



digital education system



**user guide**  
version 1.0

# Welcome to the world of DESY

DESY - Digital Education System is a web application thought to create and share on-line multimedia lessons. It's designed to fit the didactic requirements of any kind of teacher.

To compose your lessons, you can upload videos and images from your personal computer and turn them into terrific didactic elements. Alternatively, you can use already prepared elements that you find in DESY's public database (where new elements are continuously fetched by users in the community).

To help you creating lessons, DESY provides three editors, one for each type of element (Audio Editor, Image Editor, and Video Editor): using these editors you can modify an existing element, or create new ones directly inside the application. Moreover, when you insert a text into a slide you can rely on many useful text tools (change text color, change font size etc.), included a complete editor to insert mathematical formulas.

When you add a new slide to a multimedia lesson, you can choose among a wide selection of templates, which integrate in different ways texts with audios, images and videos.

Once you created a sufficient number of lessons, you can fetch them inside your personal Virtual Classroom. In your Virtual Classroom you organize the lessons you want to reproduce (for instance, you can sort a selection of lessons inside your playlist). Also, you can send by e-mail to your students the public link of a lesson, allowing them to reproduce it on their personal computers at any time they want.

The screenshot shows the DESY website homepage. At the top, there is a navigation bar with links for "Home", "What is DESY?", "Sign up", "Contact us", "Forgot your password?", and a prominent green "Login" button. Below the navigation is a large graphic featuring a woman looking upwards, surrounded by various media icons (audio, video, text) connected by a network of lines, symbolizing connectivity and education. The DESY logo and "DIGITAL EDUCATION SYSTEM" text are visible in the bottom left corner. To the right of the graphic, there is a section titled "A new way of teaching" with descriptive text and a "Watch the video" button. A smaller screenshot of the DESY interface is shown in the bottom right, displaying a grid of lesson thumbnails. The footer contains the Xueda logo and copyright information: "©2013 desy. all rights reserved".

## Create it, share it!

To be an active user in DESY's community, it's important to "share" what you produce. This way you'll participate in raising the application's cultural level: if the community grows, it's better for everybody, and you'll be able as well to take advantage of interesting lessons loaded by other users.

If you decide to share one of your lessons among the other users, all media elements contained in it are added to the public database of DESY: from this database, they are available to be picked and used by the community. Furthermore, if you find a lesson that you like, you can make your own copy of it: this way you may re-use the whole of it instead of picking its single elements.

## Map of the application

DESY is structured into five main sections:

The **Dashboard** (home page) contains a resume of the last didactic elements and lessons that might interest you, chosen according to your profile.

The section **Lessons** (identified by the color orange) contains the list of your lessons, together with the ones you linked from other users.

The section **Elements** (identified by the color green) contains the list of your private didactic elements, together with the ones you linked from DESY's public database.

The **Virtual Classroom** (identified by the color blue) is the section where you can organize and reproduce your lessons.

The section **Profile** (identified by the color gray) contains your personal data and your statistics in DESY.

# Functional logics and general controls

An element (or media element, or didactic element) is either a video, an image or an audio loaded in DESY. A lesson is composed by slides that contain texts together with media elements.



Opens the **preview** of a **lesson** or **didactic element**.



**Adds** to your personal section a link of a lesson or didactic element. Added lessons are sent to the section **Lessons** (linked lessons may be seen but not modified), whereas **didactic elements** are sent to the section **Elements** (linked elements may be used inside a lesson but not modified).



**Removes** from your personal section the link of a **lesson** or **didactic element**. With this operation the selected item (lesson or element) is only removed by your section but not deleted from DESY's database: hence if you make a mistake you can always look for the item you removed.



**Removes a lesson or didactic element** from your personal section and from DESY's database. The **X** deletes definitively the item (lesson or element): hence you won't be able to use it anymore.



If you appreciate a lesson created by another teacher you can assign a **I like it** by clicking on this icon. Popular lessons are easier to find in the search engine.



When a lesson is created it automatically assumes the **private** status, which doesn't allow it to be seen by the other users in DESY. Moreover, this status applies to all the new elements that you loaded specifically to be used in that lesson: these elements too are visible only for you.

If you click on this icon, the lesson is turned into **public**: other users will be able to reproduce it, link it, give a **I like it**, and create their own copy of it.

All private elements contained in the lesson are automatically turned into "public".

You can turn back a shared lesson into "private" at any time, but you can't perform the same operation on public elements, since they are moved into the public database of DESY and they can be used also by other teachers.



Clicking on this icon, you are redirected to the **specific Editor** of the item where you find it (Lesson Editor for lessons, or Audio, Image, Video Editor for didactic elements).



Clicking on this icon you make a **copy of a lesson**. Once you copied the lesson, the new one is **frozen** until you modify it at least once (you'll notice that the lesson is frozen because of its dark grey color).



Sends a lesson to your **Virtual Classroom**.



This icon opens the **general information** form, where you can edit title, description and tags of a lesson or element.

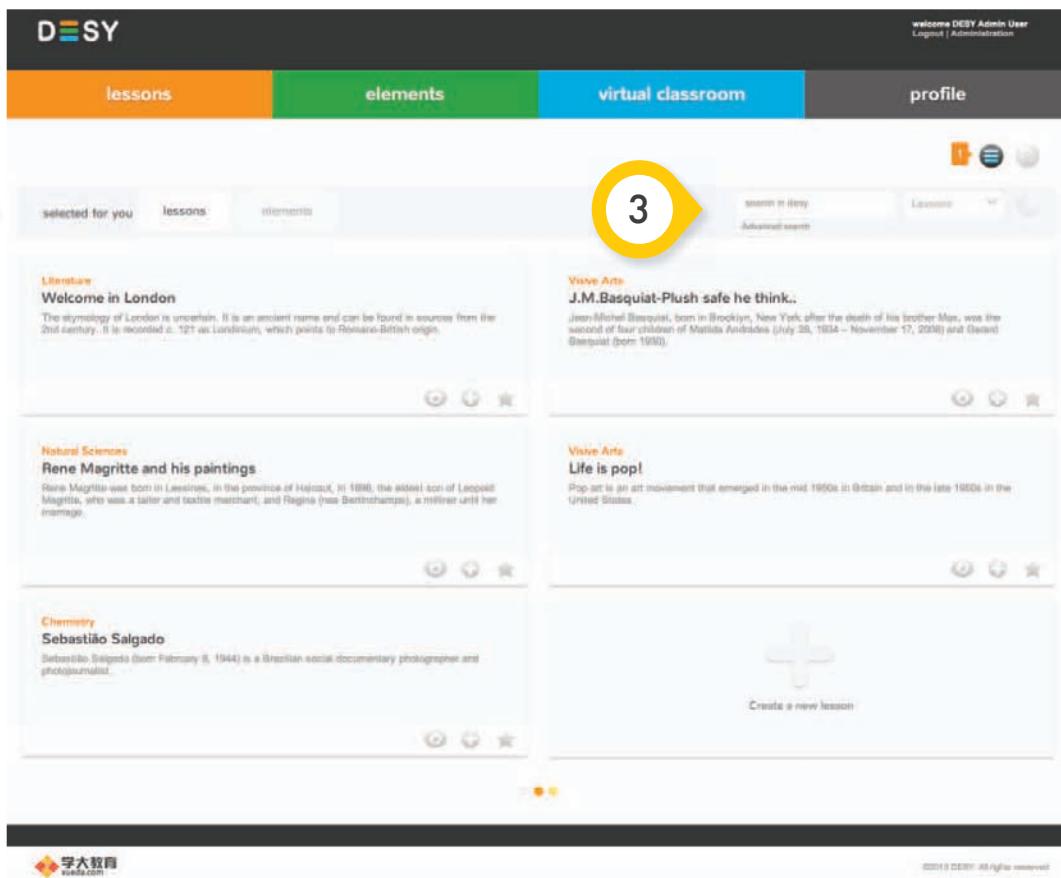


This icon is placed inside the Virtual Classroom: clicking on it you open a form that allows you to **send the public link of a lesson** to one or more email addresses.



