

The Complete Guide to Designing Technology-Rich Units Introducing the A.P.L.E Planner

We are so excited to share with you our new unit planning template, the Authentic Purposeful Learning Experiences unit planner. Yes, we're learning geeks and this is the kind of thing we get excited about.

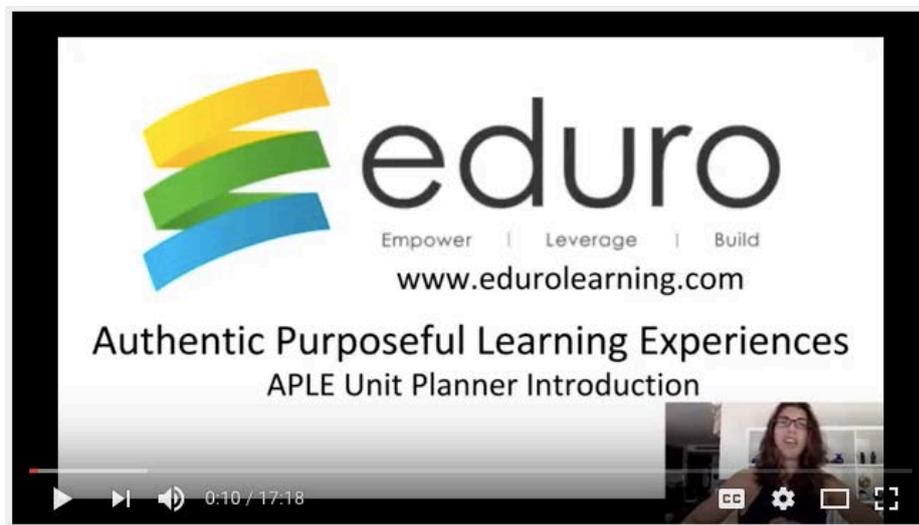
We're excited about this unit planner because we have combined four key foundational pedagogical approaches into one unit planner, to create a streamlined, and effective way to help you design units that:

- are **authentically** engaging and relevant for your students
- include the **purposeful** use of technology to transform learning
- require your students to **experience** the process of creating something
- lead to student success through a logical structure for product creation

To create this unit planner we have built on four foundational models that we think are essential to a creating an engaging learning environment for students. As you review the unit planner (and watch the video), you'll see strong ties to:

- [Understanding by Design](#)
- [Project Based Learning](#) (or any of the other similar styles like problem or challenge based learning)
- [The SAMR Model](#)
- [The MYP Design Cycle](#)

Combining these four foundational models into one unit planning process, with a strong focus on making sure the content is relevant to your students, allows you to design units that will not only engage your students, but also provide structure and support for demonstrating learning through the creation of new and interesting products.



Introducing the Authentic Purposeful Learning Experiences - APLE
Video URL: <https://www.youtube.com/watch?v=CG991D9Qnuk&feature=youtu.be>

Key To Success

The key to success using this unit planner, is to mentally toss out whatever you've done before and start from scratch. Forget about your curriculum documents and resources, start with just the end goal: what you want students to know and be able to do, and develop from there. The idea behind this is to give you the freedom to re-imagine the unit completely differently than you may have taught it before.

In fact, using this process, you might find yourself doing very little direct instruction, and instead providing experiences for students to engage with the content through different media, and then demonstrating their learning through an authentic project.

Get Started

We recommend starting with a unit that hasn't been working well in the past (if you have units where students are loving their learning, demonstrating solid understanding and creating great finished work, why change those?) Pick one that has been challenging - either you don't like how it works, or your students consistently struggle with the content, or it's just time to change something up. This will also help you open your mind to new possibilities, and teaching differently than you might have before.

Here's how the four foundational elements of our unit planner all fit together, with some tips for how to use the planner as you design your unit:

Standards

(Understanding by Design)

To make sure that we are keeping our unit focused on the learning targets, the first stage of planning your unit is determining what you would like students to know and be able to do by the end of the unit. To keep a really clear focus on those goals, we start with the relevant standards that will be assessed, just like UbD.



Tip: In order to truly assess understanding of content, you only want to include the standards here that you will actually assess. Sometime we get carried away and list all of the standards we might talk about or tangentially cover. These boxes should only include the actual standards that will be assessed. This will help you and your students stay focused.



