

ITC Chronicles

Lessons Learned:
30 Days with a Surface Pro
Windows 8 Tablet



Tom Grissom, Ph.D.
Instructional Technology Center
Eastern Illinois University

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The following is a compilation of blog posts from the ITC Chronicles blog that I posted over a 30 day period of time beginning in March 2013. I recently explored the capabilities of the Microsoft Surface Pro Windows 8 Tablet from a teaching and learning perspective. The Surface Pro is a new class of device that is a hybrid between the traditional desktop computer and a tablet device. This combination takes advantage of the power of a PC along with the flexibility of the new touch-first interface of Windows 8 to provide unprecedented flexibility for the creative process of teaching and learning.

The Surface Pro is what the iPad should have been. The Surface Pro has much to offer educators, from the full-size USB 3.0 port that allows students to easily transfer content on and off the device, to the set of enterprise class deployment tools that are being developed to assist with and manage large scale roll-outs of new tablets for schools and universities.

The Surface Pro bridges the gap between traditional applications that we are familiar with in getting our work done and the new modern touch-first Windows 8 apps that offer new and exciting possibilities. Whether you are a teacher or a student, the Surface Pro offers much for day-to-day educational activities in a lightweight and mobile slate form factor.

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Day 1 – Teaching and Learning with a Surface Pro Windows 8 Tablet – Wow!

Teaching and Learning with a Windows 8 Tablet

3/12/2013

Welcome to another edition of 30 Days with a Windows 8 Tablet series where this time I will be exploring the practical side of using a Microsoft Surface Pro Windows 8 Tablet for improving the teaching and learning experience.

The first thing I must say is Wow! The Surface Pro has all of the potential to become my “go-to” teaching and learning device for everyday classroom use. This thing is fast, especially compared to my Samsung Ativ 500T Clover Trail Tablet.

Since I already had a Microsoft account setting up the Surface Pro was easy. The out-of-box experience was one of the best I have ever had. All I had to do was go through the setup wizard and in less than 5 minutes I was up and running with all of “MY” content available automatically via Skydrive.

A Microsoft account allows you to connect your account with up to five devices and keep all of your content accessible using Skydrive. Think of Skydrive as a hard drive in the cloud. You get 7GB of storage space for free when you sign-up for a new Microsoft account. Be sure to follow your organizations policies regarding external accounts.

If you are a past reader of the ITC Chronicles blog thank you. You may remember my posts about using a “Clover Trail” class machine (the Samsung Ativ 500T) and how impressed I was with using it for educational purposes. I am still using the Ativ 500T daily as my personal tablet and it has proven itself to be worthy of consideration for anyone looking for a tablet with Pen input and long battery life (over 10 hours). You can read my conclusions after 30 days with the Samsung Ativ 500T Windows 8 Tablet [here](#).

For the next 30 days I will be setting aside the 500T for the most part and concentrating on using the more robust Surface Pro. Please note that I am using the Surface Pro and not the lower powered Surface RT version that uses the ARM processor.

The Surface Pro has a fast processor (Intel Core i5), 128 GB SSD hard drive, 4GB RAM, a FULL-SIZE USB 3.0 port (with an extra USB Port on the charging adapter for charging your cell phone), a microSD card slot for expandable storage, and a display port for use with optional adapters to connect to projectors or HDTVs in the classroom.

To top it all off there is a pressure sensitive Wacom touch screen with 1024 levels of pressure that can be used with a digitizing Pen and for me is one of the most exciting features of the Surface Pro for teachers and students.

For educators working in the digital world there is a lot to like about the Surface Pro.

The Surface Pro form factor is impressive, a 10.6 inch wide screen format that is only 1/2 inch thick. All of this in a 10.6 inch tablet form factor that weighs just 2.3 pounds, Wow!

My first impression of the Surface Pro was that it had a solid build quality and I had to remind myself that this was a “real” PC running a Core i5 processor and the Windows 8 Professional operating system complete with Pen input in a very small package. The magnesium-vapor case is of high quality and feels solid in the hand.

The Surface Pro also has a fold out stand that is a very practical edition to this tablet. The stand allows you to instantly prop it up on a table for viewing. Add the magnetic type cover that snaps on and off with a “click” and you have a new class of machine that is a full PC in a slate form factor that can transform into a laptop-like experience when a keyboard is needed.



My biggest conclusion from my previous experience with the Samsung Ativ 500T was that most of the mainstream technology press have completely missed the story about the transformation of Windows 8 devices. The world has changed and we now have sub \$1000 devices that make fantastic teaching and learning tools in a multitude of form factors. Choice is good.

One of the few things that was a mark against the Ativ 500T was the lack of CPU processing power that I sometimes needed. Enter the Surface Pro!

The Ativ 500T used the Clover Trail processor that is an Atom class processor previously used in netbook machines. The Clover Trail is the next generation of Atom and performed very well but there were times when it would bog down. The Surface Pro is the “real deal”, an Intel Core i5 processor, along with 4GB of RAM running the full-blown Windows 8 Pro operating system (the Ativ 500T only had 2GB RAM). The Surface Pro is truly a real PC in a tablet form factor.

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Day 2 – Getting started with the Surface Pro tablet, software installs and updates

Teaching and Learning with a Windows 8 Tablet

3/13/2013

Welcome to Day 2 of working with a Microsoft Surface Pro Windows 8 tablet for educators.

Today I will be taking care of some of the more mundane but necessary tasks of installing software and doing the latest Windows Updates so that my machine has the most recent patches from Microsoft.

The first decision I had to make was what version of Microsoft Office I wanted to install. I opted for the latest version, Office 2013, as this blog is meant to explore the leading edge of tablet computing. I had the installation files on a USB thumb drive and all I had to do was plug-in the USB drive into the full-size USB port and begin the install.

Having access to a full-size USB port is a great benefit of the Surface Pro, and it supports USB 3.0!!!



The installation went quickly and included what I call the “Big Four” for educators: Word, Excel, PowerPoint, and OneNote, along with other Office related programs (Access, Outlook, Publisher, Lync, Infopath). The complete Office 2013 install took less than ten minutes.

The new Office 2013, like Office 2007/2010, features the ribbon interface but the touch targets are designed to be larger so that you can use your finger to make selections if you have a touch-enabled device like the Surface Pro. This is another example of Microsoft moving toward the touch-first experience in Windows 8, even with their stalwart programs.

When I turned on the Surface Pro after charging overnight and checked Windows Updates I had 20 new updates to install. I installed the 20 updates, restarted the system and installed Office 2013. After installing Office 2013 I had another 30 updates to complete. This took a little over one hour to complete.

Yesterday was “patch Tuesday” so today I noticed Microsoft had pushed out a firmware update this morning for the Surface Pro so I installed the firmware using Windows Update. The firmware update took about 10 minutes to complete and required a restart.

One of the things that the Surface Pro, and Windows 8 in general, get criticized for is the “dual personality” of the Windows 8 operating system. On one hand you have a new and innovative “live tile” interface of the Start Screen and on the other hand you have the familiar “Desktop” view that we have become so comfortable with over the last two decades.

This is clearly a transitional operating system as Microsoft has chosen to hang onto the past Desktop metaphor but has also added the modern look and feel of the Start Screen. The modern-style of Windows 8 Start Screen is transitioning to a touch-first experience where icons have been morphed into tiles with larger touch points for interacting with the operating system. Some call this dualism “jarring” and a “mess” but after using Windows 8 for some time now I see this as hugely beneficial and not jarring at all.

People seem to making this more difficult than it needs to be. The Desktop environment is there if or when you need it and maintains a certain degree of compatibility for getting things done the traditional way. As new apps are developed I believe we will begin to see the phasing out of the Desktop but it will take some time as there are millions of programs that have been developed over the years to work in Desktop mode. Until then, I am grateful that the Desktop is there, it is a benefit and not a hindrance. The switch to all modern-style apps will not happen overnight.

I did run into a couple of issues with installing the updates that I will write about another time as it deserves its own post.

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Day 3 – A bump in the road, Safe Connect

Teaching and Learning with a Windows 8 Tablet

3/14/2013

Welcome to Day 3 of teaching and learning with a Microsoft Surface Pro Windows 8 tablet.

I did run into a couple of issues yesterday while installing software and doing the windows updates that I want to discuss so that you are aware of some potential issues and avoid them if possible.

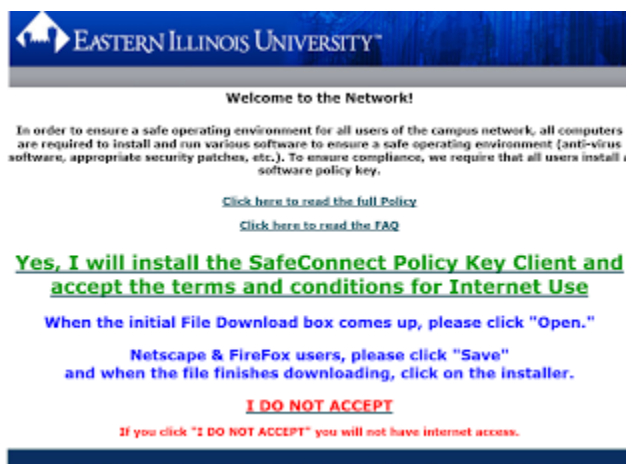
The first issue had to do with getting signed into a Microsoft account with the Surface Pro. I have a colleague who just setup a new Microsoft account and I was showing her how to login on a brand new Surface Pro.

We could not login and it was not immediately obvious to me why as I had done this thousands of times before on other PC's. This was a brand new Surface Pro that was fresh out of the box.

Since I could not login with the Microsoft account I setup a local account on the Surface Pro and was able to login and diagnose the problem. I was able to install some software including Audacity and Office 2013. I also tried to do the Windows Updates but received an error message that the Windows Updates could not be completed.

There seemed to be something wrong with the setup so I thought this would be a great time to try the new "Refresh Your PC" feature new to Windows 8. More on that story tomorrow...

Turns out we were using the university wireless network that has some safeguards to prevent just anyone from connecting to the network. Our university uses a product called "Safe Connect" that is a client you must download onto your machine before accessing the university network. The safe connect client is similar to what you see in hotel rooms where you have a splash screen that you must accept the "terms of use" before connecting to the network.



We could not login to the Microsoft account since I had not loaded the safe connect client and it was blocking network access so the username could not authenticate, doh!

Cart before the horse.

Since the Surface Pro uses Windows 8 Professional it is treated just like a regular PC by the network. All PC's must use Safe Connect before being allowed onto the university wireless network.

So I loaded the Safe Connect client and was almost home free. I say almost as the university also requires an up-to-date antivirus program on all computers on the network so we loaded the approved antivirus program from the university software download page.

All was now good as Safe Connect was loaded and the Surface Pro had the latest antivirus definitions.

Since we were now connected to the wireless network my colleague was able to login with her Microsoft Account. No more problems. I had her copy some pictures to her Skydrive and introduced her to the cloud computing options available with her new Microsoft Account including the free Office Web Apps.

Since she had never used Windows 8 before I gave her a five minute overview on using the Surface Pro tablet and she was on her way.

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Day 4 – Refresh your Windows 8 PC, be careful, refresh will uninstall programs

Teaching and Learning with a Windows 8 Tablet

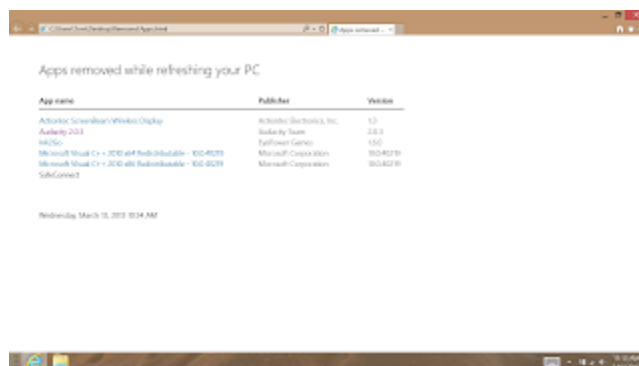
3/15/2013

Welcome to Day 4 of working with a Microsoft Surface Pro Windows 8 tablet for educators.

Another thing that I learned as part of my trouble-shooting the past couple of days is that there is a feature in Windows 8 called “Refresh your PC without affecting your files” and you must be logged in as an Administrator to use. Since I was having some difficulties I decided to give it a try. Sounds like something that might help an ailing PC.