If you find something **inappropriate**, clicking on this icon you can **send a message to the administrator** of DESY (you have a space where you can write the reason for your report).

# DESY's dashboard



## 1 Selected for you

The area marked as **selected for you** contains samples of lessons and elements, chosen among the ones you haven't linked yet, that match your subjects and interests. The area is split into two parts, one for lessons and one for elements (click on the corresponding labels to switch from one to another).

## 2 Notifications

Clicking on this icon, that you find in all the main sections of DESY, you open the **list of your notifications**. Notifications are the main communication instrument that DESY uses to contact you: when there is a new message that you haven't read yet, the button gets colored and shows the number of unread messages.

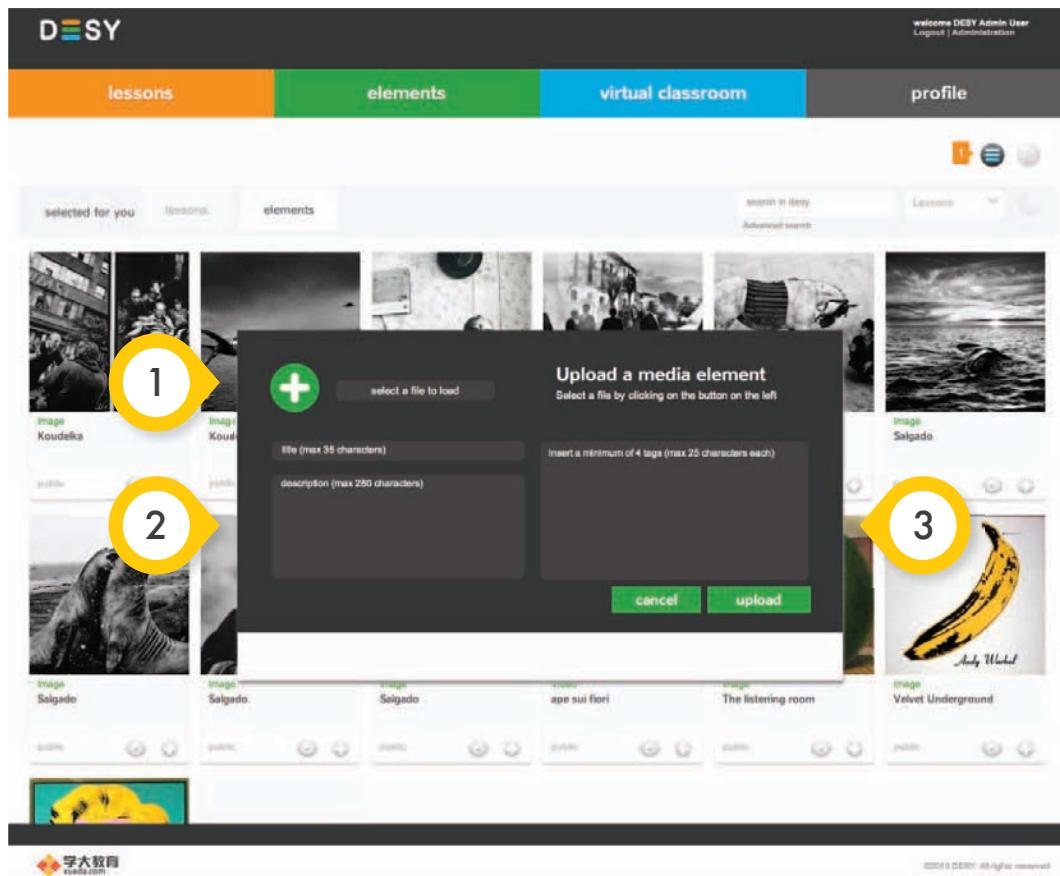
## 3 Search engine

Using the search engine you can **find any lesson** or **element** contained in the **public database** of DESY. The search engine works on **tags**: remember that a well-tagged lesson is more likely to be found by other users. If you want to apply more specific filters, click on the link **advanced search**.

## 4 Create a new lesson/element

Clicking on this button you'll be redirected to the **Lesson Editor** (for lessons) or to the **element uploader** (for elements).

# How to upload a new element



- 1 Click on the 'plus' and choose a file from your personal computer
- 2 Insert title and description
- 3 Insert a minimum of four tags

Once you filled in the whole form, use the button **upload** to save the new element.

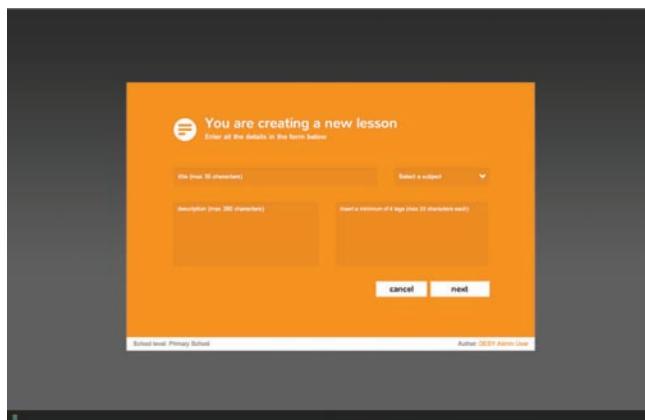
The uploading process takes a few minutes if you chose a video or an audio (you'll receive a notification when the process ends, until which moment you won't be able to use the new element), whereas for images the new element is created immediately.

The element you just uploaded can be found on top of the list of the section Elements.

# How to create a lesson

With DESY the creation of a multimedia lesson turns out to be a very simple operation.

To start, click on the button **create a new lesson** from your dashboard or from the section **Lessons**.

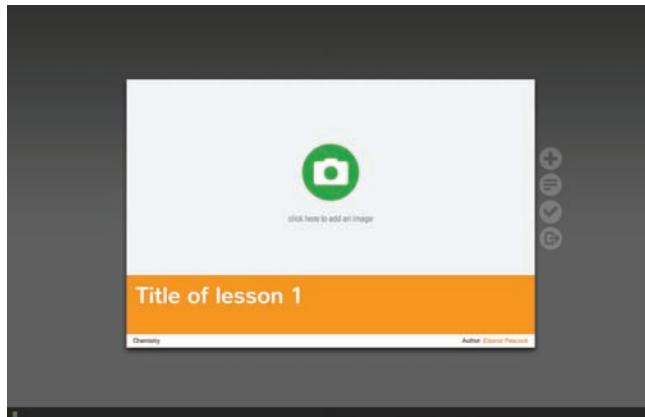


1

## Insert general information about the new lesson

As for media elements, the general information includes title, description and tags (you must insert a minimum of 4 tags, this is a standard for all the application). Moreover you need to choose a subject for your lesson, among the ones associated to your profile.

Again, remember that a proper tagging of your lesson makes it easier to be found from DESY's search engine and more likely to become popular among the community.