Extra: You'll notice that we included three types of standards - use the standards that are relevant for you and your students. The [ISTE standards](#) are included to help identify opportunities for technology use within your unit. We've selected the ISTE standards for students because they are the most widely respected and utilized in schools around the world.



Extension: Not only does ISTE have standards for students, but they also have them for [teachers](#) and [administrators](#) - just in case you're curious about technology expectations for the adults in your building too!

Authentic Learning

Once you've identified your standards, along with what you want students to know and be able to do, you'll see we've provided a section for you to reflect on how to make this particular content relevant to your students. You might want to think about how your specific content connects to the world today, where they might experience your content in their everyday lives, or how they might be affected by the content in the real world



Tip: This is the key to student engagement. If we, as teachers, can't see how our subject material relates to the real world, it will be very challenging for our students to make the connection. You might want to start by thinking about how you apply your content area in your personal life, or thinking about what will be relevant for students beyond their school career.

Essential Questions & Outcomes

(Understanding By Design)

Once you have that authentic connection determined, we head back into a modified Understanding by Design process to identify an **essential question** that can be shared with students, posted in the classroom and in digital spaces, and referred to throughout the unit. This question will be your guide as your students are learning, a reference point that can be discussed regularly.



Tip: Make sure your essential question is not "Googleable" - you don't want students to be able to search for the answer online, it should be an open question that inspires curiosity and fosters genuine interest. The time you spent thinking about the authentic learning aspect of this unit will help you develop a relevant and relatable question.

After you have your standards put into authentic context and a question that will guide you through your unit, you can think about what you want students to know and be able to do at the end of this unit. What content should they be walking away with? What skills should they have? This will lead you directly into the next section.

Authentic Product

(Project Based Learning)

This is when we start thinking about what students will actually create during this unit. You've identified your content standards, as well as the skills and knowledge you want your students to walk away with. Now is the time to determine what they can actually create to demonstrate their understanding.

The goal here is to allow students some creative expression not necessarily to force everyone in the class to create exactly the same thing (plus we all know how much more interesting it is to provide feedback on unique products, rather than 25 versions of the same thing). The finished product doesn't have to be technology-rich, but this is an opportunity for you to think of new and unique ways for students to demonstrate their learning, which could include the use of technology.

At this point, you want to be thinking about the most interesting and relevant way that students can demonstrate their understanding to you, and possibly a wider audience, at the end of the unit. Everything else in this planner will be breaking down the steps it takes to create this product. This means the product should be complicated enough that it will take almost the duration of the unit to create it (when it's broken down into steps), and so that it's interesting enough to explore for the entire time-span of the unit.

Project Ideas:

- Remix video
- Animated gif
- Presentation Zen style presentation
- Blog post
- Infographic
- Public Service Announcement



Tip: Can the product they create also be something that's relevant in their world and be something that students would enjoy creating because they see examples of it in their everyday lives?

Purposeful Use of Technology

(SAMR)

You might want to think about the use of technology at the same time as you're thinking about the authentic product, but the finished product does not have to be technology-based. If you're asking students to create something that is technology-rich, you may want to think about how you can move along in the SAMR model.

Tip: As you think about SAMR, don't try to make every single lesson redefinition. It's almost impossible to make a single lesson redefinition, instead, think about your use of technology throughout the project. Your students may experience all levels of SAMR throughout this one unit. It makes the most sense to think about the final product that students will create as the piece that is redefinition, this gives you (and them) lots of time to use technology in new and different ways.

Stages of Learning

(MYP Design Cycle)

For the rest of the unit planner, you're going to break down the process of creating that final product into steps. Instead of thinking about front-loading, content delivery, homework, classwork, and then assessment, instead you're going to think about how you would want students to create that final product and break that process down into steps. During each step, you can provide learning experiences for students to dive deeper into your content, as well as provide opportunities for formative assessment.

Each stage should be a building block to completing the final product. Imagine if you were creating this product yourself, almost without the guidance of a teacher, what would you need to do to be successful? Those are the kind of learning experiences we want to facilitate in this process. As a teacher in this classroom, your role will be to break each stage down into smaller steps so students have concrete guidance for how to move through the process, as well as provide essential resources, documentation strategies, feedback and content expertise. Because you are going to take time now to break down the process of completing each stage, and design learning experiences (that will allow opportunities for feedback), you will find that during the actual teaching of the unit you are facilitating those experiences, rather than directly teaching. Basically this means more work in the planning stages, and less pressure during the actual teaching time.

