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Screen Time Reduction Program Benchmark Study

A Paper Submitted in Partial Fulfillment of the Requirements

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by

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Executive Summary

Children and adolescents are spending an alarming amount of time engaging in screen time (ST) activities on mobile devices, computers, televisions (TV), and video games; activities include, but are not limited to, watching shows or movies, playing video games, searching the internet, texting, or using social media. This excessive ST is contributing to a vast array of serious childhood complications and health concerns, of which are rarely discussed, acknowledged, or remedied.

The proposed implementation of a structured 3-day elementary school based screen time reduction program (STRP) that would target not only the children and adolescents, but their parents and/or caregivers as well, is necessary to protect the physical and mental well-being of these youth. Such a program would ideally provide the education and support needed to motivate the target audiences to modify and/or restrict their, or their children's, allotted ST at home. Multiple prior studies have shown that interventions targeting ST are effective and worthwhile.

To explore the relationship between the proposed intervention and time spent watching TV, on the computer/phone, or playing video games, this paper examines the question: In children and adolescents, to include parents and/or caregivers (P), how does education over the effects of excessive ST and implementation of a STRP (I) compared to no education or intervention (C) affect daily ST (O) within 6 months of implementation (T)?

Benchmark Study

1. Rationale for the Project

A vast amount of research exists that shows ST is contributing to sedentary behavior, obesity, lack of socialization, impaired language, poor self-esteem, poor academic performance, inattention, sleep problems, increased anxiety, violent behavior, and depression (Saunders &

Vallance, 2017; Yilmaz, Caylan, & Karacan, 2014). The World Health Organization (WHO, 2019) recently released daily ST guidelines that do not recommend ST for children under 2 years old and recommend less than 1 hour of ST for those ages 3 and 4. Experts, to include researchers and physicians, recommend older children and adolescents not exceed 2 hours of ST daily, yet the average 8-year-old spends 8 hours a day on media devices while teenagers often get more than 11 hours a day (American Heart Association [AHA], 2018). Obesity affects 13.7 million children and adolescents in the United States and increases their risk for type two diabetes (DM2), heart disease, and certain types of cancer; these children are more likely to become obese adults (Centers for Disease Control and Prevention [CDC], 2019). Likewise, approximately 6.1 million children, ages 2-17, have been diagnosed with attention deficit hyperactivity disorder (ADHD), 4.5 million with behavioral problems, 4.4 million with anxiety, and 1.9 million with depression; these conditions commonly occur together and have been increasing in prevalence over time (Buchanan et al., 2016; Centers for Disease Control and Prevention [CDC], 2020).

When faced with these statistics, it is easy to see how these childhood behaviors will inevitably contribute to illnesses and diseases in adulthood, which is why an educational early intervention and prevention program is so valuable.

1.1 Project goal.

The goal of the STRP is to effectively reduce elementary age student's ST to 2 hours or less a day. The program will aim to ensure that all stakeholder's values, preferences, and needs are considered during the planning, integration, and evaluation of the curriculum; this concept of patient- centeredness helps a program coordinator to understand what the target audience wants

to gain from the program and how to help them achieve those gains (Melnik & Fineout-Overholt, 2015).

2. Literature Synthesis to Support Project

For the purposes of identifying negative physical and psychological outcomes of excessive ST and characteristics of individuals who surpass the suggested ST limits, a systematic review (SR) of reviews and two population-based cohort studies were examined. Results showed that higher levels of ST, particularly TV, are associated with poor diet and weight gain (Stiglic & Viner, 2019). Overall ST greater than 2 hours a day is linked to symptoms of depression and users who exceed 7 hours per day are more than twice as likely to be diagnosed, in a 12-month period, with depression or anxiety and/or take medication for psychological or behavioral issues (Stiglic & Viner, 2019; Twenge & Campbell, 2018). An association even exists between children and adolescents whose ST is 4 hours per day and lower psychological well-being (Twenge & Campbell, 2018). Furthermore, girls who conveyed poor quality of life and psychological well-being on the KIDSCREEN 27 questionnaire at baseline were more likely to live a sedentary lifestyle and exceed recommended hours of daily ST, while boys who conveyed the same were insufficiently activity (Straatmann, Oliveira, Rostila, & Lopes, 2016). Only weak associations existed between the effects of increased ST on hyperactivity, inattention, poor self-esteem, cardiovascular risk factors, cardiorespiratory fitness, educational attainment, cognitive development, and sleep patterns; insufficient research exists to link physical pain and asthma with ST usage (Stiglic & Viner, 2019).

In order to evaluate the effectiveness of existing STRPs, and extensive search of multiple online databases was performed using strict inclusion and exclusion criteria; the main databases used were MEDLINE, PubMed, and EBSCO. The search yielded over 30 relevant results, and

of those, 12 journal articles were chosen: five randomised controlled trials (RCT), four systemic reviews (SR) with meta-analysis (MA), two SR, and one SR of SRs. Outcomes from these studies suggested that future ST intervention programs should target the home environment and family factors, to include parental and/or caregiver TV and computer time, rules regarding TV, computer, or console use, and close monitoring of media time; “significant associations were found between changes in almost all TV-specific family-related factors and half of the computer/console specific family-related factors and changes in children’s TV and computer/console use” (Van Lippevelde et al., 2014, p. 10). Recommendations provided in a school environment should be reinforced at home through parent and/or caregiver’s behavior since children are highly influenced by their positive examples (Friedrich, Polet, Schuch, & Wagner, 2013). Andrade et al. (2015) suggest through their findings that interventions targeted at reducing ST should focus specifically on just that and not include components related to diet and physical activity. An unhealthy diet and unwanted weight gain could be promoted by excessive sedentary ST and even TV food advertisements, so it stands to reason that a STRP focused solely on decreasing ST would inadvertently increase physical activity, limit undesirable marketing, and positively impact weight (Wu, Sun, He, & Jiang, 2016). On the other hand, a SR by Buchanan et al. (2016), which included 49 studies, showed that interventions targeting ST, and those that targeted ST along with physical activity (PA) and diet, showed reduced ST, increased PA, and improved diet. For young children specifically, interventions reduced time spent eating meals in front of a screen and had a statistically significant impact on aggression, as violence is often portrayed on TV program, movies, and video games and children are very vulnerable to observational learned behaviors (Yilmaz et al., 2014).

