

INSTRUCTIONAL DESIGN FINAL

LT 716 Systematic Design of Instruction

By: Jennifer Funke

Executive Summary

Doesn't it seem like every time you need to run to the printer just to print off a worksheet quick, the printer is not working or there are a bunch of teachers with the same thought? Teachers don't need to be using their mornings to stand in line with the printer. Teachers at Harrisburg are all looking to improve their use of technology effectively in the classroom. The problem with this idea is that teachers don't have enough time to be learning all these new technologies and integrating them into the new classroom. This instructional design will help work through this problem with the implementation of Google Classroom. The design will help teachers utilize a tool that can not only organize assignments, but also create a standard platform for creating, assigning, and grading assignments.

After talking to five different teachers at Harrisburg North Middle School the paper problem became very evident. Not only are teachers using time that could be spent on lesson planning or grading, but they are also printing off twenty to thirty copies of each assignment daily. The middle school is a one-to-one school using both iPads and Chromebooks which will allow students to utilize this resource as necessary. While meeting with the group of Harrisburg teachers, there was a big discussion on using online tools rather than so many paper assessments and why these teachers were or were not doing so. The teachers who were already using some online assessments focused on using Google tools such as Google Classroom, Docs, and Slides. Even though they were using these tools, they felt that they were not using them to their full potential.

Audience Description

The audience is Harrisburg North Middle School staff and they range in both age and technology background knowledge. There are 73 teachers, and all have access to both MacBooks and iPads. Most of the teachers at the middle school were interested in the idea of using online tools for assessments; they just wanted to be taught how to do so quickly and easily. Harrisburg is a very progressive school district and the teachers reflected that. Based on the learner analysis, teachers all had their teaching certificates, used their computers regularly, and 77% of teachers wanted to use web-based products in a positive and educational manner. The teachers range in teaching experience from one year to eighteen years. From the learner analysis, most teachers are motivated to learn and incorporate technology into their classroom. When asked what the comfort level was for technology use in the classroom, most teachers agreed that they were comfortable using technology and learning about new technologies available. Teachers in the school range in subjects taught from core classes to CTE (Career and Technical Educators) to wellness teachers. With so many different subject areas being taught, using Google Classroom for all teachers alike would create a learning environment that all teachers can utilize.

Learning/Marketing Need

Harrisburg North Middle School is very fortunate to have access to updated technologies in every classroom. In many ways this school is very progressive, but after using Google Forms to survey a group of 20 teachers, there was one area found to be an area for concern. Teachers and students have so much technology available to them and yet printing worksheets is the first thing this group of teachers found to be dealing with each morning. There are only two printers in the entire building and yet each morning for five days between 7:30 am and 8:00 am, there were 5-6 teachers printing documents at a time. Not only is this incredibly time consuming, but it also costs money to buy paper to supply the copies being made. After surveying this group of teachers, it became clear the need for instruction was utilizing online resources where students and teachers could complete and grade assignments. When asked on the survey about attitudes towards learning a tool that could replace paper usage, over 75% of teachers rated a five out of five for excitement in learning in this area.

Along with this learner analyses that was completed in moving forward with this design a survey focusing on each of the learners in the focus group along with meeting them on an individual basis. The survey would consist of three questions: What is your preferred style of learning, are you currently using Google Classroom and if so, how confident are you with it, and after becoming more familiar with Google Classroom what is the likelihood of implementation? The face-to-face meetings would focus on getting to know each of the learners in the focus group and understanding their wants within an online tool along with learning techniques they have felt most beneficial for themselves and members of their teams.

Project Definition

Using any of the Google tools that are available requires only two things, access to a device with internet and a Gmail account. As a K12 teacher in South Dakota, teachers' emails are automatically set up to use any of the Google tools; this allows teachers to use that email rather than having to set up a separate Gmail account. All the Harrisburg students also have a K12 email which gives them access to the Google tools as well. Using this uniform tool will create a digital environment for both teachers and students to create, access, and complete assessments. Google Classroom is set up for students, teachers, guardians, and administrators and according to the Google Classroom help site there are several ways to utilize it.