It worked but what I was not expecting (although I should have known) was that the “Refresh” also removed all of the installed programs that did not come with the Surface Pro. Since I was just starting there were not that many but still it caught me by surprise. Now knowing this I will only use “Refresh our PC” as a last resort.

Below is a screenshot after the refresh with a file that was posted on the Desktop after I did a refresh. It listed all of the “removed” programs after the refresh. For me this included the Office 2013 suite of programs, Audacity, Ink2Go, and the ScreenBeam wireless display program. Luckily I was just starting to use the Surface Pro and had not invested a lot of time installing apps.



Another lesson learned.

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Day 5 – Battery life and the Surface Pro

Teaching and Learning with a Windows 8 Tablet

3/16/2013

Welcome to Day 5 of working with a Microsoft Surface Pro Windows 8 tablet for educators.

I now have two Windows 8 tablets in my life.

The first is a Samsung Ativ 500T Smart PC that I purchased to find out for myself if all the hype around the completely redesigned Windows 8 and the newly released tablet form factors would be worthy devices for teacher and student use.

They are!

I blogged about my Samsung Ativ 500T experience [here](#) as a series of blog posts similar to what I am doing with this Surface Pro.

The Samsung Ativ 500T is a wonderful device and after using it daily over the past three months it has become a favorite.

The only bad thing to say about the Ativ 500T is that I sometimes need more horsepower to get the heavy lifting done. Things like video editing and screencasting would strain the Clover Trail processor of the Ativ 500T so I would offload those tasks to a “real PC” with an Intel Core i5 or i7 processor.

Enter the Surface Pro.

I am just beginning to explore and push the Surface Pro to its limits but so far I am impressed. I have to keep reminding myself that this is a “real PC” with an Intel i5 processor, 4GB RAM, and a 128GB SSD hard drive. It is fast, especially compared to the Clover Trail tablet I have been using.

The down side to all of this speed and power is that it only gets about half of the battery life of my Ativ 500T. I usually get over 10 hours of battery life on the Ativ 500T and rarely even think about running out of battery.

The Surface Pro on the other hand has been getting a little over 5 hours battery-life. This is comparable to other Ultrabooks on the market but I do need to “pace” the way I use the Surface Pro.

Since I am using the Surface Pro in my office much of the time I have been trying to form the habit of connecting the Surface Pro to its magnetic electrical connector that snaps on while using it at my desk. That way I just disconnect the magnetic catch and I am off to meetings or the classroom with a topped off battery. I really have not had any battery issues since I am aware of the need to connect the Surface Pro to the charger when available.

The Surface Pro gives you a battery is low warning with about 10% of charge remaining. I will get a second warning when the batter gets below 6% of charge left. At this point I shut it off and find an electrical outlet to recharge the battery. It is nice to get the two warnings.

Since I now have both devices I have been choosing the Ativ 500T as my “evening tablet” for browsing the web, listening to podcasts/music, watching videos, reading ebooks, and checking email. All light duty tasks.

If I need to get some “real work” done I have now moved the Surface Pro as my machine of choice when more horsepower is needed. I will be leaving the Dell XPS 13 Ultrabook at the office and choosing to bring the lighter (2.3 pounds) Surface Pro home with me for work purposes.

I have been editing the [TechTalk4Teachers Podcast](#) with the Clover Trail Ativ 500T tablet for the past 3 months. This month I used the Surface Pro with its i5 processor to edit Episode 147 of TechTalk4Teachers and the extra horsepower was a big improvement over the Ativ 500T Clover Trail processor.

The Surface Pro really is a joy to edit an audio podcast with. I use the Audacity program and the digital Pen that comes with the Surface Pro for the edits. The Pen input is very fluid and precise and allows for very accurate selection of audio for editing purposes. Works great.

I love the Pen input available on the Surface Pro!

This is what a “Tablet PC” should have been all along. The technology has finally caught up with the Tablet PC vision with the Surface Pro.

Until next time...

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Tom Grissom, PhD

Blogged on my Surface Pro

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Day 6 – A day to relax with some xBox music

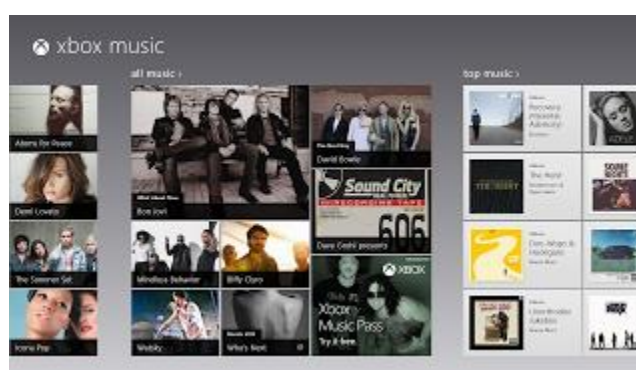
Teaching and Learning with a Windows 8 Tablet

3/17/2013

Welcome to Day 6 of working with a Microsoft Surface Pro Windows 8 tablet for educators.

Today is Sunday so I took the day off for the most part. I only used the Surface Pro to occasionally check email and Twitter feeds. The ASCD conference was going on this weekend in Chicago so I followed along monitoring the hashtag #ascd13 to keep up with the news there.

One of the features I really like on the Surface Pro (and other Windows 8 devices) is the ability to play xBox Music in the background while I browse the Internet.



The sound is fantastic and the variety of music available is liberating. An added bonus with xBox Music is that you can get a “slide show” of the artist currently playing.

You can buy the xBox Music pass subscription service for \$9.99 a month that offers millions of songs available to stream instantly. But for now I am listening to the ad sponsored music and will occasionally have to listen to commercials.

You do get some "nag" messages pushing the xBox Music pass and you can buy one if you do not want the ads. I still have a Zune pass that eliminates the commercials but I have not figured out how to merge it with my new outlook account. I just need to take some time to figure that out but it has not hit my priority to-do list yet.

The kickstand that flips out may seem like a very small detail but it is incredibly useful. The kickstand allows you to prop up the Surface Pro wherever there is a flat surface. When I place it on my TV stand I can plug the Surface Pro into the 3.5 mm AUX cable from the home stereo into the Surface headphone jack and listen to high-quality sound. Very nice for some Sunday afternoon music appreciation time.

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Day 7 – How to Wirelessly Display (Mirror) the Surface Pro Windows 8 Tablet to a HDTV or HDMI Projector

Teaching and Learning with a Windows 8 Tablet

3/18/2013

Welcome to Day 7 of working with a Microsoft Surface Pro Windows 8 tablet for educators. Today I will share what I have learned about wirelessly displaying the Surface Pro to the big screen.

Over the past month I have been experimenting with a new product called ScreenBeam from ActionTec that allows the wireless streaming of video and audio from the Surface Pro (or other Windows 7/8 computer) to a HDTV or HDMI Projector.

The initial tests are promising and I am excited to share the results with fellow educators. I have created a video that demonstrates this capability and have posted it below.

http://www.youtube.com/watch?feature=player_embedded&v=GyDg05mJmE

An AirPlay-like experience - only different:

Some may compare the ability of the Surface Pro to wirelessly mirror audio/video to the big screen to the iPads AirPlay capability. The results are the same but the ScreenBeam product is a completely different product using a different technology and offers a few advantages over AirPlay.

Below are some pros and cons:

1) The ScreenBeam product is available in kit form with a street price of around \$80. The ScreenBeam kit consists of a receiver unit that connects via a HDMI cable to the back of a HDTV or HDMI capable projector and also includes a separate USB transmitter unit.

AirPlay requires an Apple TV at a cost of \$99 and also uses a HDMI cable to connect to the HDTV. Unlike ScreenBeam, iPad AirPlay uses an existing wireless network to transmit the audio/video signals.

2) The ScreenBeam product requires the use of the only full-sized USB port available on the Surface Pro. An advantage of AirPlay is that it is built into supported Apple devices. Hopefully Microsoft and other tablet manufacturers will build this new wireless audio/video streaming into future laptops and tablets. Many HDTV manufacturers will be releasing new HDTV models with built-in wireless streaming capabilities later this year that will offer “miracast” support that should make wireless video streaming more common place in the future.

3) Since the ScreenBeam product uses a separate USB transmitter I have tested it with a five year old PC running Windows 7 and it works!

The older PC tested only had an Ethernet jack connected to the network by a LAN cable and no wireless card. I used this arrangement to demonstrate that the ScreenBeam solution could work without a

wireless network. This could be a huge advantage for teachers/presenters at conferences as connecting to unfamiliar wireless networks is sometimes difficult.

I have also tested the ScreenBeam product on a Clover Trail tablet (Samsung Ativ 500T) but results have been disappointing. The Clover Trail Atom processor does not seem to have enough processing power for video to stream smoothly. I can get it to work but performance is slow and unusable in a classroom environment.

The good news is that it is working with older Windows 7/8 computers that I have tested with a Dual Core 2 Duo processor or higher thus making it backward compatible with millions of older PC's.

Another benefit of having a separate USB transmitter is that you can leave the ScreenBeam receiver unit connected to the HDTV and move the USB transmitter from a tablet, to a laptop, or to a desktop as needed when you want to wirelessly display the screen of the device you are using to the big screen.

4) The ScreenBeam product can work as a standalone solution. AirPlay requires the use of 802.11 wireless network where the device and the AppleTV must be on the same subnet. This may be problematic for schools as many IT departments may prevent video streaming due to bandwidth concerns.

Some may purchase a separate AirPort unit at additional costs to setup an adhoc network but this can often lead to wireless problems for others using the wireless network. Please consult with your IT department for recommended solutions as some IT departments may block AirPlay connections.

5) Another issue when dealing with AirPlay compatible devices is that you need to sign-in with an Apple ID. This creates another layer of userids to be managed. ScreenBeam is simple, no userids required, just plug it in, pair it, and you are set.

6) ScreenBeam connects using a "pairing" process similar to how you connect a Bluetooth keyboard to a computer. Once the pairing is complete you will see the Surface Pro screen on the HDTV! What you see and do on the tablet is displayed immediately on the big screen in real-time. There is a slight lag, especially when streaming HD video content but it is very usable. In my testing range is about 30 to 50 feet, plenty of room to roam about the average sized classroom.

ScreenBeam also works well in a living room situation as I am able to connect the Surface Pro to the HDTV and wirelessly display the Surface Pro screen to the big screen TV from the easy chair so everyone in the room can see and hear the content. Services like Netflix and Amazon video should be able to work in this scenario, although I have not tried these streaming services on the Surface Pro yet.

Another use I have found is streaming music and audio podcasts wirelessly to the big screen and using high-quality speakers from the stereo system to play content from the Surface Pro wirelessly for all to hear.

So there you have it, my experiences with wirelessly mirroring the Surface Pro

to the big screen. It works!

I am sure there are other ways to wirelessly display the Surface Pro to the big screen so please share your experiences if you have it working a different way.

There are new products coming on the market that may make the ScreenBeam product obsolete as new miracast standards are being incorporated into new products. I expect a whole new range of capabilities coming to market just in time for this years' Christmas season so things may change rapidly.

The good news is there is a wireless display solution that works now with the Surface Pro.

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Day 8 - Surface Pro: Touch Cover or Type Cover Keyboard?

Teaching and Learning with a Windows 8 Tablet

3/19/2013

Welcome to Day 8 of working with a Microsoft Surface Pro Windows 8 tablet for educators. Today the subject is keyboards.

When you decide to purchase the Surface Pro you need to consider if you would also like to buy the “snap” style keyboard designed to work with the Surface Pro. The keyboard is sold in two different styles, the touch cover and the type cover. I have used both so here are my thoughts, but remember the feel of a keyboard is a personal preference so your opinion may vary from mine.

After my experience with the Samsung Ativ 500 where I did not initially buy the keyboard, a choice I later regretted, we elected to purchase both keyboard styles designed for the Surface Pro.

The Surface Pro keyboards have been designed with cutting edge technology just like the rest of the Surface Pro. You may have seen the Microsoft commercials that prominently feature the Surface Keyboards and the “magnetic latch” that allows you to snap the keyboard on and off with a solid sounding click. This magnetic latch system works very well and I have had no problems connecting or disconnecting the keyboard to the Surface Pro.

Both the touch and the type covers can be folded over the back of the Surface Pro when the keyboard is not needed. When the keyboard is flipped over to the back the keys are disabled so you cannot accidentally press the keys when you are using the Surface Pro in tablet mode.

