

Paper Title: Online Education: Harmful and Ineffective  
 No. of Pages: 8  
 Paper Style: APA Paper Type: Persuasive/Argumentative  
 Taken English? Yes English as Second Language? No  
 Feedback Areas: Transitions & Fluency, Organization  
 Paper Goals: It's an argumentative essay about a particular topic related to STEM stuff. I chose to argue why online learning is pretty bad, or at least was in its applied state from 2020-2022.

## Review Summary:

Hello and welcome to NetTutor! My name is ClarenceL, and I am happy to review your Research essay

### Strengths:

The paper has a very good focus.

### Suggestions:

The paper in certain sections digresses without providing ample idea development and complete discussion of the issue. The lit review section needs to be developed. Besides summarizing, comment and critically analyze the research methodologies and findings. Ensure you are fully explain the ways in which e-learning has been ineffective and detrimental. Data that shows the correlation between e-learning and inadequate learning or other negative consequences should be integrated at length.

I have marked the first instances of major grammar, sentence, and word level issues in the paper. Those comments will help you locate and fix other similar errors. You can also submit a second draft of the paper, but be sure to mark it as a second draft. Thanks for using NetTutor! Please visit us again, and tell your friends!

## **Online Education: Harmful and Ineffective**

Gage Farmer

Department of English, Columbus State Community College

ENGL 2767: Composition II

Professor S. A. Hogan

April 22<sup>nd</sup>, 2022

## Online Education: Harmful and Ineffective

### Abstract

On the page header, provide title of the essay in caps and within 50 characters (flushed left) and page numbers (flushed right)

Online education has proven to be harmful to the average student over the last few years. It was shown to be less effective towards teaching material due to the structure of requiring a student to use technology in order to turn in their work. Aside from this, it was much more difficult for students, as it punished those who were not predisposed to working with computers. On top of this, being on a computer in a video call as opposed to in class resulted in less effective lectures due to using less of a student's working memory capacity. Students with ADHD were impacted much more heavily than others through higher risk of setbacks such as greater difficulty in organization and participation (S. Cortese et al, 2020), as well as raising antisocial behavior even after students were moved back to in person classes (Becker et al, 2020; Adegboye et al, 2021).

You are not supposed to provide quoted works or lit review in the abstract. Here, provide a statement of the problems and objectives, discuss significance of the research, your research findings, research methodologies you used and further scope for research

## Discussion

Online education and distance learning has had a fairly slim history, as it had a major increase in relevance during the COVID-19 outbreak in 2020. While it wasn't too common before this, it did exist through online universities, with the main objective being to provide a quick and cheap method of obtaining a degree in various fields. These online courses were not quite comparable to an in person, brick and mortar-based university with much more history and prestige. It did provide a solid option for those not able to attend an in-person college for various reasons, mainly lack of time and money. Once the COVID outbreak began, all American universities were pushed to operate online only, in order to prevent the spread of this virus. While successful in its objective, distance learning proved to be much less effective for the average student, and even drove many to opt out of their education until lessons had returned to the classroom.

How do these elements matter when we are discussing pedagogy, learning and development? You may instead mention certain beneficial aspects of learning that can only be found in offline classrooms.

There are also many terms used by researchers in their studies. One example refers to the amount of focus a student has towards a particular assignment, and this is called 'mind unwandered' since the mind is not wandering. On the other side of the coin the term 'internet cognitive fatigue' was used, which defined how a student would become fatigued due to the distractive nature of the internet. Along with this, there are two very similar terms, ISE and SEILC. ISE stands for 'internet self-efficacy', which is the level of confidence a student has in their own ability to use the internet. Similarly, SEILC stands for 'self-efficacy of interacting with learning content', which refers to the level of self-confidence a student has at a given moment in their ability to learn through an online course with online materials. Both of these are variable, so they can change over time. An instructor is able to approximate a student's ISE and SEILC by being aware of their students' attitudes and level of attentiveness during a class. Through this,

But how are these relevant when we're assessing the effectiveness of online learning?

proper adjustments could be made to help an inattentive student. The final term 'neurodivergence', refers more specifically to students with mental disorders such as ADHD, Autism, Dyslexia, or Dyspraxia, among others. Adversely, a student without any apparent disorder would be considered 'neurotypical'.

The effectiveness of distance learning has shown to be quite questionable in the past years which it was most common. This is largely due to how students will differently experience internet cognitive fatigue and mind unwandered.

Results indicated that participants' ISE and SEILC were positively related to mind-unwandered, but negatively related to [internet cognitive fatigue] during online learning, while [internet cognitive fatigue] was positively associated with [perceived ineffectiveness of online learning] (J. C. Hong et al., 2022)

To simplify, a more focused and less fatigued student will see more effectiveness in an online learning environment than one who is not focused and is distracted. Though this seems to be simple on paper, keeping students from becoming distracted and fatigued is much more difficult within an online class, due to the ability for one to perform other tasks while attending the class. Such examples could be to open another tab and watch videos, play games, or even just turn off the webcam and leave the room altogether. As an online classroom lacks any real structure and motive to prevent the student from 'checking out' of the lecture, this allows ICF to increase and mind unwanderedness to decrease.