These include: create and manage classes, assignments, and grades; give direct, real-time feedback and grades; keep track of classwork and materials; share resources and interact in class stream or by email; submit assignments; and get feedback on grades. Google Docs and Slides are like using Word and PowerPoint but can be accessed on any computer that has internet where the students (or teachers) can sign in using their email account. Students can use both tools to submit assignments into Google Classroom and receive feedback from their corresponding teachers. By using Google Classroom, both teachers and students would reduce the amount of paper being used daily along with being able to know exactly whose assignment is whose and seeing real-time progress on each learner's assessments.

Description of Product

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Project Goal

The goal for this project is to utilize the use of Google Classroom and become aware of paper usage within the school.

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certificates, used their computers regularly, and wanted to use web-based products in a positive and educational manner.

Delivery Strategies

According to the staff at Harrisburg, many of them did not have time to sit down and read a book and then go out and try something new. Instead, many of them agreed that having videos that discussed basic steps and implementation of Google Classroom would be more beneficial. This leads to the delivery strategy of using a number of short videos that teachers can watch at their own time to work through the training. Teachers also discussed a way to share lesson plans, questions, and other implementation tips and the strategy for this will be face-to-face training during morning meetings on creating a shared Google Drive folder and then sharing documents to that folder along with the use of Google comments.

Schedule and Budget

There will be six videos created for training that will include two apiece for Classroom, Docs, and Slides. Each video will take a week to create, review, and refine to be ready to share with teachers at Harrisburg North Middle School. Every other week teachers have a 30-minute morning meeting, so this will be used for three weeks to show how Google Drive folders work, how to share content, and how to comment within a discussion. The first morning meeting will be the first Wednesday in November and will follow every other Wednesday for the next two. There is no necessary prep work except to have a device, internet access, and a projector to show teachers in the morning meetings. Teachers can also bring their device to work along with instructions. Once the first two videos have been created, they will be shared with teachers and after one week of the teachers having access, a survey will be sent out to receive feedback and modifications for following videos. Each set of two videos will be sent out after

their two-weeks of creation with a survey to follow the following week. There will be no costs because all the Google Tools are free and video creation tools are also free for use.

Project Design

Instructional Goal (s)

The instructional goal for this project is to increase teacher awareness of paper-reducing technology tools. This goal along with the project goal will create an environment that benefits educators needs. The purpose is not to guarantee that teachers will stop using paper, but instead make them aware it is easy to integrate technology tools that help reduce paper usage.

Delivery Environment

A common answer when asked how teachers prefer to learn new material was that they don't have time to sit and read a book and then answer questions on it and instead prefer to learn by watching and doing. Because of the needs/learner analysis, instruction will be delivered the first day to get teachers started and explain the process. After that teachers will have videos available to work through at their own time. Teachers will use these videos to work through using Google Classroom. The videos will be the same for all teachers but will be asynchronously delivered as far as teachers working through the videos at the pace that works best for them.

General Outcomes

This instructional design course will allow teachers to break down the use of Google Classroom and implement it into their classrooms. As the videos are created a more precise outcome will be available about what the audience has learned. Teachers will become more comfortable using these resources as a means of assessment completion.

Assessment Strategies

To assess the use of Google Classroom, teachers will be sent a confirmation email after they have completed each video lesson. Two weeks after a teacher has received their email they will be sent a survey to be filled out. The survey will include questions on the use of the tools in the classroom and a reflection on implementation within the classroom. This survey will show where teachers are at with implementation along with if there is any further help necessary. The survey will also include questions on learner satisfaction for video lessons. This can lead to future decisions on learning techniques made for both the designer and the learners. Flipgrid will also be used as an assessment strategy throughout the learning videos for students to interact with each other and reflect on others experiences throughout the video. This will create an environment for both formative and summative assessments.

Content Organization/Sources

Once created, the content will be organized in a matter by me as the instructional designer. Google Classroom is free to use through the school and the videos that teachers will be using will be created using EdPuzzle for which the school has a subscription. Teachers will meet for morning meetings during Professional Development to get a beginning idea of what the future weeks will look like. If another meeting is needed before teachers are introduced to the videos, that will be determined after the first meeting. Once the first two videos have been created, they will be shared with teachers and after one week of the teachers having access, a survey will be sent out to receive feedback and modifications for following videos. Each set of two videos will be sent out after their two-weeks of creation.