The touch covers come in a variety of colors including blue, black, pink, and white. Touch covers retail for \$119.99

<http://www.microsoft.com/Surface/en-US/accessories/home>

The touch cover is a very thin keyboard that serves as both a cover and a keyboard. The thinness really is amazing. The touch cover is essentially a printed keyboard on a cloth-like material and the keys have no give. It is like typing on a table-top, not having any feedback to your fingers is kind of a weird experience when you first try it out.



Because the touch cover has no physical keys to push it does take a while to get used to. Some people adjust better than others so I highly suggest you go to a store and try it yourself to see if you think it would work for you. One peculiar thing about the touch cover is that the top row of keys do NOT include Function Keys F1 – F12 so if you use function keys a lot the touch cover may disappoint.

The type keyboards are not cheap at \$129.99 but when compared to other tablets you have to remember you are getting both a cover and a keyboard so it works about the same as you would spend on an iPad keyboard and cover. The type cover is currently only available in black.



I much prefer the type cover as it is similar to a laptop keyboard. The type cover has individual physical keys that do have some give so you do get feedback as you type. The type cover does include the Function Keys F1 – F12 although they are secondary keys and you will have to use the Fn Key in combination with the Function keys to select.

There are also other keyboard options for the Surface Pro besides the snap-on covers. Because the Surface Pro has Bluetooth you could use a Bluetooth keyboard and mouse with the Surface. Also, the Surface Pro has a full-size USB port so you could use one of the many radio frequency keyboards or mice that use a USB transmitter. If a wireless keyboard works with Windows 7 there is a good chance it will also work with Windows 8 on the Surface Pro. Of course, you could also just plug in a full-size USB keyboard or mouse (both if you use a USB hub – the Surface Pro has only 1 USB port).

There are also docking stations that are designed to work with the Surface Pro that allow you to plug in a keyboard, mouse, ethernet cable, and large screen monitor. Choice is good.

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Day 9 - Surface Pro: On-Screen Touch Keyboards

Teaching and Learning with a Windows 8 Tablet

3/20/2013

Welcome to Day 9 of working with a Microsoft Surface Pro Windows 8 tablet for educators.

Yesterday I talked about the physical keyboard choices available for the Surface Pro. Today the subject is about on-screen keyboards.

Since the Surface Pro features a touch-screen it is natural to have an on-screen keyboard available for use in tablet mode. One thing I am finding out about the Surface Pro is that there are plenty of options available to end users. Microsoft has always been very good at maintaining backward compatibility and that can lead to many options. The old ways of doing things are often there, if you need them.

As discussed yesterday the Surface Pro features a full-size USB port that offers the possibility to plug in a USB keyboard if you would like. For that matter, you could also plug in a USB Xbox controller and use it with the Surface Pro. I am guessing you could also plugin the Kinect as well but I have not tried that. The point is there's an amazing amount of diversity of hardware that the Surface Pro can support.

Today, I would like to explore the on-screen keyboard options available on the Surface Pro. These virtual keyboards have their roots in the Tablet PC era. If you do not have a physical keyboard connected to the Surface Pro you will need to use one of the on-screen keyboards to enter information.

There are three basic styles of on-screen keyboards and you can easily switch back and forth between the different styles.

First, there is what I call the standard style. Secondly, there is the split-keyboard style that is designed to work similar to mobile phone thumb typing. The third option is for digital Pen input using the digital stylus that comes standard with the Surface Pro.

I have made a screencast demonstrating the three different types of on-screen keyboards and also discussed a fourth type that is a full-featured on-screen keyboard available in Windows 8.

http://www.youtube.com/watch?feature=player_embedded&v=u2NK9EIsPf0

Choice is good.

Until next time...

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Tom Grissom, PhD

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Day 10 - Vintage software installation options on the Surface Pro

Teaching and Learning with a Windows 8 Tablet

3/21/2013

Welcome to Day 10 of working with a Microsoft Surface Pro Windows 8 tablet for educators.

Yesterday I talked about the new on-screen keyboard options available on the Surface Pro. Today, I have been installing new software.

I will be reporting on some of the software I have selected for installation in future blog posts. Since I am investigating the educational uses of the Surface Pro I have carefully selected programs that I consider to be beneficial for everyday teachers.

We are in a transition period as new devices are offering new options for delivering software. The "app store" model is becoming a popular choice but there are downsides to this approach as well. The one-size fits all app store model does not work for many organizations. Dealing with separate userids, linking credit cards to accounts, and managing new "subscription" models can be a nightmare for large organizations to manage so new policies need to be agreed to and adopted.

Businesses and schools often want their own control of userids, applications, and most importantly, data. So, for the foreseeable future additional methods for installing programs and storing data will be needed beyond the cloud. We will be living in a hybrid world, hanging onto what works now, but also moving to the cloud when it makes sense.

The selected software I installed today is Mixcraft, a music creation program. Teachers routinely work with multimedia and having access to a music creation program opens a new world of possibilities.

We purchased this program "in the box" and it came on a CD. Yes, they still sell software in boxes with CD's.

I needed to install the chosen Mixcraft program on the Surface Pro and had the purchased CD that was needed for the installation. One problem, the Surface Pro does not have a CD or DVD player. I could have copied the files to a USB stick, or downloaded a copy from the vendors website, but I wanted to install from the CD and avoid those extra steps. Time to kick it old school.

Why install from CD? Because if I downloaded the software from the vendor site I would only get the base install. Many of the music loops that can be used with the Mixcraft program would need to be downloaded on an as needed bases after the install.

Since the Surface Pro comes with a USB 3.0 port I grabbed an external CD player, plugged it in, and was off to the races. The software CD included all of the music library loops and all were installed by default. No messing around with additional loop downloads. Another case of the versatility of the Surface Pro that once again gives me an appreciation for the backward compatibility when I needed it.



Schools have hundreds of software programs that have been purchased on CD's and DVD's over the years and it is good to know that many are compatible with Windows 7 and can be used with Windows 8. Yes, we are hanging onto the past but I am amazed at how many of the so-called new "apps" are nothing more than modern versions of the free Adobe Flash-based websites not so long ago. Everything old is new again, just in a different wrapper.

I appreciate having a full-size USB 3.0 port on the Surface Pro that offers so many possibilities for expanding the capabilities of this tablet. Having a USB port on the Surface Pro bailed me out again today.

Choice is good.

Until next time...

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Day 11 – Surface Pro supports multi-user accounts, a BIG deal for schools Teaching and Learning with a Windows 8 Tablet

3/22/2013

Welcome to Day 11 of working with a Microsoft Surface Pro Windows 8 tablet for educators. Today I will be discussing the importance of multi-user accounts for use in schools. Maybe not the most exciting topic, but a very practical one.

One of the things that often gets overlooked in education circles is the need for multi-user account support for consumer level devices that are entering the schoolhouse. In the quest of searching for the latest and greatest gadgets many are enamored by BNSO disease (Bright New Shiny Objects). In far too many cases little thought is paid to the consequences and costs of supporting these devices and other BYOD (Bring Your Own Device) initiatives.

There will be increased costs, both in personnel and networking infrastructure. These costs are often overlooked from the initial excitement over the latest gadget craze that will “change everything”. As magical as it may seem, it is not magic, and there are no silver bullets.

Meanwhile back at the schoolhouse, IT departments have been scrambling to provide “free” wireless access for BNSOs that are showing up in schools, IT departments are doing their best at securing network resources and protecting private data that are increasingly being accessed via mobile devices. Mobile devices that are often not designed for the demanding needs of the enterprise.

Fortunately, the Surface Pro is an enterprise class machine, sporting the latest Windows 8 Professional operating system.

The Surface Pro does offer multi-user account access and also Active Directory support, This may be one of its more boring details, but an important one. The advantage of multi-user account capability is that it moves the paradigm from a device centric approach to a user centric approach.

It would be great if we could provide each and every student with a one-to-one device that they could call their own every hour of the day, but unfortunately, many school districts (or parents/guardians) are not in a financial position to buy individual devices costing hundreds of dollars for each child. This cost can quickly get out of hand if you have more than one school aged child to buy for. A more efficient solution is to buy fewer devices and “share” them throughout the day with multiple users on an as needed basis.

This of course means that several students could be using the same computer over the course of the day. Some device manufacturers ignore this fact and simply say the device they are selling is meant to be a personal device and not meant to be shared, washing their hands of the gritty implementation and support details. What happens to all those documents, pictures, videos, and passwords that are saved to a shared device over the course of a day?

Microsoft has experience in this realm and have incorporated multi-user account support into the Surface Pro. Hooray! This is a HUGE advantage for schools. This effectively means that you can have a cart or computer lab full of Surface Pros and students can login with their own special account to access resources customized for them on any supported device.

Another option is to setup the Surface Pro with a generic logon and use a group policy or special software that “resets” the Desktop environment upon reboot. This method has been used for years in computer lab environments and solves the issue of the machine getting cluttered with user documents over time. Another benefit with a reset is that any passwords that a user may have left logged in will also be cleared from the device (it happens more than you think).

Another HUGE benefit is that multi-user accounts can be setup for family members so others do not “mess” with the way you have your Surface Pro setup, or worse, access your email and documents. Have you ever handed your tablet to a child and got it back with all of you app icons rearranged? Ever wondered how many emails they accidentally sent using your email account? I have, but not anymore.

Having a device with multiple accounts is also extremely helpful for teachers that are implementing the “Flip Classroom” model of instruction using screencasts. Having a special multi-user account setup that is used only for screencast creation prevents you from accidentally recording personal information you may have stored on the Surface Pro. The Windows 8 Start Screen is beautiful, with all the multicolored “Live Tiles”, but recording your screen while emails are popping up is inadvisable. A separate account solves this potential problem.

There is one more elephant in the room that many schools and organizations are currently struggling with regarding the Surface Pro and the new Windows Store. How do you handle “Microsoft Accounts” that are required if you truly want to take advantage of all the Surface Pro (and other Windows 8 devices) have to offer?

Other tablet manufacturers also have their own vendor specific user accounts that are required to purchase apps. How should this be handled for children accounts? BYOD programs? Who pays? Who keeps track of all the passwords? Who owns the apps? Many companies have Terms of Service that require children to be 13 years of age or older before obtaining accounts. How do you manage this environment in a school setting?

I also am concerned with children becoming the marketing targets of multibillion dollar corporations trying to “brand” children at such an early age. Beware the educational technology testing complex. These are all new issues facing schools and parents/guardians. There is much to work to do. A cautious approach will be required to sort these things out and for now there are no easy answers. It is a brave new world indeed.

Until next time...

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Day 12 – All Hail the mighty USB 3.0 port on the Surface Pro Windows 8 Tablet

Teaching and Learning with a Windows 8 Tablet

3/23/2013

Welcome to Day 12 of working with a Microsoft Surface Pro Windows 8 tablet for educators. Today I will be discussing one of the greatest features a tablet device can have for school use, the mighty USB 3.0 port.

The Surface Pro features a USB 3.0 port, located on the left-hand side when holding the tablet in landscape mode. The USB port is a full-size port so there is no need to buy those silly little adapter cables that can never be found when you need them.

It is important to understand that there are different versions of USB when comparing features between different tablet models. Some tablets have no USB port at all. The Clover Trail Atom models of Windows 8 tablets that I am familiar with come with a USB 2.0 port. Some use a full-size port while others use a miniUSB or microUSB connection. I much prefer the full-size version of USB as it is one less adapter cable to buy and lose. The advantage of the mini/microUSB ports are that manufacturers can make devices thinner.

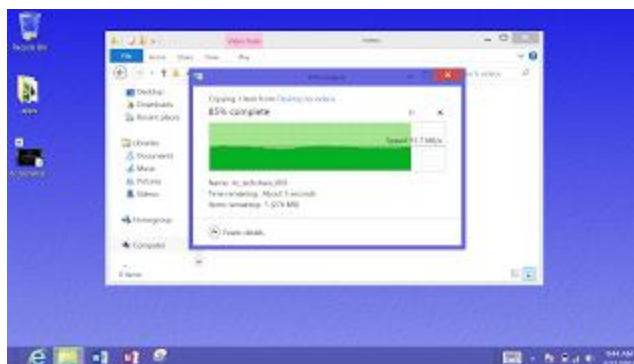
I am not sure if you can buy a Windows 8 tablet today without some version of USB. I only have hands-on experience with the Samsung Ativ 500T Clover Trail model that has a full-size USB 2.0 port, and now the Surface Pro that comes with full-size USB 3.0 port. All I can say from experience is that I would not recommend a tablet for school use without the ability for easily moving files on and off the device. A USB port makes that workflow much easier and faster. Sharing is caring.

