

Posted Script for A Video Workshop on How to Create an Interactive Applied Learning Activity

&&INTRODUCTION WhenKnowingMatters.com in background

Welcome

The Applied Learning Platform is a web-based application that **educators** use to create interactive applied learning activities, and **learners** use to work through those activities.

Learners also can use the Platform to create activities for their peers. All that is required is to paste the title and presenting information into their respective text boxes.

These interactive applied learning activities can range from simple drill and practice exercises, to comprehensive real-world case scenarios for any domain, at any level of detail.

These interactive activities can also be used by educators during class to model critical thinking skills.

This is accomplished by working through an activity prior to class, and then progressively revealing the solution during discussion using mouse clicks or arrow keys.

Creating an effective interactive applied learning activity is educational art, and it takes an initial investment of time and effort to become accomplished in using this medium of expression.

That said, you will find that your investment is minimal compared to the results your learners will achieve, and the satisfaction you will gain from creating truly innovative learning experiences that you can share with your colleagues.

The Applied Learning Platform is designed to minimize your exposure to technology, and maximize the use of your existing skills and teaching materials.

Once you are proficient in using the platform, you can easily create an interactive applied learning activity in less than 10 minutes.

The good news is that you already know most of what you need to know, which is how to use a browser, a word processor, and email.

The only required technical skills are the ability to navigate to the WhenKnowingMatters.com website, type or paste text into a form, copy the results of the form into a word processing document, and email that document to learners, or upload it to a course management system for them to download.

I am often asked if the Applied Learning Platform is an expert system, and it actually is the **exact opposite**.

An expert system provides expertise **to** its users; the Applied Learning Platform is used by educators to build expertise **in** its users.

In this video workshop, I will cover how to author a case scenario for the domain of veterinary medicine.

The features I will demonstrate apply to virtually any domain, medical or not, and you do not need to be a veterinarian to understand what I present.

I encourage you to view this case scenario through the lens of your own discipline, and think about how you would use the features of the authoring system to create activities that meet the unique needs of learners in your own teaching and learning environment.

Since an interactive applied learning activity can only be as effective as the pedagogy upon which it is based, I will call your attention to additional videos at the WhenKnowingMatters.com website in the section:

Learning Principles and Effective Implementation of the Applied Learning Platform.

These videos provide excellent background information and guidance on how to develop effective and engaging interactive applied learning activities that take into account cognitive load,

the incremental development of a learner's mental schema,

Context Applied Learning,

and the use of the Revised Bloom's Taxonomy for orienting a learning activity according to the cognitive processes that are required for its successful completion.

&&BEFOREI PROCEED

Before I proceed, I should point out that the Applied Learning Platform is always opened in your default browser, and I have most thoroughly tested it in Firefox.

In addition, the size of the browser in this video is restricted to accommodate standard recording dimensions, and I have limited the viewing area to only include the working area of the Applied Learning Platform, and no other elements, such as the browser tabs, menu, and address bar.

When you expand your browser to the size of your monitor, your working area will be much larger.

You know that your learners learn best by doing... and so do you.

This is why I encourage you to open the Platform in another browser window that is separate from the video, and follow along by working through each step that I demonstrate.

To facilitate your learning even more, it may be helpful for you to work through this video with a colleague, so the two of you can share and build upon one another's ideas.

When you work along with this video or learn on your own, please do so with the mindset that you are **playing** with the application, and nothing earth shattering will happen if you make a mistake.

Even so, it is a good idea to copy and paste various stages of your work to a series of word processing documents that you store on your computer, so you can easily revert to a previous version of an activity when needed.

Saving your work in word processing documents on your computer is necessary because no activities created by educators, or work done by learners, is stored at the WhenKnowingMatters.com website.

This design provides confidentiality, and eliminates the need and expense of IT personnel, and a database of user names and passwords for educators to maintain.

A word of caution: There is a lot of material in this video, so it is critical that you stay aware of your cognitive load.

Feel free to pause the video at any time to think about and practice what was just presented.

If at any point you become frustrated by the pace and/or amount of material, please take a break, and restart the video at the last place you felt comfortable.

Keep in mind that each activity you create is a functioning expression of your educational art.

If the Platform is missing a tool or capability that you need, let me know and we might be able to build it for you. After all, chances are if you need it, others in your learning community will as well.

The Applied Learning Platform provides two authoring options: CreatorBasic, which is available for use by educators and learners at no charge, and CreatorAdvanced, which is available by subscription.

CreatorBasic provides a fully functional subset of the features that are available with CreatorAdvanced, and it is up to educators and administrators to decide if the additional functionality of CreatorAdvanced warrants the investment.

As I describe the differences between the two, some of the terminology at this point will be foreign, but rest assured, everything will make sense by the end of this workshop.

CreatorBasic gives educators the ability to create interactive applied learning activities that:

- 1) provide learners with Presenting Information,
- 2) use educator-defined types of assessment entries
- 3) use educator-defined relationships between the assertions in an assessment
- 4) include attribution for authors, contributors, sponsors, and notice of copyright, and,
- 5) provide guiding and general frameworks to assist learners in their thinking while working through an activity.

CreatorAdvanced extends CreatorBasic in many ways.

First, CreatorAdvanced allows educators to include table data within the activity, along with the option of validating user observations from that data.

Second, CreatorAdvanced allows educators to include a set of actions within the Presenting Information section of an activity that learners can choose from in order to receive additional information. The accumulating costs of these selected actions can be tracked and displayed.