Standards

All educational standards must adhere to accessibility in readability. Because learners will be using their own devices, they should already be fitted for the specific needs of each individual learner.

Accessibility has become a huge part of learning everywhere and that means tools used need to be accessible by learners of all types and capabilities.

Media/Delivery Platform

All media will be delivered using a shared Google Drive folder. The videos will be created using EdPuzzle and access will be given to teachers throughout the middle school. The surveys will be created using Google Forms and then teachers can complete using their school email. By providing a survey after the first videos are shared with the teachers, the usability of the resources is determined and can then be modified as needed.

Production Documents/ Develop & Deliver Documents

#	Content Chunk	Treatment Ideas	Reviews
1.	Introduction	Image of Google Classroom platform, brief narrated introduction explaining the upcoming professional development.	
2.	Objectives	Objectives appear in a bulleted list.	
3.	Paper vs. Online Usage	Short attention-grabbing video on the use of paper in schools and the amount of time spent printing.	Paper Usage Video (Found on YouTube by Yonathan Shiran, published Aug, 29, 2009)
4.	Introduce Shared Google Drive folder	Teachers will be sent an email that contains a link to a shared Google Drive folder. This folder will house any videos created and other documents necessary to be shared.	
5.	Demonstrate Google Classroom	Teachers will log into Google Classroom using their K12 email account. Teachers will then walk through a brief tutorial on the	Google Classroom has a basic tutorial when someone logs in for the first time.

		different components within Google Classroom.	
6.	Practice in Google Classroom	As part of the professional development, teachers will have the opportunity to be a “student” in a practice Google Classroom. Teachers will be given an assignment and a question to answer along with different due dates to work through submitting assignments and checking the Google Calendar for when assignments are due.	The code to join the practice class will be in the email that contained the link for the shared folder.
7.	Google Classroom Creation	Teachers will work through instructional videos learning about how to create classes in Google Classroom along with how to assign assessments.	
9.	Review	After each teacher has completed all instructional videos, they will be sent a confirmation email and within the next two weeks will be sent a survey with questions on implementation of the tools.	

User Scenario:

Learner 1 will begin professional development session during a morning meeting time where the introduction, learner objectives, paper video, and email will be shared with everyone. This will be a kick-off meeting and Learner 1 will be given specifics for how the future Google Classroom integration videos will follow. Upon initial Google Classroom setup, Learner 1 will open their computer and preferred internet browser to type classroom.google.com into the address bar. Learner 1 will then be prompted through signing in with K12 email account. Next, Learner 1 will be walked through a brief tutorial that has written explanations of each button within Google Classroom and its function. By clicking the next arrow, Learner 1 will be taken through each button and once all have been shown, will be able to click Done.

Learner 1 decides to sign up for the practice Google class so, Learner 1 signs into Google Classroom and on the right-hand side there is a plus button. Learner 1 clicks on this button and is prompted to click on Join Class or Create Class. At this point, Join Class will be clicked, and Learner 1 will enter in the class code as provided in the email. After, Learner 1 will see Practice class has been joined and is now showing up on the Google Classroom platform. Now that the class has been joined, Learner 1 can enter the Practice class and see there is an assignment to complete along with a question. Learner 1 can click on whichever post first. In doing so, the post will be brought to the center of the screen and Learner 1 can type in a textbox to answer the question or click the add button and add a document. When the assignment is ready to be submitted, Learner 1 will click the submit button. This will bring up a prompt that asks, "Are you ready to submit?" and then Learner 1 can click submit again to have completed the assignment.

Learner 1 is now ready to complete Google Classroom integration videos. To complete these videos, Learner 1 will go into the shared folder and click on the file titled Classroom setup 1. The

instructional videos are set up in Edpuzzle and Learner 1 will click the play button and begin listening to the instructional video. Learner 1 will learn about setting up classes, assigning assessments, and the functionality of Google Classroom by watching the Edpuzzle videos. These videos will all follow the same format and will also teach about integration of Google Classroom assignments. After completing all the instructional videos, Learner 1 receives a survey asking about the helpfulness of the videos and whether Google Classroom has been implemented, and if so how it is working in the classroom. The final question on the survey will ask if Learner 1 needs any further assistance in video or face-to-face form.

