**RESEARCH, NOTES AND RESOURCES TO ADDRESS HEALTH AND WELLNESS**

**ISSUES DURING VIRTUAL LEARNING IN A PANDEMIC**

**NEGATIVE EFFECTS OF PROLONGED EXPOSURE TO THE SCREEN AND RESOURCES FOR HOW TO MITIGATE THOSE EFFECTS**

**Important Takeaways:**

1. National Board of Professional Teaching Standards recommendation of on-line instruction hours, middle school students 2-3 hours, and high school students 3-4 hours. [TOPIC: Education News Classroom Ideas Kids (and Teachers) Don’t Need to Spend 8 Hours a Day on School Work Right Now. The pace of distance learning is different.](https://www.weareteachers.com/virtual-learning-schedule/)
2. Online instruction is screen time.
3. Zoom Fatigue is Real.
4. The negative effects of prolonged screen time are multifaceted and affect the whole child, particularly eyes and sleep.
5. Kids need to move during the day to function effectively and stay healthy. Movement is essential for optimal health, boosting their immune system, and also for learning and retention.
6. Children need real one-on-one human connections with family and friends outside of school hours for their emotional health. Social connections are particularly important during this period of isolated learning. Today, personal connections to friends also involve screen time.
7. Children should be encouraged to go outdoors during the day to offset the negative effects of screentime.

**RESEARCH:**

1. This scientific article details sleep deprivation, adiposity, hypertension and depression and other adverse psychological and physiological effects of excessive screen time.

[Adverse physiological and psychological effects of screen time on children and adolescents: Literature review and case study](https://doi.org/10.1016/j.envres.2018.01.015)

1. Low levels of physical activity and long screen times were associated with significantly higher risk of hypertension among children and adolescents with intellectual disabilities.

[The Relationship between Physical Activity and Screen Time with the Risk of Hypertension in Children and Adolescents with Intellectual Disability](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5688362/)

**Eye Health**

1. Prolonged Screen Time Effects: Sleep Deprivation, Nearsightedness, Loss of Focus Flexibility, Dry and Irritated Eyes.

<https://www.chop.edu/news/health-tip/how-too-much-screen-time-affects-kids-eyes>

1. How to Protect Eyesight:

[All the Zoom calls and screen time stress out your eyes. Here are ways to protect your eyesight.](https://www.chicagotribune.com/lifestyles/ct-life-zoom-call-eye-stress-tt-07092020-20200709-eep33rev4vgrtl452wym27jdyq-story.html)

<https://www.nytimes.com/2020/08/17/parenting/kids-eyesight-distance-learning-coronavirus.html>

**SCREEN BREAKS - HOW TO IMPLEMENT AND COMBAT ZOOM FATIGUE**

**Important Takeaways:**

1. Blink a lot.
2. 20-20-20 Rule (focus eyes on an object 20 feet away for 20 seconds every 20 mins). <https://www.healthline.com/health/eye-health/20-20-20-rule>
3. 10-minute breaks away from the screen every 60 minutes.
4. Facilitate and encourage movement breaks.
5. Teachers/Parents need to remind children and give them the opportunity to take breaks. Most kids will not be able to do so without prompting.

BEST PRACTICE: Use timers to alert yourself of reminders for breaks and encourage students to do so.

**RESEARCH:**

[Give Your Child's Eyes a Screen-Time Break: Here's Why](https://www.healthychildren.org/English/health-issues/conditions/eyes/Pages/What-Too-Much-Screen-Time-Does-to-Your-Childs-Eyes.aspx?fbclid=IwAR232LOt6T13rQ_G3pNjAFmlH5qntAQ8CFiSQ6VApD617AcXAGRwCFMZLX0)

[Five Reasons to Take a Break from Screens](https://greatergood.berkeley.edu/article/item/five_reasons_to_take_a_break_from_screens)

[What Does Seven+ Hours of Screen Time Do to Students' Vision?](https://www.weareteachers.com/too-many-screens/)