There are workarounds if you do not have a USB port on a tablet, but they are just that, workarounds. We are not quite ready to live 100 percent in the cloud so once again we are holding onto the old ways of doing things, like transferring files via USB. It may not be fashionable but it is definitely practical in a school environment.

I often work with large multimedia files. In the era of the flipped classroom having a way to easily share very large video files with colleagues and students is becoming more common.

Having the files hosted on YouTube or stored in a cloud storage solution is one option, but what happens when the students go home? Do they have broadband Internet access at home to watch videos? Some do of course but we are still living in the digital divide era that prevents many students from having access to the Internet at home. Don't believe me? Checkout this map of broadband access for the county our university is located in.

<http://www.broadbandillinois.org/Get-it/East-Central-Regional-eTeam/Broadband-Maps-Demographic-Analysis/Coles-County.html>



It would really be a disappointment if USB 2.0 was not compatible with USB 3.0 as we would have to buy all new USB 3.0 drives for the Surface Pro. Happily, USB 3.0 is backward compatible by design so we can still use the older USB 2.0 technology with the new, it will just be at the slower USB 2.0 speeds.

USB 3.0 offers 8 to 10 times faster copy times compared to USB 2.0. Think of it this way, if I could go to work for just one hour a day and work at USB 3.0 speeds I could get as much work done in that one hour as it would take me to do in 8 hours if I worked at USB 2.0 speeds. That's a big difference!

Copying that 2GB video file locally just saved 2GB of traffic over the wireless network. Multiply that by 30 students and you just saved 60 GB of wireless network traffic. I hope your schools data plan is not capped at 5GB ;) Bits are bits, it all adds up.

So the mundane USB 3.0 port is definitely a positive for the Surface Pro. I may not be the typical tablet user but I do appreciate the technical improvements that the Surface Pro has to offer. These technical improvements do increase the cost of the Surface Pro but as they say, you get what you pay for.

Choice is good.

Until next time...

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Day 13 – Thunder in the Cloud

Teaching and Learning with a Windows 8 Tablet

3/24/2013

Welcome to Day 13 of working with a Microsoft Surface Pro Windows 8 tablet for educators. Today is Sunday so I am taking the day off for the most part with the exception of this blog post.

As I get ready to write this post snow is coming down rapidly. March weather is weird, this morning the sound of thunder could be heard as the first snow fell. The forecast is calling for a foot of snow tonight and we have already lost Internet connection at my house. This outage is probably due to the snow piling up on the wireless antennas that we rely upon to deliver Internet service here in the country. Living in the country has many benefits, but also has a few downsides. Below is a picture of one of the benefits I took this afternoon.



I will do my best to post this entry today, but if not you know why.

Before the Internet went out we were experiencing very slow Internet service this weekend. It is March Madness here in the United States and many people are now using the Internet as a glorified TV. Between weekend Netflix usage and the March Madness College basketball tournament, the bandwidth I rely upon to access cloud-based resources like Skydrive and other Microsoft account resources has been diminished.

This is yet another reminder of “the cloud” not being ready for prime time. When using a modern PC like the Surface Pro we expect cloud services to be there all the time. This outage requires an adjustment that I can make, although it is an inconvenience.

It also underscores the point that I still must have a hybrid approach to computing for occasions like this. If the cloud is not available I do have a Plan B to continue to work. I am using Microsoft Word 2013 on the Surface Pro to write this entry and when the Internet connection is back I will post it.

This experience has given me pause to consider the new “Chromebook” computing paradigm that heavily relies upon the cloud. The Chromebook is intriguing for educators as some models only cost

\$250 and are essentially a Chrome browser with the bones of a laptop. I am still interested in learning more about the Chromebook but if I were using a Chromebook today it would be useless.

Besides, I can have a Chromebook-like experience on the Surface Pro using the Chrome browser on the Desktop. I do use the Chrome browser along with the new IE 10 browser and is another example of the flexibility built into the Surface Pro. The advantage of the Surface Pro today for me is that I can continue to use it as a PC without Internet connection and get things done locally.

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Day 14 – Surface Pro: 64GB or 128GB?

Teaching and Learning with a Windows 8 Tablet

3/24/2013

Welcome to Day 14 of working with a Microsoft Surface Pro Windows 8 tablet for educators. Today I will address the issue of expandable storage options available on the Surface Pro.

The ability to have expandable storage space is yet another advantage of the Surface Pro over other tablets on the market. It is also a very convenient way to get student work on and off the tablet.

There have been press reports that 64 GB of storage on the entry model of the Surface Pro is not enough, especially since the operating system takes up a large chunk of it. Many have pointed out that a large portion of the hard drive is consumed by the Windows 8 operating system and recovery partition.

<http://www.pcworld.com/article/2026692/microsoft-surface-pro-64gb-comes-with-only-23gb-of-available-storage-space.html>

PC World reports that the advertised space of a 64GB Surface Pro, “will only have 23GB available for use out of the box – that’s just under 36% of the advertised capacity”.

Some in the blogosphere have tried to make a big deal out of the storage space issue on the Surface Pro comparing it to the 16GB iPad that has 75% of advertised storage space available. The 16GB iPad has 12GB available storage, about half of the 23GB available on the Surface Pro 64GB model.

What many are missing is that the Surface Pro is really a new class of device and making such comparisons are invalid. Windows 8 and iOS are two completely different operating systems, one a full-featured enterprise class device, the other a consumer level device.

If a comparison need be made it would be more relevant to compare the Surface Pro to the Macbook Air model as Ed Bott has done in the article below.

<http://www.zdnet.com/surface-pro-versus-macbook-air-whos-being-dishonest-with-storage-space-7000011009/>

You can see the results are similar for the amount of advertised space available between the Air and the Surface Pro. The Surface Pro is more of an Ultrabook class device dressed up in a tablet form factor, but it is much more than an Ultrabook. It really is a new class of device as we make the transformation to new touch-centric devices that have the full power of a PC.

So the bickering goes back and forth in the blogosphere about storage availability on the Surface Pro. But, the big story here, the one that most are missing, is that the Surface Pro has a USB 3.0 port that offers essentially unlimited storage capacity.

Think the 128GB SSD hard drive in the Surface Pro is not big enough? No problem, just plug in a 1 Terabyte hard drive into the USB 3.0 port. Is that enough storage for you?

True, it is detachable storage but as I have said before this capability is a huge plus in my daily workflow of working with large video files. Having something stick out the side of the Surface Pro however, is limiting and in a perfect world more internal storage would be preferable.

So, 64GB or 128GB?

More is better in this case and thus we elected to go with the 128 GB Surface Pro, at a cost of \$100 more than the 64GB model. The main reason is that I do work with large files regularly and the additional space is warranted. I also plan on installing some full-featured programs that will take up additional disk space.

In addition, the Surface Pro also offers a microSD slot that allows you to add up to 64GB of additional storage. The advantage of the microSD card is that it becomes essentially hidden (does not stick out) and disappears into the Surface Pro.

Since the Surface Pro features full Windows 8 file management capability (it is Windows after all), the microSD card just appears like any other drive would on the Surface Pro in File Explorer. That's 64GB of "extra" storage space, beyond the internal 128GB SSD drive if you need it.

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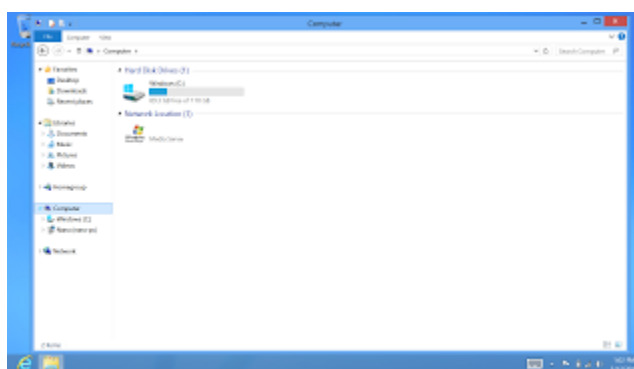
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One of the intents of this blog is to document the experience and share new possibilities for teaching and learning. Since this is a hybrid model we are exploring I am interested in both the Desktop and App worlds.

I began by installing the PC applications that I regularly use on the Surface Pro. These are the full applications that we are accustomed to running on a standard PC.

To begin with the reported amount of storage space available on the brand new Surface Pro we purchased was 89.3GB free out of the box. The rest of the 128GB SSD storage is used by the operating system and a recovery partition. You can get an approximately 7 GB of space returned if you backup the recovery partition to a USB drive if you absolutely need additional space. But if you remove the recovery partition you will not be able to do a factory reset. You will need the recovery USB drive that you will need to make if you delete the recovery partition, so be careful. Since the Surface Pro also has expandable storage I am leaving the recovery partition on the device. I will use expandable storage if I need it.



So here are the practical results from the programs that I have chosen to install to date. I have installed the following programs on the Surface Pro:

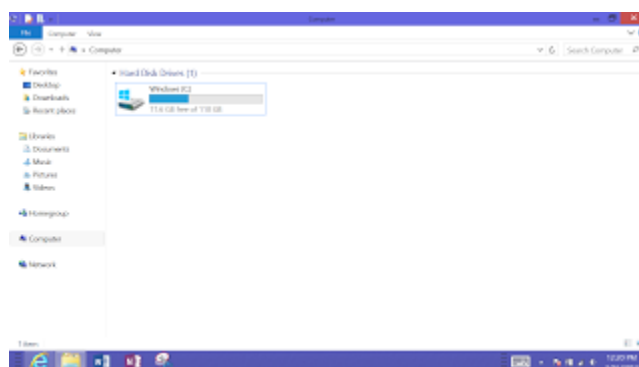
- Microsoft Office 2013 – including Word, Excel, PowerPoint, Publisher, and OneNote
- Symantec 12 – antivirus
- SafeConnect – wireless client to access university network
- Camtasia Studio 8 – screencasting
- Mixcraft 6 – for music and audio creation
- Paint.net – free image editing tool (Desktop)
- Ink2Go - Screen annotation & recording (Win 7)
- Audacity – free sound editing tool (Desktop)
- ScreenBeam – wireless HDMI display transmitter for use with HDTV

The above programs are all PC applications that are robust and full featured.

I am exploring the practical applications for teaching and learning purposes with a teachers eye. What do you need a computer to do?

I want to be able to use the de facto standard Office programs as well as have the ability to create music and audio for podcasts, produce videos, edit images, and produce screencasts. With the selected programs above the Surface Pro is becoming a powerhouse for teaching and learning purposes.

After installing the above applications and doing the Windows Updates the total amount of free space available on the 128GB Surface Pro was 71.6 GB. Not bad, not bad at all. This leaves plenty of space for additional programs and data.



In addition to the Desktop applications there are many “modern” apps available including, News, Videos, Travel, Finance, Xbox Music, Bing, Camera, Skype, Skydrive, Maps, Store, etc...

So, there you have it, well over half of the 128GB Surface Pro is still available as free space even after installing some of the heavy-weight programs listed above. I do have a couple more programs I will be installing in the future but I do have the space available when I need it.

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Day 16 – Microsoft Word 2013 adds a special touch

Teaching and Learning with a Windows 8 Tablet

3/27/2013

Welcome to Day 16 of working with a Microsoft Surface Pro Windows 8 tablet for educators. Today I would like to discuss some of the new features in the Microsoft Office 2013 suite of programs as well as share some of the adjustments I have made while using Desktop applications on the Surface Pro.

Yesterday, I mentioned the dual-personality of Windows 8 having both the traditional Desktop mode as well as the new modern Start Screen Live Tile mode. This distinction is important to recognize while using the Surface Pro. Each mode has its strengths and weaknesses.

For getting heads-down intensive work done the Desktop interface still has much to offer, but there are drawbacks as well.

One of the biggest frustrations that many have while using a Surface Pro, and Windows 8 in general, is how small some of the items on the Desktop appear on the 10.6 inch screen. This is due to the “high-resolution” 1920x1080 (1080p) Desktop display. While the high-resolution display provides a crisp viewing experience for Desktop applications it can make for very small icons that are difficult to select, especially using your finger. I think this is another reason Microsoft includes the very precise digital Pen that can be used to select small targets on the Desktop of the Surface Pro.