Templates:

Google Classroom &
Google Doc
Implementation

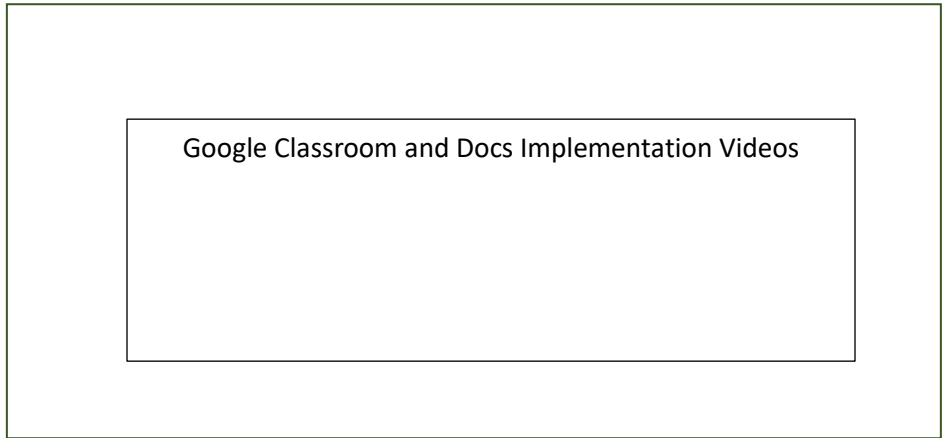
Picture

Let's save the Earth and
time!

Learning Objectives:

- Objective 1
- Objective 2

Edpuzzle Videos



Requirement Specifications:

Google Classroom is available on Google Chrome, Safari, Firefox, and Internet Explorer. The Google Classroom app is also available for Android and IOS devices for free download. Internet access is also required to use Google Classroom. Teachers in the Harrisburg District have access to MacBook Pros, iPads, and Chromebooks, all which support Google Classroom.

Description of Media Assets Needed:

Google Classroom	Free with K12 school system-platform is already set up by Google
SmartBoard	Need cable to connect Smartboard to computer for presentation at first meeting

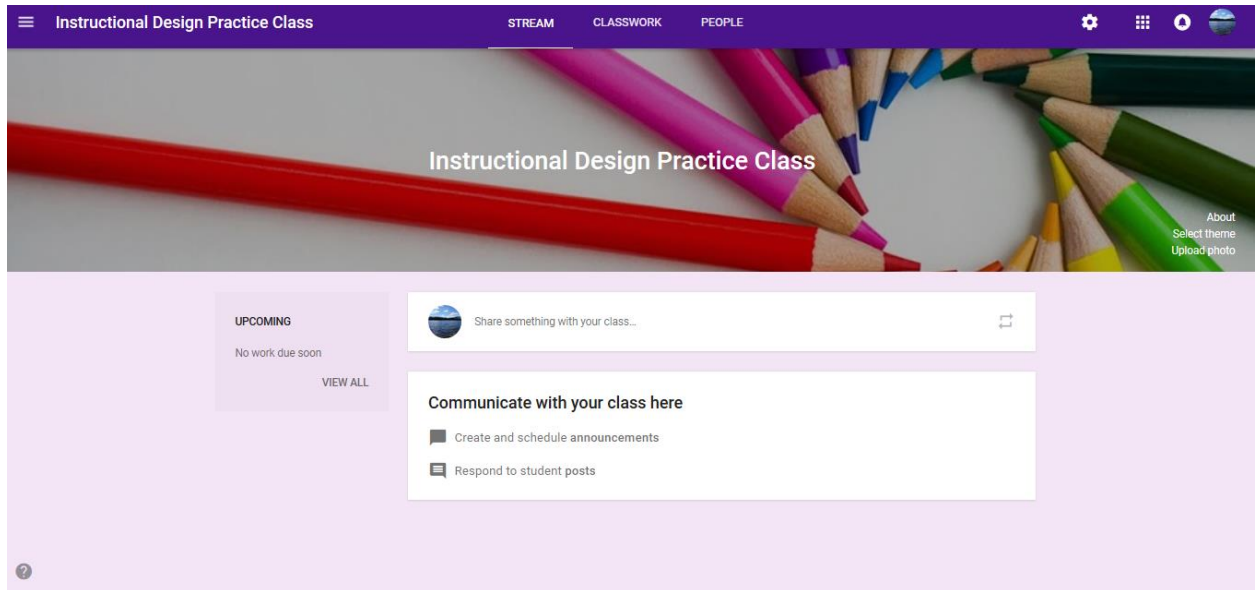
Video	Video script for classroom integration
Narration	Narration script; used for presentation at meeting and Edpuzzle Videos
Edpuzzle	Software paid for by the school-integration of classroom