One of the benefits of teaching this way is that there are many opportunities to pause and reflect throughout the process. We recommend providing specific deadlines at the end of each stage (although you may have shorter term deadlines in the middle of each stage based on the tasks and learning experiences you develop), so that at the end of each stage you provide specific and concrete feedback to each student about their work in relation to what has been completed as well as the work in process toward the finished product. Feedback can be provided in whatever way makes the most sense in your classroom, we've done conferencing, rubrics, video feedback, Google Doc comments, handwritten notes, anything and everything works!

It's worth noting that although we have numbered each stage (for convenience), you can always have students move back and forth between the stages as needed. You can even go back to Stage 1, if the final feedback or reflection prompts more valuable thinking.



Tip: This may be totally different than how you currently teach, and that's OK. Give it a try and see what you think! We have found that once teachers get the hang of this style, they are really able to take risks and try new things and their students feel very engaged in the process.



Extension: You may want to think about whether you are giving [formative feedback](#) at the end of each stage or summative. Based on your subject area, there might be specific standards you need to assess (like research skills, for example) that could be summatively assessed after the first stage, which is fine. Alternatively, you might do [all formative assessment](#) until the actual creation of the product, which is when all standards are summatively assessed.

Defining the Stages

As we break down suggested learning experiences for each stage, please note that you can combine and include as many experiences as you feel are necessary, each one having a specific deadline (smaller deadlines within the larger stage), so that students get feedback on each task they complete.

Exploration (Research): Learning Stage 1

This stage introduces the concept to your students, ideally through some kind of hook or interesting starter at the very beginning of the unit. Once they are engaged, this stage provides the framework for student-led investigation into the subject area.

This will most likely be the stage where students learn the most content. The key behind the success of this stage is not deliver content to students, but to provide lots of different media and resources that students can explore and interact with to develop their own understanding.

Ideas for Learning Experiences:

- Determine the problem you're trying to solve
- Research & take notes
- Compile citations
- Explore examples of completed projects
- Determine success criteria

You can choose to have students do all of these things, a few of them, or come up with your own ideas. The goal is to provide students with opportunities to explore and experience the content and to document their developing understanding through the process so that you have a window into what they know about your content by the end of this stage.



Tip: For each of these tasks you might want to create a template for students to complete to document their learning. This provides structure for them as they explore, it also ensures that students are examining all facets of the content that are critical for your subject area. Additionally, it will provide a clear framework for class discussions so that students can all explore different content but come to shared understandings because of the structure they've used.



Tip: If you asking or allowing students to use a new technology for their final product, you may also want to include some time during this stage to explore with the new tool so they know how to use it and what a reasonable expectation will be for their ability level in the final product.

Finding Pathways (Planning): Learning Stage 2

At this point, students will have developed some strong content understanding and have documented their thinking about the subject area. They will (ideally) be inspired by the product idea that they are expected to create and they will be ready to start planning what their finished product could look like.

The purpose of this stage is to force students to stop and plan out their finished product before they start to actually create. We all know that when we plan something before starting to create it, that the creation process goes much more smoothly.

This stage will not only teach students how to plan successfully, but it will also give you a clear insight into what their finished product will look like before they actually spend the time to make it. This is a great way to scaffold students for success - by giving them feedback on how their concept of their finished product is developing, before so much time has been invested.

Ideas for Learning Experiences

- Student-created timeline of tasks needed to finish the final product
- Storyboard
- Rough Draft
- Outline
- Student-created rubric (or self-assessment) for the final product



Tip: This is usually the stage students have the most trouble with. They want to get started right away and may not see the value of planning. The more you can do to highlight the power of planning “in real life” in your subject area, the more relevant planning will be for your students.

For example: Whenever we have students create videos, we show them clips of actual Hollywood movie storyboards. Here are two of our favorites:

- [Monsters Inc Storyboard Comparison](#)
- [Lord of the Rings Film to Storyboard Comparison.](#)

Plus two great storyboard resources:

- [Pixar Storyboarding Mini Documentary](#)
- [Intro to Storyboarding by Rocketjump School](#)

Experiencing (Creating): Learning Stage 3

This is it! This is the stage everyone is always excited about. This is when students actually create the finished product they’ve been planning for so long. They should be well-planned and organized by now. You as the teacher should have a good idea of how the finished products will turn out. If there were any issues during the Finding Pathways stage, they should be identified so students can address them when they actually create their products.

