

MANUAL

virtual science hub

User manual for
teachers of
e-Infrastructure
integration
in schools

GLOBALexcursion 
Extended Curriculum for Science Infrastructure Online

European Commission Seventh Framework Project
(Research Infrastructures Activity – Grant Agreement No. 283686)

ViSH

ViSH is a social network for teachers and scientist to meet and collaborate in the science teaching.

ViSH includes a variety of functionalities that aim to provide users with the right tools and enough flexibility, allowing them to make use of resources and put together quality excursions that they can use in their classrooms and enhance their teaching. A few of these functionalities that we are going to look into more detail are listed below:

- Social network
- Excursions
- Resources
- Videoconference

The ViSH is available for registered and non-registered users. Non-registered users can view both excursions and resources. Registered user can create excursions, upload resources and access collaborative features such as MashMeTv and the social network.

Advantages

The driving force behind ViSH is the wish to offer teachers a social and collaborative platform allowing them to create, manage and use pedagogical content using current web technologies based primarily on HTML5. The use of this latest technology contributed to the achievement of certain standards and advantages.

The first advantage is the possibility of collaborating among users in several ways. As a social network ViSH offers common features related to them like sending private messages, commenting in other user's timeline or sharing learning objects with the community (e.g. images, videos, presentations, etc.). In addition, ViSH integrates MashMeTV to allow real-time collaboration via videoconference. In this way, ViSH users can collaborate in a synchronous way while they are watching, for example, a virtual excursion.

The second major advantage is the easy accessibility derived from its technological foundation. Bearing in mind that the whole platform is based on web technologies, it is possible to access ViSH through desktop computers and mobile devices (i.e. smartphones and tablets) without the need of any special software installation.

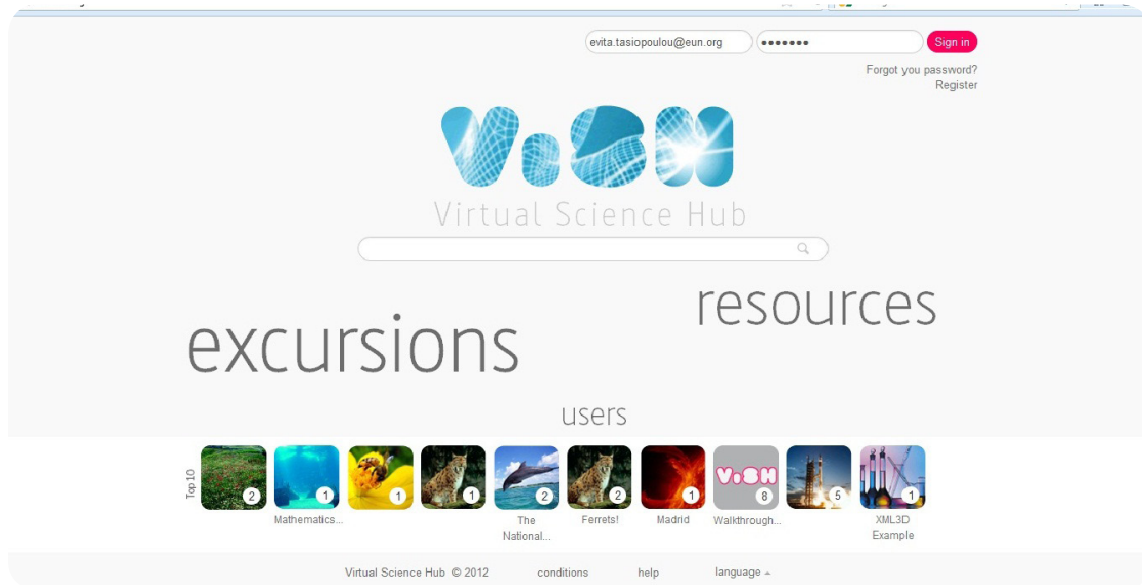
In the third place, ViSH integrates two powerful tools named ViSH Editor (which allows both editing and viewing presentations) and ViSH Viewer (that allows viewing presentations). Having both tools available in ViSH is a clear advantage in terms of user experience. In addition, the resources used to create virtual excursions can be chosen not only from ViSH repositories, but also from third-party web platforms, like YouTube or Flickr.

The next sections of this document will explain the main functionalities of ViSH.