Prototype:

Beginning Meeting



Google Classroom



Edpuzzle

Google Classroom Tutorial



Delete

Duplicate

Edit

Assign

Small-Group Evaluation

The small group evaluation will take place with one teacher from each of the eight teams. I will begin by emailing this group of teachers sharing a Google Drive Folder that contains the beginning PowerPoint, The first two Edpuzzle videos, and some extra tips from Google Education's website. The email will also include a link to the introduction survey.

(<https://drive.google.com/drive/folders/15oojhx4fvCtI30upHCAFMyTSHCw5Z6Am?usp=sharing>) We will meet after school and this group of teachers will be shown the PowerPoint and will be given two weeks to complete the videos on their own. Upon completion, the small group will receive the post training survey to receive feedback for the instructional designer to modify or enhance if necessary.

Material Delivery:

After the small group has completed the videos and the surveys, I will take the results to the assistant principal and principal at Harrisburg North Middle School. They want to see the materials that were used with the small group along with the responses from the survey. This will help determine the value for other educators and time frame for when the training can be implemented.

Appendix

Instructional Materials:

Learners- Introduction Survey:

<https://goo.gl/forms/A2B1yWAzWZRDtFWG2>

Post Training Survey:

<https://goo.gl/forms/UaMfpVEwOQpV7v6v1>

Google Classroom Brief Training created by Google Education:

<https://teachercenter.withgoogle.com/first-day-trainings/welcome-to-classroom>

<https://youtu.be/dQ04WE3QzXI>

<https://youtu.be/jbhK-Tar7fY>

Broken down into Edpuzzle chunks:

<https://edpuzzle.com/media/5be76495b3acaa4069e3bc69>

<https://edpuzzle.com/media/5be76439d44edb406f1cb1c3>

Presenter:

https://drive.google.com/file/d/1Fh1AP-hFii_24o1W8PxnXPXDWTvOuVX1/view?usp=sharing

Reflective Journal

Chapter 8 – Define Phase

The define phase worked very well after meeting with teachers at the middle school. The part that I felt like I was struggling with was the scheduling and budgeting part. Never setting up a schedule or budget for a large project like this has me a little worried. To set this up I looked at lessons I have done with students and the amount of time needed to set those up and used a similar schedule.

Feedback: I like your project, and I myself use Google Classroom in all of my classes. However, I also feel as if I underutilize the site. I think one thing that you could change in this project is to pick one Google Tool to teach your colleagues. I think it could be better to focus more on one Google Tool and go more in-depth on that tool so that teachers can fully utilize that tool. I think this could help in underutilizing the tools. This would then change the videos you make, and you would then fully focus on one tool. I really liked how you talked to other teachers and saw what they used, and how they have similar problems to you. You found the problem and then wanted to find a solution. I also like how you are creating videos that teachers can watch on their own time. -Dalton Hannasch

Feedback: You really grabbed my attention here! I try to stay away from the printer in my school except for assessments. This is how I feel in my classroom! I keep learning of all these new learning tools, but it is difficult to find the time to research them more! It seems like the teachers at your school are wanting to utilize this, but need assistance getting started. Maybe include something in your goal about teaching and guiding them in using the Google Tools to

rely less on paper assessments. I think the Google calendar tool is fabulous. I wish my school would use that to keep all the activities straight! -Kaylee Vander Wal