One of the first things I did when I received the Surface Pro was change the Desktop resolution to 1600 x 900. I also deselected the auto-rotate radio button under display settings. Since I use the Surface Pro in Landscape orientation 99 percent of the time I did not want the display switching back-and-forth between portrait and landscape. Deselecting “Allow auto-rotate” prevents this switching. I can always change this setting back in the future if I decide I want to use portrait mode. I have provided a screenshot of “change display settings” options below.



If you are connecting the Surface Pro to a projector you may want to select a lower resolution as some older projectors will not support higher resolutions. The lower the resolution the larger items on the Desktop will appear.

If you are only using your finger to select items on the Desktop you may find them too close to accurately select by touch. This can lead to frustration as many people expect to be able to “touch” the screen to make selections on a tablet.

If you remember that you are in the Desktop environment you do have the option to completely ignore touch and only use the keyboard/touchpad. Or, you can use an external mouse as I often do. I use the very portable Microsoft Arc mouse that has a small USB transceiver that magnetically connects to the back of the Arc mouse for storage. The Arc mouse gets its name from the way that it flexes into an Arc when in use. When you are finished you flatten it and turns itself off. This makes for easy transport when you are finished using it.

Here is a link to the Arc mouse I use:

http://www.staples.com/Microsoft-Arc-Touch-Mouse/product_923878?cid=PS:GooglePLAs:923878&KPID=923878

Microsoft is also advertising a Surface Pro edition of a “Wedge Mouse” that uses Bluetooth. Since Bluetooth is built into the Surface Pro you won’t need a transceiver like the Arc mouse requires. This would free up the only USB port so it may be an option for you if you regularly use the USB port for other things. The downside is Bluetooth may reduce battery-life but I have not tested how much impact this might be.

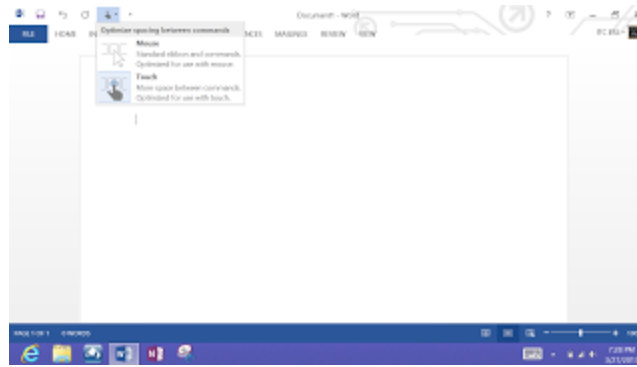
http://www.staples.com/Microsoft-Wedge-Touch-Mouse-Surface-Edition/product_153965

Adding an external mouse to the Surface Pro when using Desktop applications like Word 2013 gives you the precision that is sometimes needed for applications originally designed for the Desktop. If you are frustrated by the smallness of items on the Desktop an external mouse may be the solution for you.

Now back to new changes in Word 2013...

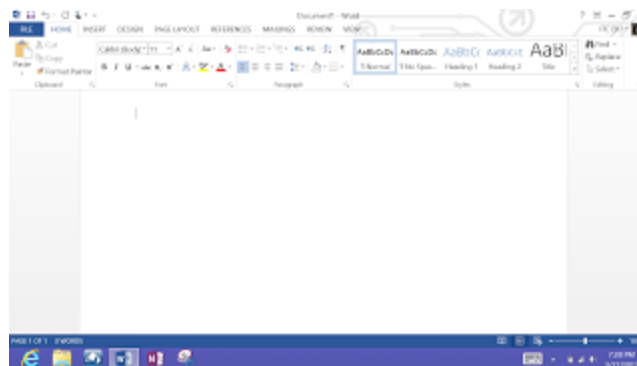
I would like to bring your attention to a couple of subtle interface changes to the Microsoft Word 2013 interface that will make your experience with a touch tablet more productive.

There is a very tiny icon located on the quick access toolbar located in the top left-hand corner of Word 2013 that looks like a little hand with a finger pointing and sparks coming from the finger. This is the icon to “switch” the Word 2013 interface back-and-forth between “mouse mode” to “touch mode”

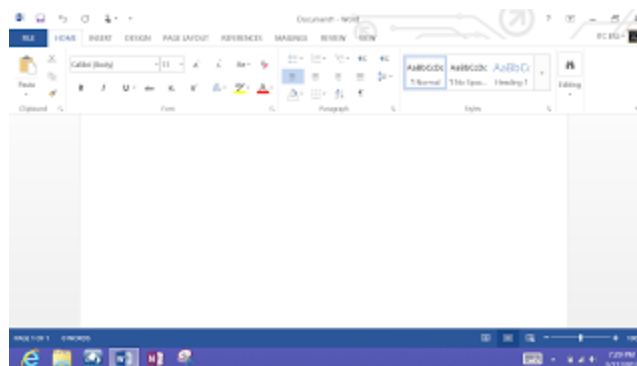


I have provided screenshots below of the difference between selecting mouse mode and touch mode in Word 2013. Can you tell the difference?

Mouse Mode



Touch Mode



You can see that when Word 2013 is in “touch mode” the icons are spread apart just a little bit more in an effort to make them easier to select using your finger. This touch mode is also available in Excel 2013 and PowerPoint 2013. Nice “touch” Microsoft! Sorry couldn’t resist.

We are seeing Microsoft evolve the Office suite of tools toward a more touch-friendly interface. I believe this is just a beginning and we will see larger touch targets in future versions of Office products.

As I have stated before, the Surface Pro is a transition device. Both the hardware and the software are evolving into what Microsoft calls a “touch-first” experience.

I am very interested in seeing what Microsoft will do with the Surface Pro 2.

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Day 17 – The Mighty Pen and Microsoft Word 2013

Teaching and Learning with a Windows 8 Tablet

3/28/2013

Welcome to Day 17 of working with a Microsoft Surface Pro Windows 8 tablet for educators. Today I would like to bring your attention to one of the magical features of the Microsoft Surface Pro, the mighty Pen.

I will start with an unlikely application in discussing the digital Pen, Word 2013.

The Surface Pro comes standard with a digital stylus that allows for the input of “digital ink”. The digital Pen allows for you to write on the Surface Pro just like the analog equivalent of pen and paper. The digital Pen feels fairly natural as it glides across the glass of the Surface Pro. This is the best writing experience I have had using a tablet.

The Pen can also be used as an input device like a mouse when you need really precise and accurate selection. I mentioned yesterday that I sometimes use the digital stylus for Desktop applications because the touch targets of Desktop applications are often too small for using your finger for selection.

There is a button on the Pen that if you depress it while selecting something acts as a right mouse click. Another helpful feature is that you can use the Pen as an eraser if you turn it upside down, very handy.

The digital Pen features 1024 levels of pressure that you can use to vary the weight of your pen strokes. Press with a heavy hand and you get bold thick lines, a lighter touch will feather out the pen stroke

Many artists are finding the built-in Wacom technology of great benefit and are using the Surface Pro to create artwork. The link below is from a YouTube video demonstrating an artist inking a cartoon using the Surface Pro. Notice the varying widths of the lines being drawn as the artist varies the pressure used on the Pen.

<http://www.youtube.com/watch?v=puyMmARTqck>

This digital inking makes the Surface Pro a breakout product for artists and the \$999 price tag suddenly seems like a bargain compared to the thousands of dollars artists often spend on other digital tablets like the Cintiq.

Digital ink also offers several advantages, chief among them is the ability to immediately share your digital creations with the world using Skydrive or some other digital sharing service. Need a different color of Pen, no problem, you have a choice of thousands of colors, along with many different styles and widths of pens and highlighters.

Now, for a secret use of Word 2013 for teachers using the Surface Pro.

It is very easy to use the Surface Pro and Word 2013 together as a digital whiteboard when you connect the Surface Pro to a projector or HDTV. Of course, you could also use OneNote and I will be discussing

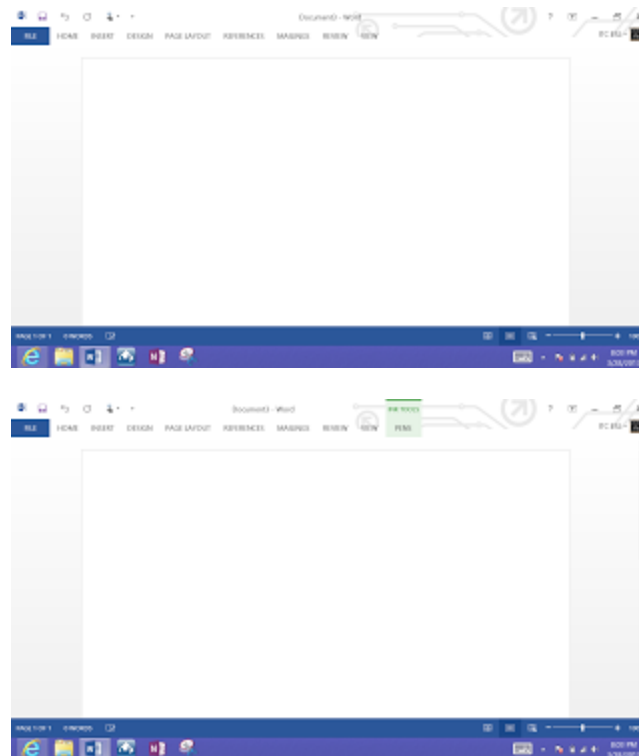
OneNote in a future post. I just want to point out the incredible flexibility teachers can now have access to with the Surface Pro and encourage you to explore new and innovative uses.

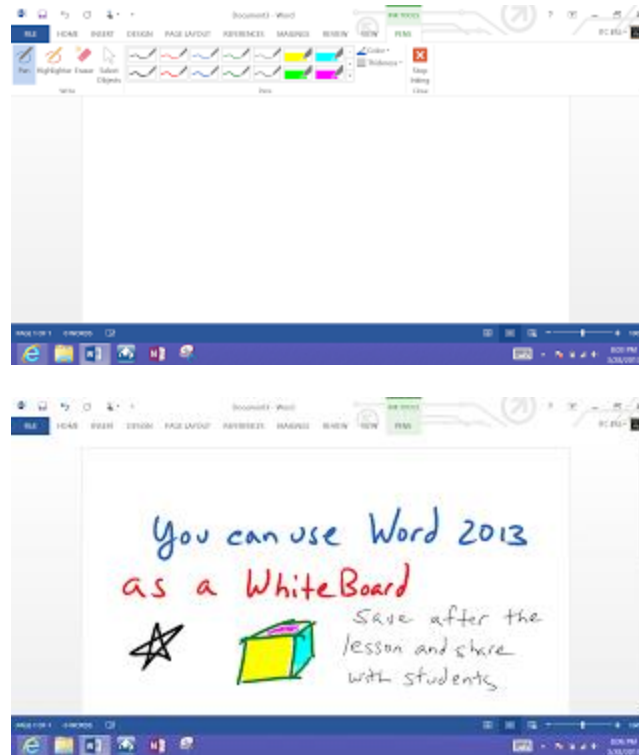
Here is how the magic works. When you take the digital Pen that comes with the Surface Pro and bring the tip of the digital pen close to the Word 2013 menu tabs along the top of the screen you will see a new tab appear that says “Ink Tools – Pens”.

The digital stylus activates the “Ink Tools” option and since Word 2013 is “pen-enabled” you essentially have a blank document that you would normally start typing words but why not consider it a blank slate like a whiteboard? Best of all your digital notes can be saved as a Word document or PDF and posted or emailed for your students.

The obvious choice of using a Pen while in Word 2013 is for marking student work. It works great inking over students work submitted in Word. Since you can save your ink notes along with the student’s original document you can have a 100% paperless workflow while still using traditional handwritten comments. Just save the marked up copy under a different filename and return to the student either as a Word document or PDF. This works great for online learning management systems like BlackBoard, WebCT, Desire2Learn, or Canvas...

I have provided screenshots below. The first shows the normal menu tabs across the top of Word 2013. The second and third, is a screenshot that illustrates the new “Ink Tools” menu option that appears when you bring the Pen close to the Surface Pro that activates the additional “Ink Tools” options. The fourth shows some digital inking in Word 2013.





The Surface Pro takes advantage of over a decade of practical research that Microsoft has developed through the Tablet PC days and this research is now paying off in the features of the Surface Pro.