Usually during this stage, we recommend providing in-class work time for students. This will help you get a good understanding of how they’re progressing. It will also teach them how to break down a bigger process into smaller time chunks (since they’ll most likely have to do some work at home and some work at school over the course of several days), and it will give you an opportunity to check in with each student over the course of the work periods. Another great thing about in-class work time is, if you’ve chosen a technology-rich final product, (like the list below), if students have technical trouble, they can get support from other students in class, and you can learn too!

Ideas for Final Products:

- Remix video
- Animated gif
- Presentation Zen style presentation
- Blog post
- Infographic
- Public Service Announcement

Note: you already selected which type of product your students would create during the Authentic Product step above.



Tip: In the past, the creating part may have taken the longest for students, but now with this new structure, you might notice that the first two stages are quite long because that’s the most content-dense part of the unit. This stage is all about demonstrating understanding, rather than taking the time to acquire content. Because students should be fairly knowledgeable and organized from the first two stages, this is just a matter of actually doing the work to bring it all together.

Scrapbooking (Reflecting and Evaluating): Learning Stage 4

This is the stage we often skip when following “traditional” unit design, because once we have our assessment completed, we feel the need to move on to the next unit. However, we like to highlight this part of the process because we want students to have the opportunity to receive feedback from a variety of audiences, and ideally, an authentic audience of others who have created similar products.

Ideas for Feedback Opportunities:

- Feedback survey by peers
- Video journal self reflection
- Self-assessment using student created rubric



Tip: You might want to provide different styles of self reflection for different students. Some feel more comfortable talking about their learning (so a video or audio recording works great), others would rather write, and still others would like to have a conversation with you. If you can differentiate the format of feedback, sometimes the depth of reflection improves right along with it.

Additional Resources

We hope this is a helpful guide to planning authentic, purposeful learning experiences for your students! Just in case you’re looking for a little more, here are a few additional resources from Kim Cofino:

- [Designing Learning Experiences](#)
- [The Great Design Challenge: Introducing the Design Cycle](#)
- [Creating Independent Learners: The Design Cycle](#)
- [The Perfect Match: Technology Integration and Understanding by Design](#)

Also included in this packet:

- APLE Unit Planner (Printable)
- APLE Guide
- [APLE Unit Planner](#) (Google Doc Template - Make a copy)

If you give it a try, please let us know how it went! You can reply to this e-mail, info@edurolearning.com or send us a message on Twitter at [@edurolearning](https://twitter.com/edurolearning), take a picture and share on [Instagram](#) with the hashtag [#edurolearning](#), and/or message us or post about your experience on our [Facebook page](#)!

Unit Name:

Estimated class periods needed to complete:

Class:

College and Career Readiness Standards:

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-
-

Content Standards:

-
-
-

ISTE Standards: (if applicable)

-
-
-

Authentic Learning: Why is this unit considered authentic? How is this relevant to your students today? How will the students interact with authentic data, people or places?

Essential Question(s): What provocative questions will foster inquiry, understanding, and transfer the learning?

Student Objectives (Outcomes):

Students will be able to:

What key knowledge and skills will students acquire as a result of this unit?

What should they eventually be able to do as a result of such knowledge and skill?

Purposeful Authentic Product to Demonstrate

Understanding: Through what purposeful authentic task(s) will students demonstrate the desired understandings?

Purposeful Use of Technology: How is technology used in a purposeful authentic way to help students achieve the desired understandings?

Stages of Learning:

Use the following stages to break down the larger product that students will create into stages or steps

Exploration (research)

Examples of Possible Tasks

- Determine the problem you're trying to solve
- Research & take notes
- Compile citations
- Explore examples of completed projects
- Determine success criteria

Learning Experiences (opportunities for formative assessment)

Standards / Learning Outcomes Assessed

Self (and or Peer) Assessment & Teacher Feedback

Finding Pathways (planning)

Examples of Possible Tasks

- Student created timeline of tasks needed to finish the final product
- Storyboard
- Rough Draft
- Outline Student-created rubric (or self-assessment) for the final product

Learning Experiences (opportunities for formative assessment)