Third, CreatorAdvanced includes the ability for educators to provide a reference solution for learners to study and compare to their own.

Fourth, CreatorAdvanced gives educators the option to provide a discussion at the conclusion of an activity.

This discussion may be a summary explanation of the learning objectives of the activity, or perhaps additional thoughts for learners to consider as they incorporate what they learned from the activity into their existing mental schema.

Fifth, CreatorAdvanced provides educators with the option of reinforcing learning objectives by including a set of multiple choice and short-answer questions with feedback for them to consider as they reflect upon an activity.

Sixth, CreatorAdvanced allows educators to provide a set of topics for learners to use when they complete a self-evaluation of their assessment.

And seventh, CreatorAdvanced gives educators the option of including a rubric for use with the Peer or Educator evaluation modules.

To create an interactive applied learning activity, navigate to the WhenKnowingMatters.com website, and start the Applied Learning Platform.

This is accomplished by hovering your cursor over the Applied Learning Platform menu option,

and selecting, Start ALP Basic.

&&MAIN MENU

The first option on the menu is, “Begin an activity,” which is selected by learners to

- 1) load a new activity,
- 2) reload and continue working on an activity,
- 3) review a completed activity, or
- 4) view a peer or educator's evaluation of an activity.

The second option is "Create an activity," which I will return to after I explain the remaining menu options, and show you the case scenario that we will be recreating with several variations.

The third menu option is either, Peer evaluate an activity, which is used by learners, or Evaluate an activity, which is used by educators.

Peer evaluate an activity is available with CreatorBasic, and Evaluate an activity, which has additional capabilities, is available with CreatorAdvanced.

These evaluation modules enable a peer or educator to add annotated feedback to a learner's assessment. This feedback can also include an educator-defined rubric.

The fourth option, Sample activities, is a set of activities that educators can study and modify as they learn to create their own.

The fifth option, "Display settings," is used to change the font sizes of visual elements in the Platform. This enables activities to be presented in various sized rooms and venues.

The options to Begin an activity, Peer evaluate an activity, and change Display settings are covered in detail in the video workshop, "The Mechanics of Loading and Working Through a Case Scenario."

The CreatorBasic and CreatorAdvanced menu options are only present for this demonstration video.

You will not see either of them when you work with the Platform, because you will either be working with the free basic version, or the advanced that is available by subscription.

Let's look at the case scenario we will be working with.

I'll click on "Sample activities."

I will select, “Foal Demonstration Case – with guiding and general framework and no solution.”

I can either double click the title, or select it, and click the “Proceed with the activity” button.

As I mentioned previously, we will be recreating this case scenario with several variations, so I will point out design and formatting elements for you to keep in mind.

The title of a case scenario is at the top, followed by the Presenting Information, which in this activity is a History, Physical examination, and Hematology, which is the laboratory results from analyzing a blood sample.

The educator has also included a guiding framework, which provides specific questions to help learners think through and assess this particular activity.

(refer to the image in the activity document that you received containing this case)

History

You are a practitioner with an interest in equine medicine. During a routine visit to an area stable, your client asks you to perform a physical examination and to draw blood and collect urine from a near weaning Thoroughbred foal for future sale. The potential buyer wants a routine examination before purchasing the animal.

Physical examination

The foal is high spirited and makes the client chase him around the paddock a few times before he can be haltered. Eventually, no abnormalities were found on physical examination.

The guiding framework for this case scenario consists of four questions.

- 1) Is it relevant that your patient’s owner scheduled this visit as a routine physical examination?
- 2) Are you concerned that the foal had to be chased for 15 minutes before obtaining the blood sample?
- 3) Could chasing the foal affect the results of the hematology report that you get back from the laboratory?

and

4) What do you see in Image 1 that could be of concern?

Image 1 would be included in the word processing activity document that is referred to in the first line of the Presenting Information.

You may recall from previous videos that the use of a word processing document allows an activity to include any word processor compatible source of data, such as images, tables, reports, and links to videos or other Internet resources.

These resources in the document are referred to from within the activity as needed.

The use of an activity document is covered briefly later in this video, and more thoroughly in the video workshop, “The Mechanics of Loading and Working Through a Case Scenario.”

In this case scenario, the guiding framework of questions emphasizes the potential value of anything routine that is presented in the history, along with the effects of exertion on a foal’s physiology and laboratory test values.

In addition, the question about image 1, highlights the importance of observing a patient for subtle lesions.

As learners become more accomplished in their understanding, subsequent case scenarios would not include guiding frameworks such as this because learners would be expected to have internalized these types of considerations.

The Presenting Information can be formatted using underlines, bolding, changes in font color and size, and alignment. The Presenting Information can also include direct links to Internet resources.

For demonstration purposes, I have included a link to additional videos.

A key element in assessing any situation is to identify the relevant features.

Learners do this with this case scenario by identifying and recording relevant observations.

This is accomplished by either selecting existing text...,

or by entering an observation based on the narrative.

The heading, **Relevant Observations**, was educator-defined when the case was authored.

Before I click on “Build assessment,” I want to point out that the term “assessment,” is also educator-defined. I will show you how to customize the headings Relevant Observations and Assessment in a moment.

The Assessment is constructed on the left and the relevant observations are listed on the right.

The first entry of an assessment is the title, which cannot be edited or removed.

In addition to the guiding framework in the presenting information, the author of this case scenario has included a general framework for helping learners think through and build their Differential Diagnoses.