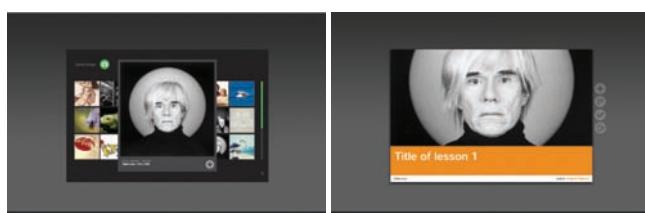


2

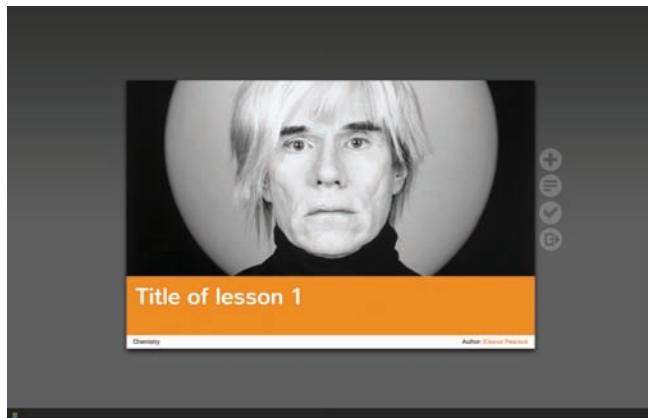
## Fill the cover

Once you filled in the general information form, you are redirected to the Lesson Editor working space. Since the lesson is new, the only slide present is the **cover**: the cover contains the title of the lesson, the subject, the name of the author, and a blank space that you can fill with an image at your choice.

To pick up an image, click on the **photo** icon positioned in the middle of the slide: this way you open your **image gallery**, that contains all the media elements of type **image** present in the sections Lessons. The image that you choose is resized to fit the slide and centered automatically: if you don't want the image to be centered, you can drag it with your mouse until you found the correct position.



# How to create a lesson



3

## Actions



If you click on the icon **plus** placed on the right side of the slide, you open the window for selection of slide types. Click on the template you need and the new slide is automatically added right after the current slide. If you want to add a new slide at the end of your lesson, click on the same button on the right side of the slides index in the header.



As for elements, this icon redirects to the general information form (where you can modify title, description and tags)



This icon saves the lesson manually; anyway, the Lesson Editor automatically saves your lesson when you pass from a slide to another (each time this happens, a green circle appears for a second in the middle of the screen).



Clicking on this icon, you save your lesson and leave the Editor.

# How to create a lesson



4

## Add a new slide: list of DESY's standard templates

DESY provides you a list of nine available slide templates. For each type of media element supported (image, audio, video), there is at least one specific template that may contain it. Let's have an look at the details of each template:

- 1) **Only title** – it contains only a big title in the middle: this can be useful to introduce a different topic inside your lesson
- 2) **Title + text** – good to write long texts. The standard text editor allows you to choose size, color and formatting of what you write. In this template, as in any other containing texts, it's possible to insert mathematical formulas.
- 3) **Title + picture + text** – using this template you can insert a picture together with a title and a description. As for any image, the picture may be moved as you whish, and labelled by a small caption.
- 4) **Picture full screen** – it contains a single picture that fills all the slide.
- 5) **Double picture** – two pictures, without title.
- 6) **Four pictures** – four pictures, without title.
- 7) **Video full screen** – it contains a full screen video; to pick up the video you want, you need to open your **video gallery**, that, similarly to the image gallery, contains all the media elements of type **video** present in the section Lessons: You open the gallery clicking on the **video** icon in the middle of the slide.
- 8) **Title + small video + text** – you can insert a video and a text to introduce it.
- 9) **Title + audio + text** – you can insert an audio track together with a text description and a title. The audio track can be chosen among your audios: clicking on the **plus** button in the middle of the track you open your "audio gallery" that contains all the media elements of type **audio** present in the section Elements.

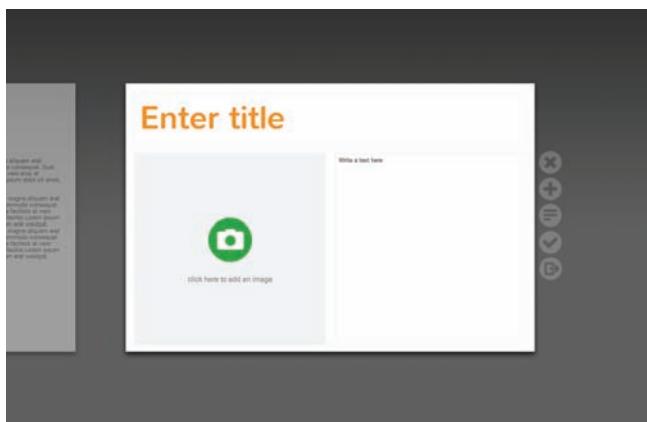
# How to create a lesson

5

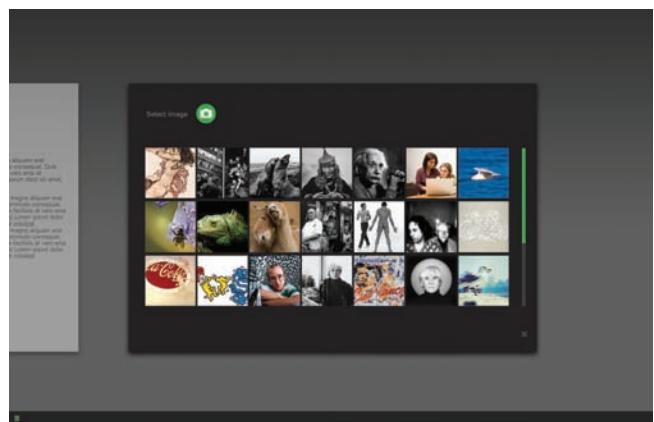
## How to insert a media element into a slide

We have already seen that if a slide template may contain a didactic element, you can open the specific gallery for that type (audio, image and video gallery).

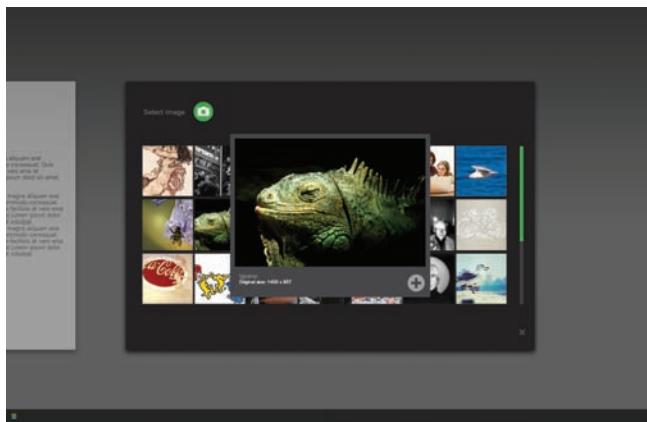
We show here how to choose an image from the image gallery: a very similar procedure (click to open preview, click on **plus**) permits to pick a video or an audio, respectively from video and audio gallery.



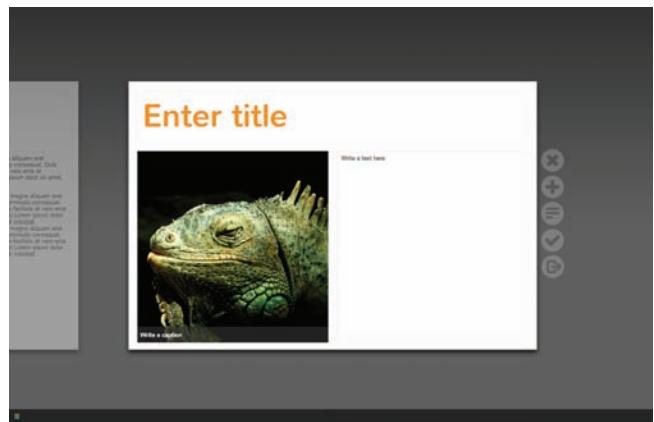
Click on the icon **plus** inside a slide that can contain images; if an image is already present, the same button appears when you pass with the mouse over the image.