Having a digital stylus takes your work to the next level and eliminates some of the deficiencies of capacitive touch screens that only allow finger input. Having the precision of pen input is very beneficial for teachers.

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Day 18 – Microsoft’s Worldwide Telescope Brings the Universe to Your Fingertips with the Surface Pro

Teaching and Learning with a Windows 8 Tablet

3/29/2013

Welcome to Day 18 of working with a Microsoft Surface Pro Windows 8 tablet for educators. Today I would like to let serendipity take its course and introduce you to the Worldwide Telescope Project from Microsoft Research.

I happened to come upon a link from my Twitter feed this morning about the Worldwide Telescope that made me curious about what updates Microsoft have completed since I last reviewed the project over a year ago.

Here is a link to the article from my Twitter feed:

Microsoft’s Worldwide Telescope Brings the Universe to Your Fingertips

<http://techcrunch.com/2013/03/28/microsofts-worldwide-telescope-maps-the-universe-with-nasas-data/>

Please take a moment to read the article if you would like a quick overview of the project.

After reading the article, I downloaded the Worldwide Telescope application onto the Surface Pro. Since the Surface Pro is a “real PC” I used the Desktop IE 10 browser to download the program. In less than 10 minutes I had the Universe in my hands.



You may have noticed that the title of this blog post is similar to the article mentioned, but I added “with the Surface Pro” to the title as it more aptly describes the experience you will have with the Worldwide Telescope application in combination with the Surface Pro.

With this free application the Universe is available to explore with your fingertips and with “real” data from NASA.

My initial experience was another “WOW” moment. I was using my fingers to pinch, zoom in and out, and swipe my way across the massive NASA data collection Microsoft Research has cataloged. I could

see in real-time how my finger manipulations interacted with the data as I bent the laws of the Universe to my command. WOW!



As a former science teacher and astronomy buff, it does not get much better than this resource for studying Astronomy. It is amazing, absolutely amazing! Who needs a textbook when there is a treasure trove of real data and images? Let your students' imaginations soar as they discover for themselves the mysteries and vastness of the Universe.

It is also important to get students outside in a safe environment to experience the wonder of the night sky. I used to have "Star Nights" at school many years ago when I was teaching Earth Science. Seeing the wonder and curiosity in your students' eyes is one of the most rewarding aspects of being a teacher. Screen-time is great but let us not forget the "real world" that we are seeking to understand.



There are tutorials and tours that will get teachers and students off to a great start exploring the Universe with the Worldwide Telescope Project.

I would advise not to structure your lessons too much as we should encourage students to experience the sense of curiosity and inquire on their own. As teachers we want to let students mentally roam from time-to-time and exploring the Worldwide Telescope application is one of those times.

I suspect I will be roaming quite a bit myself this weekend as I explore the wonders of the Universe on the Surface Pro.

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Day 19 – Sent from my Surface Pro ...at McDonalds

Teaching and Learning with a Windows 8 Tablet

3/30/2013

Welcome to Day 19 of working with a Microsoft Surface Pro Windows 8 tablet for educators.

It's the weekend and I am experiencing another Internet outage. For those of us not living in a major metropolitan city this unfortunately happens way too often in the country.

My electricity service also "blinked" this morning temporarily knocking off all electrical devices in our house. It only lasted one second, and returned immediately, but that blink is all it takes to disrupt modern life.

It is also a reminder to the digerati that while popular culture is increasingly pushing the analog world into the Cloud that there are downsides as well. We need to always have a Plan B.

We also need to keep in mind that reliable Internet access is not available to all of our students. With all the hype around the flip classroom approach to learning there are significant access issues to deal with when expecting students to use technological tools that require Internet access at home. This is exacerbated in lower-income neighborhoods that could benefit most.

Once again, I find myself typing this post on this Surface Pro that is not connected to the Internet. No fault of the Surface Pro, but fault does not matter here, it is a reality for me right now. Since the Surface Pro is a hybrid device, it still works as a stand-alone device, but it is a major inconvenience when I cannot access the Internet.

I have learned to work around these Internet access hiccups and I approach these situations as challenges. If I was "all in" on the cloud computing paradigm my device would currently be useless. I cannot access anything on the Internet, no email, YouTube search engines, Twitter, Facebook, Skydrive, online music, etc... it's all unavailable to me right now.

So, I have elected to type this post in Word 2013 and find a way to post it later today. This afternoon we are going shopping so I am taking the Surface Pro with me. Hopefully I can find public wireless access somewhere on the road, maybe a McDonalds?

Technology has always been a double-edged sword. Technology offers amazing possibilities when it works, but it is frustrating when things do not work as planned. However, as much as I sometimes get frustrated by things when they do not work, I would not trade my frustration for all the good things that tech allows us to do the other 99% of the time.

As teachers, we are becoming more and more reliant upon technology. Technology is becoming more reliable and thus is being used more and more in the classroom. This is a great thing as it makes possible things that were previously impossible to do in the classroom. Amazing things, like the Worldwide

Telescope Project I wrote about yesterday. But, things do go wrong from time-to-time in the classroom and you will have to occasionally adapt your lessons to work around “technical difficulties”.

Do not be the teacher that throws up your hands in frustration and “quit” the lesson and blame the technology. Take it on as a challenge and work around the obstacles. Adapt, adjust, change lessons, there is always something new to be learned. It is sometimes refreshing to take technology completely out of the lesson and focus only on the content and context.

Now for my challenge. Time for a road trip and find a McDonalds.



If you are reading this, mission accomplished.

How many of your students are doing homework at McDonald's?

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Day 20 – Wireless Xbox controller works with Surface Pro and Worldwide Telescope

Teaching and Learning with a Windows 8 Tablet

3/31/2013

Welcome to Day 20 of working with a Microsoft Surface Pro Windows 8 tablet for educators.

Just a short entry today as it is Easter Sunday.

I noticed when I setup the Worldwide Telescope program that it made reference to using a Xbox controller. Being the curious person I am, I just had to try it for myself.

I used a wireless Xbox controller and hooked up the receiver to the USB port on the Surface Pro. I installed the controller software that came with it and then started the Worldwide Telescope program. I paired up the controller with the wireless receiver and was ready for testing.

It works!

This essentially turns the Worldwide Telescope into a game-like experience that anyone using an Xbox will be familiar with. I can use the triggers on the controller to zoom in and zoom out and the directional stick to move about in 3-D space. The D-pad can be used to rotate a planet on its axis.

There are some things the Xbox controller cannot select so you will have to use the touch interface on the Surface Pro to navigate some of the options in the program.

Using the Xbox controller feels very much like you are controlling a spaceship as you navigate throughout the solar system, pretty cool! I used it to zoom from planet to planet and it was interesting changing viewpoints to see the moons orbiting a particular planet. It gives you a sense of perspective as I was able to navigate around Planet Earth and see Saturn in the distant background floating in Space. This experience gives one pause to ponder the vastness of Space and just how tiny we are in the scheme of things.

This success has also left me with another question. Now that I have the wireless Xbox controller working in the Worldwide Telescope program I would also like to use it for navigating around Desktop applications like PowerPoint.

I have not been successful with PowerPoint although I have found some hacks on the Internet that might work. If anyone out there has already solved this problem please email me at techtalk@eiu.edu and let me know a solution.

All I am wanting to do is use the Xbox controller to move the mouse around on the Desktop and be able to use the right click and left click mouse buttons mapped to the Xbox controller. I would think that Microsoft would have a driver already mapped for this, anyone know?

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Day 21 – Basic Keyboard Shortcut Keys for Windows 8

Teaching and Learning with a Windows 8 Tablet

4/01/2013

Welcome to Day 21 of working with a Microsoft Surface Pro Windows 8 tablet for educators.

Today I would like to share some of the Basic Keyboard Shortcuts that I find most useful when using the Surface Pro with a keyboard.

Keyboard shortcuts are a very efficient method for quickly getting work done without removing your hands away from the keyboard. When the Surface Pro and other Windows 8 touchscreen PC's first came to market there were many critics that said a touchscreen would never work on a vertical screen.

After using Windows 8 with a touchscreen for many months I can say the detractors were wrong. In fact, I routinely find myself reaching up to my regular monitors trying to interact with the screen. Now I wish all PC's and laptops had touchscreens. Windows 8 is a touch-first operating system but there are times when a keyboard is the best method of getting things done. Choice is good, and Windows 8 is a very flexible operating system offering multiple methods of input and providing users a choice for their preferences.

In the future I do not think I will buy a PC without a touchscreen, it is that handy. Being able to pinch and zoom, swipe, and pan the screen around is now expected in the Windows 8 world.

But, there are times when the touchscreen is not appropriate for inputting data. Windows 8 has you covered there as well. There are a handful of Windows 8 shortcut keys I find indispensable when working with the keyboard on the Surface Pro. I previously blogged about some of my favorite shortcut keys so here is an excerpt:

The “Windows” (Win) key by itself immediately brings you to the “Start Screen”, press Windows key again and you return to whatever app you were in. The Windows Key (located in lower left corner of PC keyboards, usually between the Ctrl and Alt Keys). I will refer to the Windows Key as the Win Key and it often is represented by the Windows Flag.

Win+C brings up the Charms bar

Win+I brings you to Settings

Win+X brings up the “Power Users” menu

Win+S brings up the screen clipping tool to save selected regions of the screen to OneNote in Desktop mode

Win+D switches to Desktop mode

Win+H Share

Win+K Devices

Win+F Files

Win+Q takes you to Search.

On the Desktop side of Windows 8 all the normal keyboard shortcuts that I have learned over the years still work in Windows 8 using the snap-on keyboard.

Alt+F4 closes the current window (also a very easy way to close metro-style apps)

Ctrl-C for copy

Ctrl-V for Paste

Win+Tab cycles through your open apps (Alt+Tab also works this way)

Shift+arrow keys allow you to highlight text on the screen in Word.

Ctrl++ Zoom in

Ctrl+ - Zoom out

Learn these shortcuts and you will be able to fly around the interface and become much more productive in your day to day work with a Windows 8 Tablet. Use the touchscreen whenever it is more natural for you. Having a choice of user inputs puts you in control of your workflow.

If I can find some time in the next couple of weeks I will make a screencast to demonstrate some of the keyboard shortcuts I use most often.

For a more complete list of Windows 8 Keyboard Shortcuts visit the link below:

<http://windows.microsoft.com/en-US/windows-8/new-keyboard-shortcuts#1TC=t1>

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Day 22 – Xbox Controller with Surface Pro and Worldwide Telescope Video Demo

Teaching and Learning with a Windows 8 Tablet

4/02/2013

Welcome to Day 22 of working with a Microsoft Surface Pro Windows 8 tablet for educators.

I have put together a short screencast video created with the Surface Pro demonstrating the Worldwide Telescope program and the use of a wireless Xbox controller to navigate through the Solar System. Microsoft's Worldwide Telescope program caught my attention about a week ago and I was curious if I could get a Xbox controller working with it.

It was easy loading the Worldwide Telescope program on the Surface Pro and using the touchscreen to pinch and zoom in and out of Space is intuitive. I should have been satisfied there but the little boy in me just had to try out the Xbox controller to get more of a "spaceship" experience.

The Xbox controller works very well and I am able to navigate using the directional sticks on the controller and the triggers will zoom in and out. Navigating through Space data collected by NASA and seeing the fabulous photography is a joy. There is a guided tour mode but the explore mode is where the real free-style exploration begins.

I have embedded a YouTube video I created today to give you a sense of what it is like using the Xbox controller with the Worldwide Telescope Program.

http://www.youtube.com/watch?feature=player_embedded&v=IFYdNLY3Kpg

All of this on the Surface Pro!

Having the Intel Core i5 processor and 4GB of RAM certainly helps with the heavy processing required to use this program. Another Wow moment with the Surface Pro.

The only downside is that the wireless receiver uses up the USB port on the Surface Pro so I cannot use the wireless HDMI receiver at the same time. I did however hook up the Display Port to a HDTV and was able to have the Worldwide Telescope display on a 60 inch HDTV and control the program from the wireless Xbox controller. Pretty cool!

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Day 23 – Podcasting with the Surface Pro Windows 8 Tablet

Teaching and Learning with a Windows 8 Tablet

4/03/2013

Welcome to Day 23 of working with a Microsoft Surface Pro Windows 8 tablet for educators. Today I will discuss why I have switched to using the Surface Pro as my full-time podcasting machine of choice.