A general framework differs from a guiding framework in that it provides a consistent and systematic approach for assessing many different case scenarios that vary in their presenting information, whereas a guiding framework provides specific guidance for working through a specific scenario.

The author of this Differential Diagnosis framework wants learners to consider findings that support and findings that do not support a potential diagnosis.

Learners must also consider what additional tests are indicated along with the rationale for their request and the anticipated result.

And finally, learners must commit to how they would initially treat this patient.

I will load another version of this case scenario that has been completed by a learner. This version differs in that it focuses on a learner’s understanding of the physiology of the foal, not on creating a list of differential diagnoses.

This flexibility enables the same case scenario to be used by various educators to achieve a different set of learning objectives.

I'll exit this activity.

I am reminded that I have made changes without saving my work.

I will click "Yes."

Sample activities - Foal Demonstration Case – with solution including relationships

To begin the assessment, this learner has made 10 relevant observations; 5 from the Presenting Information and 5 from the hematology data. The last entry is a question that was brought forward from the presenting information to be addressed at the end of the assessment.

I'll click on "Build assessment."

This assessment in outline form represents the learner's thinking on what is occurring physiologically with this foal.

Assertions made by the learner are in bold and denoted with an "A," and the evidence for these assertions are the relevant observations that are denoted with an "O."

This learner asserts that excitement has occurred and epinephrine was released, which caused the spleen to contract, and the heart rate to increase.

The increased heart rate caused an increase in blood flow and pressure, which resulted in a demargination of leukocytes.

Notice the explicitly defined relationships between assertions and observations such as supported by, causes, and results in.

The assertions reflect course material that was learned, which is usually tested with multiple choice, true/false, or short-answer questions.

Unfortunately, that type of testing still may not answer the question, "Can learners apply this material to an authentic real-world scenario?"

In essence, “Are these facts about physiology true for this patient?” And if so, “Where is the evidence?”

I will go over this learner’s assessment again, and this time I will include the evidence for the assertions, which are the relevant observations.

This learner’s asserts that **EXCITEMENT HAS OCCURRED**,

which is supported by it being a near weaning Thoroughbred foal that is high spirited, and was chased around the paddock. In addition, no abnormalities were found on the physical examination, and it was a routine visit.

This learner also asserts **EPINEPHRINE WAS RELEASED**,

which causes the **SPLEEN** to **CONTRACT**,

which is supported by the evidence of the hematology test interpretations, erythrocytosis and thrombocytosis.

The learner also asserts that the **EPINEPHRINE RELEASE**

causes **TACHYCARDIA**, which is an increased heart rate,

that causes **INCREASED BLOOD FLOW AND PRESSURE**,

which results in a **DEMARGINATION OF LEUKOCYTES**.

This chain of assertions is supported by the hematology test interpretations of leukocytosis, neutrophilia, and lymphocytosis.

This outlined evidence-based assessment demonstrates that the learner not only understands the physiology related to epinephrine release, but also understands that it applies to this particular patient based on the identified evidence in the scenario.

This assessment is not unlike a case summary that would be reported during ward rounds, or in a case studies class. It can also serve as the outline for a written report.

Now that you understand the general structure of this case scenario and its evidence-based assessment, it's time for us to recreate various versions of it using CreatorBasic, along with the Table builder that is available with CreatorAdvanced.

&& CreatorBasic and the Wizard

I will exit this sample activity...

and I will start CreatorBasic by clicking on, "Create an activity."

[Do not read. Raw text for the case] *****

Foal Video Demonstration Case

(refer to the image in the activity document that you received containing this case)

History

You are a practitioner with an interest in equine medicine. During a routine visit to an area stable, your client asks you to perform a physical examination and to draw blood and collect urine from a near weaning Thoroughbred foal for future sale. The potential buyer wants a routine examination before purchasing the animal.

Physical examination

The foal is high spirited and makes the client chase him around the paddock a few times before he can be haltered. Eventually, no abnormalities were found on physical examination.

- 1) Is it relevant that your patient's owner scheduled this visit as a routine physical examination?
- 2) Are you concerned that the foal had to be chased for 15 minutes before obtaining the blood sample?
- 3) Could chasing the foal affect the results of the hematology report that you get back from the laboratory?
- 4) What do you see in Image 1 that could be of concern?

This case is used with permission from Dr. Holly Bender.

CreatorBasic consists of four sections:

which are, "Core Activity Elements"

Presenting Information

Attribution for Author(s), Contributor(s), Sponsor(s), and/or Copyright

and the Framework builder.

&& Wizard

Before I talk about these sections individually, I will show you the “Create an activity (wizard),” which is the easiest and quickest way to create an interactive applied learning activity.

The create an activity wizard is most often used by learners to create activities for their peers because it is easy to learn, and accepts the default settings of the Platform.

The wizard only requires a title and presenting information, and there is an optional entry for the attribution of authors, sponsors, contributors, and/or a copyright notice.

Feel free to time me as I create this interactive applied learning activity using existing case materials.

I will enter the title of our case scenario.

And I will paste in the Presenting Information.

(refer to the image in the activity document that you received containing this case)

History

You are a practitioner with an interest in equine medicine. During a routine visit to an area stable, your client asks you to perform a physical examination and to draw blood and collect urine from a near weaning Thoroughbred foal for future sale. The potential buyer wants a routine examination before purchasing the animal.

