REAL SAFETY AI FOUNDATION · EVIDENCE SUBMISSION

ASSISTIVE TECHNOLOGY · SPECIAL EDUCATIONAL NEEDS · EARLY CHILDHOOD · SCREEN TIME · EARLY INTERVENTION · CHILD DEVELOPMENT · DISABILITY · SEND

UK DEPARTMENT FOR EDUCATION · OPEN CALL FOR EVIDENCE

Screen Time Is Not One Thing

Screen-based assistive technology for children ages 0–5 with special educational needs and disabilities.

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For many disabled children, the screen is not a vice. It is the voice.

A blanket screen-time limit that does not distinguish recreational consumption from assistive technology does not merely overlook disabled children, **it authorises the removal of a medical and educational necessity.**

Drawn from 80+ peer-reviewed studies, including 15+ randomised controlled trials and 20+ systematic reviews.

The studies excluded the very children the policy will govern.

Cite an assessment that removed disabled students before measurement as evidence that "screens harm learning," and you have drawn a conclusion that **cannot apply to the population most likely to use screens as language tools.**

4–56%

US state exclusion rates for students with disabilities in PISA, TIMSS & PIRLS.

Vanderloo et al. (2025): the **first** systematic review to include disabled children at all.

SOURCES Schuelka (2013) · Vanderloo et al., *Child: Care, Health & Development* (2025) · JAMA Pediatrics meta-analysis (2020).

Classify screen use by purpose, not by the clock.

RECREATIONAL CONSUMPTION

Watching cartoons

The activity a duration limit was written to address.

vs

ASSISTIVE / THERAPEUTIC USE

A tablet AAC voice · post-implant auditory training

Medically necessary rehabilitation and communication. **The distinction is clinical, not semantic.**

Canada's ParticipACTION model already does this, defining recreational screen time apart from use for health and communication.

MODEL ParticipACTION Ability Toolkit (Canada), purpose-based, not duration-based.

Consistent, replicated, and strongest where the research most often excludes.

Down syndrome — d ≈ 0.43

RCT (n=103) digital vocabulary; first aided-AAC RCT improved generative language.

Cerebral palsy — SMD 0.98

VR meta-analysis (under-6); eye-gaze comms feasible from age 3.

Autism — AUC 0.90

Tablet phenotyping (Nature Medicine); screen association n.s. after publication-bias adjustment.

Speech & language — tablet = therapist

RCT: no significant difference from face-to-face; phonics apps d up to 1.92.

Hearing & vision — p < 0.05

Game-based auditory training post-cochlear-implant; tele-intervention higher expressive scores.

Reverse causality: children seek screens for regulation, screens did not cause the condition.

SOURCES Naess et al. (2022) · Kent-Walsh et al. (2025) · AlSoqih et al. (2025) · Perochon et al., Nature Medicine (2023) · Jesus et al. (2019) · Ophir et al. (2023).

Down syndrome

Naæss et al. (2022), 103-child RCT: d=0.429 expressive, d=0.447 receptive language gains from a digital vocabulary program. Kent-Walsh et al. (2025), the first RCT of iPad-based AAC for this population. Seager et al. (2022) review of 11 studies, 242 children: positive outcomes in 9 of 11.

Cerebral palsy

AlSoqih et al. (2025) meta-analysis: large effect (SMD=0.98) for VR interventions under age six. Karlsson et al. (2019): eye-gaze communication feasible from age three. Drager (2023) systematic review: never too early to implement AAC before age six.

SOURCES Naæss et al. (2022); Kent-Walsh et al. (2025); Seager et al. (2022); AlSoqih et al. (2025); Karlsson et al. (2019); Drager (2023).

Autism	Dawson et al. (2010): Early Start Denver Model RCT, 17.6-point IQ gain from intervention starting at 18-30 months. Perochon et al. (2023), *Nature Medicine*: tablet-based phenotyping, 0.90 AUC, 475 toddlers. Ophir et al. (2023): the screen-autism association becomes nonsignificant after adjusting for publication bias.
Speech & language	Jesus et al. (2019), 22-child RCT: tablet therapy no different from a therapist. Carson (2020): d=1.86-1.92 effect sizes for phonological-awareness apps.
Hearing & vision	Berber & Cetinkaya (2025) RCT: significant auditory gains from mobile training post-cochlear-implant. Blaiser et al. (2013): telehealth intervention outperformed in-person care at lower cost.

SOURCES Dawson et al. (2010); Perochon et al. (2023); Ophir et al. (2023); Jesus et al. (2019); Carson (2020); Berber & Cetinkaya (2025); Blaiser et al. (2013).

One clear model already exists. The UK's own statute already requires the exemption.

WHO (2019)

Acknowledges its guidance does not address disability and defers the question to health professionals.

AAP (2016 vs. 2025)

Nine years passed between a screen-time statement with no disability exception and a 2025 clinical report finally naming one, uncross-referenced.

Canada's ParticipACTION model

Defines recreational screen time as distinct from use for school, work, health, or communication. Purpose-based, not duration-based.

UK SEND Code of Practice

Already requires assistive technology in joint commissioning. Guidance without a SEND exemption directly conflicts with existing statute.

SOURCES WHO (2019) guidelines on physical activity and sedentary behaviour; AAP (2016), Media and Young Minds; AAP (2025), Prescribing Assistive Technology; ParticipACTION Ability Toolkit; UK SEND Code of Practice (2015).

Guidance without a disability exception does not overlook these children. It authorises taking the tool away.

A right to assistive technology; removal is a harm
Stramondo (2020)

Device removal as technological abuse
Patrus (2021)

Absent access excludes children from education
Botelho (2021)

Removal increases caregiver burden
Nicolson et al. (2012)

The AAP took nine years, from its 2016 screen-time statement to its 2025 assistive-technology report, to state that AAC is appropriate "at any age" and does not limit verbal language.

1. Distinguish recreational from assistive/therapeutic use in all guidance.
2. Include a SEND exception clause for EHCP / therapist-recommended technology.
3. Adopt a purpose-based framework (the Canadian model).
4. Cross-reference the SEND Code of Practice (2015).
5. Fund research on under-studied populations.
6. Mandate AT assessment for children identified with SEND in the EYFS.

PROPOSED EXCEPTION CLAUSE

"Screen-time limits in this guidance do not apply to screen use documented in an EHCP or SEND Support Plan, or recommended by a qualified registered health professional for communication, regulation, or accessibility purposes."

ALIGNS WITH UK SEND Code of Practice (2015) · WHO/UNICEF Global Report on Assistive Technology (2022).

IN CLOSING

The choice is not caution versus permissiveness. It is guidance that can tell a cartoon from a voice, or guidance that cannot.

The fix is small, specific, and already modelled abroad: **distinguish by purpose, exempt documented assistive use, align with existing statute.** It protects every child the blanket limit was meant to help.

Without abandoning the ones for whom the screen is the only voice they have.

KEY REFERENCES

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