

# ACADEMIC TECHNOLOGY SUPPORT



## **Interactive Content:**

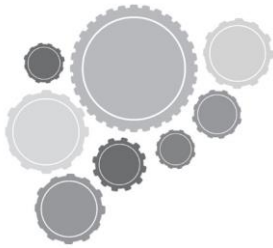
*Integrating H5P Content in Brightspace*



e LEARNING

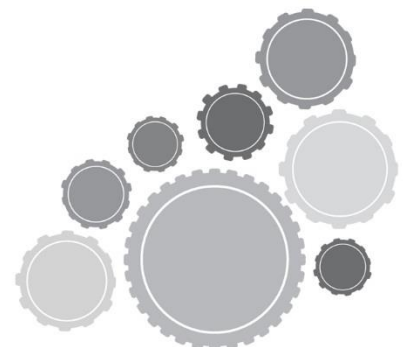
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# Why Create Interactive Content?

According to the latest research published by the Online Learning Consortium (2017), one in four students enroll in at least one distance education (online) course. Institutions of higher learning can no longer ignore the obvious trend of education moving online. But, once students enroll in these online and hybrid courses how can we keep them happy? Engaged? How can we verify that a transfer of knowledge is happening?

The practice of creating engaging, effective online courses is a group effort. Content and subject-matter experts must bring forth the information that students need. Instructional designers must translate that information into digestible, appealing online content. In a perfect world, this dream-team would be comprised of multiple experts in online learning. But what if you're working in a team of one? What if you're a college professor wanting to disseminate great information to your students?

Instructional design principles exist to help ID professionals and educators create approachable, cognitively appropriate material for learners. Some of these principles share boundaries with our in-person lecture counterparts while other principles target only online audiences. Formative assessment, for example, is a way for both traditional and online courses to incorporate opportunities for students to check their understanding of the presented material. In the online world, the designer can tailor this opportunity to the individual student (Hart & Shaw, 2017).

Interactive content is material delivered in an asynchronous format that requires learner interaction. This interaction can be as simple as clicking to expand areas to expose additional information or it can be as complex as assessments weaved into a video. Interactions within a course can help students with pacing and time management (Pappas, 2015). Also, the planning for and creation of these interactions give you, as the designer, the opportunity to reflect and revise your course so that you can exhibit some recommended practices in online instruction.

## What is H5P?

H5P is an open source content creation tool. This tool allows you to create, edit, and share interactive HTML5 content in your browser. Each piece of content you create can be either embedded into a course LMS/website or can be hosted elsewhere for internal playability. The tool is open source and constantly expanding and improving. The site includes access to tutorials, examples, and a wealth of knowledgeable community experts in the forums. Creating content is simple. The cloud-based interface allows users with little-to-no HTML5 design experience to create engaging, interactive content through simple menus and straightforward interfacing.



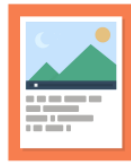
# Content Types in H5P

Currently, H5P supports over 25 different content types. Each content type option includes expansive documentation, tutorials, and examples available on the creation interface. Additionally, the content types are always improving in terms of mobility and accessibility. H5P content is responsive. Users will have a great, interactive experience with the content across all platforms. Below is a list of all content types.



