"Apple." Official Apple Support, <u>support.apple.com/kb/SP731?locale=en\_US</u>.

This is achived documentation of the iMacs used in CTE DigVid. It's incredibly helpfel to know the specifications of each editing station in the lab so that we can best design a solution to the CTE DigVid storage problem. From what I've seen after reading the direct documentation and analyzing the computers myself, the iMacs can become several times faster a few small adjustments.

- Some iMacs come with an SSD and a Hard Drive. SSDs are several times faster than hard drives, but the computers aren't using them! We should change it so that programs and editing software is on the SSD for fast computing, and bulk footage/clips should be stored on the Hard Drives.
- 2) File orinization and file sharing is just such a pain. One project can only be worked on the same computer, preventing working on a project if the computer is used. Also, collaboration is made harder in this current system. If a classmate needs their friend's file, they have to grab it from the local system and somehow think of a way to take and use it. If we had a centralized file storage server, then files can be saved, backed-up, and shared easier and simpler.
- 3) Having a lab technican to manage upkeep of the iMacs (and possibly the new storage sever) and track inventory of equipment. This usually falls as respocibilities of an SAT, it could also be split among a very tech-enthusiast student who can be a part of the SLA Tech Team.

## Dell. "Chromebook 11 3180 Disassembly and Reassembly Guide - For Use by Dell Certified Technicians Only."

## www.dell.com/support/manuals/en-us/chromebook-11-3180-laptop/chrome3180 om pub.

This can prove useful for our SLA Tech Team. This is because most Chromebooks are this exact model. Having documentation from the manufacturer itself is immensely helpful for understanding what quick solutions we can implement or acting preemptively and maybe creating a FAQ page so the average student could understand and fix any small problems they might encounter. This is also good for me to see if our current generation of computers is capable enough for the workload it demands. While yes the administration surely has already taken this into consideration, I want to do my own and more technically in-depth analysis and reach my own conclusions.

AKA, can be used to know the ins and outs of our school's laptops as well as help in analyzing our school's technical capabilities.

Finn, Kari "Kalsariknni". "Create Windows 10 ISO Image from Existing Installation." *Windows* 10 Help Forums RSS, Designer Media Ltd, 28 Nov. 2019,

www.tenforums.com/tutorials/72031-create-windows-10-iso-image-existing-installation.ht ml.

This has been the most useful resource I have used in this project. Trying to create a custom Windows 10 Installation tailored to best fit the CTE Engineers is quite a task! Thankfully, this has been in the works for quite some time. I'm still finalizing and polishing all the little quirks and bugs, but I'm almost done! This is all thanks to this amazing resource. This is also a great example of the power of technology in education. Without having this online resource, I could never have managed to make this Custom Version Of Windows in a timely manner, if at all. Using technology to learn about improving technology and its role in education, what a mouthful! Lehmann, Chris, and Zac Chase. *Building School 2.0: How to Create the Schools We Need*. Jossey-Bass, a Wiley Brand, 2015.

This is a book written by the principal himself on how to improve the system of education. While the book describes SLA's focus on collaboration, inquiry, project-based learning, it also describes the ideal use of technology. Chapter 9 describes how SLA sees the ever-growing advancement of technology, and what's its place in the classroom with the title "What's good?' is better than 'What's new?""

"While we should be sure our schools evolve to accommodate these changes and work to incorporate new ideas into our schools, we should also remember that very smart people were teaching before us. In our haste to rush to the new, the shiny, we must not forget the lessons learned from the past." (pg. 22)

In proposing new changes to SLA's use of tech, we must first investigate and learn what has worked for our school, and what hasn't. We must avoid blindly making changes because the new thing came out. Every problem needs its own unique solution, especially regarding tech. In devising improvements, we must not think what's new, but what works and how to make it better.