Identifying obstacles and effective aids to implementation of a STRP were discussed in a qualitative metasynthesis of findings. Minges et al. (2015) acknowledged three main themes:

- ST is a youth norm, addictive, part of daily life, entertaining, and provides for social interaction and escapism.
- Parents and/ or caregivers do not enforce ST limits and promote and model screen time behavior, which sends mixed messages to children; ST is sometimes used as childcare.
- “Engagement in screen time is often dependent on the school, community, neighborhood, and home environmental contexts” (p. 393).

Setting mutually agreed upon time limits and rules between children and adolescents and their parents and/or caregivers and parental/caregiver monitoring of ST were identified as effective strategies to decreased ST use (Minges et al., 2015).

3. Project Stakeholders

A stakeholder is an individual, group, or organization who is impacted by the outcome of a project; a stakeholder also has an interest in the success of the project (within or outside the organization) and can have a positive or negative influence on the project (Landau, 2017).

Stakeholders in a STRP are identified as the a) children and adolescents, b) parents and/or caregivers, c) teachers and school staff, d) schools, and e) healthcare organizations. The children and adolescents will be positively influenced by the STRP and the additional health benefits it will offer them in the immediate and long term. Parents and/or caregivers have the potential to have the greatest influence on the success of the program by helping to manage their child’s ST at home and holding them accountable for their behaviors. Assisting children to develop an understanding of the benefits and risks of digital technology, alongside appropriate ways of using

digital technology, is an adult responsibility (Straker et al., 2018). Teachers and school staff will be an integral part of ensuring the effectiveness and sustainability of the STRP since they will be the ones to launch, teach, and execute the program; they will undoubtedly appreciate the children's expected increase in attention span, school interest, and performance. Thinking long term, healthcare organizations will ultimately be impacted by STRPs, if they are broadly utilized in an effective manner; the healthcare burden that obesity and mental health places on the society is immense.

By sharing the projects vision for change with these stakeholders and educating them on the potential health benefits it could provide long term for their children and students, it will ideally promote their engagement and involvement in the STRP. Staff and stakeholders must be invested in an issue in order to develop a supportive and successful environment for its implementation (Hockenberry et al., 2015). It will be important for these stakeholders to support one another and identify successes, challenges, and setbacks throughout the program. It is also essential that the stakeholders are all aware of what the program's goal is and that each of them is working towards the same goal. When stakeholders are not working towards the same objective their efforts can become easily divided and less effective in reaching the end goal of program sustainability (Hanson, Salmoni, & Volpe, 2009).

4. Planned Implementation

A STRP will be developed for later implementation at Jack Elementary School, a local elementary school in Tyler, TX. Two weeks prior to the preparatory phase, a school wide email will be sent out to all elementary school parents and/or caregivers asking for after school volunteers; these volunteers will assist in making copies of the newsletter, educational curriculum, and Screen Time Challenge toolkits.

4.1 Preparatory phase.

Approximately 1 week prior to the start implementation, the preparatory phase will start and consist of the following:

- an email correspondence from the student's teacher will go out to the parents and/ or caregivers informing them of the program and its intentions; this same information will be sent home in a newsletter. A short pre-survey will be included in this email as well.
- an after-school teacher seminar will be held to educate the elementary teachers over the profound benefits of ST reduction at home for their students; teachers will be shown a PowerPoint presentation that will visually walk them through the Screen Time Challenge program and will be given curriculum based handouts to illustrate what they will be asked to teach their homeroom classes over the course of a 3-day implementation period.
- Student packet/ toolkit preparation will begin (packets will include educational handouts, Screen Time Contract, and tracking charts); volunteers will put these packets together as mentioned previously.
- an educational video will be recorded to include the reported physical and psychological effects of excessive ST and to reinforce the program intentions.

4.2 Implementation phase

The implementation of the STRP will be executed over a three-day period, preferably prior to the weekend, and consist of three lesson plans each lasting approximately one hour.

- Day one will consist of an age-appropriate interactive lesson to identify the students understanding of ST and its effects on their physical and mental health; the previously recorded ST education video will be emailed to all parents.
- Day two will consist of an age-appropriate interactive lesson in identifying activities to replace ST.
- On day three student will be introduced to the Screen Time Challenge program and will be sent home with their individual toolkits; they will be asked to sign individual ST contracts with their parents and return them the following week.

Further implementation will continue in each individual child's home environment with evaluations taking place at the midway and final checkpoints.

4.3 Anticipated challenges to implementation

There are many challenges that exist to implementing a STRP, especially in a district school setting, being that there are many different stakeholders involved and the implementation process in each child's home setting can vary greatly. Some identified challenges to implementation include:

- There might be an extensive amount of time and paperwork involved in getting approval for a STRP to be introduced in an elementary school, especially in a public-school setting.
- Teachers may not welcome the additional curriculum requirements. According to a very recent study, teachers are more likely than other professionals to suffer from job related stressors, due in part to increased classroom demands and accountability (Busby, 2019). A STRP will add a minimal amount of required classroom educational

activities to the teacher’s workload, but hopefully the addition of volunteers in the preparatory phase, and the fact that the majority of the program will be implemented in the child’s home environment, will alleviate some of this pressure.

- Parents and/ or caregivers may be reluctant to implement a STRP in their household for a variety of reasons. They may view the program as unnecessary, pointless, or think of it as an added after school chore for both them and their child; many may think that they need to use ST as an escape from the stress in their own lives. Jenny Radesky, a top researchers in the field of parents, children, and new media, has found a correlation between behavior problems and ST, in regards to parents and/or caregivers and their children, that she calls a “bi-directional flow”; “the more kids act out, the more stressed parents get...and the more stressed parents get, the more they turn to screens as a distraction — for themselves and for their kids” (Kamenetz, 2019, “Stop using the phone”, para. 5).

So, while a STRP will require some effort from school administration, teachers, and parents, it is necessary to teach all involved of the proven benefits of replacing ST with healthier alternatives so the barriers can be overcome. The program is intended to make implementation easy in any household and will support parents and/or caregivers in empowering the children to keep up with their daily ST use.

