebral adj1 palsy) or (diplegia* adj1 spastic) or (little\$2 adj1 disease)).tw,id. (1437)
 - 22 ((brain? or central*) adj1 palsy).tw,id. (2)
 - 23 ((brain? or central* or cerebral*) adj1 (paralys* or pares#s)).tw,id. (4)
 - 24 encephalopathia infantilis.tw,id. (0)
 - 25 intellectual disability/ (2354)
 - 26 (intellectual* adj2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*).tw,id. (7051)
 - 27 (brain* adj2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*).tw,id. (783)

Online learning for children and youth with brain-based disabilities



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- 28 (cognitiv* adj2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,id. (2084)
- 29 (cognition* adj2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,id. (96)
- 30 (mental* adj2 (atypical* or a-typical* or deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or dysfunction* or handicap* or impair* or retard*)).tw,id. (18939)
- 31 down syndrome/ (1386)
- 32 (Down* adj2 syndrome*).tw,id. (2309)
- 33 (mongolism* or mongoloid*).tw,id. (75)
- 34 ("trisomy 21" or "trisomy G1" or "trisomy (G)1" or "trisomy G-1" or "trisomy GM" or "trisomy G" or "21 trisomy" or "G1 trisomy" or "G(1) trisomy" or "G-1 trisomy" or "GM trisomy" or "G trisomy").tw,id. (38)
- 35 (translocat* adj1 DS).tw,id. (0)
- 36 mild intellectual disability/ or moderate intellectual disability/ or severe intellectual disability/ (423)
- 37 fetal alcohol syndrome/ (227)
- 38 ((f?etal or f?etus*) adj2 alcohol syndrome*).tw,id. (372)
- 39 FASD.tw,id. (101)
- 40 (alcohol-related adj3 (birth defect* or birth disorder*)).tw,id. (12)
- 41 (alcohol-related adj3 (neurodevelopment* or neuro-development*) adj2 (deficit* or delay* or deviation* or disabil* or disabled or disorder* or disturb* or handicap* or impair*)).tw,id. (4)
- 42 ((neonat* or newborn*) adj2 (abstinen* or addiction* or withdrawal*)).tw,id. (5)
- 43 "Fragile X".tw,id. (458)
- 44 (FRAXA or FRAXE or "Fra(X)").tw,id. (2)
- 45 ("Mar (X)" or "Marker X" or "Martin-Bell").tw,id. (1)
- 46 ("X-Linked" adj2 mental retardation).tw,id. (3)
- 47 (angelman* or "happy puppet" or puppet child*).tw,id. (62)
- 48 neurological impairments/ (4989)
- 49 (brain* adj3 (injur* or commotio* or concuss* or damag* or trauma*)).tw,id. (1647)
- 50 concussion*.tw,id. (148)
- 51 commotio.tw,id. (1)
- 52 ((brain or cerebral) adj2 insult\$2).tw,id. (9)
- 53 or/1-52 [BRAIN-BASED DISABILITIES] (93036)
- 54 exp children/ (115263)
- 55 adolescents/ (52135)
- 56 (adolescen* or child* or pre-adolescen* or preteen* or pre-teen* or school-age* or teen or teens or teenage* or teen-age* or youth*).tw,id. (421651)
- 57 pediatrics/ (1154)
- 58 p?ediatric*.tw,id. (3170)
- 59 "K-12".tw,id. (17742)
- 60 Schools/ or Elementary Schools/ or State Schools/ or Secondary Schools/ or Junior High Schools/ or Public Schools/ or Middle Schools/ or High Schools/ (110439)
- 61 ((primary or elementary or middle or public or secondary or high) adj school*).tw,id. (379903)
- 62 highschool*.tw,id. (25)
- 63 ((grade or grades) adj ("1" or "2" or "3" or "4" or "5" or "6" or "7" or "8" or "9" or "10" or "11" or "12" or "13")).tw,id. (90562)
- 64 Kindergarten/ (12444)
- 65 kindergarten?.tw,id. (24436)
- 66 special education/ (23033)