Choose a thumbnail of an image



Clicking on a thumbnail, you open a window which contains the full image and a button **plus**, that selects that image and places it inside the slide you are editing.



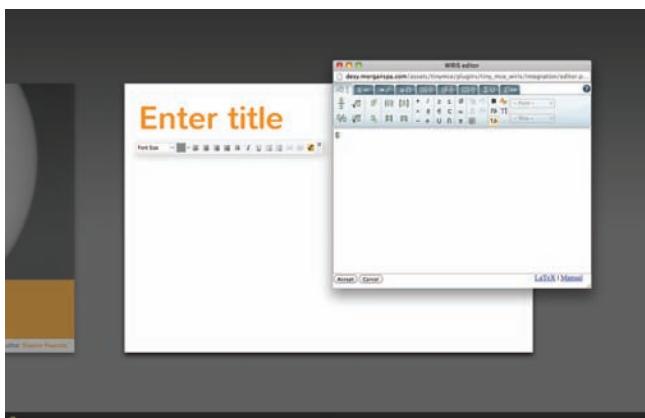
Once you inserted the image, you can drag it to set its correct position.

# How to create a lesson

**6**

## Text editor and mathematical formulas

In the slide templates allowing texts, you can use the standard text editor to choose size, color, style, and alignment.



If you click on the icon **square root** of the text editor toolbar, you open the mathematical editor window: you can construct a mathematical formula using a very wide range of tools (basically, you can create with an easy graphical interface the same formulas that you would write using LaTeX). Clicking on the button **accept** the formula is inserted inside the text.

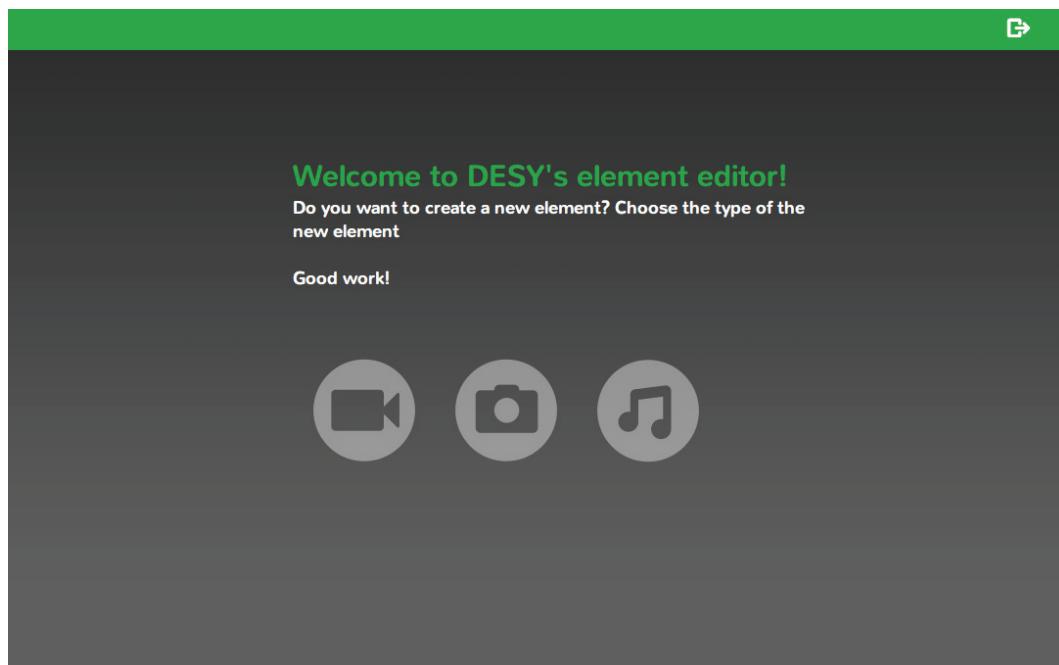
When you leave the Lesson Editor, the new lesson can be found in the section Lessons: clicking on the icon **pencil**, you can open the Lesson Editor again and modify your lessons at any time.

# Editing a media element

DESY's Element Editor can be used either to modify existing elements or to create new ones. For instance, you can upload a video of which you need only a part, and cut it directly inside the application; or otherwise, you can be creative and build your own video using elements already loaded in DESY.

To enter in the element editor, click on the **pencil** icon that you find below each didactic element in the section Elements: this way you automatically open the specific editor for the type of element you clicked on (Image, Audio or Video). You find the **pencil** icon on any element, but if this is public you are not allowed to overwrite the original: you are forced to save it as new.

The Element Editor can also be opened empty: click on the button **element editor** in the section Elements, and choose among one of the three specific editors.

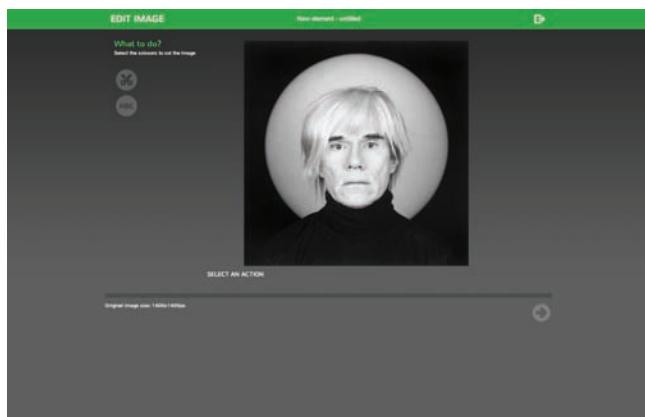


## Editing a media element

# How to edit an image

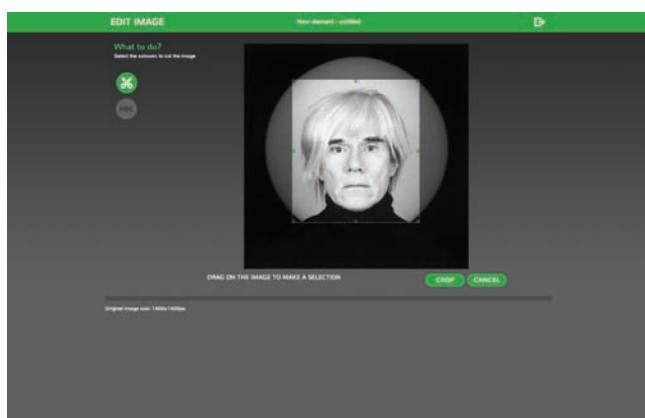
DESY's Image Editor allows two simple but effective operations: image cropping and texts inserting.

## Crop an image



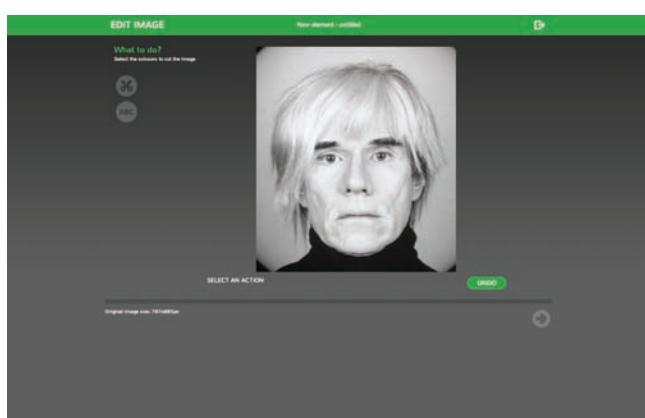
1

To switch to the **crop** mode, click on the icon with scissors on the left column.



2

When this icon is selected, you can draw a crop area clicking on the image and dragging with your mouse. The crop area may be resized (by dragging its borders) until you select the right portion of the image.