5. Timetable

Timeframe	Action	Collection
1-week prior	<ul style="list-style-type: none"> • Parent e-mail/newsletter sent with pre-survey attached • After-school teacher seminar; curriculum handouts distributed • Student packet/ toolkit preparation • Record educational video 	

Day 1	<ul style="list-style-type: none"> • Handout student toolkit packets • Lesson Plan #1: Understanding Screen Time and its Effects • Pre-recorded ST education video emailed to parents 	
Day 2	<ul style="list-style-type: none"> • Lesson Plan #2: Replacing Screen Time 	
Day 3	<ul style="list-style-type: none"> • Lesson Plan #3: Introduction to The Screen Time Challenge • Students will take their toolkit packets home 	ST contracts the following week
3-Month	<ul style="list-style-type: none"> • Follow-up parent e-mail with midway survey attached 	3-month tracking (midway)
6-Month/ Final Day	<ul style="list-style-type: none"> • Thank you e-mail to parents/caregivers with final survey attached • Drawing/ prizes awarded 	6-month tracking (final)

6. Data Collection Methods and Planned Evaluation

To evaluate the STRP, surveys will be conducted at the 3-month (mid-way) mark and at 6-months (completion); participants will have a week to complete and submit each survey. Surveys allows for quantitative and qualitative data to be collected and are primarily used to obtain information related to behaviors and preferences from individuals and groups (Ponto, 2015). Even though it seems counterintuitive, the surveys will be conducted online. Although online surveys have shown to have lower response rates, they are much more cost effective and have lower numbers of missing values than paper questionnaires (Ebert, Huibers, B. Christensen, & Christensen, 2018).

For the first evaluation, at the 3-month mark, an online survey link will be emailed to all parents and/or caregivers to assess adherence to the program. Students will also be asked to turn in their ST and activity logs for the first half of the program. The second evaluation will take place at the 6-month mark and measures to adherence, via survey and student logs, will be the same as the first evaluation. Parents and/or caregivers and their children will be encouraged to

share feedback on the program to include a) what worked well, b) what didn't work, and c) how they plan on continuing ST restriction and increasing physical activity in their homes.

7. Costs and Benefits

Materials, such as paper, ink, and staples, will be needed to construct the teacher and student packets; free computer software will be utilized to make the educational video and PowerPoint presentation, and Survey Monkey will be used to create the surveys. Snacks and beverages will be provided free of charge to elementary teachers at the initial after-school seminar. Money will also be spent on some items for the final prizes; donated items will be requested so this allowance may significantly vary.

Cost	Supplies
\$200	Packet construction materials
\$30	6-month Survey Monkey membership (discounted for educators)
\$150	Snacks and beverages
\$600	Final drawing prizes (ex: gift certificates to local businesses, homework passes, lunch with the teacher, school gear)

The cost of the STRP should be relatively inexpensive, considering its 6-month timeframe, coming in at just under \$1,000. This price point is a bargain considering that childhood obesity alone costs \$14.1 billion a year, with the health expenses averaging \$6,000 per obese child (Nath, 2019). Likewise, childhood mental health disorders cost \$10.9 billion a year in the United States (Suryavanshi & Yang, 2016).

Anticipated Outcomes

The anticipated success of the benchmark STRP will greatly benefit children, their parents and/or caregivers, and school faculty. The anticipated outcomes, derived from the Campaign for a Commercial-Free Childhood (CCFC) (2017), are as follows:

- Door will be opened to literacy and learning.
 - Children and adolescents who watch more than 3 hours of television a day are at a significantly higher risk for poor homework completion, negative attitudes regarding school, and long-term academic failure with poor grades.
- Families will experience less stress due to less media marketing.
 - Screens allow total strangers to convince children that material items are essential to their happiness; these strangers are knowledgeable about children's developmental weaknesses.
- Children will spend more time in active and creative play, which will increase learning and improve physical health.
 - When children play with media-based toys they engage in less creative play because they are not encouraged to make up their own world. Children need at least 60 minutes of energetic and vigorous play each day, such as playing outside.
- Children will hold less materialistic values, have more life satisfaction, and show more concern for the environment.
 - Children who have increased materialistic values a) have a lower self-esteem, b) have a higher disregard for their parents, c) are more depressed and anxious, d) have more mental illnesses, and e) participate in fewer positive environmental practices.

Conclusions and Recommendations

Understanding of the effects that excessive ST can have on the physical and mental health of today's youth is vital in motivating children, adolescents, and parents and/or caregivers to make changes in their daily habits. The amount of ST that young people today spend on media devices justifies the implementation of a STRP. Healthcare providers, teachers, community leaders, and parents and/or caregivers all have an obligation to our youth to encourage and role model behavior that will have a lasting impact on their current and future health.

It is important to remember, when planning a STRP, that most youth constantly seek entertainment as an escape from boredom; it is imperative that a program provide multiple alternatives to ST and heavily reinforce these alternatives and their benefits over watching television (TV), playing virtual games, or spending hours a day on a tablet or phone. When children and adolescents were asked what they needed in order to learn better, Wiggins (2017) reports that the overall theme of their responses incorporated (a) hands on/interactive learning, (b) working in groups, (c) positive reinforcement, (d) the use of visual aids, and (e) ensuring the learning activities were fun and entertaining.

It is equally important to consider what educators and parents and/or caregivers need from a STRP. Much like the children and adolescents need alternatives to ST, they need ideas, tools, and resources readily available to them in order to assist these children. Suggestions need to be convenient and simple to incorporate into their already busy and hectic lives in order to be successful and attainable long-term. School educators need a program that is straightforward and can be implemented with ease so as not to disrupt the core curriculum they are already tasked with teaching; a STRP must not add additional stress to the teachers or it will not be welcomed and executed effectively.

A school based STRP might also incorporate classroom protocols to limit the amount of time viewing or using electronic devices while at school. It appears that the state of Texas has policies, which may help to develop protocols, in place to regulate ST and content in child care centers, child care homes, and in school age before and after school programs, but none within the school districts themselves (“Child Care”, 2017); classroom curriculum could limit assignments that require the use of electronic devices to complete.

Home-based rules for ST reduction should include, as previously mentioned, restricting ST to no more than 2 hours per day. Parents and/or caregivers could (a) remove televisions (TV) from their children’s rooms and set time limits on their electronic devices, (b) establish media free zones, such as in bed and at meal times, (c) practice parental role modeling by limiting their own ST when around their loved ones, (d) monitor the content of technology their children are exposed to by setting viewing restrictions, and (e) offering alternatives to ST such as exercise, games, and reading (“Parents”, 2019). The options for ST reduction are plentiful and easily tailored to individual environments.