Physical examination

The foal is high spirited and makes the client chase him around the paddock a few times before he can be haltered. Eventually, no abnormalities were found on physical examination.

- 1) Is it relevant that your patient's owner scheduled this visit as a routine physical examination?
 - 2) Are you concerned that the foal had to be chased for 15 minutes before obtaining the blood sample?
 - 3) Could chasing the foal affect the results of the hematology report that you get back from the laboratory?
 - 4) What do you see in Image 1 that could be of concern?
- *****

and add some formatting to improve its appearance.

I will also add the heading, "Guiding framework."

I will also add a link in the Presenting Information.

First I will add the text. "Click this link to view additional demonstration videos."

Next I will highlight the text I want associated with the link.

and enter the url.

<http://www.whenknowingmatters.com/demonstration-videos-current-release/>

And finally, I will add the attribution.

This case is used with permission from Dr. Holly Bender.

Now all I have to do to finish is to click on the "Click here to continue" button, which was enabled once I entered data into the required title and presenting information fields.

Done!

The wizard has created the markup tags for this case scenario and automatically opened the case in Presenter.

This is exactly what learners will see when they receive and load the case.

The Presenting Information is formatted.

The attribution is present.

And the link works.

To the right is the Relevant Observations list.

Recall that this heading is educator-defined, which we will change with CreatorBasic.

I will click “Build assessment,” which we will also change.”

I will select the first entry, right-click on it to bring up the context menu, and add an indented entry.

I am limited to the three default types of assessment entries “Observation,” “Assertion,” and “Framework.”

In CreatorBasic, we will change Observation to Evidence, and add the entry types, Mechanism and Diagnosis.

The wizard does not provide a default set of explicit relationships because relationships between assessment entries are discipline and activity-specific.

Even though I have completed the activity, my work is not finished in that I still need to package this case scenario in an activity document for learners.

I will click cancel so this entry is not saved with the case.

Next, I will click, “Save to my clipboard.”

and “Save the Learning Activity with any changes for reloading later,” of which I have not made any.

When I do this, I am reminded to save my work in a word processing activity document.

I will click Ok.

I will bring in the word processing activity document, which for this video is the Student and Teacher version of Microsoft Word.

And I will paste the activity's markup tags.

The content of the markup tags is encoded so learners cannot look for hints in the activity document before working through the activity.

Here are the directions for learners to follow in order to load the activity into the Platform.

I will activate the direct link for starting the Platform that takes learners to the "Begin an activity" import box.

The alternate WhenKnowingMatters.com link is what learners use to begin an activity by navigating to the website, and starting the Platform using the menu options.

I also want to add the image that is referred to in the Presenting Information.

I can do this by simply dragging an image file and dropping it into the document.

And I will add the "Image 1" label.

And save my changes.

This activity document is ready for me to send to learners as an attachment to an email, or I can upload it to a course management system or file repository from which they may download.

When learners receive this document, they will open it as it is here,

select all of the contents, and copy them to their clipboard,

Next, learners would navigate to the WhenKnowingMatters.com website,

start ALP Basic,

Select "Begin an activity"

Paste the activity into the box,

and begin working through the case scenario.

I will Exit the activity and demonstrate the direct link is used.

Select all of the contents and copy them to the clipboard,

Click on the direct link,

and paste the activity into the box.

I think you would agree...that was a pretty quick way to create an interactive applied learning activity and prepare it for distribution to learners.

The wizard does, however, have limitations with regard to flexibility and features.

&& CreatorBasic

Let's take a look at what we gain by using CreatorBasic.

I will restart the Platform and select Create an activity.

Rather than redo my work, I will import the case scenario that is still on my clipboard.

I do this by clicking on "Import an activity,"

and pasting the contents of my clipboard into the box,

And click, "Accept imported activity."

Once again, you will have much more room to work than what is shown in this video due to my use of standard recording dimensions.

The title has been filled in, as well as the attribution section.

I will click on the "Presenting Information – Click to open" button to show you that it is there and formatted correctly.

To close the Presenting information, I click on the same button, which is now labeled, "Presenting information – Click to close.

Or I can click on the Core activity elements button to open that section. This button is only present when the section is closed.

I can also click on the “Restore default layout” button.

Now we will look at the additional options and functionality that are available in the Core Activity elements, and how to build a general framework using the Framework builder.

I will begin by changing the default terms for “Relevant Observations” and “Assessment.”

Let’s use “Findings” rather than Relevant Observations,

And “Differential Diagnoses” instead of “Assessment”

Next, I will change the types of assessment entries.

As I mentioned previously, I’ll change Observation to Evidence.

The single letter followed by a space and its term is used for displaying either the entire term for the type of assessment entry, or only a single letter abbreviation.

The labels on the input form for Observations, Assertions, and Framework do not change because the functions of these three entry types are still used by the application behind the scenes.

For example, the application sees Observation, and reports it according to the author’s preferred terminology, which in this case will be “Evidence.”

Let’s also enter the additional assessment entry types of Mechanism and Diagnosis.

The format is the same one letter abbreviation followed by a space and the term, and each entry type must be separated from the next with a comma.

In the Assessment Relationships box, I can enter the acceptable relationships that learners will use between assertions in their assessment.

I will enter “causes,” “results in,” and “is evidenced by”

These relationships are separated by a comma in the same way as the types of assessment entries. A single letter abbreviation is not used for relationships.