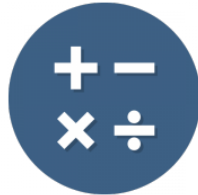
## Accordion

Create vertically stacked expandable items



## Agamotto

Create a sequence of images



## Arithmetic Quiz

Create time-based arithmetic quizzes



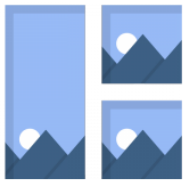
## Audio Recorder

Create an audio recording



## Chart

Quickly generate bar and pie charts



## Collage

Create a collage of multiple images



## Column

Column layout for H5P Content



## Course Presentation

Create a presentation with interactive slides



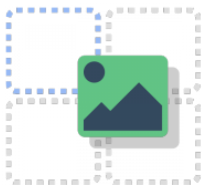
## Dialog Cards

Create text-based turning cards



## Documentation Tool

Create a form wizard with text export



## Drag and Drop

Create drag and drop tasks with images



## Drag the Words

Create text-based drag and drop tasks



## Essay

Create essay with instant feedback



## Fill in the Blanks

Create a task with missing words in a text



## Find Multiple Hotspots

Create many hotspots for users to find



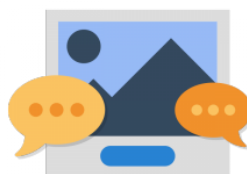
## Find the Hotspot

Create image hotspot for users to find



## Flashcards

Create stylish and modern flashcards



## Guess the Answer

Create an image with a question and answer



## Iframe Embedder

Embed from a url or a set of files



## Image Hotspots

Create an image with multiple info hotspots

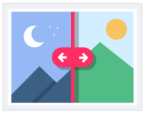


Image Juxtaposition  
Create interactive images



Image Sequencing  
Place images in the correct order



Image Slider  
Easily create an Image Slider



Impressive Presentation (ALPHA)  
Create a slideshow with parallax effects



Interactive Video  
Create videos enriched with interactions



Mark the Words  
Create a task where users highlight words



Memory Game  
Create the classic image pairing game



Multiple Choice  
Create flexible multiple choice questions



Personality Quiz  
Create personality quizzes



Questionnaire  
Create a questionnaire to receive feedback



Quiz (Question Set)  
Create a sequence of various question types



Single Choice Set  
Create questions with one correct answer



Speak the Words  
Answer a question using your voice



Speak the Words Set  
A series of questions answered by speech



Summary  
Create tasks with a list of statements



Timeline  
Create a timeline of events with multimedia



True/False Question  
Create True/False questions



Twitter User Feed  
Show your Twitter feed with H5P

## Accessibility Concerns

Listed below is an overview of the accessibility status for each of the H5P content types. Please be mindful of the accessibility status of each of these content types before integrating into your online courses.

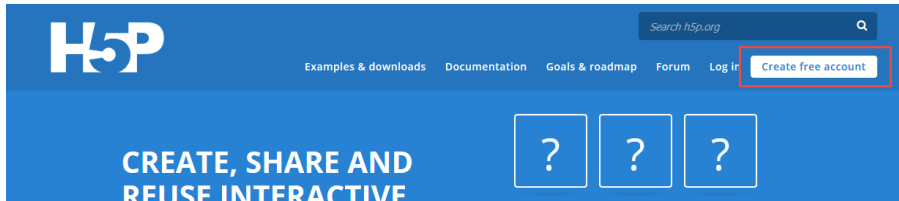
Content type	Status	Comment
Accordion	OK	
Agamotto	UNKNOWN	
Arithmetic Quiz	OK	
Audio recorder	OK	
Chart	OK	
Collage	OK	
Column	OK	Depends entirely on the content
Course Presentation	OK	
Dialog cards	OK	
Documentation Tool	OK	
Drag and Drop	OK	
Drag the Words	OK	
Fill in the blanks	OK	
Find the hotspot	NOT OK	
Find multiple hotspots	NOT OK	
Flashcards	ALMOST	There are a few known problems
Guess The Answer	OK	
Iframe embedder	OK	Depends entirely on the content
Image hotspots	OK	
Image juxtaposition	UNKNOWN	
Image sequencing	NOT OK	
Image slider	OK	
Impressive presentation	NOT OK	
Interactive Video	OK	
Mark the Words	OK	
Memory Game	OK	
Multiple Choice	OK	
Personality Quiz	NOT OK	

<b>Question set</b>	OK	
<b>Questionnaire</b>	NOT OK	
<b>Quiz (Question Set)</b>	OK	
<b>Single Choice Set</b>	OK	
<b>Speak the words</b>	NOT OK	
<b>Speak the words set</b>	NOT OK	
<b>Summary</b>	OK	
<b>Timeline</b>	UNKNOWN	
<b>True/False</b>	OK	
<b>Twitter User Feed</b>	UNKNOWN	