References

- Advent Health. (2016, October 23). Screen time: When to say no. Weekly Tracking [Image]. Retrieved from: https://www.adventhealth.com/sites/default/files/styles/fc_1800x1200/public/media/16-bic-01092_screen_time_chart_infographic_f.jpg
- American Heart Association. (2018). *Limit screen time and get your kids (and the whole family) moving*. Retrieved from <https://www.heart.org/en/healthy-living/fitness/getting-active/limit-screen-time-and-get-your-kids-and-the-whole-family-moving>
- Andrade, S., Verloigne, M., Cardon, G., Kolsteren, P., Ochoa-Aviles, A., Verstraeten, R., . . . Lachat, C. (2015). School-based intervention on healthy behaviour among Ecuadorian adolescents: Effect of a cluster-randomized controlled trial on screen-time. *BioMed Central Public Health*, 15(942), 1-11. doi: 10.1186/s12889-015-2274-4
- Buchanan, L. R., Rooks-Peck, C. R., Finnie, R. K. C., Wethington, H. R., Jacob, V., Fulton, J. E., . . . Community Preventative Task Force. (2016). Reducing recreational sedentary screen time: A community guide systematic review. *American Journal of Preventative Medicine*, 50(3), 402-415. doi: 10.1016/j.amepre.2015.09.030
- Busby, E. (2019, February 25). Teachers suffer more stress than other workers, study finds. *Independent*. Retrieved from <https://www.independent.co.uk/news/education/education-news/teachers-stress-professionals-mental-health-workload-national-foundation-educational-research-a8795691.html?fbclid=IwAR3qWVKbuA92FrP5sK2sK28yU5hPTTH9kRnUJ0qX4kPJPp35MQAWRVsMSNY>

- Campaign for a Commercial-Free Childhood (2017). Screen-free week organizer's kit. Retrieved from <https://getthehealthyclarkcounty.org/wp-content/uploads/2017/08/tv-free-screen-free-toolkit.pdf>
- Centers for Disease Control and Prevention (CDC). (2019). *Childhood obesity facts*. Retrieved from <https://www.cdc.gov/obesity/data/childhood.html>
- Centers for Disease Control and Prevention (CDC). (2020). *Children's mental health*. Retrieved from <https://www.cdc.gov/childrensmentalhealth/data.html>
- Child care screen time regulations – Texas. (2017, May). Public Health Law Center of Mitchell Hamline School of Law. Retrieved from <https://www.publichealthlawcenter.org/resources/child-care-screen-time-regulations-texas>
- Ebert, J. F., Huibers, L., Christensen, B., & Christensen, M. B. (2018). Paper- or web-based questionnaire invitations as a method for data collection: Cross-sectional comparative study of differences in response rate, completeness of data, and financial cost. *Journal of Medical Internet Research*, 20(1), e24. <https://doi.org/10.2196/jmir.8353>
- Friedrich, R. R., Polet, J. P., Schuch, I., & Wagner, M. B. (2013). Effect of intervention programs in schools to reduce screen time: A meta-analysis. *Jornal de Pediatria*, 90, 232-241. doi: 10.1016/j.jped.2014.01.003
- Hanson, H., Salmoni, A., & Volpe, R. (2009). Defining program sustainability: Differing views of stakeholders. *Canadian journal of public health*, 100(4), 304–309. doi.org/10.1007/BF03403952
- Hockenberry, M. J., Brown, T. L., & Rodgers, C. C. (2015). Implementing evidence in clinical settings. In Melnyk, B. M., & Fineout-Overholt, E. (Eds.), *Evidence based practice in*


- nursing & healthcare: A guide to best practice* (3rd ed., pp. 202-223). Philadelphia, PA: Wolters Kluwer.
- InternetMatter (2020). *Balancing screen time*. Retrieved from <https://www.internetmatters.org/resources/esafety-leaflets-resources/>
- Kamenetz, A. (2019, July 21). Parents, sometimes you're the problem when it comes to tech use [Audio podcast]. Retrieved from <https://www.npr.org/2019/07/21/742168987/parents-sometimes-youre-the-problem-when-it-comes-to-tech-use>
- Landau, P. (2017, June 13). *What is a stakeholder* [Web log post]? Retrieved from <https://www.projectmanager.com/blog/what-is-a-stakeholder>
- Melnyk, B. M., & Fineout-Overholt, E. (2015). Integration of patient preferences and values. In *Evidence-based practice in nursing & healthcare: A guide to best practice* (3rd ed., pp. 171-181). Philadelphia, PA: Wolters-Kluwer Health.
- Minges, K. E., Owen, N., Salmon, J., Chao, A., Dunstan, D. W., & Whittemore, R. (2015). Reducing youth screen time: Qualitative metasynthesis of findings on barriers and facilitators. *Health Psychology, 34*(4), 381–397. doi: 10.1037/hea0000172
- Nath, T. (2019, June 25). The economic cost of an obese society. *Investopedia*. Retrieved from <https://www.investopedia.com/articles/personal-finance/041715/economic-cost-obese-society.asp>
- Net Nanny. (2016, July 7). *Family contract for electronic devices*. Retrieved from <https://www.netnanny.com/blog/family-contract-for-electronic-devices/>
- Parents and children's screen time guidelines. (2019). *Powerstown Educate Together National School*. Retrieved from <https://www.powerstownet.com/screen-time-guidelines/>

- Ponto J. (2015). Understanding and evaluating survey research. *Journal of the advanced practitioner in oncology*, 6(2), 168-171. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4601897/>
- Saunders, T. J., & Vallance, J. K. (2017). Screen time and health indicators among children and youth: Current evidence, limitations, and future directions. *Applied Health Economics and Health Policy*, 15, 323-331. doi: 10.1007/s40258-016-0289-3
- Stiglic, N., & Viner, R. M. (2019). Effects of screentime on the health and well-being of children and adolescents: A systematic review of reviews. *BMJ Open*, 9(1), 1-14. doi: 10.1136/bmjopen-2018-023191
- Straatmann, V. S., Oliveira, A. J., Rostila, M., & Lopes, C. S. (2016). Changes in physical activity and screen time related to psychological well-being in early adolescence: Findings from longitudinal study ELANA. *BioMed Central Public Health*, 16, 977-987. doi: 10.1186/s12889-016-3606-8
- Straker, L., Zabatiero, J., Dandy, S., Thorpe, K., & Edward, S. (2018). Conflicting guidelines on young children's screen time and use of digital technology create policy and practice dilemmas. *The Journal of Pediatrics*, 202, 300-303. doi: 10.1016/j.jpeds.2018.07.019
- Suryavanshi, M. S., & Yang (2016). Clinical and economic burden of mental disorders among children with chronic physical conditions, United States, 2008–2013. *Preventing Chronic Disease*, 13, 150535. doi: 10.5888/pcd13.150535
- Twenge, J. M., & Campbell, K. W. (2018). Associations between screentime and lower psychological well-being among children and adolescents: Evidence from a population-based study. *Preventative Medicine Reports*, 12, 271-283. doi: 10.1016/j.pmedr.2018.10.003