I can omit the requirement for learners to identify observations, which in this activity are called “Findings,” by checking the box.

I can do the same for differential diagnoses.

The one instance in which you would check both of these boxes is when using CreatorAdvanced, and you want to distribute a read-only case scenario with a reference assessment for learners to study and not be able to change.

Recall that the ability to include a reference assessment within a case scenario for learners to compare to their own at the completion of their work is available with CreatorAdvanced.

CreatorBasic, on the other hand, does provide the option for authors to notify learners that a reference assessment is available, though it cannot be included within the activity.

Learners are notified about this by way of an added menu option. Authors would then include directions in the activity document, or by other means, as to how learners could obtain the reference assessment.

Giving learners immediate access to the reference assessment once they have completed their work is particularly helpful to learning because the activity is fresh in their minds.

This learning can be reinforced even more when the activity is reviewed in class. I have made all of the changes I want and will copy this version of the case to my clipboard. Let's see how it looks.

I'll start another instance of ALP Basic

Select Begin an activity

Paste the contents of my clipboard into the box.

The Relevant Observations heading is now “Findings.”

The menu option that used to read “Build assessment” is “Build differential diagnoses.”

I will make sure the first entry of the “Differential Diagnoses” is selected,

Right+click,

and add an indented child entry.

Let’s look at our new types of assessment entries.

Observation has been changed to Evidence, and Mechanism and Diagnosis have been added.

I’ll move the slider bar and let’s look at the list of acceptable relationships between assessment entries.

The blank relationship option is there along with “causes,” “results in,” and “is evidenced by.”

I will select “is evidenced by,”

and remove it by selecting the blank entry.

I will “Cancel.”

Once again, making changes to the case scenario that we originally created in the Wizard, and then imported into CreatorBasic, went pretty quickly and wasn’t all that difficult.

&&General Framework

We have two remaining tasks to perform, which are to add a general framework using the Framework builder, and to add the Hematology laboratory tests using the Table builder.

Let’s return to our case scenario in CreatorBasic

And click on Framework.

I will give us more room.

In the interest of time, this framework will not be as extensive as what we saw earlier.

I will give the framework a title [Differential Diagnoses Framework]

I will hover my cursor in the working area and right-click to bring up the context menu.

I will add an entry that is left justified.

The text for this entry is “Differential Diagnosis.”

My options are to bold this entry, and to let learners edit the text, change its indentation, or remove it from an assessment.

I do not want learners to be able to edit this entry or change its indentation because I want this fixed configuration to be used and easily recognized by anyone viewing the assessment.

I do want learners to be able to remove it from their assessment in the event they add it inadvertently.

The exclude from preload and exclude from select options allow individual entries to be omitted when preloading or excluded from selecting.

This is used when the major elements of a framework are always indicated, but the sub-elements are only included based on the specific circumstances of a scenario.

This type of implementation is covered in a separate video on Frameworks.

I can also add a note to each framework entry to more fully elaborate on its meaning to learners.

I will add two more entries.

Findings that support, and

Findings that do not support

This next point is very important. My framework is only in the builder, and has not been added to the case scenario.

If I try to copy this case to my clipboard, I receive a warning.

I must click on “Commit framework to markup.”

Now I am asked if I want to make the framework available for learners to select, and/or preload.

I want both.

I want the framework to be preloaded into their assessment for their first differential diagnosis, and I want them to be able to select and add additional copies of the framework for each of their remaining differential diagnoses.

Let’s see how this case scenario looks with this framework.

Here is the preloaded copy of the framework,

and here is the selectable.

I will add another copy of the framework for a second differential diagnosis.

Let’s return to CreatorBasic

It would be tedious and time consuming to create a framework from scratch for every case scenario that I author.

To address this, authors can save the framework separately in a word processing document, and import it into another case scenario.

All I need to do is click on “Copy framework markup to clipboard,”

and then paste the contents into a word processing document.

Now, whenever I want to use this framework in another case scenario, all I need to do is open the word processing document, select the markup tags, copy them to my clipboard, and import them into the builder.

To demonstrate, I will remove all entries,

and erase the framework markup tags

Click on “Import a framework (markup)”

Paste the contents into the box, and accept.

An author or an institution can establish a standard set of these reusable resources for use throughout the curriculum. This standardization provides continuity within the learning environment.

CreatorAdvanced includes a Resource Repository feature that authors can use to store frameworks and other reusable resources such as tables, reference assessments, sets of actions, questions, rubrics, and even entire learning activities in a single word processing document.

This eliminates the need for storing each resource in a separate word processing document.

I’ll demonstrate by switching to a new copy and setting it for CreatorAdvanced.

Here is the word processing document that contains my resources.

I will import them.

Resources can be organized by authors into a hierarchical structure of their choice. All that is needed to import the desired resource is to navigate to the appropriate entry and click the “Copy markup” button.

I’ll demonstrate.

I can add a new resource by right-clicking an existing resource and choosing to either add an indented resource, or one on the same level.

I’ll enter a name for the resource,

and paste the markup tags of the resource into the markup field.

I can add a note to further explain the function of the resource.

My last step is to identify the type of resource. I will choose framework.

If I do not paste anything into the markup tags field, the resource defaults to “Category,” which is used to organize the resources.

I’ll return to CreatorAdvanced and import the Differential Diagnosis Framework that I copied from my repository.

Authors can also begin building a framework by importing a list of text entries.

I’ll demonstrate.

Remove all entries

Click on “Import a list of entries.”