To add on to the issues surrounding internet cognitive fatigue, self-efficacy of interacting with learning content (SEILC) goes hand in hand in that it is naturally at a disadvantage in modern society which perceives distance learning to be less effective than in-person teaching. Lower SEILC not only causes a student to perform in a less efficient manner during lectures and

5

assignments, but it also causes the student to feel less fulfillment while completing classwork.

“Online learning does not provide individual satisfaction for students, especially when their ability to use technology is not optimal...” (R. Ramadhani et al., 2021, pg. 1244). Self-fulfillment

is a driving factor in a student's desire to perform well in education. Without this, one would see less desire to attend classes and seek education. Decrease of SEILC and in turn self-fulfillment

risks a student becoming less interested in their education, and thus may cause them to drop out and pursue a different path in life. All hope is not lost though, as teachers themselves are able to

fix this issue. As stated by Ha & Im (2020, pg. 150) “...teachers should provide guidance for

those students with low Internet self-efficacy and self-efficacy of interacting with learning content.” Such guidance from instructors can be blatant things such as reminding a student to

stay focused on the lesson, or more subtle methods such as asking a question to try and pull the student back into focus. Successfully doing this would be able to reduce a student's ISE and

increase their mind unwanderedness by being more cognizant of the students who may be showing signs of distraction or fatigue. By being trained in doing these things, teachers of future

distance learning classes may be able to increase the success rate of students as well as increase a student's internet self-efficacy and self-fulfillment.

But which factors lead to the decrease in SEILC? What findings and evaluation do we have on this? What are the significant findings on this?

Instead of criticizing online learning and discussing its inadequacies, the paragraph provides an overview of what should and could be done. So, here your argument that e-learning has been ineffective is weakened. Consider reviewing the research findings of sources to explain why online learning has been unable to cater to students' academic needs.

Working memory is crucial to the retention of information, particularly in an educational environment. It ties in directly with factors such as cognitive ability and self-efficacy, such that a student with greater self-efficacy will experience a lower burden on working memory resources than an individual with less self-efficacy (Mayer et al., 2001). In order for a student to endure a lengthy high-level course and retain the information given to them, not only do they have to be cognitively sufficient, but they need to be able to keep their self-efficacy high enough so that they don't reduce their working memory capacity. This directly correlates to the discussion of

self-efficacy versus internet cognitive fatigue and mind unwanderedness. For a student to be able to retain most of their material in a lesson or assignment, they need to be able to stay focused and have pre-existing experience with the internet in order to prevent cognitive fatigue. Most students though, do not have this ability as they have only interacted with the internet recreationally, as opposed to using it for a full or part time job which requires them to use it for several consecutive hours.

Another added difficulty which is commonly overlooked is the struggle of many students to comfortably use various programs which are required for their class. Given how the COVID-19 pandemic caused everyone to suddenly move to the online classroom, many were not prepared for this change, and their education suffered as a result. As Ramadhani (2021, pg. 1244) stated in his report that students also feel anxious and insecure when the learning process changed from face-to-face to online learning. This showed how many students were not prepared for the use of technology in the learning process, and their low-level mastery of technology makes the use of online learning ineffective. Such examples of programs which students were not prepared to use once the switch to distance learning may be but are not limited to Matlab, GeoGebra, Desmos, Scilab, OrCAD, Microsoft Excel, Wireshark, and just about any programming IDE. Some of these programs may come easy to some students, however many required several weeks of in person lessons in order for a student to become comfortable using them. The struggle that comes with learning a new program should not be applicable to the learning process, though it is when it comes to taking online classes. This will cause unnecessary anxiety in students, as well as further reducing individual satisfaction from completing assignments (S. F. Sihotang et al., 2021).

In the two highlighted sections, the transition is abrupt. The first proclamation needs to be evaluated further to explain how it lead to the overall inefficacy when e-learning was implemented. What are the available research findings? Consider synthesizing the sources-- discussions and findings.

7

Those most heavily affected by the disadvantages of online learning are neurodivergent students, namely those with ADHD. These students are at a much higher risk of setbacks due to difficulty in organization and raised antisocial behavior, given how online classes typically take place in a student's own home. A neurodivergent student may find it more difficult to stay on top of due dates given how most assignments are only posted online, and how many online classes only meet once or twice per week if at all, with no mention of said assignments. This requires a student to go and frequently check the calendar for the due dates, which is much more difficult for someone with ADHD to remember to do. A student with ADHD will typically be in a different mindset depending on the room they're in during a lecture. This means that a student in an online class in their own bedroom will not think about assignments, while one attending a traditional lecture in a classroom will constantly be reminded while in that area. In my experience, a neurodivergent student will be attentive to whatever area they are surrounded with, as opposed to the material in front of them. Meaning, a student with a reading assignment in front of them will have more success focusing on the material in a classroom or library, but will struggle to focus somewhere such as their home or a park. For lack of a better term, I would describe this phenomenon as contextual focus. This also ties in with how a neurodivergent student is at a higher risk of non-participation within online classes. The biggest factor of this is the surrounding area a student is placed in while taking the class. Referring back to contextual focus, a student will be much more inclined to go do something else unrelated to the class if they are taking it in their own home. For the vast majority of students this was the case, given how the COVID-19 pandemic caused all public places to be shut down for so long, leaving home to be the only option.