- Van Lippevelde, W., Bere, E., Verloigne, M., van Stralen, M. M., De Bourdeaudhuij, I., Lien, N., . . . Maes, L. (2014). The role of family-related factors in the effects of the UP4FUN school-based family-focused intervention targeting screen time in 10- to 12-year-old children: The ENERGY project. *BioMed Central Public Health*, 14, 857-866. doi: 10.1186%2F1471-2458-14-857
- Whiteley, A. (n.d.). *25 simple and fun non-screen activities that children can do at home*. Retrieved from <https://medium.com/pobble/simple-and-fun-non-screen-activities-that-children-can-do-at-home-115543cb3b9c>
- Wiggins, G. (2016, January 11). Students learn best when you do this. Retrieved from <https://teachthought.com/pedagogy/students-learn-best/>
- World Health Organization. (2019). To grow up healthy, children need to sit less and play more. Retrieved from <https://www.who.int/news-room/detail/24-04-2019-to-grow-up-healthy-children-need-to-sit-less-and-play-more>
- Wu, L., Sun, S., He, Y., & Jiang, B. (2016). The effect of interventions targeting screen time reduction: A systematic review and meta-analysis. *Medicine*, 95(27), 1-7. doi: 10.1097/MD.00000000000004029
- Yilmaz, G., Caylan, N. D., & Karacan, C. D. (2014). An intervention to preschool children for reducing screen time: A randomized controlled trial. *Child: care, health and development*, 41(3), 443-449. doi: 10.1111/cch.12133

Appendix A

Screen Time Contract (Net Nanny, 2016)

 Net Nanny™

Family Contract

— for Electronic Usage —

MISSION STATEMENT

People first, devices second. While using devices we will always remember family rules including being kind, respectful, and present at all times. In addition, parents will be open and understanding when answering questions or addressing challenges children may face online. All devices must be handled with care and put away properly. It's important to remember that these devices are expensive and should be taken care of appropriately.

These rules apply to the following electronics:

☐ TV ☐ Computer ☐ Tablet ☐ Video Games ☐ Phone

RULES OF ENGAGEMENT

- ☐ I agree to use devices only during the times specified
- ☐ I agree to put away devices during the following times: mealtimes, family time (games, movies, etc.), and when we have guests
- ☐ I agree to not use devices when it's dangerous such as while driving, biking or walking
- ☐ I agree to respect other's privacy and not post pictures or videos of someone on Social Media without their permission
- ☐ I will remove myself and tell a parent immediately if something doesn't feel comfortable while online
- ☐ I agree to show my parents what sites I'm using so we can explore them together
- ☐ I agree to listen calmly and openly when discussing online situations or rules
- ☐ I will not give out any personal information including full name, password, phone numbers, address to people I don't know
- ☐ I will keep passwords private and not change them
- ☐ _____
- ☐ _____

ALL family members, please sign in agreement to this Family Contract below.

Parent/Guardian

Youth(s)

Appendix B**Survey Monkey****Initial survey.**

1. How many hours of screen time does your child get each day? a) None b) 1 hour or less c) 2 hours or less d) 3 hours or less e) 4 hours or less f) >4 hours per day
2. Most of my child's screen time is spent (choose all that apply): a) Watching television (TV) b) On a tablet or computer c) On a phone d) Playing video games e) Other _____
3. As a parent/caregiver, I understand _____ the negative effects of screen time: a) all of b) some of c) very little about d) I did not know there were negative effects
4. As a parent/caregiver, I try and limit the amount of screen time allowed per day: a) True b) False c) Sometimes
5. My child often chooses technology over other activities: a) True b) False c) Sometimes
6. My child uses devices when they are not supposed to, or tries to sneak devices: a) True b) False c) Sometimes
7. My child gets angry when they cannot use technology: a) True b) False c) Sometimes

8. It is hard to get my child's attention when they are using technology: a) True b) False c) Sometimes
9. It is difficult getting my child to be active due to technology: a) True b) False c) Sometimes
10. My child would choose technology over hands on activities, games, or outdoor fun: a) True b) False c) Sometimes
11. I am concerned about my child's mental health: a) True b) False c) Sometimes
12. I am concerned my child is addicted to screen time: a) True b) False
13. I try and limit my own screen time when I am with my children: a) True b) False c) Sometimes
14. I am excited about trying a screen time challenge with my child/children: a) Yes b) I am apprehensive about it c) I am indifferent d) No, I do not think it will work e) Other _____
15. Is there anything else you want to say about the Screen Time Challenge? _____

Midway survey.

1. My child is adhering to the screen time goal of less than 2 hours per day: a) Yes, everyday b) Yes, on most days of the week c) Rarely d) Not at all e) Other _____
2. Most of my child's screen time is spent (choose all that apply): a) Watching television (TV) b) On a tablet or computer c) On a phone d) Playing video games e) Other _____
3.. My child is filling out their weekly screen time tracking charts: a) True b) False c) Sometimes
4. My child is still choosing technology over other activities: a) True b) False c) Sometimes
5. My child uses devices when they are not supposed to, or tries to sneak devices: a) True b) False c) Sometimes
6. My child gets angry when their screen time is restricted: a) True b) False c) Sometimes
7. I have noticed a positive change in my child's behavior: a) Yes b) Maybe c) No d) No, it has gotten worse e) Other _____
8. My child is spending more time on other non-screen activities: a) True b) False

c) I have not noticed a difference d) Other _____
9. I try and limit my own screen time when I am with my children: a) True b) False c) Sometimes
10. I feel like the Screen Time Challenge is effective: a) Yes, definitely b) It may be helping a little c) I am indifferent d) No, I do not think it is working e) Other _____
11. Is there anything else you want to say about the Screen Time Challenge? _____

Final survey.