**Zoom Fatigue**

[HBR: How to combat Zoom Fatigue](https://hbr.org/2020/04/how-to-combat-zoom-fatigue)

[12 Tips to Combat Zoom Fatigue](https://www.vidyard.com/blog/zoom-fatigue-tips/)

[Zoom Exhaustion is Real.](https://www.mindful.org/zoom-exhaustion-is-real-here-are-six-ways-to-find-balance-and-stay-connected/)

[Zoom Fatigue: It's Real and Kids Need a Break](https://www.mother.ly/news/zoom-fatigue-kids)

Teacher Resources for Zoom Fatigue

<https://www.weareteachers.com/ways-to-beat-zoom-fatigue/>

<https://marketscale.com/industries/education-technology/students-teachers-prevent-zoom-fatigue/>

<https://bmgator.org/21601/news/teachers-and-students-address-zoom-fatigue/>

Teacher Resources for Movement and Brain Breaks

[Add Movement, Brain Breaks to Learning While Social Distancing or Virtual Learning](https://lessons4littleones.com/2020/08/17/add-movement-brain-breaks-to-learning-while-social-distancing-or-virtual-learning/)

[20 Three-Minute Brain Breaks](https://minds-in-bloom.com/20-three-minute-brain-breaks/)

[50 Educational Brain Breaks that Your Students Will Love!](https://www.weareteachers.com/brain-breaks-for-kids/)

[“Jump Around!” The Benefits of Movement in the Online Learning Process](https://blog.alo7.com/online-learning-brain-breaks/)

[Movement and Brain Breaks](http://www.tetonliteracy.org/movement-and-brain-breaks.html)

Parent Resources for Zoom Fatigue

<https://www.parents.com/parenting/better-parenting/zoom-fatigue-is-real-here-s-how-to-deal-with-it/>

<https://community.today.com/post/how-to-help-kids-with-zoom-fatigue>

**POSTURE AND ERGONOMICS**

**Important Takeaways:**

1. Screen placement and keyboard placement at the right height.

2. Feet planted on the floor or a stool and comfortable seating.

3. Frequent movement and screen breaks.

4. Adjust screen brightness to reduce stress on eyes

5. Eye strain, wrist injuries, head and neck pain are common side effects of working on screen all day. When proper ergonomics and breaks become routine it can reduce the strain.

**RESEARCH:**

[Preventing at-home learning injuries: A primer in ergonomics](https://www.texaschildrens.org/blog/preventing-home-learning-injuries-primer-ergonomics)

[Remote-learning health tips to prevent neck pain and eye strain in children](https://www.washingtonpost.com/lifestyle/2020/09/10/remote-learning-ergonomics-eye-health/)

[School at home may be a pain. Setting ergonomic student workstations](https://www.usatoday.com/story/tech/columnist/2020/09/09/virtual-home-school-home-ergonomic-student-workstations/5744468002/)

[Remote Learning Ergonomics – 3 Tips to Keep Your Child Children Focused and Engaged this Upcoming School Year](https://www.summitergo.com/blogs/news/homeschool-ergnonomics-keeping-your-child-focused)

[Ergonomics for the Home Office](https://ehrs.upenn.edu/sites/default/files/inline-files/Ergonomics_Home_Office_Humantech_0.pdf)

[10 Ergonomics Dos and Don’ts For Those Now Working from Home](http://www.bu.edu/articles/2020/10-ergonomics-dos-and-donts-for-those-now-working-from-home/)

**EFFECTS OF HIGH WORKLOAD AND EXPECTATIONS DURING A PANDEMIC**

**Important Takeaways:**

1. Reduce hours spent on school work in general during virtual learning.
2. Reduce pace of learning to adapt to virtual learning.
3. Balance between synchronous and asynchronous learning.
4. PhilaSD allows all schools and educators leeway in scheduling the number of hours of instruction as long as 180 days are logged.

