# Tea Area School District - Staff Laptop Selection Matthew Brue

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**Computer Hardware / Networking Essentials** 

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### **Abstract**

Every seven years, one school within the Tea Area School District (TASD) is due for new staff laptops. This upcoming school year, it is the rotational year for the Middle School staff to receive their new laptops for the 2021 - 2022 school year. In this paper, I will dive into all aspects of the current laptop the Middle School staff currently utilizes, and then I will research and provide explanations as to the process of receiving the new laptops for the upcoming school year. Also, I will provide specifications and features of the new laptop.

#### Introduction

It has always piqued my curiosity as to how school districts decide upon resources and devices for their teachers. In late February, we were informed it was our rotational year at the Middle School to receive new staff laptops. We have currently been using our HP Elite x2 1012 G2 device for four years. We are partnered with HP so all of our staff devices are HP products. Eventually, I asked our technology director, Chris Friedrich, about the process of selecting the new technology for the district. She informed me of the district's process of selecting new devices, which I will cover in the proceeding sections. First, I will cover the Tea Area Middle School (TAMS) staff's current device, which is a HP Elite X2 1012 G2.

#### **TAMS Current Device**

The TAMS currently utilizes a HP Elite X2 1012 G2, which is a two-in-one laptop/tablet device with an Intel Core i5-7300 processor. For graphics, it contains Intel HD Graphics 620. It features a refresh rate of 60 Hz and a brightness of 450 nits (maximum). As far as storage, it contains a 256 GB SATA-3 SS value solid state drive, but it does offer and supports M.2 solid state drive possibilities. It has 8 GB of RAM available and can support up to 16 GB of RAM. When it comes to wireless capabilities, it supports a broad range of secure and integrated wireless LAN/Bluetooth, as well as wireless WAN options featuring support for the latest industry standards. Standalone GPS is also available (factory configurable only) and is supported via combo card. [1] The audio for the laptop is from Bang &

Olufsen. There are dual front-facing speakers with an echo cancellation and noise suppression microphone. It also features a front and back camera. The front camera Integrated 5 MP for still photo capture and 1080 p format for video. The back camera has an Integrated 8 MP with flash for still photo capture and 1080 p format for video.[1] In my opinion, a few of the key features for this device include the flexibility it provides by having a detachable keyboard to allow it to go from laptop to tablet seamlessly. I also like the active pen and touch screen options it has to allow users to draw or take notes. A disadvantage I have noticed and seen in various reviews is the limited ports and slots for USB connections, which is almost a necessity to purchase a docking station with more USB ports. I also despise the "Kickstand" it has on the backside of the laptop. It is not a traditional folding, open and closed, laptop. The kickstand option is fine if you are going to be stationary on a desk, but if you were to have to take this device on the go with you, it's almost impossible to get it to sit steady on uneven surfaces.

Product image



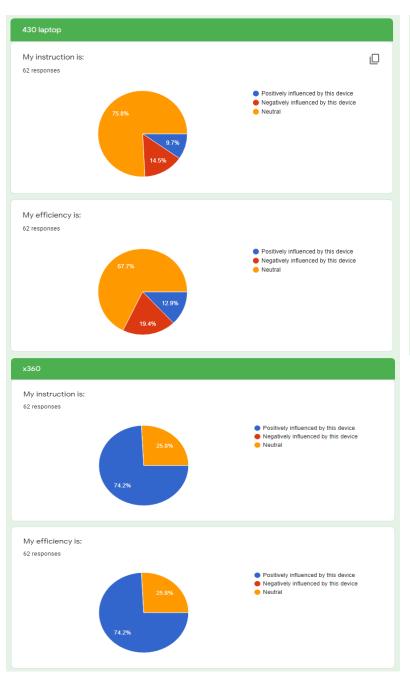
HP Elite x2 1012 G2 Tablet

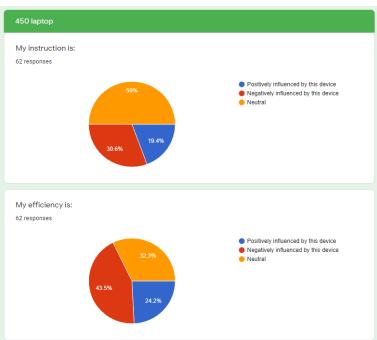
## **Laptop Options**

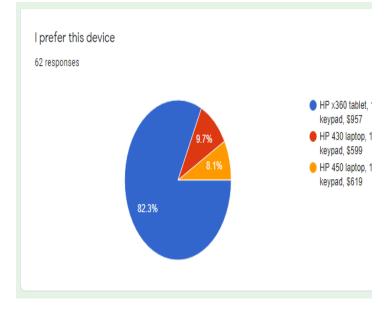
After meeting with our technology director, I learned that when deciding on new staff devices she first sets some basic specifications that the laptop must contain, which I have found aren't too far off from the device we currently have. Most notably, the device will have an intel i5 processor and run on Windows 10 Pro as an OS. The device must also have Intel UHD 620 Graphics with at least 8 GB of DDR4 RAM. Lastly, she said per teachers requests, they have to have a stylus pen and be touchscreen. There are 3 main laptops that HP has currently that can fit those specifications, the HP x360, HP 430, and HP 450. The next process that occurs is they bring in test models from HP and they let our teachers demo the three different laptops for a couple days. At the end of the process, a google form survey was then sent around to staff members which asked one main question per device, "My instruction was \_\_\_\_ ?" The options to the question are, "Positively influenced by this device", "Negatively influenced by this device", or "Neutral". Next, there was a question that asked faculty to provide comments, both positive or negative, about the device they were testing. Then, the final question asks which device was preferred of the three options. Finally, whichever device received the majority of the votes is the device that we order for that school's faculty. I found out that just because one of the elementary schools liked the HP 450 more, it doesn't mean that the whole district gets that laptop, just that specific school would receive that device.

## The Winner Is

After teachers were able to trial the three different devices, the overall winner was the HP x360 830 G7. Attached is the actual statistics / data from the TAMS Google Forms.[2]







Running head: Selecting The Right Laptop

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As supported by the data, the HP x360 was the clear favorite from the Middle School faculty. Some of the specifications from the machine are the intel i5 processor and the Intel UHD 620 Graphics. The device we will receive will have 8 GB of DDR4 RAM. [3] It will run on Windows 10 Pro 64 National Academic Plus as its OS. It features a 13.3 (1920x1080) LED with Webcam Touchscreen. The device will have a 53 WHr which offers up to 16 hours of battery life and a 45 Watt Smart Fast Charge AC Adapter. [4] The TASD also purchased a 4 year warranty which covers parts and labor. [5]

#### References

- [1] "HP Elite x2 1012 G2 Tablet Product Specifications." HP Elite x2 1012 G2

  Tablet Product Specifications | HP® Customer Support,

  support.hp.com/us-en/document/c05415563.
- [2] "Chris Friedrich" Tea Area School District Laptop Google Form
- [3] "HP EliteBook x360 830 G7 Notebook PC Customizable." HP EliteBook x360 830 G7 Notebook PC Customizable (8MQ81AV\_MB), www.hp.com/us-en/shop/pdp/hp-elitebook-x360-830-g7-notebook-pc-customizable-8mq81av-mb
- [4] HP EliteBook x360 830 G7 Notebook PC.

www8.hp.com/h20195/v2/GetPDF.aspx/4AA7-6973ENUC.pdf

[5] HP EliteBook x360 Quote For Tea Area School District