1. My child is adhering to the screen time goal of less than 2 hours per day: a) Yes, everyday b) Yes, on most days of the week c) Rarely d) Not at all e) Other _____
2. Most of my child's screen time is spent (choose all that apply): a) Watching television (TV) b) On a tablet or computer c) On a phone d) Playing video games e) Other _____
3.. My child has filled out their screen time tracking charts: a) Always b) >75% of them c) >50% of them d) >25% of them e) <25% of them f) They have not filled them out at all g) Other _____
4. My child is still choosing technology over other activities: a) True

b) False c) Sometimes
5. My child uses devices when they are not supposed to, or tries to sneak devices: a) True b) False c) Sometimes
6. My child gets angry when their screen time is restricted: a) True b) False c) Sometimes
7. I have noticed a positive change in my child's behavior: a) Yes b) Maybe c) No d) No, it has gotten worse e) Other _____
8. My child is spending more time on other non-screen activities: a) True b) False c) I have not noticed a difference d) Other _____
9. I try and limit my own screen time more than before when I am with my children: a) True b) False c) Sometimes
10. I feel like the Screen Time Challenge has been effective: a) Yes, definitely b) It helped a little c) I am indifferent d) No, I do not think it worked e) Other _____
11. Is there anything else you want to say about the Screen Time Challenge?
12. What did you like about the program (what worked well)?

13. What did you dislike about the program (what didn't work)?

14. Do you plan on continuing the program in your household?

- a) Yes, absolutely
- b) Yes, with some changes
- c) Maybe
- d) No
- e) Other _____

15. Share what screen time reduction activities worked well for your children.

Appendix B

Weekly Tracking (Advent Health, 2016)

Place this sheet near your computer, TV or on the refrigerator.
And remember, 2 hours or less is best!

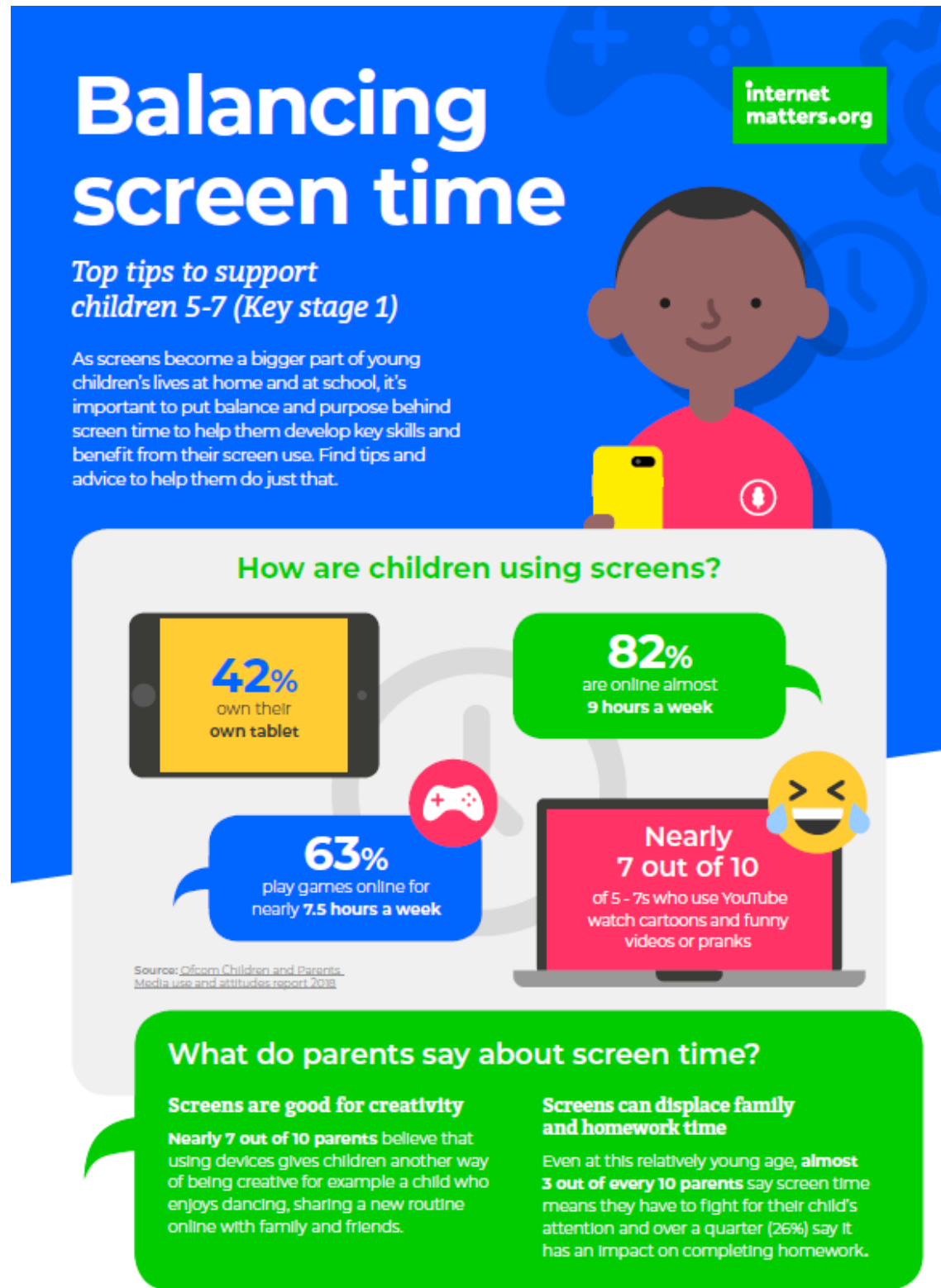
Name _____

Week _____	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Watching TV							
Video Games							
Computer/Internet							
Other							
Color the star for the day with less than 2 hours of TV, video games or computer/Internet.							
Have Fun and Be Active Everyday!							

List your favorite sports or other activities and then make a priority to participate in these daily:

Appendix C

Parent Handouts (InternetMatter, 2020)



What are the benefits and challenges of screen use?



Screen time benefits

- Screen use provides a range of opportunities for creativity and learning – **70% of parents strongly agree that using devices is essential** for their child's development
Source: [Internet Matters Look both ways report](#)
- Screens can be a great tool to allow children to **maintain relationships** with family and friends.
- **Screens can help ease the financial burden** when looking to entertain children.

Screen time challenges

- Young children might stumble **across inappropriate content** that may have a negative impact on their digital wellbeing.
- Passive screen time **could have a physical effect on their development** (i.e. eyes, brain), sleep cycle and behaviour.
- Younger children **may not understand the concept of what the Internet is** and how it works so could find it hard to differentiate between what is real and what is fake.



5 top tips to balance screen time

1 Set digital rules together

Agree digital boundaries together with your child to get them involved in the process and build up their understanding of why it's beneficial for them to stick to them.

Choosing device free zones in the home, keeping phones out of the bedroom at night and using free tools to turn devices on and off at different times of the day are just some ways to help children strike a healthy balance between activities on and offline.