# Create an H5P Account

To begin working in H5P you must first create a free account. This account will house all of your H5P interactive creations. Follow these steps to create a free H5P account:

1. Navigate to the website: <https://h5p.org/>
2. Click on the **Create free account** button.



3. Enter in the following required **credentials**. All other credentials and account details are optional.

The image shows the 'User account' creation page. At the top, there are links for 'Create new account', 'Log in', and 'Request new password'. Below these are four input fields, each with a red box around it: 'Username \*', 'E-mail address \*' (with the example 'dubayc@etsu.edu'), 'Password \*' (with a strength indicator), and 'Confirm password \*'. Below the password fields, there is a 'Description' text area and a 'Get monthly updates' checkbox section.

- a. **Username** - This username will be used to sign in to the site as well as to identify your interactions in the community forums.
  - b. **E-mail Address** – You may use your personal or professional email in this space. Subscribing to notifications and other alerts are optional.
  - c. **Password** – Create a strong account password.
  - d. **Captcha** – Solve the captcha prompt.
4. Click **Create new account**.

The image shows a CAPTCHA challenge box. The text reads: 'CAPTCHA This question is for testing whether you are a human visitor and to prevent automated spam submissions.' Below this is a question: 'What is the opposite of black? - five letters, starts with "w", ends with "hite" \*'. There is an input field for the answer and a 'Fill in the blank.' label. At the bottom of the box is a button labeled 'Create new account' which is highlighted with a red rectangular box.



# H5P Interface

The H5P Interface is relatively intuitive. Once logged in, an end-user can create or edit interactive content. The user dashboard is divided into three major sections: the Toolbar, Quicklinks, Recent Content, and Recent Comments.

The **toolbar** across the top of the site provides main-site-level navigation to the end-user. You're able to browse examples, documentation, and the community forum from these links. The **Quicklinks** section provides your only access to creating interactive content. The **Recent Content** section provides an at-a-glance overview of the most recent content you've created as well as access to edit and/or embed the content. The **Recent Comments** section provides an overview of your community interactions.

The screenshot shows the H5P user interface for a user named 'dubayc'. At the top, there is a blue navigation bar with the H5P logo on the left, a search bar with the text 'Search h5p.org' and a magnifying glass icon on the right, and a menu of links: 'Examples & downloads', 'Documentation', 'Goals & roadmap', 'Forum', 'My account', and a 'Log out' button. Below the navigation bar, the user's profile is displayed. On the left is a profile picture of Chelsie Dubay, with the name 'Chelsie Dubay' and the username 'dubayc' below it. Underneath the name, it says 'Member for 1 year 1 month'. To the right of the profile picture is a 'Quick Links' section with a 'Create New Content' button and three links: 'Latest Release Note', 'Content Author Tutorials', and 'Forum'. Below this is a 'Recent Content' section, which is a table with three columns: 'Title', 'Updated', and 'Edit link'. The table lists five items: 'Creating and Embedding Interactive Content' (updated 2018/03/26 - 21:29), 'Quality Online Courses' (updated 2017/09/08 - 18:48), 'Simple Video Example' (updated 2018/03/26 - 20:54), 'Facilitating Successful Group Projects in an Online Course' (updated 2017/05/26 - 21:16), and 'Building Blocks' (updated 2017/06/14 - 17:34). Each item has an 'edit' link. Below the table is a 'View All' button. At the bottom is a 'Recent Comments' section with the text 'No comments yet.'