In a previous blog post, I mentioned that I was using the Samsung Ativ Windows 8 tablet to edit my podcasts since purchasing it back in December. What I liked most about the Ativ was the digital S-Pen that I use to highlight and edit my audio podcasts. Using the digital Pen on the touchscreen gives me much more control and precision than either a mouse or my finger when using the Ativ.

All of that remains true with the Surface Pro with one big addition.

This thing is FAST!

Most impressive is the speed at which you can import and export audio on the Surface Pro. I have embedded a screencast below that goes over my podcasting workflow.

http://www.youtube.com/watch?feature=player_embedded&v=VpJONuV8KMU

This screencast was recorded on the Surface Pro so it gives you a sense of the speed this Windows 8 tablet commands. With an Intel Core i5 processor, 4GB of RAM and a 128GB SSD hard drive the power and speed is appreciated when some heavy lifting is needed.

The digital Pen that comes standard with the Surface Pro is larger and more comfortable in the hand than the Samsung S-Pen. With the digital Pen you can really zoom in and out on the timeline to carefully select areas for editing. This comes in handy when trying to remove some of the ums and ahs that inevitably happen when we record the TechTalk4Teachers podcast.

There were just some things the Samsung Ativ Clover Trail processor just could not handle. I could get by with some shorter podcasting edits on the Ativ, but editing video would bring the Clover Trail processor to its knees.

Of course the trade-off for all this power and speed is battery-life. The Ativ gets over 10 hours and the Surface Pro gets around 5 hours, less if you are doing heavy processing.

The other thing to note about the Surface Pro is that the back will get warm whenever you are doing tasks that require heavy use of the i5 processor. The Surface Pro has a vent around the backside and a fan will kick in to cool it off when needed. The fan is quiet but can definitely be heard with a whispering sound.

The Surface Pro Windows 8 tablet has much to offer the creative person and the processing power is a big advantage over other tablets on the market.

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Day 24 – Making Music with the Surface Pro Windows 8 Tablet

Teaching and Learning with a Windows 8 Tablet

4/04/2013

Welcome to Day 24 of working with a Microsoft Surface Pro Windows 8 tablet for educators. Today I will demonstrate the versatility of the Surface Pro by creating an original musical composition using the Acoustica Mixcraft program.

The barriers to entry for any digital creative activity have once again been lowered by the Surface Pro.

Today, it is often our imagination that holds us back from creating amazing digital works. The tools are here, it is what we choose to do with them that matters. I always get a kick out of people that put artificial limitations on PC's. I often get the reaction of "I didn't know you could do that on a PC". Yes, yes you can, it just takes a little time and your imagination.

Below is a screencast that I created using the Surface Pro with a short demo of the Mixcraft music program. This screencast barely touches the "surface" (sorry, couldn't resist, ...again) of what is possible using the Surface Pro to make musical compositions.

http://www.youtube.com/watch?feature=player_embedded&v=54VY7DZIlb8

The Acoustica Mixcraft program has a street price around \$50 - \$80 US and is basically a music studio in a box. Version 6 is compatible with Windows 8 and works great on the Surface Pro. If you are into creating your own music Mixcraft is for you. You can use the music you create with your school projects and not have to worry about copyright issues. If you buy in volume there are substantial discounts for quantity purchases as well.

The first loop-based music programs came to market in the late 1990's for the PC. Sony's Acid Music was an early pioneer and is still available today. Acid is a little more sophisticated program and is targeted at professional musicians.

Mixcraft, in my opinion, is a better choice for aspiring musicians as it is easy to learn and use. Don't be mistaken though, Mixcraft can be used to create professional level recordings.

I recommend that you use a mouse with the Mixcraft program on the Surface Pro as the Mixcraft program utilizes the traditional desktop interface and the screen is packed with options. Many of the controls are small so I often use the digital Pen that came with the Surface Pro to make selections.

You might also consider changing the resolution of the Surface Pro display from 1920x1080 to 1368x766, this makes the interface appear a little larger on the Desktop screen. A second monitor might also be a solution by using the Surface Pro's display port.

When I use the loop-based portion of Mixcraft I think about "painting music" using the digital Pen. I use the digital Pen to paint musical measures by pressing and dragging the Pen across the screen as you will see in the screencast.

Since the Surface Pro is a hybrid device, the dual-personality of the modern interface and the desktop interface gives you access to the best of both worlds. Until the developers catch-up with the newly designed modern interface we have the luxury of using most of the existing applications that bridge this divide, backward compatibility is appreciated.

The modern Start Screen interface is designed with a touch-first experience using large touch targets for new apps. There are however, millions of legacy programs, like Mixcraft, that still work with the Surface Pro, thanks to the backward Desktop compatibility.

I do not worry much by comments from the techno-blogsphere stating there are “only” 50,000 plus apps in the Windows 8 app store. That’s more than enough to keep me busy for the rest of my life. I focus on getting things done and I have yet to run into a situation where I cannot find a solution either “old school” or “new school” for completing the major work that I do day-to-day with the Surface Pro.

To get an idea of what Mixcraft music creation program can do please watch and listen to the screencast demo posted above.

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Day 25 – USB Man to the Rescue

Teaching and Learning with a Windows 8 Tablet

4/05/2013

Welcome to Day 25 of working with a Microsoft Surface Pro Windows 8 tablet for educators. Today I will share one of the solutions I have found for the lonely USB port on the Surface Pro.

There are many times when I wished the Surface Pro had more than one USB port. At least this tablet gives you the option to use USB peripherals, unlike some other tablets on the market. Just having access to expandable USB storage is a HUGE benefit over other tablets.

The Surface Pro has one high-speed USB 3.0 port. There are many USB devices that come in handy in my daily workflow that I would like to use when needed. If something is already plugged into the USB port I have to remove it and plug in something else, inconvenient.

A couple of days ago I found myself in one of those situations. I recorded the “Surface Pro and Worldwide Telescope” screencast on the Surface Pro but I also had it connected to a Xbox wireless controller. This controller took up the only USB port and I wanted to load something else from a USB flash drive.

My cheap solution, USB Man. You can get USB Man or something similar for around \$5 US. USB Man will take your existing USB Port and turn it into 4 USB ports! It is basically a splitter that expands the one USB port into four ports. The one I have is USB 2.0 so I do not get the benefit of the higher-speed USB 3.0. Sometimes I am willing to trade the speed for the convenience of more ports.

It may not work for USB devices that draw a lot of power but so far it has worked for me. Be careful not to overload the USB bus on the Surface Pro.

Below is a picture of the Surface Pro with my USB Man setup.



Here is a description of what is in the picture. The cable coming out of the head of USB man is connected to the Surface Pro's only USB port. I have a Logitech USB headset plugged into the right foot of USB Man. The Surface Pro's audio jack is only for playing audio out to headphones so you cannot plug a 3.5mm jack in for recording (I wish I could, it would allow me to take my line out of my mixer into the audio jack of the Surface Pro but audio-in is not supported). A workaround is to get a USB mixer, there goes another USB port.

I also have a Microsoft wireless mouse transceiver plugged into USB Man's right hand that allows me to use the Arc mouse with the Surface Pro. This is very useful for Desktop applications where I need precise control. You will also notice in the picture that the digital Pen never strays far from my Surface Pro :)

This leaves two open USB ports possibly for a USB flash drive or my ScreenBeam video transmitter to wirelessly project the Surface Pro's screen to the big screen.

Granted, with all these things plugged-in the Surface Pro is not very portable, but sometimes you need the "extras" to get some work done.

Not bad for a \$5 solution, but there are other more expensive solutions as well. Docking stations are available to plug the Surface Pro in to and we have a couple working with the Surface Pro here at EIU. The price ranges from \$80 on the lower end up to \$200 for docking stations that support high-resolution dual-screen monitors, USB 3.0 ports, and 1GB RJ-45 LAN jack.

A docking solution can basically turn your Surface Pro into a traditional PC by connecting it to a large monitor via a USB cable to use in your office. When you want to be mobile again just unplug the USB cable and you can take the Surface Pro with you to meetings.

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Day 26 – Ink2Go Screen Annotation for the Surface Pro Desktop

Teaching and Learning with a Windows 8 Tablet

4/06/2013

Welcome to Day 26 of working with a Microsoft Surface Pro Windows 8 tablet for educators.

This post is about a Windows 7 tool that I sometimes use to annotate items on the Desktop that I want to “draw” the eye to focus on when I am teaching. Ink2Go is affordable at only \$20 and can serve to substitute for a Whiteboard and an added bonus adds a built-in screen recorder. This is a lot of functionality for the money in an easy to use tool.

Ink2Go works on Windows 8, sort of. The screen annotation tools works fine on the Desktop side of Windows 8 but does not work well on the modern Start Screen side. If I want to annotate on top of webpages I need to make sure I am using the Desktop version of IE and not the modern IE. This can get confusing but once you understand the difference you can easily adjust.

http://www.youtube.com/watch?feature=player_embedded&v=EU2LxGLPrRU

The webcam tool of Ink2Go also does not work properly on Windows 8. Since the Surface Pro has two webcams, one front and one on back, the Ink2Go software chooses the back camera and I cannot change it to the front camera.

So, with those two big caveats why am I spending my time with Ink2Go on the Surface Pro? The first reason is the digital Pen that comes with the Surface Pro works well on the Desktop side and is easy to use with the Ink2Go toolbar. It is very easy to use.

Ink2Go

<http://ink2.eyepowergames.com/>

You can even freeze YouTube videos and annotate over them. Once you finish you can erase the ink annotations and continue. This is a great feature for coaches or science teachers wanting to freeze-frame something to analyze further.

The second reason to consider this program is that Ink2Go has a built-in screen recorder that does a good job for recording screencasts on the cheap. I have provided a quick screencast below made using the Surface Pro and the Ink2Go software. The sound quality is not great but is acceptable.

I do hope that Ink2Go will update their software so it is compatible with Windows 8, but for now I find enough value to continue using it.

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Day 27 – The Artistic Side of the Surface Pro Windows 8 Tablet: The Mighty Digital Pen

30 Days of Teaching and Learning with a Windows 8 Tablet

4/07/2013

Welcome to Day 27 of working with a Microsoft Surface Pro Windows 8 tablet for educators.

I have had a couple of inquiries about using the digital Pen with the Surface Pro. At the risk of embarrassing myself I have created a screencast to demonstrate the digital Pen in action. In this screencast I dust-off my artistic skills and attempt to draw a horse using the free Sketchbook Express Windows 8 app.

http://www.youtube.com/watch?feature=player_embedded&v=r2gtgajL8CM

The Surface Pro uses Wacom digitizing tablet technology that many artists have come to love over the years. What is amazing is that this is built-in to the Surface Pro and is a great value.

I have used an external USB Wacom Bamboo tablet connected to a regular PC for a couple of years. The Bamboo tablet is very helpful when I create screencasts, especially screencasts that require freehand writing or drawing like those I do when I use Interactive Whiteboard programs.

The digital Pen on the Surface Pro blows everything else out of the water. Wow, just Wow! Other add-on tablets, like the Bamboo, require you to draw on a screenless slate. This requires a lot of eye to hand coordination and some are better than others at it.

There are other touchscreen options for PC's like the Cintiq, but they are in the thousands of dollars costs and out of reach for the average user. The big advantage of the Surface Pro is that you are actually drawing on top of the screen with the digital Pen using the built-in Wacom digitizer!

This harkens back to the Tablet PC days and reminds me of that experience. The Tablet PC really was ahead of its time, too bad it did not catch on with educators as it had much to offer. All has not been lost as the Tablet PC research over the past decade has been infused into the Surface Pro making it an amazing device. The pressure sensitive digital Pen, handwriting recognition, touchscreen advancements, support for legacy applications, and new modern apps all combine into one of the best tablet experiences I have ever had while using a device for teaching and learning purposes.

The more I use the Surface Pro, the more I am impressed. It is one of the most versatile and creative devices I have ever used.

Until next time...

Keep on Learning,

Tom Grissom, PhD

Follow me on Twitter @tomgrissom

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Day 28 – OneNote 2013 and the Surface Pro

30 Days of Teaching and Learning with a Windows 8 Tablet

4/08/2013

Welcome to Day 28 of working with a Microsoft Surface Pro Windows 8 tablet for educators.

In this post I will share my experiences with the full version of OneNote 2013. OneNote is one of the more underutilized programs in the Microsoft Office Suite of tools, but can quickly become a favorite if you take the time to explore its many benefits.