1 User registration/login

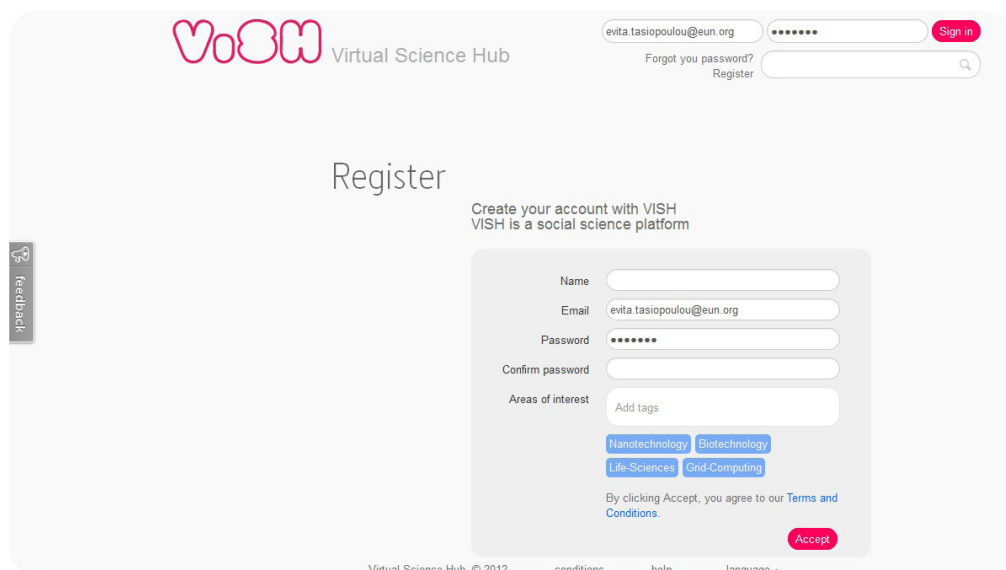
If you are interested in using ViSH not only as a resource repository but also as a tool for creating your own resources and excursions, you first need to register and identify yourself within the system. For this reason and as soon as you reach the appointed URL (<http://vishub.org/home>) you are asked to login using the username and password you have chosen during your registration.

FIGURE 1. ViSH Sign in



New users are invited to register by clicking on the link to be found just under the “Sign in” section of the page.

FIGURE 2. ViSH - User registration



Once you complete your registration you are presented with a confirmation message on the screen while you also receive an email with your details which you can keep for future reference.

You are now ready to explore ViSH!

1.1 Non-registered user

ViSH can be used in two different ways, depending on users' rights and identification within the system. A non-registered user is not excluded from the system but he can still use it while searching, viewing and using the available excursions and resources. Students are generally non-registered users, who can view the specific virtual excursions and even fill in quizzes without being registered.