I will paste a list that is on my clipboard.

Differential Diagnosis
Findings that support
Findings that do not support

Entries must be one per line.

I’ll click continue.

Now I need to drag each entry to its appropriate position,

and double-click each to set the properties.

As before, when I am finished I need to Commit the framework to markup.

Rather than continue with this simplified Differential Diagnosis Framework, I will repurpose this case scenario for more advanced learners, and import the more complex version.

This version of the differential diagnoses framework is available at the WhenKnowingMatters.com website in a veterinary reference sheet.

Let's retrieve it and import it into this case scenario.

Before I do, I will erase the markup tags, and remove all entries.

I don't want two tests, so I will remove one.

I will also change the indentation of Initial treatment.

I can check the "Display entry settings" box to view the settings for all of the entries, and I can display all of the notes.

will commit this framework to markup

And make it selectable and preloaded.

Now let's look at our results.

This ability to quickly repurpose a case scenario by importing a different framework, facilitates the sharing and adaptation of interactive applied learning activities among colleagues.

We are almost finished recreating this case scenario.

What remains is to add the Hematology data using the table builder, which is available with CreatorAdvanced.

I will switch from CreatorBasic to CreatorAdvanced.

You will not see these two menu options when you work with the Platform.

You will either be working with the free basic version, or the advanced that is available by subscription.

Before I switch to CreatorAdvanced, I need to warn you that you are about to see one of the most crowded computer displays of your life, which is made even worse by the limited working area of this video.

While this display can be difficult to understand initially, with a little practice you will appreciate having access to all functions on one screen, rather than having to navigate through multiple layers of menus.

Here goes.

I will blur everything we have not discussed, and review what you already know.

You are already familiar with the Title,

along with the educator-defined terminology for observations and the assessment.

You have seen the three default types of assessment entries that can be changed, and the option to include educator-defined types of entries.

You have also seen the option to add educator-defined relationships between assertions in an assessment.

The checkboxes to not include the step for learners to identify and record observations, or build an assessment are the same.

You are also familiar with the Presenting Information,

Attribution field,

and the Framework builder.

Now we can move on to the table builder.

I will maximize the table builder.

I can get even more room to work by moving the slider bars.

A table can have a title that will be displayed in the Presenting Information.

I'll use Hematology.

Next I'll set the column count to four,

and check the box that signifies that the first row contains column headings.

The current maximum number of columns is 7. Tables requiring more columns can be included in the word processing activity document, and referred to from within the activity.

I will check the “Table observations can require spellchecked terminology” box.

Notice when I check this box, two additional columns appear;

Assess R E Q. for Assessment is required, and

Valid assessment term or terms.

Checking the assessment required for a test means that learners must successfully interpret this test before they can leave the Presenting Information page to “Build their assessment.”

A test can check for a valid interpretation without requiring that it be processed by a learner.

This means that if learners attempt an interpretation, the test is validated,

and if learners skip the test, they are allowed to proceed.

Requiring an interpretation before being allowed to proceed is helpful for novice learners, while not requiring an interpretation is more representative of authentic real-world scenarios.

I will Add a row for the headings.

The headings for this table are Test name | Result | Reference Interval | and Units

I will add another new row and enter the first test.

I will not check the required box, though I will include the valid terms| polycythemia, erythrocytosis.

Notice that the terms are separated by commas.

Just as it is with the framework builder, having to create the same table every time is not acceptable.

The Table builder also allows authors to import existing tables.

Sets of tables with and without data values, provide efficiency and continuity within an institution or organization.

All an author needs to do is import a table from the set, and change the test results for that particular case scenario.

This import option is also helpful when creating a series of case scenarios in which there are minor changes in the table data from scenario to scenario.

I will return to the WhenKnowingMatters.com website where I have created and saved two versions of this Hematology table.

Before I do, I will remove the two rows.

could also retrieve either of them from the Resource Repository I created.

The first hematology table does not include values for the laboratory tests, and the second does.

I will import the second.

Now I will commit this table to markup.

Once one table is committed to the activity, another can be created and committed as well without altering the first.

If you choose not to use a table that you have already committed, it can be selected in the Markup tags and deleted.

If I want to make a change to a table that has been committed, I can move the markup tags back to the builder,

erase the current markup tags,

make changes to the table,

and commit the new version of the table.

It is important to remember that the table is not part of the case until it is committed to the markup tags.

Let's take a look at our work.

I will copy the activity to my clipboard

Open presenter,

Begin an activity,

Import,

I will interpret the first test.

Notice that the test has been checked and the Interpret button has been disabled.

I will return to the authoring module.

Now I can prepare this case for sending to learners or uploading to a course management system.

I'll bring in a new word processing document.

Paste the markup tags into the document.

I'll will add the image

And the Image 1 label.

I will activate the links in the directions.

And Save.

Now I can send this document to learners as an attachment to an email, or upload it for them to download.

I can also share this case with a colleague.

Let's say I have received this case from a colleague, and it isn't exactly what I want.

I will show you how easy it is for me to make changes.

I like the laboratory data and physical examination, but I want to change the History

All I have to do is open the word processing activity document as it is here,

select all,

and copy it to my clipboard.

I will start another version of the Platform.

and choose "Create an activity."

I will select "Import an activity."

and paste the contents of my clipboard.

Once again, notice the encoding.

I will click Accept imported activity.

I want to change the title to, "Listless foal"

And I want to change the History.