Also, it's a good idea to encourage them to take a break every 30 minutes and use screens in short bursts. Experts recommend turning screens off an hour before bedtime to give children time to wind down.



2 Stay engaged in their screen use

Get engaged and stay engaged in their digital life as they grow. The more you get involved and understand the things your children do online, the easier it is to gain their respect and influence what they do in their digital world.

Ensure they have a healthy mix of screen activities that encourage creativity, learning & education, connecting with family & friends, as well as using devices for downtime.

3 Discuss online risks and strategies to tackle them

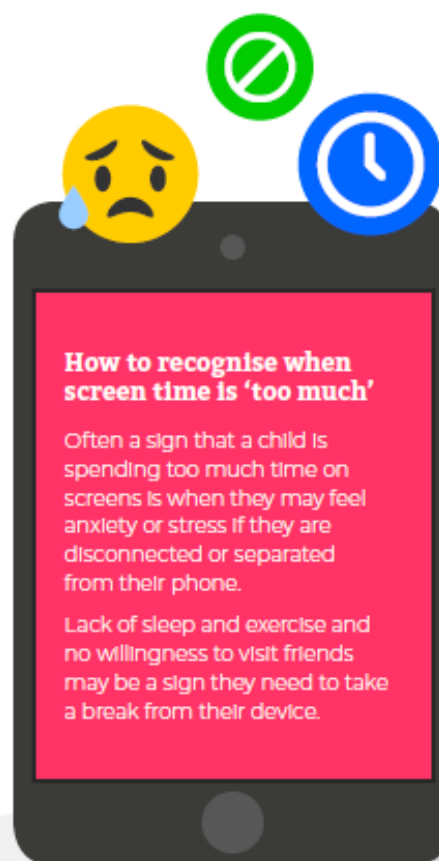
Take time to **help them understand the risks and benefits of using the Internet**, whether it be discussing what steps to take if they see something that upsets them or guiding them towards apps and platforms that will help them explore their passions and enhance their skills.

4 Set a good example with your own screen use

Children will tend to model their behaviour on you, so if you encourage them to take breaks when on screens or leave phones out of the bedroom at night, they will follow your lead.

5 Use tech tools to manage their time & access to media

Whatever device your child uses, be sure to make use of free and premium tools available to manage their access to age-appropriate content and review the time they spend on specific online activities.



How to recognise when screen time is 'too much'

Often a sign that a child is spending too much time on screens is when they may feel anxiety or stress if they are disconnected or separated from their phone.

Lack of sleep and exercise and no willingness to visit friends may be a sign they need to take a break from their device.



The truth about screen time

Not all screen time is created equal so it's important to encourage children to have a healthy balance between passive screen time (i.e. watching YouTube) and interactive screen time (i.e. creating content or playing games online).

There is no safe level of screen time but it doesn't mean that all screen time is harmful. Lack of evidence has meant that experts have found it hard to recommend a cut-off for children screen time overall.

One size does not fit all when it comes to screen time – It's more about getting it right for your families needs.

Visit Internetmatters.org/screentime for more advice

InternetMatters

internetmatters

@im_org

**internet
matters.org**

Balancing screen time

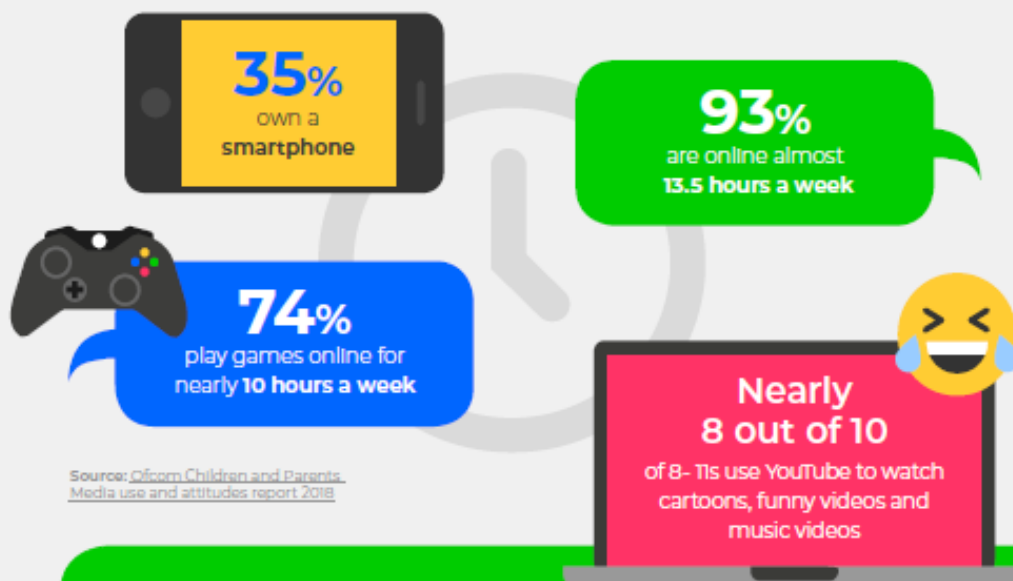
internet
matters.org

Top tips to support children aged 7-11 (Key stage 2)

Typically at this age children will start to be more active online so it's important to equip them with the tools to strike a healthy balance between the time they spend on and offline, especially as they start to get their own devices.



How are children using screens?



Source: [Ofcom Children and Parents Media use and attitudes report 2018](#)

What parents tell us

Screens are good for creativity

Nearly 7 out of 10 parents believe that using devices gives children another way of being creative for example a child who enjoys dancing, sharing a new routine online with family and friends.

Screens' impact on physical wellbeing

Nearly half of parents in the UK are worried their children are spending too much time online – with the majority believing it is causing their kids to lead a sedentary lifestyle lacking in physical exercise.

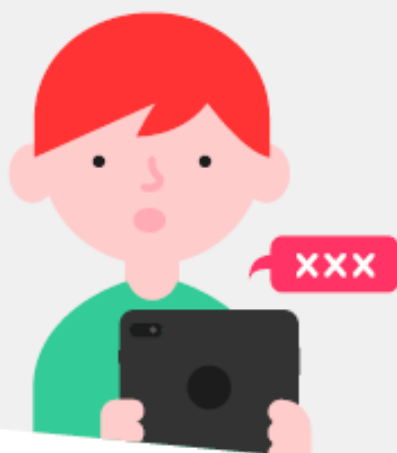
Source: [Internet Matters Look both ways report](#)

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Screen time benefits

- Screen use provides a range of opportunities for creativity and learning – **70% of parents strongly agree that using devices is essential** for their child's development
Source: [Internet Matters Look both ways report](#)
- Screens can be a great tool to allow children to **maintain relationships** with family and friends.
- Screens can provide much needed down-time at the end of the school day.



