

***Change Your Mobile Response Life Forever...with Doceri!***

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If you've been teaching for any length of time, especially in this era, the you've undoubtedly faced the awkward “math help session” via email between teacher and student. It probably goes something like this:

**STUDENT:**

*Dear Professor*

*I'm having trouble on number 23, can you help?*

**TEACHER:**

*Suzy*

*Which section are you working in?*

**STUDENT:**

*Dear Professor*

*It's number 23 in section 3.2, I've got no idea. Please help.*

**TEACHER:**

*Suzy*

*I'm sorry, I don't have my textbook with me at Wal-Mart, can you send me the problem?*

**STUDENT:**

*Dear Professor*

*Sure. It says put  $f(x)=x^2-2x-9$  into the special form  $a(x-h)^2+k$ . I don't see where the “missing piece” comes from?*

**TEACHER:**

*Suzy*

*Just take one half of the middle term, -2, and square that...oh, but don't forget that whatever you add or subtract... do the opposite on the outside so everything stays equal!*

**STUDENT:**

*Dear Professor*

*I'm so sorry, I'm really trying to follow you...can't make heads or tails of it. Could you come in early, before my 8am... maybe like 6:45am so we have plenty of time to discuss?*

**TEACHER:**

*Suzy*

*I don't think it'll be necessary, let me try to show you:*

$$(x^2 - 2x + (-1)^2) + 9 - 1$$

$$= (x-1)^2 + 8$$

*Hope this helps...*

**STUDENT:**

*Dear Professor*

*Now I'm even more confused... what is a “^”?  
And why did the 9 change to an 8???*

*:(*

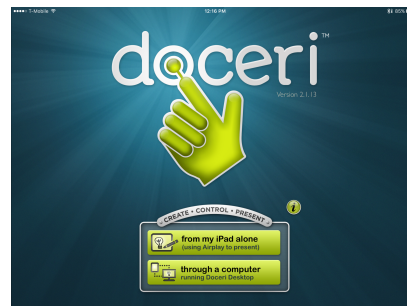
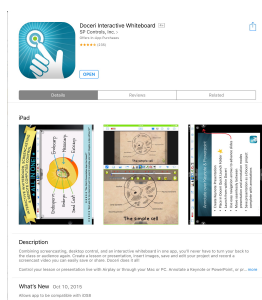
**TEACHER:**

*Suzy*

*I just learned this cool new technique from a talk at ICTCM 2017 in Chicago...let me prepare a "whiteboard video" using Doceri to illustrate this solution and I'll post it to Blackboard ASAP!!!*

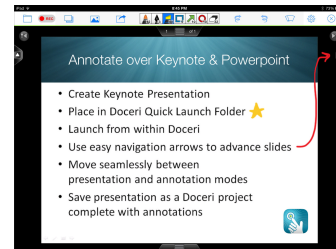
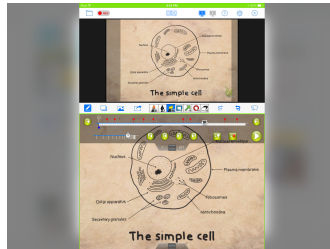
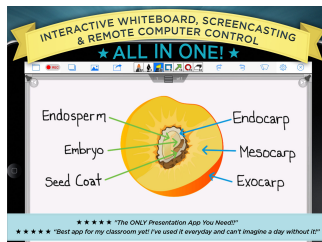
As you know, if you've lived through such “email exchanges”, these can go on seemingly endlessly...and often seem to accomplish nothing but setting up a time to meet in person anyway! And this could've been done in the very first email, saving you both tons of frustration and effort. I've always struggled with this and wondered...hoped for a better way! It was at a past ICTCM workshop where I experienced Doceri for the first time... and not sure if this was their original intent or not, but it's immediately where my mind took it; to solve my own problem...of course!

So, what is Doceri, where can I get it and the ever critical question, especially in the climate of ever dwindling (or completely vanishing?) departmental budgets...how much does it cost? Good news, it's an app in the Apple AppStore ... available for iPad and it's



absolutely free! That's right, it's a totally free download and I've found it ever so useful in cases like our above “email exchange”. One catch, there's always a catch...right?, and that is any of the Doceri creations for output or posting come with the “Doceri watermark” unless you pay the one time charge of \$4.99; and that's really very reasonable, I think.

Here are some of the uses demonstrated by the app developer...