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CHILD-BRIGHT
Network



SPOR
Strategy for Patient-Oriented Research
EVIDENCE
ALLIANCE

Strategy for Patient-Oriented Research
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- 67 (special need? or special ed or special education).tw,id. (51495)
68 student*.tw,id. (871219)
69 or/54-68 [INFANTS/CHILDREN/ADOLESCENTS, INCL SCHOOLING] (1207873)
70 53 and 69 [BRAIN-BASED DISABILITIES - INFANTS/CHILDREN/ADOLESCENTS/SCHOOLING]
(73373)
71 distance education/ (19261)
72 virtual schools/ or virtual classrooms/ (3019)
73 ((blended or cyber* or digital* or distan* or online or internet or on-demand* or remote* or video*
or virtual* or web or web-based) adj3 (class* or course? or curricul* or educat* or instruct* or learn* or
school* or highschool* or study* or syllabi or syllabus\$2 or teach*)).tw,id. (67053)
74 electronic learning/ (13727)
75 (eclass* or e-class* or ecourse? or e-course? or ecurricul* or e-curricul* or eenvironment* or e-
environment* or einstruct* or e-instruct* or elearn* or e-learn* or eschool* or e-school* or estudy* or e-
study* or esyllab* or e-syllab* or eteach* or e-teach*).tw,id. (5592)
76 (cyberclass* or cyber-class* or cybercourse* or cyber-course* or cyberinstruct* or cyber-instruct*
or cyberlearn* or cyber-learn* or cyberschool* or cyber-school* or cyberstud* or cyber-stud* or
cyberteach* or cyber-teach*).tw,id. (137)
77 (teleclass* or tele-class* or telecourse* or tele-course* or teleinstruct* or tele-instruct* or telelearn*
or tele-learn* or teleschool* or tele-school* or telestudy* or tele-study* or teleteach* or tele-teach*).tw,id.
(1126)
78 exp computer assisted instruction/ (31618)
79 (computer* adj3 (educat* or instruct* or learn*)).tw,id. (61253)
80 Learning Management System?.tw,id. (1499)
81 (LMS or LMSs).tw,id. (1091)
82 ((game or game-based or games or games-based or gaming) adj3 (class* or course? or educat*
or instruct* or learn* or school* or highschool* or serious or study* or syllabi or syllabus\$2 or
teach*)).tw,id. (11563)
83 google class*.tw,id. (41)
84 gamification*.tw,id. (418)
85 video games/ (1958)
86 (videogam* or video-gam* or computergam* or computer gam*).tw,id. (4532)
87 ((virtual or augmented) adj realit*).tw,id. (1801)
88 virtual environment*.tw,id. (1140)
89 or/71-88 [ONLINE LEARNING] (132282)
90 70 and 89 [BRAIN-BASED DISABILITIES - INFANTS/CHILDREN/ADOLESCENTS] (3144)
91 meta analysis/ (5341)
92 (meta-analy* or metanaly* or metaanaly* or met analy* or integrative research or integrative
review* or integrative overview* or research integration or research overview* or collaborative
review*).tw,id. (7126)
93 (systematic review* or systematic overview* or evidence-based review* or evidence-based
overview* or (evidence adj3 (review* or overview*)) or meta-review* or meta-overview* or meta-
synthes* or rapid review* or "review of reviews" or scoping review* or umbrella review? or technology
assessment* or HTA or HTAs).tw,id. (5567)
94 (network adj (MA or MAs)).tw,id. (3)
95 (NMA or NMAs or MTC or MTCs or MAIC or MAICs).tw,id. (85)
96 indirect* compar*.tw,id. (19)
97 (indirect treatment* adj1 compar*).tw,id. (1)
98 (mixed treatment* adj1 compar*).tw,id. (2)

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- 99 (multiple treatment* adj1 compar*).tw,id. (7)
- 100 (multi-treatment* adj1 compar*).tw,id. (0)
- 101 simultaneous* compar*.tw,id. (21)
- 102 mixed comparison?.tw,id. (7)
- 103 or/91-102 [SR FILTER] (12050)
- 104 90 and 103 [SYSTEMATIC REVIEWS ETC] (59)
- 105 literature reviews/ (25337)
- 106 narrative review?.tw,id. (257)
- 107 review.ti. (21630)
- 108 or/105-107 [NARRATIVE REVIEW FILTER] (41734)
- 109 90 and 108 [NARRATIVE REVIEWS] (88)
- 110 guidelines/ (24761)
- 111 standards/ (16405)
- 112 (consensus or guideline* or guidance? or standards or recommendation*).ti,id. (27439)
- 113 (expert consensus or consensus statement* or consensus conference* or practice parameter* or position statement* or policy statement*).tw,id. (3050)
- 114 ((curricul* or educat* or instruct* or learn* or school* or high-school* or highschool* or study* or syllabi or syllabus\$2 or teach*) adj2 (standard or standards or path or paths or pathway or pathways or map or maps or plan or plans or protocol?)).tw,id. (34078)
- 115 best practice?.tw,id. (13046)
- 116 or/110-115 [GUIDELINE FILTER] (101612)
- 117 90 and 116 [GUIDELINES] (177)
- 118 Policy/ (2243)
- 119 educational policy/ (51306)
- 120 policy formation/ (17557)
- 121 (policy or policies or policymak* or policy-mak*).tw,id. (180621)
- 122 or/118-121 [POLICY FILTER] (180621)
- 123 90 and 122 [POLICIES] (113)
- 124 104 or 109 or 117 or 123 [ALL REVIEW TYPES] (368)
- 125 limit 124 to english (359)
- 126 limit 124 to french (1)
- 127 125 or 126 (359)
- 128 limit 127 to yr="2010-current" (208)