2 Main landing page

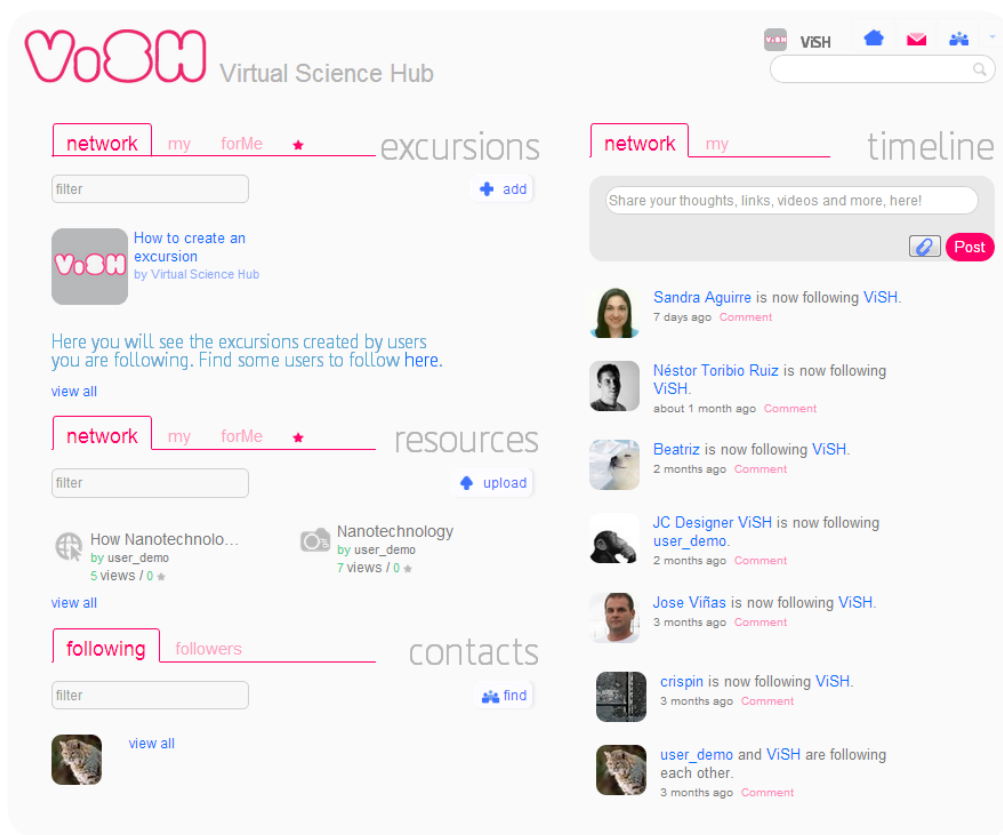


FIGURE 3. ViSH - Main landing page - top part

The main landing page of ViSH represents the heart and centre of all activity. From this page, users can obtain a quick overview on the latest

The main landing page of ViSH represents the heart and centre of all activity. From this page, users can obtain a quick overview of the latest activities of their network, access the latest resources and created excursions, update their timeline, search for resources or excursion and launch their own activities. All parts of the landing page are organised in a similar way, using tabs in order to provide different views and organise information. More specifically we have:

3 Excursions

Four (4) different tabs allow users to access and view the excursions in a variety of ways, depending on their individual needs.

In all the tabs, two options are always available: “Add” and “View all” buttons.

“Add”, launches the creative process of putting a new excursion together. This process will be explained in every detail in Section 3.2.

The “View all” button presents the user with a full list of the excursions related to every tab.

“Network” tab

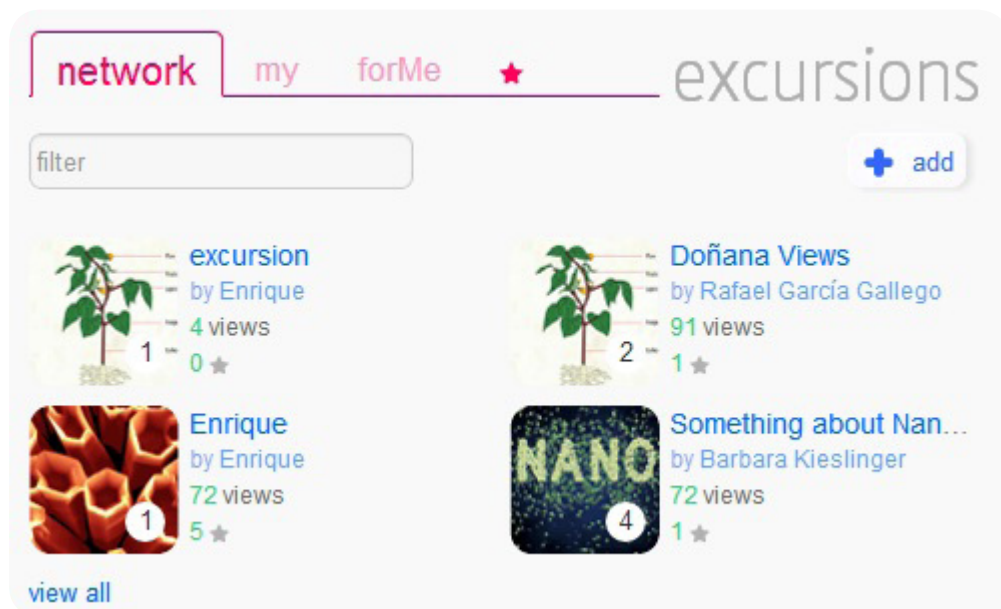
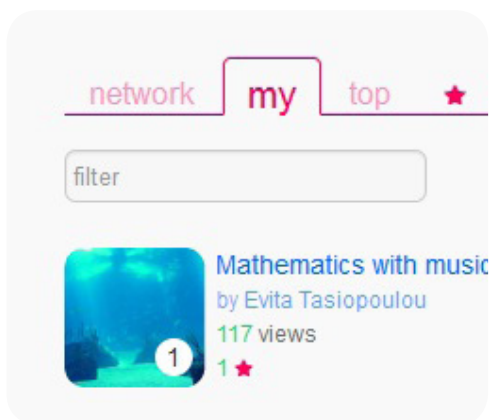