*Sure it's got many more applications than what I use it for, and I'm sure the wonderful workshop I attended went through much of it... but with my “email exchange” problem on my mind, and finally seeing a tool that could cure what ailed me, I don't think any of those stuck. I was just happy finally seeing a better way to handle a long-time problem.*

*So, what exactly do I use it for? It basically is a white board...you can write up a solution (using just your finger, or I love using my Apple Pencil on the larger iPad Pro for more writing space!). I basically create a “help video” in three separate stages.*

**Stage one:** *I just write out exactly what I want to show the student... from beginning of problem to end of solution; if it takes more than one frame/panel, it can handle that too. One could use just this, if nothing fancier was needed or if time was especially of the essence, and you just needed a detailed solution “whiteboard video” to send or post asap.*

**Stage two:** *if there's pieces or substitutions I'd like to emphasize, you can go back in the timeline... write (in red “ink”) directly over the top of what was in black, and then with a couple of backspace clicks... you automatically remove any traces of the expression ever having been there in black at all... and when played from beginning to end, it just seamlessly looks like the emphasized red text was there in the first place. Very cool!*

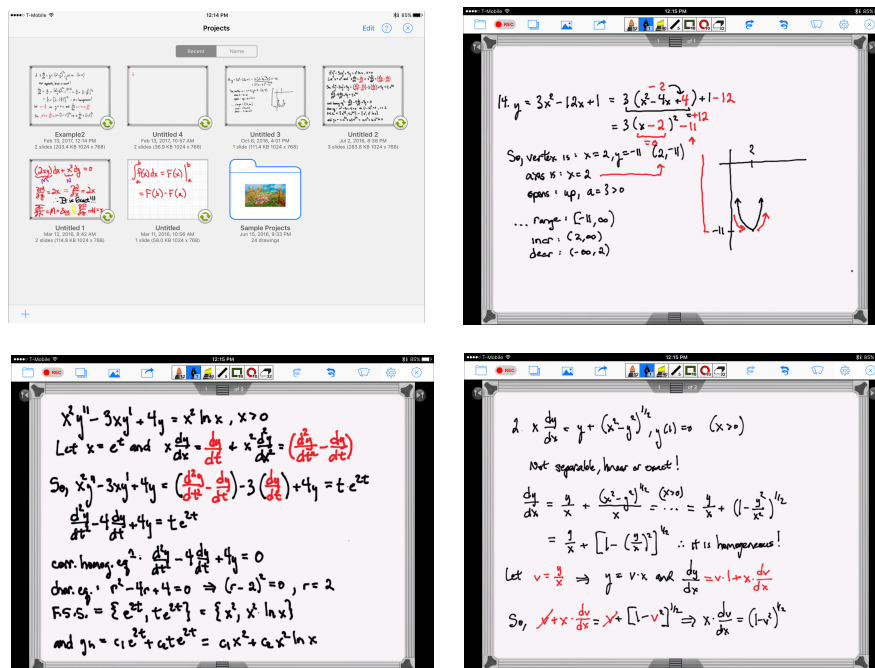
**Stage Three:** *the final piece of the puzzle is overlaying an audio track on top of your finished “masterpiece”. Technically, Doceri is recording audio in the “stage one”*

*process too... so if that's all you're doing, be careful what you say during the creation! But once I have my final “whiteboard product” and happy with it, I record one final audio track overlay where I walk through the example and maybe explain details I didn't necessarily write on the panel... similar to what I'd do in a class or lecture.*

And that's really it...it's so neat, relative simple and painless, and ready to be exported. You can export the “whiteboard video” as a .mov file and send in an email, post it to blackboard (or other CMS that your school might utilize) and send out a link to one student/or the entire class. It's really that simple!

Along with helping us to not go completely insane with situations like my original “email exchange”, I've recently been using it when I get part of the way through a final example in class that is going to be critical for the student's understanding to complete a homework assignment. Rather than putting off the completion of this example until Monday, and then the homework can't be turned in until Wednesday... I just created a simple “whiteboard video” (I created it with the entire solution, but emphasized during playback on the details we had not yet gone through) and sent it out on Friday afternoon so they could complete their work and turn in the homework on Monday; I'm sure they weren't super thrilled about that...but they all seemed to like the video help, some said they thought it was cool.

Here's a glimpse of a couple class “whiteboard help videos” I've created recently:



One of the videos was demonstrating a completing the square question that a couple of students from my college algebra class had written to me “needing more help”... so I created it and sent them a link on Blackboard. When that class next met, I explained to the entire group what I'd done and asked if anyone else still had issues with those



problems/if they'd like me to post the link for everyone... I got an overwhelming “yes!”. The other two videos were for two separate differential equations classes. The first one needed another explanation of how to solve a Cauchy-Euler problem from beginning to end to arrive at the general solution. The final example was for my differential equations class just this semester, I really was in a spot where they should be finishing up a homework assignment (that they'd been working on for a couple of weeks) to turn in on Monday, so we could continue on to the next topic. I ran short on time and only got through part of my explanation. Rather than just saying “finish it up on your own” (and how many students ever do this when asked anyway?) I told them I'd send a short video showing the final steps... I think it worked really well; not so sure they were so thrilled that this meant they needed to turn in homework that Monday though!

I hope this gives you a small glimpse into how this simple yet powerful app has changed my email responses (no, I don't have time to create one every single time a student contacts me...although I wish I could!) and... hopefully once you investigate the app on your own, you might even find some other more helpful “use cases” in your daily teaching lives.