Title	Updated	Edit link
<a href="#">Creating and Embedding Interactive Content</a>	2018/03/26 - 21:29	<a href="#">edit</a>
<a href="#">Quality Online Courses</a>	2017/09/08 - 18:48	<a href="#">edit</a>
<a href="#">Simple Video Example</a>	2018/03/26 - 20:54	<a href="#">edit</a>
<a href="#">Facilitating Successful Group Projects in an Online Course</a>	2017/05/26 - 21:16	<a href="#">edit</a>
<a href="#">Building Blocks</a>	2017/06/14 - 17:34	<a href="#">edit</a>

# Create New Content

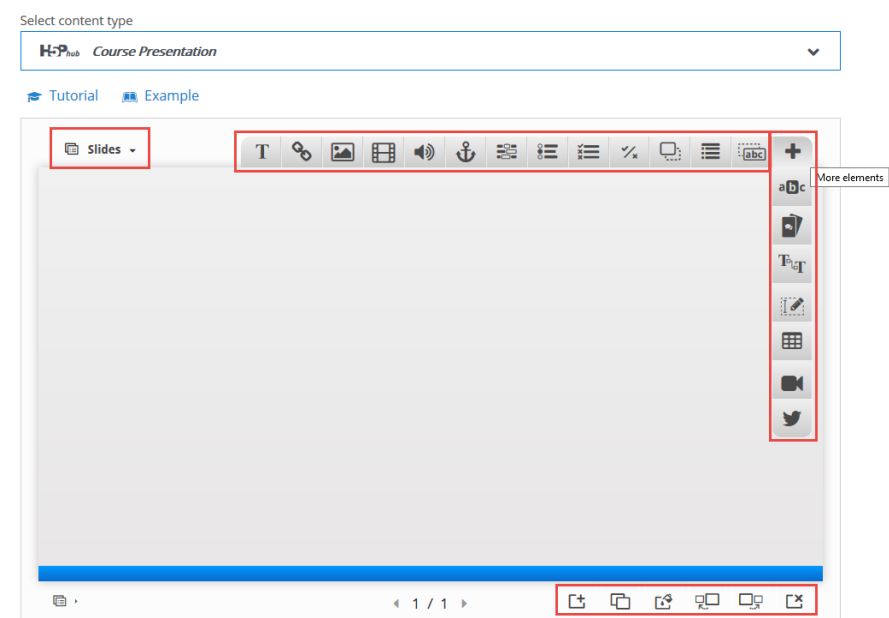
The tutorials provided in this section of the document serve as an introductory to each of the featured content types. After familiarizing yourself with the basic components of each content type, explore the more advanced settings a bit further to better enhance your content and to discover ways of incorporating additional interactivity into each element.

## Course Presentation (Slide deck)

1. Click the **Create New Content** button.
2. Enter a **Title** for your content project.
3. Select **Course Presentation** from the content type dropdown menu. The Course Presentation Editor will appear on your screen. Use the Course Presentation Editor to build your presentation. (Additional tutorial information is available below.)
4. (Optional) Select the appropriate **Behaviour Settings** to better control how the end-user can and will interact with the presentation.
  - a. Select the appropriate **Social Settings**.
5. (Optional) Use the **Text Overrides and Translations** options to configure and customize the naming and labeling within a Course Presentation.
6. (Optional) Enter and organize your content with tags.
7. Ensure that the H5P Options are appropriately configured. Note that the H5P Options control the content's sharing buttons.
8. Click **Save**.

## Understanding the Course Presentation Editor

Using the labeled diagram, explore the options available to you when creating Course Presentations in H5P.



- A. The **Slides** Dropdown – These settings control the visibility and availability of the traditional outline view and navigation of the presentation. To the end-user, the “Slides” will display similarly to Word’s Navigation View.

- B. **Insert Text** – Use this feature to insert text. Note that you can control text size, alignment, and appearance, but you cannot control or customize font face.
- C. **Insert Link** – Use this feature to insert a text hyperlink or button hyperlink to an external website. External websites will open in a new tab.
- D. **Insert Image** – Use this feature to insert an image from the local machine you’re using. Maximum image size is 16mb. This feature supports alt and hover text.
- E. **Insert Video** – Use this feature to insert a video from the local machine you’re using. Maximum video size is 16mb. This feature does not support embedded videos from other hosts (YouTube, etc). The videos must originate as local files on your computer. This restriction can affect end-user experience.
- F. **Insert Audio** – Use this feature to insert an audio from the local machine you’re using. Maximum audio file size is 16mb. This feature does not support embedded videos from other hosts (YouTube, etc). The audio files must originate as local files on your computer. This restriction can affect end-user experience. The Insert Audio feature does include a player.
- G. Insert **Interactive Elements** – The following elements can be integrated within your course presentations:
  - a. Fill in the Blank
  - b. Single Set (Multiple Choice)
  - c. Multiple Choice (Multi-Select)
  - d. True/False
  - e. Drag and Drop
  - f. Mark the Words
  - g. Dialogue Cards (Flash Cards)
  - h. Interactive Video
  - i. Twitter Feed
- H. **Slide Buttons** – Use the Slide Buttons toolbar at the bottom of the editor to add, delete, and arrange slides within the course presentation. The buttons include the following functionality:
  - a. Add Slide
  - b. Clone Slide
  - c. Slide Background
  - d. Move Slide Left/Right
  - e. Delete Slide