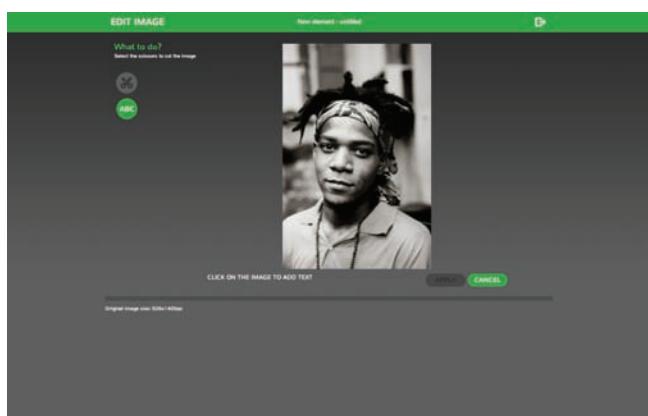
3

Finally, to apply the selection click on the button **crop**.

## Editing a media element

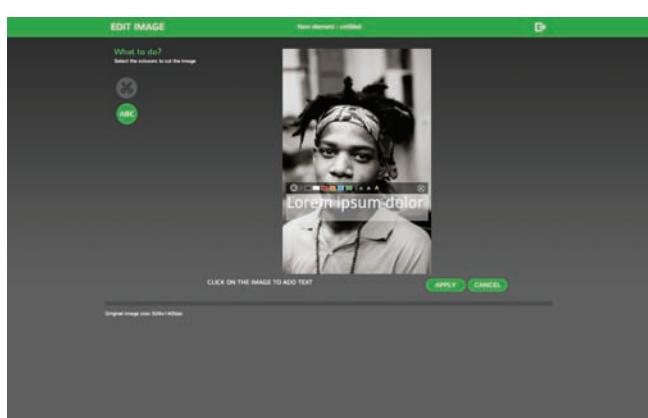
## How to edit an image

## Insert texts



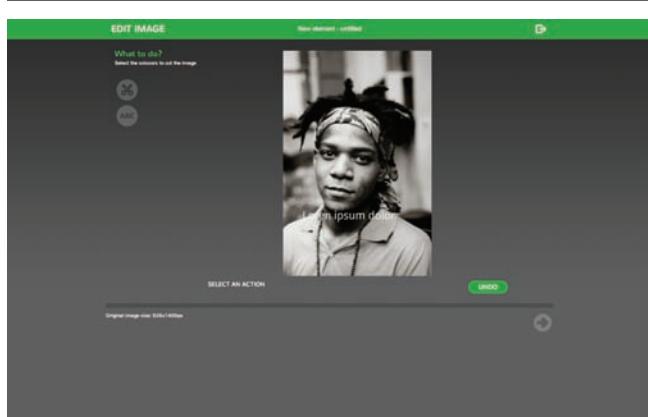
4

To switch to **insert texts** mode, click on the icon **ABC** on the left column.



5

When this icon is selected, you can create small text areas with a simple toolbar, just clicking on the image. For each text area you can insert a text, and optionally choose its size and color; once the text is ready, move it around inside the image.

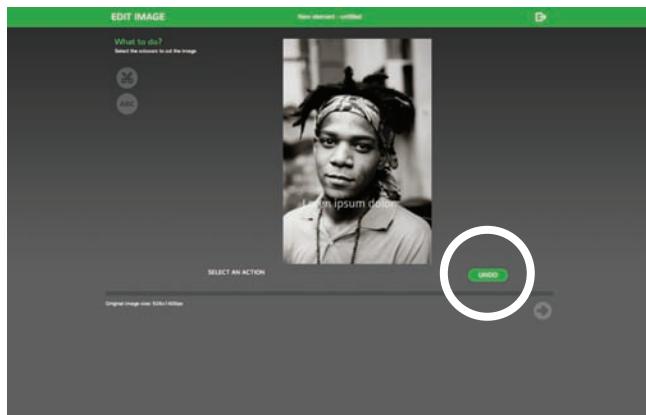


6

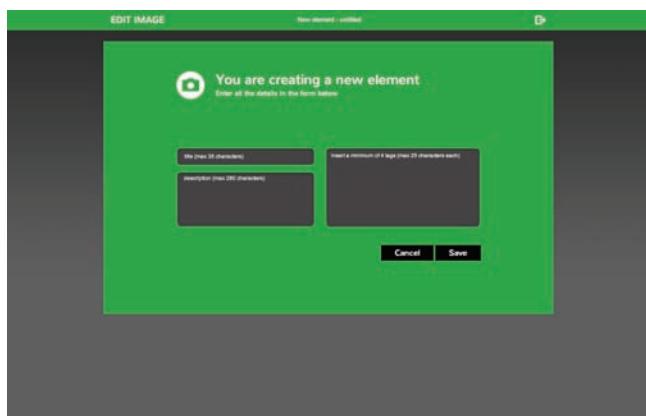
To save the text areas, click on the button **apply**.

## Editing a media element

# How to edit an image



If you made a mistake, click on the button **undo**.



### Commit your changes

When you finished working on an image, to go to the next step click on the arrow on the bottom.

Before committing your changes, you are requested to fill in the general information about the new element (if the initial image was public you are forced to save it as new, if it was private you are allowed to overwrite it).

## Editing a media element

# How to edit a video

DESY's Video Editor is very simple and intuitive to use.

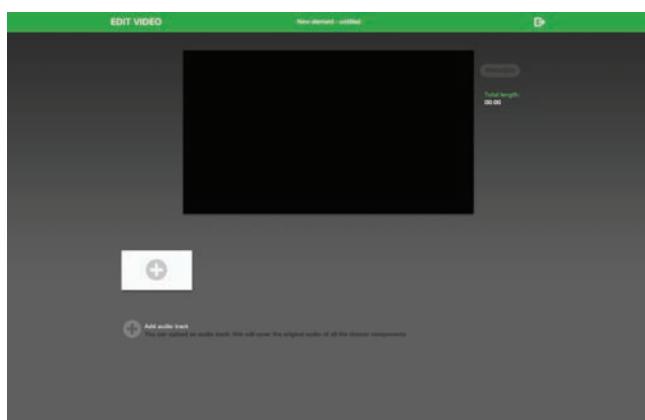
A video is made of three different types of **components**:

**video** (a video element in DESY)

**image** (an image element in DESY, appearing in the video for a configurable number of seconds)

**title** (a centered text, appearing in the video for a configurable number of seconds)

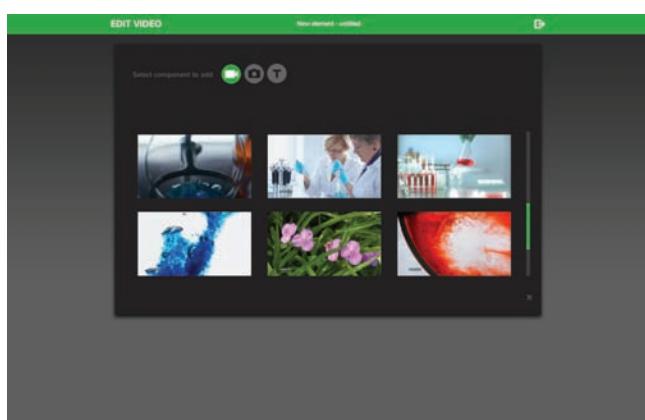
The components are positioned in order inside the timeline (on the bottom of the Editor); in the preview screen in the middle you can visualize the preview of the video you are creating.