Feedback: Are you using any specific tools from the G Suite for the assessment or allowing for a variety of them? I really only have one small question. Would you think of compensating the Instructional Designer? The text mentioned it. Personally, I was initially resistant to the idea (a good hardworking South Dakotan) but if it requires video creation and the inevitable q/a that the instructor will be asked to do. Just some thoughts. -Christian Pirlet

Feedback: I like how you are not just incorporating technology to incorporate technology, but you are using it to fix a problem and help your district solve a cost problem. In your delivery system you talk about how the teachers do not have time to sit down and meet about this topic. Could you use a PD time for this? The videos are a great way of doing it. You can set it up like an online class and allow discussion boards. This is a great way to get the lesson across. -Dan Hall

Based on the feedback in this chapter, I decided to focus on implementing Google Classroom alone rather than working with the other Google tools as well. This allowed me to really focus on the strength of my instructional videos along with what learners would find most beneficial.

Chapter 9 – Design Phase

The design phase was a little tougher to work through. I was slightly sure of how to go through it, so I did a very basic outline of my project. Based on my feedback I will be adding a lot more detail, but it was nice to see I had the base idea correct. The one detail within the design phase that took me by surprise was how much extra detail needed to go into each component.

Feedback: It always seems to be a race against time! I like your time frame here. It gives the teachers time to experience with the tech tools. I think your draft is great! You gave specific details throughout the entire document. -Kaylee Vander Wal

Feedback: It might be useful to have some “assistant” instructors to help with that many people working on the process. Great use of surveys to assist in the assessment. Are there any specific sites or sources that you will use for the EdPuzzle videos? It might not matter but just a thought. -Christian Pirlet

Feedback: Would it be possible to have more time together as a group? Even though they aren't reading and doing worksheets they would still be working alone if watching videos. I also wonder if doing that teachers would feel like they don't have to watch the videos, then they don't learn. They may not know all the benefits until they learn it. Sometimes I feel as if learning as a group is better than they can discuss amongst each other. Awesome to take advantages of other technologies so teachers see these as well. Overall, I think it is great! -Dalton Hannasch

Feedback: OK - in general you have a good start. However, you must include a greater amount of detail and justification on how you made your decision and information related to your design. For example, how do you know that all teachers are looking to improve their use of technology...."? Did you do an analysis? You need to specify how you know the learning need. You need to specify how you know your learners/audience. Most of this information should be from a learner and needs analysis that you need to construct. These analyses need to be referenced in your documents. I like how you have structured your overall goals and your outcomes. -Professor

With this chapter I really focused on what my classmates said and added a significant more amount of detail in this section. I had to push myself in this chapter to really grasp the project as a whole and upon revision, I feel like it came together much better.

Chapter 10 – Production Documents

This phase of development worked well for me. Having it organized in a table format really helped me see the whole picture and I felt like I had a good grasp on the project at this stage. I didn't have questions at this stage because it was more of a layout that I was used to.

Feedback: I think your document looks really good this week! You provided a lot of detail and it was easy for me to follow. Great job! -Kaylee

Feedback: I really like your work here. This is an easy to follow and even cited at times. Nice work. I like the inclusion the media you are planning on utilizing. Nice work. -Christian

Feedback: Great to have a practice room for teachers, that way they see what the students will see in the future. What questions specifically? Will this be something that most people simply continually click next until they are done? If this is an overload of information I wonder if this would happen. Great Work! -Dalton

Based on the feedback, I didn't make much for changes on this chapter.

Chapter 11 – Develop and Deliver

This phase I felt like I had a good start on but struggled to know if my documents were what my audience fully needed. But it made me realize as an instructional designer having a team to work with along with testing the documents with the clients through the process would make it easier to have the best design for the learners.

Feedback: Great idea! I really like how you are doing your trial run. You should get good feedback! Looks awesome! -Kaylee

This chapter I didn't change much, I did however finish the materials that were necessary to complete the instructional design.