## Important Course Presentation Considerations

- Individual learners are not collected or tracked. No logging information is available.
- Please do not use course presentations as a type of formal assessment. At the current time, H5P does not fully integrate with Brightspace. Thus, the instructor cannot capture the progress and interactions of a specific student to be used for the purposes of assigning a grade for the student’s performance within the course presentation interactions.

## Interactive Video

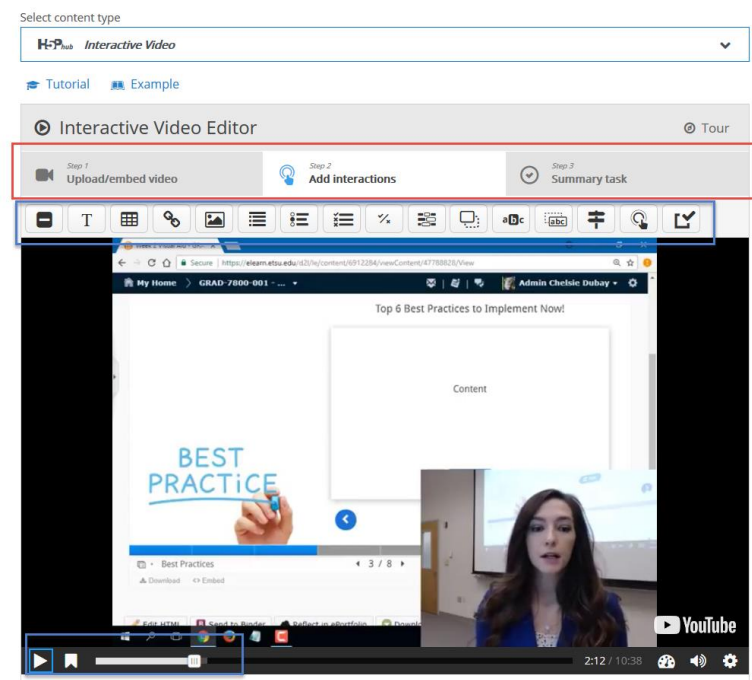
1. Click the **Create New Content** button.
2. Enter a **Title** for your content project.
3. Select **Interactive Video** from the content type dropdown menu. The Interactive Video editor will appear on your screen. Use the Interactive Video Editor to layer interactive elements on top of a video. (Additional tutorial information is available below.)
4. (Optional) Select the appropriate **Start Screen** options – Not available for YouTube Videos.
5. (Optional) Select the appropriate **Text Track** options – Not available for YouTube Videos.

6. (Optional) Select the appropriate **Behaviour Settings** to better control how the end-user can and will interact with the presentation.
  - a. Select the appropriate **Social Settings**.
7. (Optional) Use the **Text Overrides and Translations** options to configure and customize the naming and labeling within a Course Presentation.
8. (Optional) Enter and organize your content with tags.
9. Ensure that the H5P Options are appropriately configured. Note that the H5P Options control the content's sharing buttons.
10. Click **Save**.

## Understanding the Interactive Video Editor

The Interactive Video Editor is divided into three steps: Upload/Embed Video, Interactions, and Summary Tasks.

Use the diagram below to learn more about the options available to you.