## NewBay Media. "Building A Deep-Learning Culture While Making The Technology That Supports It Invisible." 2015

i.dell.com/sites/doccontent/business/solutions/whitepapers/en/Documents/sla-inquiry-drive n-learning-technology-wp-2015.pdf

This is an old-ish article on how SLA aims to use technology as an invisible tool. It's important to learn and remind myself that this is what the school's vision is with tech. While yes this is the case for most, more specialized cases like CTE DigVid and CTE Engineering IMO should have technology be more of a focus in their classes. For the general student population, this article does remain true. It's just a shame as I am a big proponent for learning and understanding the amazingly intriguing world of tech. My idea is different from the vision of SLA, so that will most likely cause some difficulty.

Pahomov, Larissa. *Authentic Learning in the Digital Age: Engaging Students through Inquiry*. ASCD, 2014.

This is a book written by Larissa Pahomov, a teacher who has been working at SLA for over a decade as of 2022. As of this year, she's also my current English teacher. As a veteran at this school, she has seen firsthand how technology has adapted and improved learning at SLA. In here describes some of the several benefits and main uses of technology in the classroom. From accessing tons of research, continuously promoting the development of new ideas from several different people at once, and creating an amazing finished projects that would be made 10x harder if not impossible without technology. AKA, Pahomov talks about how technology should be applied in schools. I am here to talk about the technicalities of how it can be done.

Pages of note include; 4-9, 43, Appendix B 150-157, and Appendix H 188-189.

The School District Of Philadelphia. "Budget 101 Understanding the District's Budget." 16 April 2021

www.philasd.org/budget/wp-content/uploads/sites/96/2021/04/FY22-Budget-101\_FINAL.

This is a report of how much the district gets from the Federal Government, State Government, and other sources. It also details how the District spends its budget on schools and where. It also provides an overview of how much the District pays employees, spends on supplies, spends on technological infrastructure, etc. While it's great general info on the whole distric, it's not specific enough for me and my focused analysis of SLA's technology. The School District Of Philadelphia. "FY2021-22 District-Operated School Budgets." April 2021 cdn.philasd.org/offices/budget/FY22 School Budget Book.pdf

Here, we get to have a closer look at what the budget is school-by-school. Page 133 is the one that describes how much the District is allotting for SLA. The total projected budget from the District to SLA is approximately \$4 million. HOWEVER, after speaking with Principle Lehmann himself, this is inaccurate to how much the school truely has to spend as this does not account for however much money SLA gets from outside orginization like the SLA HSA. From a general estimate, Mr. Lehmann believes the school spends around \$75,000 yearly on technology. With that in mind, I must create solutions that are not excessively expensive compared to the schools \$75k budget.

Watts, Robert. "How to Start & amp; Manage a Help Desk – The Ultimate Guide." *Fit Small Business*, Fit Small Business, 22 June 2021,

www.fitsmallbusiness.com/start-and-manage-a-helpdesk/.

One of the ideas I just pitched to both Mr. Lehmann and Mr. Henkel (Principle and Teacher/Tech Administrator, respectively) was to create a sort of student-run Help Desk. With the loss of our last Tech Coordinator, "SJ", the prospects of getting one back are slim to none. With that hole now left in the system, I believe the missing piece and be filled with the power of our already incredibly tech-savvy students. If we can focus their knowledge on helping those who are a little less knowledgeable navigate the always evolving world of technology without making it an annoying nuisance, that would be an achievement worth my resume! Jokes aside, this resource does mainly focus on creating and managing and helpdesk within the lens of a business, this is still useful as a source of inspiration. In the bluntest and brashest sense, we are a small school anyways, effectively a small business that provides quality education. The specifics of this endeavor are still in its infancy, and the idea will surely have many issues that need to be dealt with first, but it's an idea I believe in and hope I can execute well. "What Is NAS (Network Attached Storage) and Why Is NAS Important for Small Businesses?: Seagate US." Seagate.com, <u>www.seagate.com/tech-insights/what-is-nas-master-ti/</u>.

Useful general knowledge on how to start up a NAS Storage server. The general basics are that a NAS (Network Attached Storage) is a storage server that can be accessed via a local network. AKA, how to build a small-scale server. While hardware and equipment for this is quite expensive, I'd like to offer a budget solution that would be half the price of the iMacs we currently use in CTE DigVid.