1

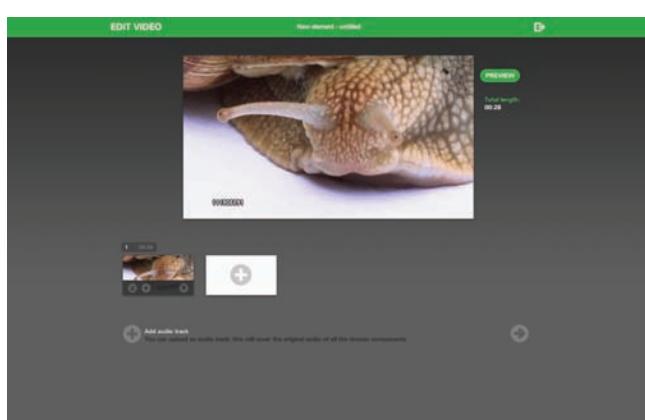
To add a new component you need to open the components editor, which contains a **video gallery**, an **image gallery**, a **title component editor**.

To open the components editor click on the button **plus**.



2

For instance, let's create a video component: click on the icon **video** on top of the components editor, pick a video and click on the icon **plus**.



3

The component you chose has now been added to the timeline. Passing with your mouse over the component, you make visible the **action icons**:

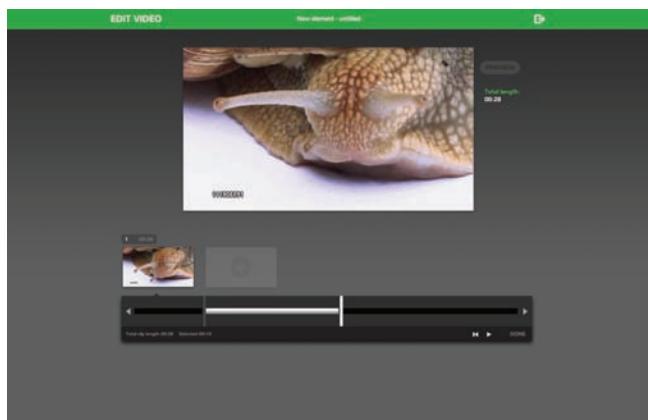
**Cuts** a video component, or **edits** the duration of an image or a text component

**Replaces** the component with another one

**Removes** the component from the timeline

## Editing a media element

# How to edit a video



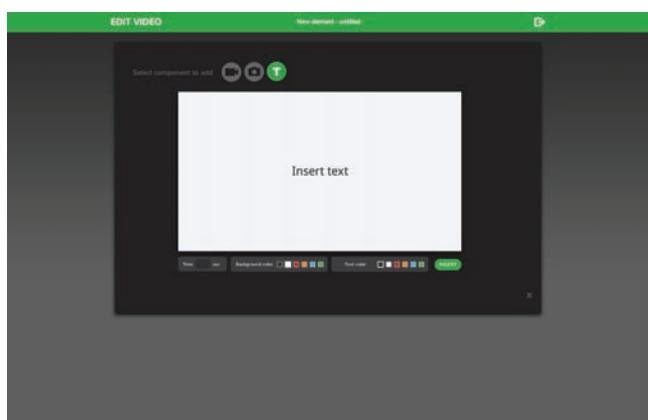
4

### Cut a video component

Clicking on the icon **scissors** on a video component you open an instrument for video cutting. Here you find:

- a cursor that holds the current time of the video
- two draggable handles to cut the video on both sides
- two precision arrows to move manually cursor and handles, with steps of one second each.

Click on the button **done** to commit the changes.

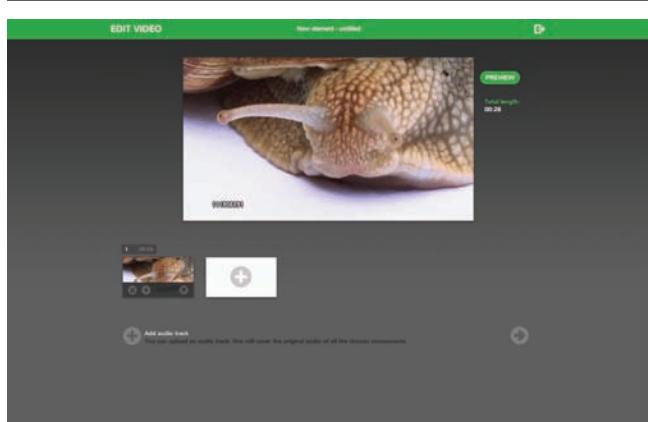


5

### Create a title component

The component of type title is useful to introduce new topics inside your video. To add such a component, open the **components editor** and click on the icon **T**. Choose the color of the text, the background color, and the duration in seconds of the component.

Click on **insert** to add the component to your video.



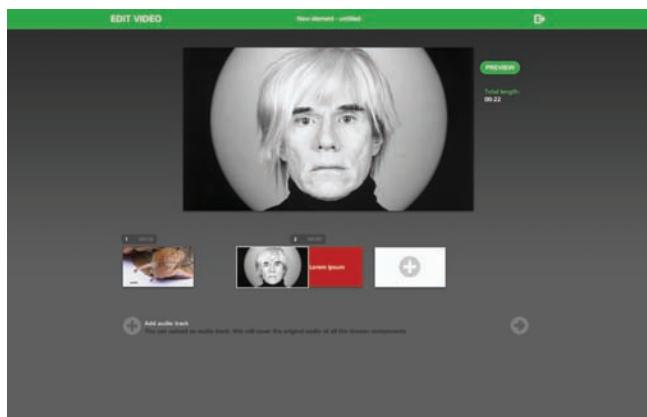
6

### Create an image component

Open the image gallery inside the components editor, pick an image and click on the icon **plus**. Finally insert the duration in seconds of the component.

## Editing a media element

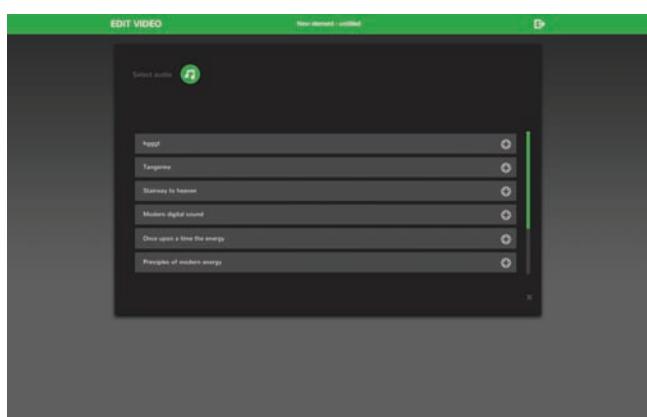
# How to edit a video



7

### Move components

You can sort the components inside the timeline by dragging them with your mouse.

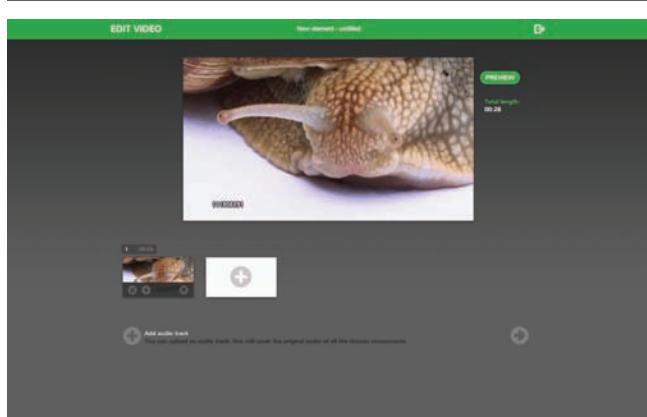


8

### Add an audio track

If you wish, you can remove the original audio of all the video components and use your own audio instead.