Screen time challenges

- **Peer pressure from friends to stay online** and the way certain platforms are developed to keep users engaged can make it harder for children to switch off.
- As children get more active online there is an **increased risk that they might stumble across inappropriate content** that can have a negative impact on their digital wellbeing.
- Long periods of passive screen time (i.e. bingeing on box sets) **could have a physical effect on their development** (i.e. eyes, brain), sleep cycle and behaviour.



5 top tips to balance screen time

1 Create screen time rules together

To help them stick to digital boundaries **get them involved in the process of setting simple rules** on how they should use screens in and out of the home.

Giving them reasons why it's important to prioritise sleep, homework and family time can help them make smarter choices about when and how they should switch off screens.

Make sure to model the behaviour that you'd like to see in them – children tend to do what you do, not necessarily what you say.

2 Take an active role in their digital life

Get engaged and stay engaged in their digital life as they grow. The more you get involved and understand the things your children do online, the easier it is to gain their respect and influence what they do in their digital world.

Making screens part of family time, like a movie or an online games night is one way to make it more inclusive and engaging.

Also, encouraging them to have a healthy mix of screen activities that encourage creativity, learning & education, connecting with family & friends, as well as using devices for downtime is important.

3 Equip them with know-how to manage risks online

As children become more active online, **have regular conversations with them about ways to deal with a range of risks** that they may be exposed to such as seeing inappropriate content or being cyberbullied.

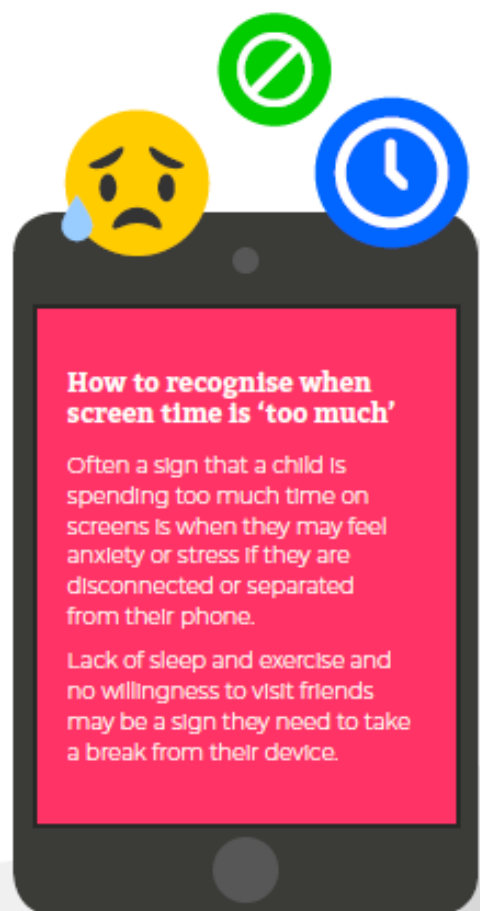
Make sure they know when and where to seek help if they need it and what tools they can use to deal with it.

4 Use tools to manage their screen time & access to media

Whatever device your child uses, be sure to **make use of free and premium tools available** to manage their access to age-appropriate content and review the time they spend on specific online activities.

5 Encourage them to be selective about what they do online

Help them avoid mindless scrolling and be more critical about the media they watch and the platforms they use. Encourage them to explore apps and websites that will compliment what they enjoy in the real world and develop their key skills.



How to recognise when screen time is 'too much'

Often a sign that a child is spending too much time on screens is when they may feel anxiety or stress if they are disconnected or separated from their phone.

Lack of sleep and exercise and no willingness to visit friends may be a sign they need to take a break from their device.



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Appendix D

Alternatives to Screen Time (Whiteley, A., n.d.)

Non-screen activities you can do at home

What can you do when there's no school and you're stuck at home? Here are 25 fun ideas to choose from.

Pobble

25 ideas!



- 1 How many different words can you make from the letters in this sentence, below?**
Grab a pencil and paper and write a list!
- 2 Thank a community hero.**
Think of someone that helps you in some way and write a short letter to thank them.
- 3 Get building!**
You could build a Lego model, a tower of playing cards or something else!
- 4 Can you create your own secret code?**
You could use letters, numbers, pictures or something else! Can you get someone else to try and crack it?
- 5 Start a nature diary.**
Look out of the window each day and keep note of what you see. Birds, flowers, changes in the weather, what else?
- 6 Hold a photo session.**
Use a camera or a mobile phone to take some snaps. What will you photograph? Your pets or toys perhaps?
- 7 Build a reading den.**
Find somewhere cosy, snuggle up and read your favourite book!
- 8 Use an old sock to create a puppet.**
Can you put on a puppet show for someone?
- 9 Make a list of all the electrical items in each room of your home.**
Can you come up with any ideas to use less electricity?
- 10 Design and make a homemade board game**
and play it with your family.
- 11 Do something kind for someone.**
Can you pay them a compliment, make them something or help them with a task?
- 12 Can you create a story bag?**
Find a bag and collect items to go in it that relate to a well known story. If you can't find an item, you could draw a picture to include.
- 13 List making!**
Write a list of things that make you happy, things you're grateful for or things you are good at.
- 14 Design and make an obstacle course at home or in the garden.**
How fast can you complete it?
- 15 Can you invent something new?**
Perhaps a gadget or something to help people? Draw a picture or write a description.
- 16 Keep moving!**
Make up a dance routine to your favourite song.
- 17 Write a play script.**
Can you act it out to other people?
- 18 Read out loud to someone.**
Remember to read with expression.
- 19 Write a song or rap about your favourite subject.**
- 20 Get sketching!**
Find a photograph or picture of a person, place or object and sketch it.
- 21 Junk modelling!**
Collect and recycle materials such as yoghurt pots, toilet rolls and boxes and see what you can create with them.
- 22 Draw a map of your local area**
and highlight interesting landmarks.
- 23 Write a postcard to your teacher.**
Can you tell them what you like most about their class?
- 24 Draw a view.**
Look out of your window and draw what you see.
- 25 Get reading!**
What would you most like to learn about? Can you find out more about it in books? Can you find a new hobby?

Pobble.com – More writing. More progress.