FIGURE 4. Network excursions

“Network” tab presents users with the latest four (4) excursions that have been selected by users within their network. Excursions are presented in the form of thumbnails accompanied by short information on:

- Title of the excursion.
- Name of the composer/user who has created this excursion.
- Number of times this excursion has been viewed by other users.
- Number of times this excursion has been marked by a user as a favourite (star).

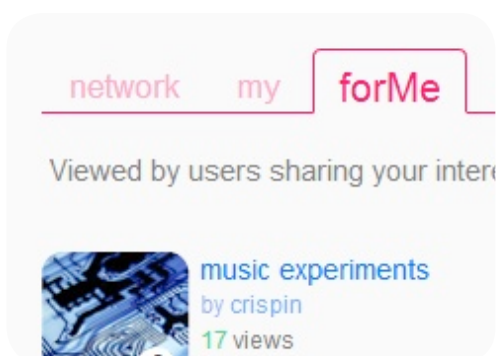
“My” tab



“My” tab, lists the excursions created by a specific user. In this tab, users have a quick overview of the excursions they have put together so far while they can also check very quickly how many time their excursions have been viewed and liked by other ViSH users.

FIGURE 5. My excursions

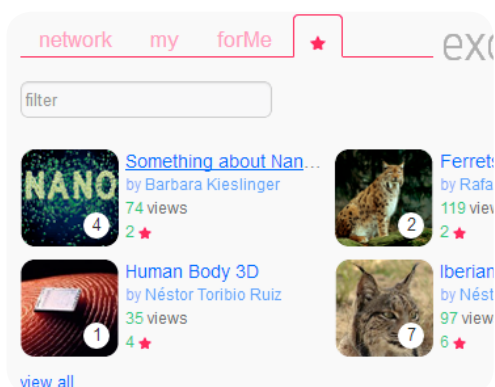
“forMe” tab



The “forMe” tab presents a set of recommended excursions that are selected taking into account the profile, interests and past activity of the user and other ViSH users’ activities with similar interests. By clicking on the title of the excursion, users can launch it directly. Adding a new excursion and viewing more excursions recommended is also possible by clicking on the appropriate buttons.

FIGURE 6. For Me (recommended) excursions

“*” tab



In this tab, users have a quick overview of all the excursions they have identified as interesting and favourite while navigating through ViSH. As one can see at the bottom of their information, all these excursions have been awarded with a star (*).

FIGURE 7. Starred excursions

3.1 Viewing excursions

By clicking on an excursion title or avatar, user can access and navigate through it.