First, I will Maximize the Presenting Information working area...

and change the history.

Your client has called you and is very concerned about his foal. To his knowledge it hasn't eaten in several days, and is not drinking water.

will also delete the Guiding framework of questions.

Now I will update the attribution

And I will copy this modified case to my clipboard.

I am asked if I want to use the default system encoding.

Yes.

I am also asked if I want learners to be able to navigate directly to the Applied Learning Platform, or to go to the WhenKnowingMatters.com website.

I will select to allow learners to go directly from the link in the document to the Applied Learning Platform.

And click “Copy.”

Now I will bring in a blank activity document...

And paste the markup tags into the document.

I will add a picture of the foal laying down.

If you happen to be changing the original document that was sent to you, what comes next is very very important and involves, “Save as.”

Be sure to save the modified document with a new file name so as to not overwrite the original.

In fact, it is good practice to have a separate directory for storing the original version of all activities.

I can now send this modified case to my learners by attaching it to an email, or I can upload it to a course management system or file repository for them to download.

When learners receive this document, they select all, and copy to their clipboard as before.

This time, rather than navigate to the WhenKnowingMatters.com website and starting the Applied Learning Platform, and selecting “Begin an activity,”

I will just click on this link.

Now I will paste the results into the box, and I am ready to begin working through the activity.

Let’s look at the results of my changes.

The title has been changed, and the history is changed, with no changes to the physical examination or laboratory data.

I’ve changed the Presenting Information and the image to make it seem as though this foal is ill to see if the diagnosis made by learners will be influenced purely by the concerns of the foal’s owner and the different image, without any change in the evidence of the physical examination or the hematology data.

I will select, “Build differential diagnoses.”

The framework has been preloaded into the evaluation,
and is available for learners to select.

Now it is time to look at the other features that are available in CreatorAdvanced.

Start here - I will begin with the Core Activity Elements.

Three additional default types of assessment entries are available.

They are:

Questions, rubric entries, and self-evaluation topics.

Another capability with CreatorAdvanced is to allow learners to import observations and/or an assessment from a previously completed activity.

This enables learners to extend their existing work in a follow-up activity. Existing work includes the initial Presenting Information along with any added information from selected actions.

A check in the “Learners cannot edit assessment after it is finalized” box prevents further edits.

The need for this option is that some educators want learners to be able to revise their work after receiving feedback, while other educators want to keep the original work prior to feedback

CreatorAdvanced provides the option for learners to do a self-evaluation.

When I check the box, the Self-assessment topics field is enabled. Educators enter the topics they want evaluated separated by a comma.

For this demonstration I will enter “Indications that the foal does not have an illness” and “The effects of epinephrine release.”

The steps for performing a self-assessment are covered in the video workshop, “The Mechanics of Loading and Working Through a Case Scenario.”

Checking the “Learners can copy the reference assessment” box enables this option, because some authors want learners to be able to copy the reference assessment for further study, while others do not.

CreatorAdvanced also has an option to display the total cost of actions selected along with the appropriate currency label.

Leaving this box unchecked is often done when educators want novice learners to focus only on what actions they think need to be taken, without the additional and often distracting cognitive load of staying within a budget.

As learners grow in competence, expectations of remaining within budget can be added.

This covers the additional features that are available in the Core Activity Elements.

Now we will move to the additional features of

- 1) adding a Discussion for viewing at the completion of the activity,
- 2) including a Reference assessment for learners to study,
- 3) Questions to enhance learning,

- 4) Actions that can be selected by learners to receive additional information,
- 5) Creation of an author-defined rubric for peer and educator evaluation, and
- 6) a notes field for educators to describe such matters as the intent, scope, constraints, and learning objectives of the activity.

A Discussion is added to an activity and formatted in the same manner as the Presenting Information.

I will click on the “Discussion – Click to open” button.

Next, we will turn our attention to adding a Reference Assessment, which requires three distinct steps involving three versions of the case scenario.

The first step is to create an initial preliminary version of the case scenario and save it in its own word processing activity document. This version is incomplete in that it does not include a reference assessment.

For this demonstration, the initial version of my case scenario will be the sample activity, “Foal Demonstration Case – without solution.”

will copy it and import it into CreatorAdvanced

Here is the presenting information,

And the reference assessment is empty.

The second step is to start another instance of the Platform, select Begin an activity, and work through this initial preliminary version in the same way that a learner would.

This means that all of the observations are made, the assessment is completed, and the completed activity is stored in a separate word processing document.

Rather than work through this case scenario, I will use a completed version from the sample activities.

Here is the completed assessment.

I will save this second version to my clipboard

This second version with a completed assessment will be the source of the reference assessment for the initial version.

The third step is to return to the initial preliminary version of the case scenario, and import the assessment from the completed case scenario that is on my clipboard.

I will click on Import an assessment,

And paste the completed case scenario into the box.

CreatorAdvanced scans the markup tags of the completed case scenario, extracts the assessment, converts it into a reference assessment, and adds this reference assessment to the activity.

The newly created markup tags of the reference assessment are in the box on the left, and a Read-only view of how the reference assessment will look to learners is on the right.

Now when I save this third and final version of the case scenario in a yet another word processing document, it will include the initial case scenario and the reference assessment.

This is the version that is distributed to learners.

Let's take a look at it.

For a quick review, in order to create a case scenario with a reference assessment for learners to study, you need three versions.

The first version is the initial preliminary version of the case without a reference assessment.