- A. Step 1 – **Upload/Embed Video** – This tab allows you to either upload a video file from your local computer or embed a hosted video file. Most commonly, you'll embed a video from YouTube. Note that you do not have to own the video in order to add interactive elements to it.
- B. Step 2 – **Add Interactions** – This tab allows you create overlays that reside on the surface of a video. These interactions can pause videos, requiring students to interact with the prompts before being able to continue viewing. Move the Playhead to the desired location for the interaction. Then, using the interaction toolbar, select and configure the appropriate interaction. Choose from the following interactions:
  - a. Insert label
  - b. Insert text
  - c. Insert table
  - d. Insert hyperlink
  - e. Insert image

- f. Insert statement
  - g. Insert question set
  - h. Insert crossroad
  - i. Insert hotspot
  - j. Insert questionnaire
- C. Step 3 - **Summary Task** – This tab will allow you to further customize the summary and feedback of the interactions and the end-user responses collected throughout the video.

## Important Interactive Video Considerations

- Individual learners are not collected or tracked. No logging information is available.
- Please do not use interactive videos as a type of formal assessment. At the current time, H5P does not fully integrate with Brightspace. Thus, the instructor cannot capture the progress and interactions of a specific student to be used for the purposes of assigning a grade for the student’s performance within the video interactions.
- If using a YouTube video, in the event that video is removed or otherwise disabled, your interactions and content created in H5P will be lost.

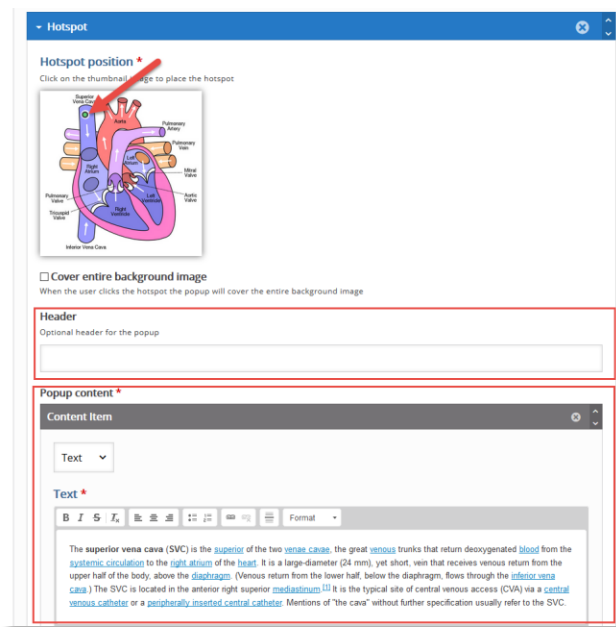
## Accordion

The Accordion interactive content option is a great way to visually chunk and organize information. This interaction is also an alternative to demonstrating steps in a process or sequence. The accordion interaction piece displays headings that, when expanded, unveil extended information.

1. Click the **Create New Content** button.
2. Enter a **Title** for your content project.
3. Select **Accordion** from the content type dropdown menu.
4. One panel will be available for customization. End-users will be able to add additional panels.
5. Enter a **Title** for the panel. This title will display to the learner.
6. Enter the **Text** that will display when the learner clicks the panel title. *\*I would recommend typing out context in a word editing software and pasting the content into the textbox.\**
7. Click **Add Panel** to add additional panels.
8. Click **Save**.

# Image Hotspots

The Image Hotspots interactive content option allows an instructor to provide additional information on images and diagrams that pop up when clicked by an end-user. This pop-up window can contain images, text, and/or video.



1. Click the **Create New Content** button.
2. Enter a **Title** for your content project.
3. Select **Image Hotspots** from the content type dropdown menu.
4. **Upload** an image.
5. Select a hotspot **color**.
6. One hotspot configuration is provided for you. You can add additional hotspots.
7. Locate the appropriate **hotspot position**. Simply click within the image.
8. (Optional) enter a hotspot **Header**.
9. In the Popup content, you'll select the type of content (Text, Image, or Video).
10. Enter the appropriate content.
11. Click **Add Item** to add additional items within the same hotspot.
12. Click **Add Hotspot** to add additional hotspots.
13. Click **Save**.