Click on the **audio** icon below the timeline and pick an audio from the gallery.



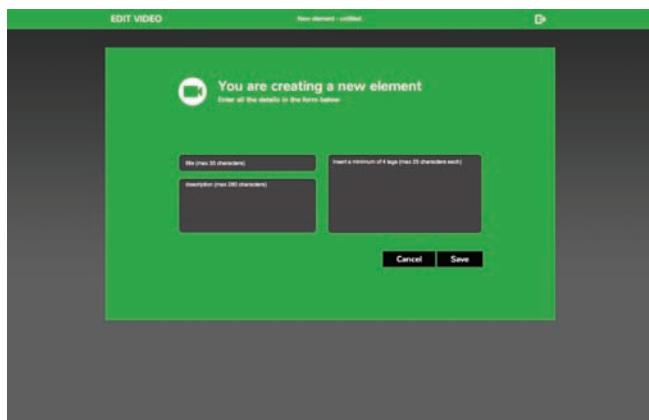
9

### Global preview

To enter in the preview mode, click on the button **preview** on the right of the preview screen. In preview mode, you are in condition to visualize a simulation of the whole video: use the arrows to move yourself among the components, and check out the transitions between them.

## Editing a media element

# How to edit a video



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**Commit your changes**

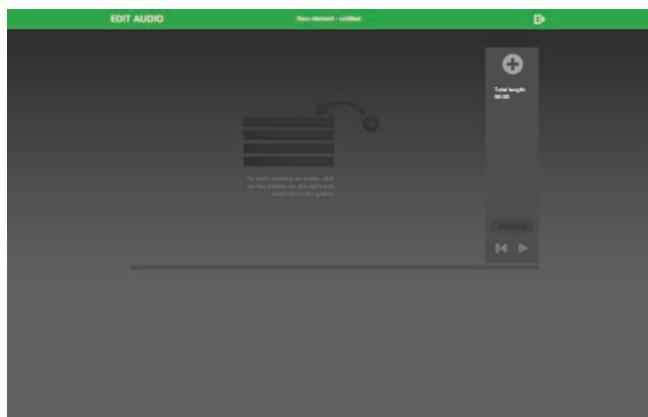
Before committing your changes, you are requested to fill in the general information about the new element (if the initial video was public you are forced to save it as new, if it was private you are allowed to overwrite it).

Remember that the process of video editing takes a few minutes: you'll receive a notification at the beginning and at the end of this process.

## Editing a media element

# How to edit an audio

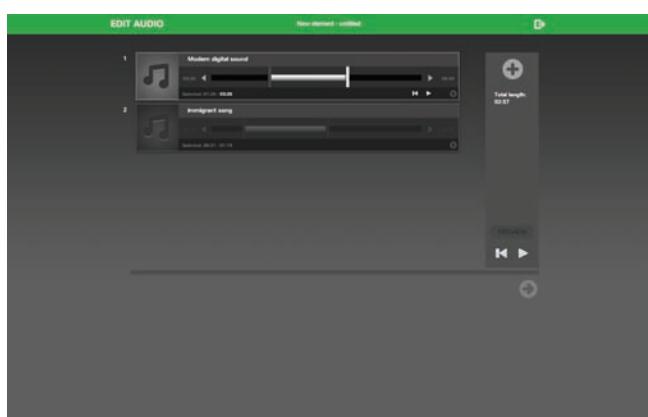
DESY's Audio Editor allows you to cut and concatenate didactic elements of type audio.



1

### Add a new audio

Use the button **plus** on the right column to open the audio gallery and add a new audio to the timeline.



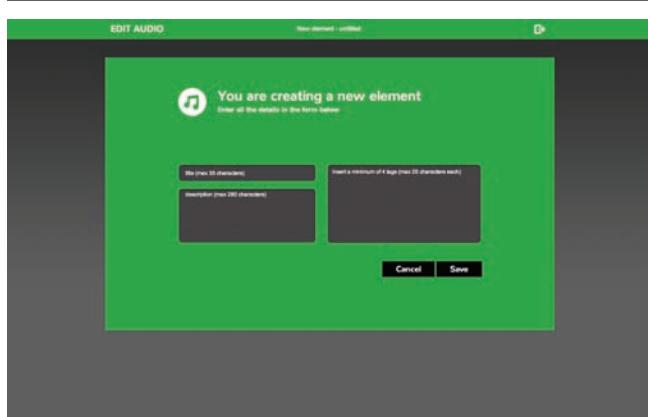
2

### Cut and move audios in the timeline

On each audio you find:

- a cursor that holds the current time of the audio
- two draggable handles to cut the audio on both sides
- two precision arrows to move manually cursor and handles, with steps of one second each.

To change the position of an audio, you can drag it with your mouse using as a handle the icon **note** on the left.



3

### Commit your changes

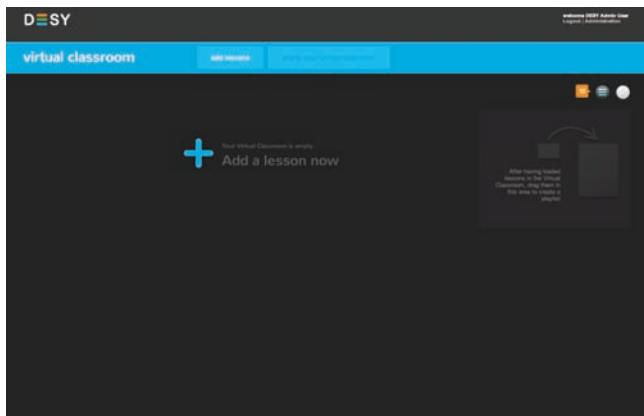
Before committing your changes, you are requested to fill in the general information about the new element (if the initial audio was public you are forced to save it as new, if it was private you are allowed to overwrite it).

Remember that the process of audio editing takes a few minutes: you'll receive a notification at the beginning and at the end of this process.

# Your Virtual Classroom

The **Virtual Classroom** is a useful tool, that allows you to organize your lessons according to your preferences and necessities.

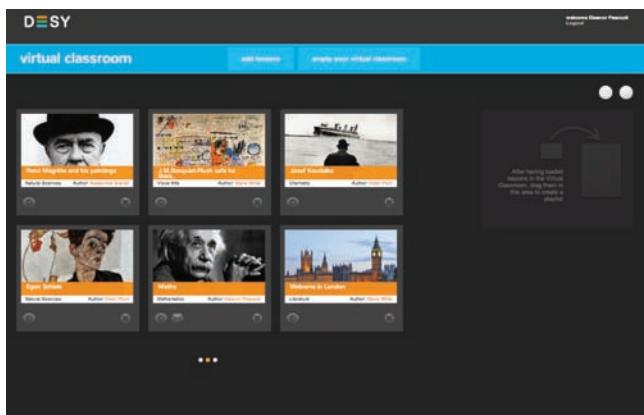
You can pick lessons among from your personal section, view them individually, and load them into your personal playlist.



1

## Load lessons

If your Virtual Classroom is empty, click on the button **add lessons**, select one or more lessons from the list and load them.



2

## Actions performable on a lesson



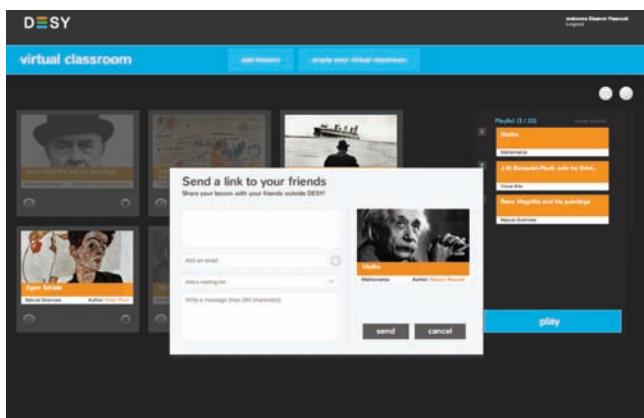
Opens the lesson viewer for that lesson



Removes the lesson from your Virtual Classroom



(mail) Allows you to send to a list of emails a message containing the public link of your lesson (active only for lessons created by you).