The second version is the completed solution of the initial version.

And the third version is the initial version with the added reference assessment that was imported from the solution assessment of the completed version.

This final version with the reference assessment is what is distributed to learners.

The initial version without a reference assessment could also be distributed to learners or shared with colleagues if an author did not want to provide a reference assessment.

Next, let's look at the Question builder.

Before I get into the mechanics of using the question builder, I want to emphasize two points.

The first is that the question builder is rudimentary, and enhancements will be made in the future based on user feedback.

The second is that these questions are meant to reinforce and solidify gains in learning. They are not intended to be an assessment instrument that prevents cheating.

If you want to assess learners in a more rigorous and secure manner, you should employ other more traditional means of assessment.

Two types of questions can be created with the question builder:

multiple choice and short answer.

Both have the option of providing learners with immediate feedback.

I'll create a multiple choice question by clicking on the "Create multiple choice question" button.

I will enter the question from my clipboard, "What laboratory value is most helpful as an indication that this foal does not have an infection?"

And I will enter the choices, one per line

- 1) Normal physical examination
- 2) White Blood Cell Count
- 3) Segs
- 4) Bands
- 5) Trick question - this foal has an infection

Now comes a potential for error. The correct answer must be entered exactly as it appears in the choices. Rather than type it again, it best to select and copy it from the list of choices, and paste it into the box.

Notice that the number 4, space, and right parenthesis are part of the correct answer. That is why copying it directly is much more reliable than typing.

I will provide some feedback.

The remaining three options have to do with the width in pixels of the question and answer items when they are displayed.

Once I am satisfied with this question, I click on “Save this Question

I will check my answer to make sure the question functions as I expect.

Now I will create a short answer question by clicking on “Create short answer question,”

and I will paste the question and the feedback into the boxes.

[What does demargination mean when referring to the physiology of this foal?]

[White blood cells in the blood stream can circulate in the blood, or crawl along the inner wall of a blood vessel looking for ways to move into the tissues where they are needed. Increased blood flow washes some of these cells off of the walls and into circulation. That is why the concentration of the white blood cells in the blood is temporarily increased, even though no additional cells are formed. When the rate of blood flow returns to normal, the concentrations of cells will as well.]

I will click, “Save this question.”

This is how the question will appear to learners.

When I click “Finalized your answer,” I see the feedback that learners will see.

I can edit a question by selecting it and clicking, “Edit question.”

You also have the option of encoding the questions with a password that learners must enter before being able to view them in the activity.

I will click on encode – and enter “Cat.”

Save and reload and demonstrate the password.

This brings us to the option of adding actions to an activity that learners can select when working with the Presenting Information in order to receive additional information.

I will click on “Actions.”

The next step is to “Import selectable actions markup tags” from which learners may select to gain additional information.

Let’s take a look at a sample activity that uses these selectable actions in a very effective way.

I will switch to another window...

Select Sample activities...

And load, “Blackie the cat that was hit by a car with a solution (Reference assessment)

The authors begin by presenting learners with a History, Physical examination, Budget, and a reference to Resources contained in the activity document.

Let’s take a look at these resources, which are the whole body Radiographs,

There are also links to additional resources, and a Guiding Framework of questions to help learners work through the activity.

So, “Where do these actions come from, and how do they find their way into this case scenario?”

You must first create these actions using the Actions builder, which is started by clicking on the menu option, “Actions Builder.”

The mechanics of using the Actions builder are covered in a separate video.

For now, however, I will return to the case scenario we are authoring, and import a set that I have already created.

I will return to the WhenKnowingMatters.com website

Learning Center - Resources - Authoring resources – and Actions markup tags

I will select them.

And copy to my clipboard.

Import paste and Proceed.

Actions markup tags can also be encoded and decoded in the same way as with questions.

Let's take a look at how these actions appear to learners.

Copy the activity

Switch to Presenter

Exit the activity

Begin activity

The actions that are selectable have a select button.

Actions can also include a Note to clarify what is being selected.

Entries without a select button, denote categories.

These categories and nested actions can be collapsed and expanded.

Not all actions are indicated.

I will select both consultations, which are disabled once the additional information is added to the presenting information.

I will also select the Procedure: Doncilectomy

Rather than receiving additional information, I am notified that this procedure is not indicated. The name was somewhat of a clue.

Next, we will look at the rubric builder.

Authors can include a rubric for use in a peer or educator's evaluation of a learner's assessment.

I will click on the "Rubric – Click to open" button.

The rubric builder functions the same as the Framework builder.

A rubric is created in the same way and must be committed to the case scenario.

Rubric markup tags can be imported, or a list of text items can be imported, and then formatted and arranged.

When a case scenario is imported into the Evaluation module, peer or educator, the rubric that is associated with the activity will be displayed to guide the evaluator.

The next and final authoring element is the "Author's notes."

Notes are used to help other educators determine if the activity is appropriate for their learners by explaining such matters as the activity's background, context, pedagogy, learning objectives, etc.

Notes are entered and formatted in the same way as the Presenting Information and Discussion.

In this workshop video, I have shown you the features that are available with the basic and advanced authoring versions of the Applied Learning Platform.

As I mentioned before, feel free to play with the application, and be sure to save the various stages of your work in word processing documents.

Have fun, and be creative.

Thank you for watching, and if you get a chance to use the Applied Learning Platform, please do not hesitate to send me your thoughts and suggestions. It would be great to hear from you.