# Embedding Interactive Content in Brightspace

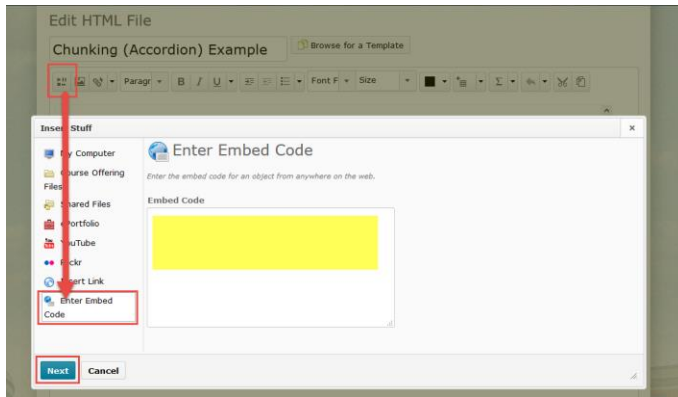
Now that you've created your interactive content, it's time to decide where these interactivities will live. Inside of your online course you have an abundance of options. You can embed this content in any space or tool that allows the HTML content editor (news, content files, assessments, discussion prompts, assignment instructions, and even feedback!) The world is your oyster in terms of where the fruits of your labor will live. Below are two different ways to embed the content you've created in H5P into your Brightspace course.

Both workflows assume that you've copied the Embed code from one of your H5P content creations. The **Embed** function is housed at the bottom of the View/Edit content page. You'll click the embed function, enter a preferred size, and then copy the embed code:

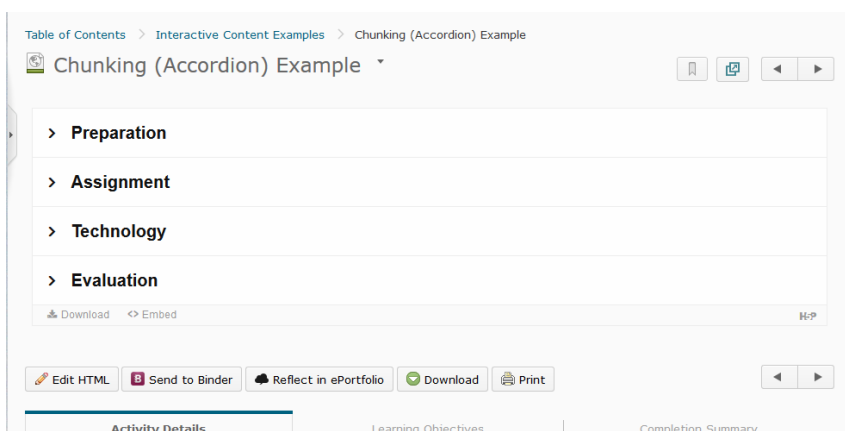
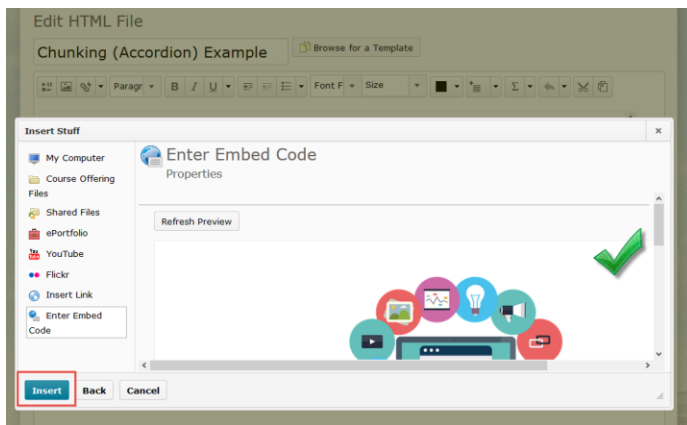
The screenshot displays the Brightspace interface for viewing and editing content. At the top, there are 'View' and 'Edit' links, and a 'Clone content' button. Below this, it shows the content was submitted by 'dubayc' on 'Thu, 09/07/2017 - 22:29'. The main content area features a central graphic of a computer monitor surrounded by various icons representing different media types (video, audio, text, images, etc.). Below the graphic is the title 'Creating Great Online Courses'. At the bottom of the content area, there is an 'Embed' button. A red arrow points from this button to an 'Embed' dialog box. The dialog box shows the embed code: `<iframe src="https://h5p.org/h5p/en`. The size is set to 890 x 638 px. A green box highlights the code, with a text box saying 'Copy the highlighted code.' Below the dialog box, there are social media sharing options for 'Tweet' and 'Liker 0'.