How were they affected with the implementation of e-learning? What data do we have on this?



Antisocial behavior became much greater among students with ADHD, even after lessons had returned to the traditional classroom. Antisocial behavior in this particular case refers to lying, disrespect, some types of aggression, fights, violence, and others (Đurišić & Gajić, 2016). Attending school in person is especially beneficial to the social development of younger kids with ADHD. It gives them the ability to shape their relationships with peers and teachers, as well as learn rules, structure, and understand how the school content is beneficial to the student themselves (Ђурић-Здравковић, 2020). The transition to online classes has eliminated the resources necessary for a neurodivergent student to grow properly, and has further increased hyperactivity and impulsive behaviors.

Consider explaining why. Elaborate the discussion. Which resources are you referring to? Review the extent to which e-classrooms were unable to allow those.

Discuss the research methodologies of the source. Evaluate the data available on this.

It has been noted that, with reverting to school teaching, relationships with peers, self-management and the quality of social competence as a whole, were statistically significantly worse than before online classes.... Regarding the antisocial behavior, it is noted that students with ADHD, when examining all forms of behavior, showed significant deterioration when they returned to school teaching. (A. Đurić-Zdravković et al., 2021)

The paper has ample room to consider and critically assess two or more sources.

The studies done here have provided more than enough evidence to claim that online education is especially harmful to neurodivergent students. This is especially true with those with ADHD, as being in a social environment is crucial to their behavioral and social development.

Consider assessing the education gap online learning had created among children belonging to different social status. How was their learning affected?

While the benefits to the introduction to online learning are few and far between, they do exist. One such example would be for preventing the spread of COVID-19, the sole reason of it becoming so widespread in such a short time frame. Without online learning, the virus undoubtedly would have spread to many more people, thus causing more unnecessary deaths and a longer lockdown period. While this is a completely necessary solution to terrible

circumstances, it does not leave the involved students completely unharmed from the effects of distance learning.

To conclude, not only is online education much more difficult to the average student, it is also less effective for the time it consumes, and leaves students much less satisfied and confident in the education they received. When possible, online education is to be avoided particularly by students with neurological disorders such as ADHD, as they are affected the greatest by the lack of focus and sociality that goes with being in a classroom with students. It goes without saying that the years the world went without in person classes definitely had a negative effect on the students of the time, not only drawing back intelligence wise, but also within the aspects of mental and social health.

## References

- Gibrian, F. L., Monteiro, E., Ankrah, E., Beltran, J. A., Tavakoulia, A., Schuck, S. E. B., Hayes, G. R., & Lakes, K. D. (2021). Parents' perspectives on a smartwatch intervention for children with ADHD: Rapid deployment and feasibility evaluation of a pilot intervention to support distance learning during COVID-19. *PLoS ONE*, 16(10), 1–23.  
<https://doi.org/10.1371/journal.pone.0258959>
- Cortese S., et al (2020). ADHD management during the COVID-19 pandemic: guidance from the European ADHD Guidelines Group. *The Lancet Child & Adolescent Health*. Volume 4. Issue 6. Pages 412-414. 2352-4642. [https://doi.org/10.1016/S2352-4642\(20\)30110-3](https://doi.org/10.1016/S2352-4642(20)30110-3)
- Đurić-Zdravković, A., Japundža-Milisavljević, M., & Roknić, A. (2021). Social competence and antisocial behavior in students with ADHD before beginning and after the end of online classes during COVID-19. *TEME: Casopis Za Društvene Nauke*, 45(4), 1229–1243.  
<https://doi.org/10.22190/TEME210830073D>
- Jon-Chao Hong, Xiaohong Liu, Wei Cao, Kai-Hsin Tai, & Li Zhao. (2022). Effects of Self-Efficacy and Online Learning Mind States on Learning Ineffectiveness during the COVID-19 Lockdown. *Journal of Educational Technology & Society*, 25(1), 142–154.
- Nadeau, K. G. (2006). *Survival guide for college students with ADHD or Ld*. Magination Press.

Ramadhani, R., Sihotang, S. F., Bina, N. S., Rusmini, Harahap, F. S. W., & Fitri, Y. (2021).

Undergraduate Students' Difficulties in Following Distance Learning in Mathematics

Based on E-Learning During the COVID-19 Pandemic. *TEM Journal*, 10(3), 1239–1247.

<https://doi.org/10.18421/TEM103-30>