**RESEARCH:**

National Board of Professional Teaching Standards recommendation of on-line instruction hours, middle school students 2-3 hours, and high school students 3-4 hours.

[TOPIC: Education News Classroom Ideas Kids (and Teachers) Don’t Need to Spend 8 Hours a Day on School Work Right Now. The pace of distance learning is different.](https://www.weareteachers.com/virtual-learning-schedule/)

How Long Should a Student Spend On Synchronous Lessons?

[How Long Should a Student Spend On Synchronous Lessons](https://www.edsurge.com/news/2020-05-04-how-long-should-a-remote-school-day-be-there-s-no-consensus)

I. Philadelphia School District’s guidelines for virtual learning allows for reduced/flexible daily instruction during the pandemic

[*https://www.education.pa.gov/Schools/safeschools/emergencyplanning/COVID-19/SchoolReopeningGuidance/ReopeningPreKto12/Pages/InstructionalHours.aspx*](https://www.education.pa.gov/Schools/safeschools/emergencyplanning/COVID-19/SchoolReopeningGuidance/ReopeningPreKto12/Pages/InstructionalHours.aspx)

II. School District has made a commitment to health and safety and supporting the needs of students, families and staff for the 2020-2021 academic year

[*https://www.philasd.org/coronavirus/schoolstart2020/*](https://www.philasd.org/coronavirus/schoolstart2020/)

**HOW HOMEWORK AFFECTS HEALTH AND WELLBEING IN DISTANCE LEARNING**

**Important Takeaways:**

1. Amount of time spent on homework increases student stress, compromises health and provides less time for family, friends and extracurricular activities even in normal times.
2. Time spent on homework reduces opportunities for real meaningful connections with family members and down time that is essential to reduce cortisol levels that increase due to screen time.
3. Free time to go outdoors and exercise while there is still sunlight is essential for good health and boosting the immune system.
4. Extra curricular activities and social connection with friends in a pandemic essentially increases exposure to screen time, but is vital to the emotional well being of the child and family.

**RESEARCH:**

[**https://www.washingtonpost.com/education/2020/09/01/does-homework-work-when-kids-are-learning-all-day-home/**](https://www.washingtonpost.com/education/2020/09/01/does-homework-work-when-kids-are-learning-all-day-home/)

**(copy of article attached to this email for non subscribers)**

[Stanford research shows pitfalls of homework](https://news.stanford.edu/2014/03/10/too-much-homework-031014/)

[Why Homework is Bad: Stress and Consequences](https://www.healthline.com/health-news/children-more-homework-means-more-stress-031114)

[Education Inequity: Homework and its Negative Impact on Students](https://onlinedegrees.sandiego.edu/education-inequity-and-homework/)

[Homework, in a pandemic](https://www.technologyreview.com/2020/06/16/1003003/homework-in-a-pandemic/)

### Equity Issues to Consider (Social, Emotional and Academic Well Being)

1. Quality of internet access and mandatory camera requirement.
2. Work expectations from students should fall within the limitations of district-issued chrome books. Chrome books are not equipped to take pictures of homework and upload.
3. Work that requires access to a printer.
4. Ergonomics - not all home work spaces have ideal ergonomics.

[10 Questions for Equity Advocates to Ask About Distance Learning](https://edtrust.org/resource/10-questions-for-equity-advocates-to-ask-about-distance-learning/)

Parent Resources for PhilaSD

[*https://www.philasd.org/schoolboard/contact/*](https://www.philasd.org/schoolboard/contact/)

[*https://www.philasd.org/schoolboard/about/who-we-are/*](https://www.philasd.org/schoolboard/about/who-we-are/)

[*https://www.philasd.org/schoolboard/wp-content/uploads/sites/892/2020/03/005\_Admin\_Procedures.pdf*](https://www.philasd.org/schoolboard/wp-content/uploads/sites/892/2020/03/005_Admin_Procedures.pdf)