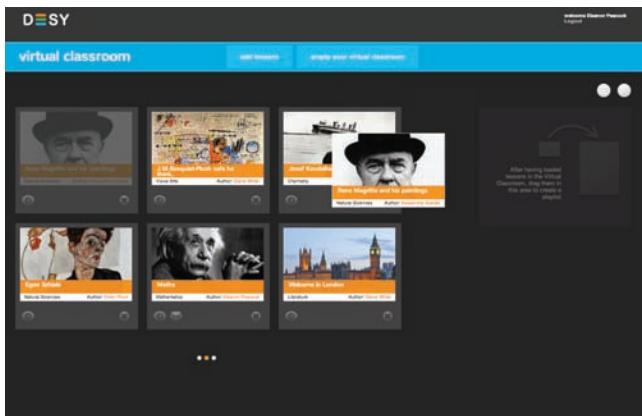


3

## Send the public link of your lesson

To send the public link of your lesson, click on the icon **mail** and fill in the form. Choose among your mailing lists (defined in the section Profile) or add single emails to the list of recipients.

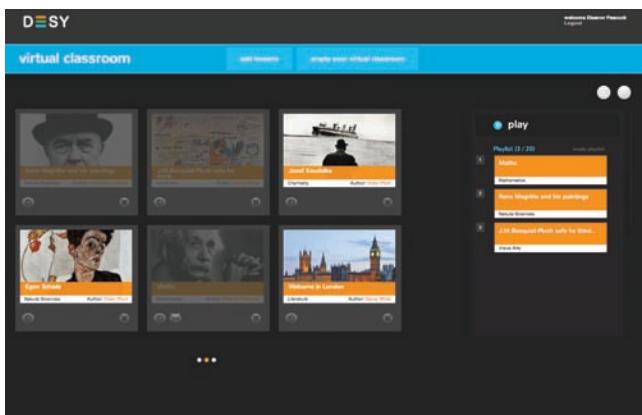
# Your Virtual Classroom



4

## Playlist

To add a lesson to your personal playlist, drag it with your mouse until the playlist area on the right.



5

## Playlist

Sort lessons inside the playlist by dragging them with your mouse.

To remove a lesson from the playlist, click on the small icon **x**.



6

## Lesson viewer

Clicking on the **play** button above the playlist, you start the ordered reproduction of all the lessons. To navigate the slides, use the arrows on both sides of the screen.

# Your Virtual Classroom



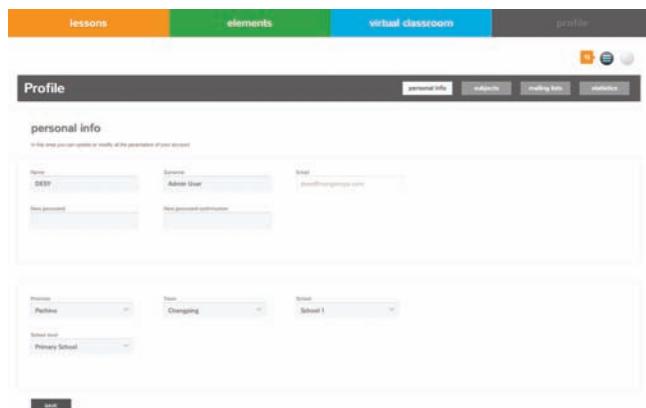
7

## Lesson viewer in playlist

If you want to jump from a lesson to another, click on the button **open playlist bar** below the current slide, and choose the lesson you want to reproduce.

# Your personal profile

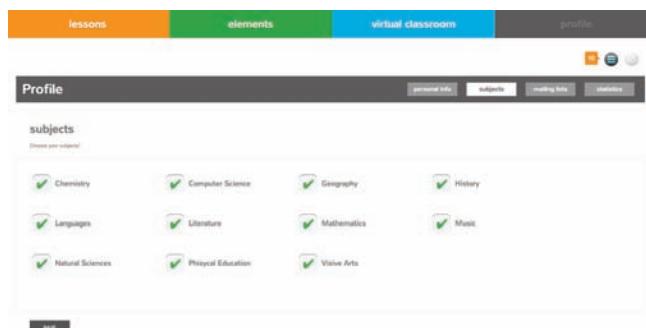
The section ‘profile’ contains your personal data and the information relative to your account in DESY.



This screenshot shows the 'Profile' section of the DESY application. The top navigation bar includes 'lessons', 'elements', 'virtual classroom', and 'profile'. Below the navigation is a 'Profile' tab with sub-links: 'personal info', 'subjects', 'mailing lists', and 'statistics'. The 'personal info' section contains fields for Name (DESY), Surname (Admin User), Email (desyadmin@desy.de), Date of birth, Sex (Female), Name (Changing), School (School 1), and School year (Primary School). A 'Save' button is at the bottom.

1

## Modify your personal data

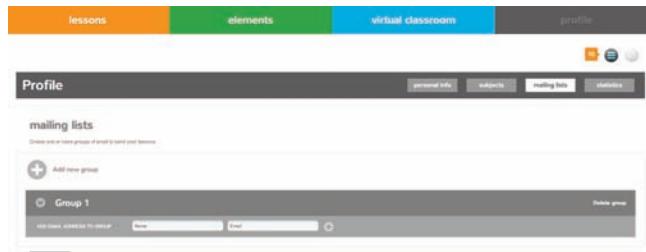


This screenshot shows the 'Profile' section with the 'subjects' tab selected. It displays a grid of subject icons with checkboxes: Chemistry, Computer Science, Geography, History, Languages, Literature, Mathematics, Music, Natural Sciences, Physical Education, and Visual Arts. A 'Save' button is at the bottom.

2

## Subjects

You can add or remove subjects at any time: according on your subjects list, the application chooses which lessons and elements suggest you.



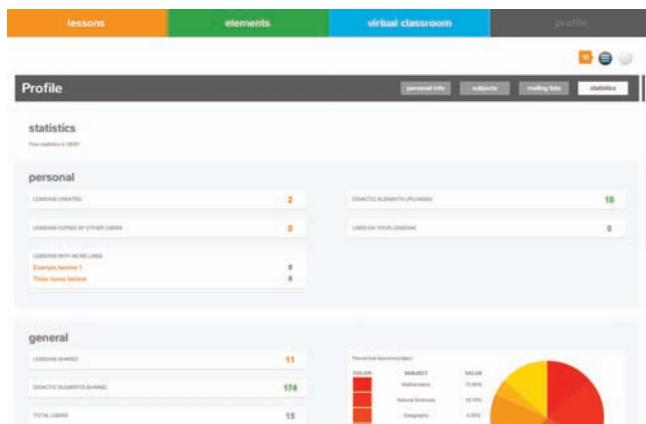
This screenshot shows the 'Profile' section with the 'mailing lists' tab selected. It displays a list of groups: 'Group 1' (with 'Add new group' and 'Delete group' buttons) and other entries like 'Maths', 'Science', and 'History'. A 'Save' button is at the bottom.

3

## Mailing lists

Click on ‘add new group’ to create a new mailing list.

# Your personal profile



4

## Personal and general statistics

This page is divided in two parts:

- your personal statistics  
(statistics about your profile in DESY)
- general statistics (statistics about the whole application)