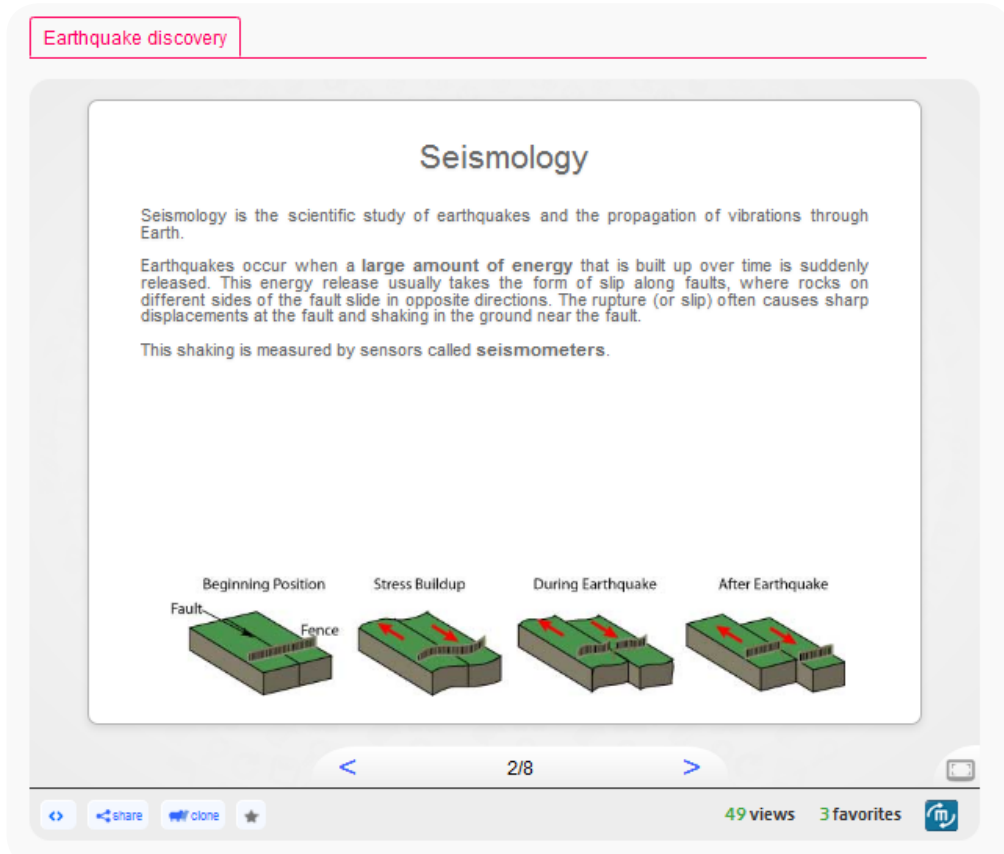


FIGURE 8. Viewing an excursion

The user can use the arrows at the bottom and go back and forth to the different pages. Same result can also be achieved by using the arrow buttons of the keyboard. Below the excursion we can find four (4) buttons.

The first one is for exporting the excursion as an iframe which then allows us to embed it in an external site.

The "share" button is for sharing this excursion in Facebook, Twitter or Google Plus and allowing more people to see it.

The "clone" button allows users to create a copy/clone of an existing excursion. Users can then edit the excursion, improve it and publish it as a new excursion.

The "star" button is for marking this excursion as favourite and having it appear in your homepage. In the right bottom corner we can find information about the number of views and the number of times that this excursion has been made favourite and a button to start a

videoconference via web which allows users to share and talk about the excursion with some of their following contacts.

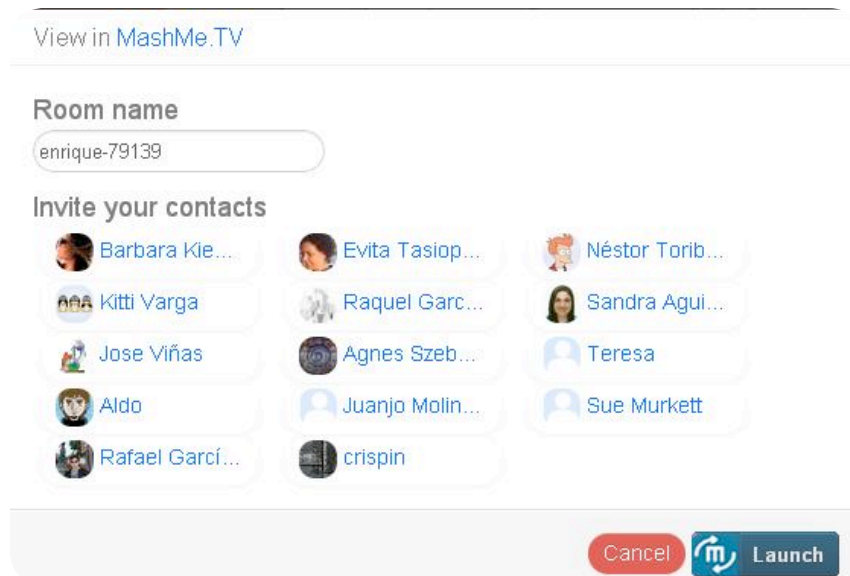


FIGURE 9. Start videoconference

When the user clicks on the videoconference button a light box like the one depicted in Figure 9 will appear where he/she will have to select among his/her contacts the ones to invite to the videoconference. After that, user will have to click on “Launch”, starting the videoconference.