## Embed using the HTML Editor.

1. In a space you've identified as compatible with the HTML editor, click the **Insert Stuff** button.
2. Select the **Embed Code** option.
3. **Paste** in the embed code.
4. Click **Next**.



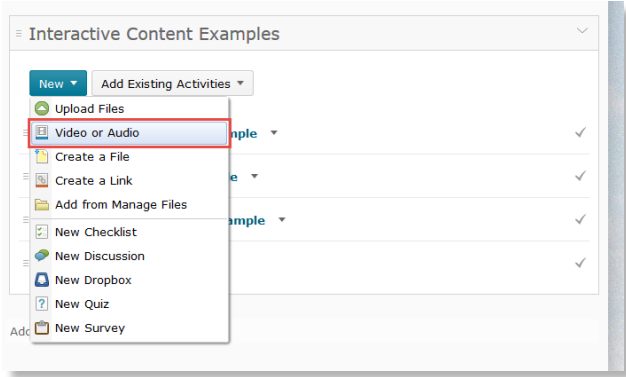
5. Preview the content to ensure that it is displaying as you intend.
6. Click **Insert**.



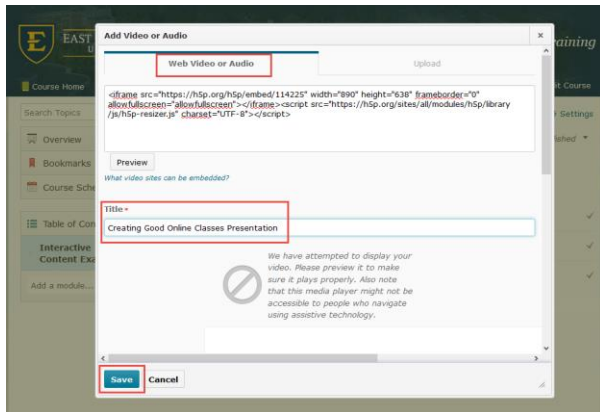


## Embed using the Audio/Video Content Type.

1. In a Brightspace course shell, navigate to the **Content** tool.
2. Identify the module that will house the interactive content. From that module, click the **New** button.
3. Select **Video or Audio**.



4. Within the *Web Video or Audio* tab, **paste** in the embed code.
5. Enter a **Title**.
6. Click **Save**.



7. Preview the content to ensure that it is displaying as you intend.



# References

Hart, T., & Shaw, A. (2018). Creating Interactive Content. Retrieved January 20, 2018, from

<https://ctl.learninghouse.com/creating-interactive-content/>

New Study: Over Six Million Students Now Enrolled in Distance Education. (2017). Retrieved January 20, 2018, from

[https://onlinelearningconsortium.org/news\\_item/new-study-six-million-students-now-enrolled-distance-education/](https://onlinelearningconsortium.org/news_item/new-study-six-million-students-now-enrolled-distance-education/)  
*to multiple images, then hit ESC or click on the Format Painter*

Pappas, C. (2017). 7 Tips To Beat Short Attention Spans In eLearning. Retrieved January 20, 2018, from

<https://elearningindustry.com/7-tips-to-beat-short-attention-spans-in-elearning> *button again to stop using it.)* The image alignment will unfortunately not be copied. You can set the alignment to “center” from the *Picture Tools > Format* tab.