Standards / Learning Outcomes Assessed

Self (and or Peer) Assessment & Teacher Feedback

Learning Experiences (opportunities for formative assessment)

Experiencing (creating)

Examples of Possible Tasks

- Remix video
- Animated gif
- Presentation Zen style presentation
- Blog post
- Infographic
- Public Service Announcement

Standards / Learning Outcomes Assessed

Self (and or Peer) Assessment & Teacher Feedback

Scrapbooking (reflecting & evaluating)

Examples of Possible Tasks

- Feedback survey by peers
- Video journal self reflection
- Self-assessment using student created rubric

Learning Experiences (opportunities for formative assessment)

Standards / Learning Outcomes Assessed

Notes

APLE

Unit Name:	
Estimated class periods needed to complete:	Class:
College and Career Readiness Standards: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Content Standards: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	ISTE Standards (if applicable):

<p>Authentic Learning: Why is this unit considered authentic? How is this relevant to your students today? How will the students interact with authentic data, people or places? <i>How is what you are asking students to do relevant to their lives today? What aspects of the unit allow students to tie the knowledge and understanding back to their personal lives in the time period for which they live? If a student was to ask you "why does this matter to me today?" what would be your answer?</i></p>
<p>Essential Question(s): What provocative question(s) will foster inquiry, understanding, and transfer the learning? <i>What leading questions can you ask of students to get them to understand the Big Ideas? Addressing the heart of the discipline, and framed to provoke and sustain students interest; unit questions usually have no one obvious "right" answer</i></p>
<p>Student objectives (outcomes): Students will be able to: What key knowledge and skills will students acquire as a result of this unit? <i>These are observable, measurable outcomes that students should be able to demonstrate and ones that you can assess. Your assessment evidence in Stage 2 must show how you will assess these.</i> What should they eventually be able to do as a result of such knowledge and skill? <i>Your learning activities in Stage 3 must be designed and directly linked to having students be able to achieve the understandings, answer the essential questions, and demonstrate the desired outcomes.</i></p>
<p>Purposeful Authentic Product to demonstrate understanding: Through what purposeful authentic task(s) will students demonstrate the desired understandings? <i>Purposeful authentic tasks that have students apply what they have learned and demonstrate their understanding. Designed at least at the application level or higher on Bloom's Taxonomy.</i></p>
<p>Purposeful Use of Technology: How is technology used in a purposeful authentic way to help students achieve the desired understandings? <i>Purposeful authentic use of technology that is designed at least at the modification level or higher on the SAMR Model of Technology Integration.</i></p>

Stages of Learning
 Use the following stages to break down the larger product that students will create into stages or steps

<p>Exploration (research)</p> <p>Examples of Possible Tasks</p> <ul style="list-style-type: none"> Determine the problem you're trying to solve Research & take notes Compile citations Explore examples of completed projects Determine success criteria 	<p>Learning Experiences (opportunities for formative assessment)</p> <p><i>Stage 1</i></p>
<p>Standards / Learning Outcomes Assessed</p>	

Self (and or Peer) Assessment & Teacher Feedback

<p>Finding Pathways (planning)</p> <p>Examples of Possible Tasks</p> <ul style="list-style-type: none"> • Student-created timeline of tasks needed to finish the final product • Storyboard • Rough Draft • Outline • Student-created rubric (or self-assessment) for the final product 	<p>Learning Experiences (opportunities for formative assessment)</p> <p><i>Stage 2</i></p>
<p>Standards / Learning Outcomes Assessed</p>	

Self (and or Peer) Assessment & Teacher Feedback

<p>Experiencing (creating)</p> <p>Examples of Possible Tasks</p> <ul style="list-style-type: none"> • Remix video • Animated gif • Presentation Zen style presentation • Blog post • Infographic • Public Service Announcement 	<p>Learning Experiences (opportunities for formative assessment)</p> <p><i>Stage 3</i></p>
<p>Standards / Learning Outcomes Assessed</p>	

Self (and or Peer) Assessment & Teacher Feedback

<p>Scrapbooking (reflecting & evaluating)</p> <p>Examples of Possible Tasks</p> <ul style="list-style-type: none"> • Feedback survey by peers • Video journal self reflection • Self-assessment using student created rubric 	<p>Learning Experiences (opportunities for formative assessment)</p> <p><i>Stage 4</i></p>
<p>Standards / Learning Outcomes Assessed</p>	