I am amazed at how few teachers and students know about OneNote. OneNote has been around since 2003. Many are familiar with Word, Excel, and PowerPoint but few are aware of the power of OneNote for keeping track of everyday teaching and learning activities.

There is also a OneNote app available in the Windows Store but the OneNote app is severely limited in its functionality compared to the full version of OneNote 2013. The free app will do for basic tasks but I quickly outgrew it. If you have access to the full version I recommend it over the watered down modern app.

Since I have been using OneNote on my Samsung Ativ Tablet over the past three months ALL of my notebooks were available to me on the Surface Pro as soon as I signed in to my Microsoft Account!

Moving from a device-based paradigm to a user-based paradigm makes it much easier to manage multiple devices and the data we access via cloud services like SkyDrive.

The full version of OneNote comes standard with most versions of Microsoft Office including the teacher and student editions. I have provided a link to a blog posting and YouTube video of how a Physics teacher is using OneNote to share his classroom notes with students to give you a better idea of the possibilities. This blog posting gives you a better idea about the capabilities of OneNote.

<http://blogs.office.com/b/microsoft-onenote/archive/2011/07/28/teaching-with-onenote-how-students-benefit.aspx>

The video featured in this blog post was originally produced in 2011, The technology behind the Surface Pro has evolved making it an even better solution for note taking today. Since that time the Tablet PC form factor has evolved into the streamlined Surface Pro.

OneNote 2013 is also useful as a collaborative tool when used with SkyDrive. You can share OneNote notebooks with others including your students. One of the benefits of SkyDrive is that I can access Office web apps via a browser, this includes Word, Excel, PowerPoint, and OneNote documents that are stored on SkyDrive.

SkyDrive can also sync your notebooks to a Windows Phone so you can have access to all of your Notebooks at anytime. This has been very handy for me as I have been able to refer back to notes that I

have taken whether I have the Surface Pro with me or only my mobile phone. If you do not have a Windows Phone you can login and use the web version of OneNote, all you need is a browser.

The digitizer Pen that comes standard with the Surface Pro is much different than a capacitive stylus that is often sold for use with iPads or Android tablets. The Surface Pro's Pen is pressure sensitive with 1024 different pressure points that provides for much more control and accuracy than a finger can provide. This design is meant to replicate the way a real Pen works in that if you start drawing a line with a light touch and gradually apply pressure the line will get thicker as you apply more pressure. This makes for a much more realistic and natural writing experience.

The Surface Pro comes with a Wacom digitizer tablet and Pen that allows for digital inking. Yesterday, I demonstrated the artistic side of this tablet but the Pen is extremely useful for day-to-day note taking as well.

OneNote 2013 Rocks!

Until next time...

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Day 29 – Screencasting and Video Editing on the Surface Pro

30 Days of Teaching and Learning with a Windows 8 Tablet

4/09/2013

Welcome to Day 29 of working with a Microsoft Surface Pro Windows 8 tablet for educators, almost home, one more day.

I have been creating educational screencasts for the past 30 days using the Surface Pro Windows 8 tablet as part of this blog series. I have kept this relatively quiet as I wanted to thoroughly test the capabilities of the Surface Pro's i5 processor. For the most part I have been satisfied with the results. The screencasting application I have been using most this month is Camtasia Studio, by Techsmith, and Version 8 is compatible with Windows 8 on the Surface Pro.



There is something magical about using the Surface Pro with its digital Pen in combination with Camtasia Studio to record screencasts. It is easy to use and the digital Pen is a natural for marking selections and annotating on the screen. There is a cost however as the street price for Camtasia Studio is \$180 US.

If you checkout my blog posts for [Day 22](#), [Day 24](#), and [Day 27](#) you will see examples of embedded YouTube videos that I created using the Surface Pro and Camtasia Studio. [Day 26](#), I used Ink2Go to record the screencast and you can tell a difference, especially in audio quality. I used the exact same headset (Logitech H330) to record all episodes so the difference was in the codec used to encode the screencast with Camtasia clearly sounding better.

In the future I may consider screencasting my OneNote sessions as the digital Pen writes fluidly on the Surface Pro and I could record my voice at the same time. I could then share out both my screencast video and my OneNote notebook with students.

Another possibility is grading student papers using Microsoft Word by recording a screencast of a grading session and using the built-in drawing tools in MS Word to markup notes on a students paper. I could then share the grading session screencast along with emailing the students paper back to them as a PDF attachment with inked notes included.

I did try to use Camtasia on the Samsung Ativ Windows 8 tablet however the Clover Trail processor was under powered for the intense processing required for screencasting. I could do short screencasts, but anything over a minute or two was too cumbersome to edit and produce, not so with the Surface Pro.

With the popularity of the flipped classroom creating screencasts is becoming more common for the average teacher. Having tools like the Surface Pro and Camtasia Studio make this time-intensive task much easier and faster. The Core i5 processor along with 4GB of RAM in the Surface Pro is appreciated when I create the screencasts.

Of course, more is usually better in the computing world so an i7 processor with 8GB or more of RAM would make the video editing work go even faster but the battery-life on such a tablet beast would probably be 5 minutes and would likely melt in your hands. There is a reason high-powered desktops have lots of air circulation and big fans for cooling.

I have also been experimenting with Ink2Go, a very affordable program that works only on the desktop-side of Windows 8 with a few caveats. Ink2Go is not fully compatible with Windows 8 but with a street price of \$20 US Ink2Go is worthy of consideration for those on a budget.

For my video editing I have been using a combination of the Camtasia Studio and the free Microsoft Live Movie Maker video editing program. Editing videos is a time intensive tasks and rendering five to ten minute screencast usually takes about a 1:1 ratio time for encoding. That is, if I record a seven minute screencast it will usually render in under seven minutes using Live Movie Maker.

The Surface Pro will get warm as you edit videos and create screencasts. The i5 processor will heat up as it works overtime to process the video. This causes the back of the Surface Pro to become warm and a fan will kick on to help cool the processor. I usually have the keyboard cover on and flipped over the back so this is less noticeable.

Once I have the final MP4 or WMV file produced using Live Movie Maker I upload it to YouTube. That usually takes about 20 minutes for a 10 minute video as it takes time to upload the video, and then more time to process it once it has been uploaded to YouTube.

So, all-in-all the Surface Pro is a great solution for those wanting a tablet that has the muscles to produce screencasts and/or videos for the world to see if you post them on YouTube. What will you teach the world about today?

Surface Pro Rocks!

Until next time...

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Day 30 – Lessons Learned from 30 Days with a Surface Pro Windows 8 Tablet

30 Days of Teaching and Learning with a Windows 8 Tablet

4/10/2013

Wow, just Wow!

I began my [first post](#) of this blog series with a Wow, and it is only fitting to close with yet another Wow after spending 30 Days with the Surface Pro.

The [Surface Pro Windows 8 Tablet](#) is an amazing and versatile device, especially for teachers and students. Having a 10.6 inch by ½ inch thick tablet with digital Pen, touch, and keyboard/mouse input and a full-size USB 3.0 port allows for much flexibility for the creative process of teaching and learning.



Surface Pro connected wirelessly to HDTV in the background.

The first thing that impressed me was how fast the Surface Pro was compared to my Samsung Ativ Clover Trail tablet. Of course, everything is relative and speed wins in the race of first impressions. The Intel Core i5 processor handled everything I threw at it over the past 30 days. It did not choke on processor-intensive applications like some of my experiences with the [Samsung Ativ Clover Trail tablet](#) that I previously reviewed on this blog.

I have kept an open mind as I have put the Surface Pro through its paces. Many in the blogosphere will focus on the negative, especially when it comes to Microsoft, while ignoring the tremendous potential that has been afforded by this new class of device.

This is the type of device I have been waiting for as an educator for the past two decades. It is small, light-weight, mobile, and has the power to get things done. The fantastic possibilities are staring us right in the face.

The Surface Pro is a hybrid device that stretches between the traditional desktop paradigm of computing and the new touch-first experience of Windows 8. Yes, the interface is new and different, and you will have to learn a new way of doing some things, but that is why we call it “new”.

Do not let the newness block you from taking advantage of the Windows 8 interface. Once you learn just a [few keyboard shortcuts](#) and new swipe gestures you will become proficient with the “new” way of doing things in a couple of days. Swiping in with your right thumb brings up the Charms bar, swiping down from top to bottom will close an app, and swiping in with your left thumb repeatedly will cycle through open apps and allows you to easily multitask.

I have provided links to two screencasts from Scott Hanselman below that if you take just ½ hour to learn the new Windows 8 interface many of the complaints you hear about will go away. We can spend our energy complaining, as many will do, or we can adapt and move on to take advantage of fantastic new possibilities. I choose the latter.

[Learn Windows 8 in 3 minutes \(OK, it's really 4\)](#)

[The Missing Windows 8 Instructional Video - Who moved my Windows 8 Cheese](#)

As for the old consumption versus production argument about tablets, it is not even close. The Surface Pro is definitely a production device providing the power needed for producing creative content at a professional level.

The Surface Pro is also equally at home on the consumption side of things with tens of thousands of apps in the Windows Store, access to [Xbox Music and Video services](#), and millions of traditional desktop applications that are compatible with Windows 8. The major apps are there for entertainment purposes including Netflix for videos and the Kindle and Nook apps for reading ebooks.

There is a small price to pay for this production capability. The battery-life of the Surface Pro is around five hours, less if you are doing intensive video editing with it. I have learned to keep it plugged into a power strip on my desk when I am doing processor intensive activities. The back of the Surface Pro will also get warm from intense processor activity and you will hear a fan whisper in the background as it blows across the i5 processor to keep it cool.



My Surface Pro kit over the past 30 days. In this picture you see USB Man, Xbox controller, wireless Arc mouse, Logitech headset I use for podcasting and screencasting, and of course, the digital Pen.

Teaching and Learning with the Surface Pro

I think I have demonstrated over the past 30 days that the Surface Pro is a fantastic choice for teachers, students, and others that want a full-featured tablet device with few compromises. Let's take a look at what I have asked of the Surface Pro over the past 30 days:

[Creating and editing podcast episodes](#) of the TechTalk4Teachers

[Creating original Music tracks](#) using MixCraft

[Creating original artwork](#) using SketchBook Express and the amazing digital Pen

[Creating and editing new ITC Techshare video screencasts](#)

[Creating and editing documents in Word 2013, Excel 2013, and PowerPoint 2013](#) (the fully functional Office 2013 applications, not watered down apps)

[Creating notes using OneNote2013 with the digital Pen](#) extensively for notetaking with my notes stored on SkyDrive that are also immediately accessible on my mobile phone.

[Using the digital Pen for marking up Word documents](#) and saving them as PDF's (with ink annotations) to return to students.

Using business related applications including our university business system, learning management system, and other enterprise systems.

[Using a Xbox wireless controller to fly through the Universe](#) using the Worldwide Telescope program.

[Using the Multiuseraccount feature of the Surface Pro.](#) Having multiple accounts is a great feature, especially for screencasting where you can keep a more pristine look and not display your personal account information.

[Using the USB 3.0 port of the Surface Pro](#) daily (this is one of my favorite feature and it is nice to have accessible and expandable storage on a tablet device)

I have also [connected the Surface Pro wirelessly to the big screen](#) (HDTV/Projector) so I can roam about the room completely untethered by wires. This allows me to “mirror” my screen to the HDTV so students see what I am seeing on the Surface Pro tablet. Range is about 50 feet.

What did I miss? If there is something I have missed in the day-to-day life of a teacher that you are curious about let me know.

I have not really had the chance to talk much about the enterprise management features built-in to the Surface Pro, but suffice it to say these are critical to rolling out any tablet initiative or 1:1 program in mass. The enterprise toolset is there, SCCM, InTune, VDI, Remote Desktop, and AD with group policies. Since the Surface Pro runs Windows 8 Pro I can access Active Directory and other enterprise resources. Docking stations are also available that can morph the Surface Pro into a desktop unit with a larger external monitor and full-size keyboard and mouse.

So there you have it, a whirlwind tour of the Surface Pro and its many capabilities for teachers and students. This is not the future, everything I have shared over the past 30 days you can do today, all at an affordable cost.

I still use my Samsung Ativ Smart PC but look at it as a consumption device. The Ativ is a great device, with 10 hours of battery-life, but when I need to get real work done with a tablet or produce creative works I reach for the Surface Pro first.

Surface Pro Rocks!

Until next time...

Keep on Learning,

Tom Grissom. PhD

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