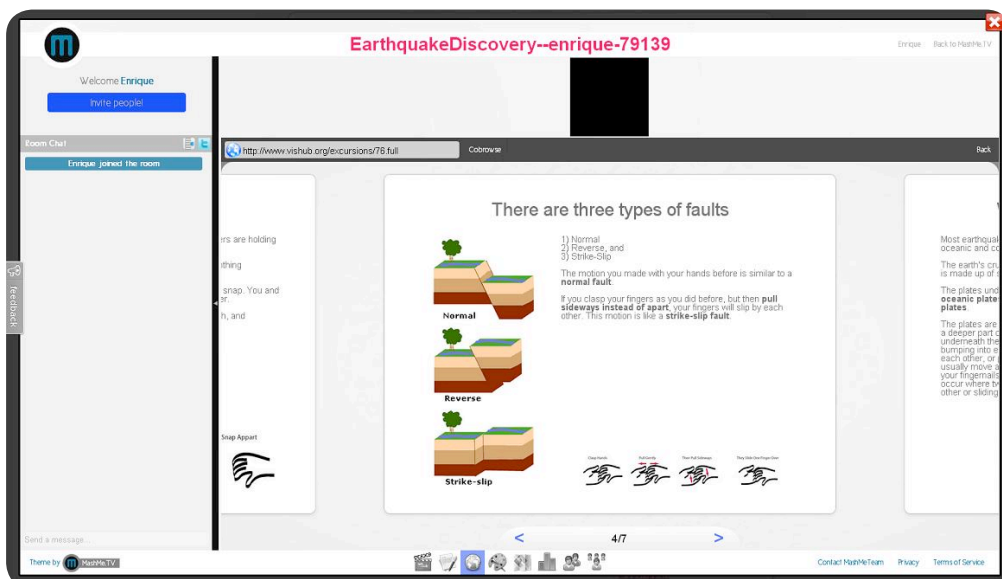


FIGURE 10. Excursion in a videoconference

3.2 Creating excursions

In the excursions section users can find a “+ add” button that allows them to access the ViSH Editor tool so as to create a new excursion.

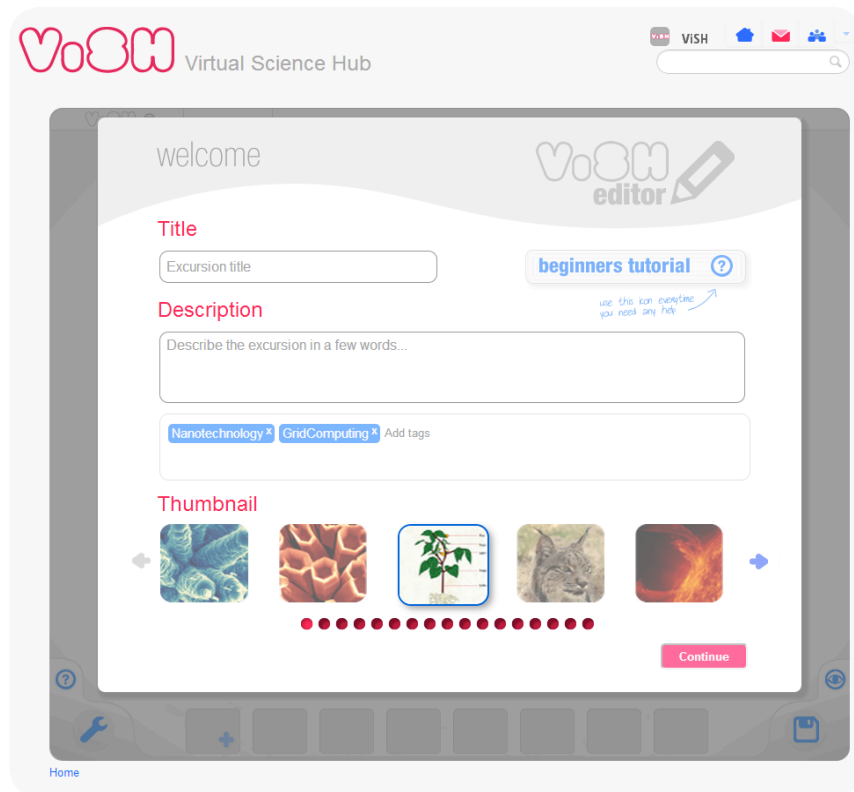



FIGURE 11. Welcome screen to ViSH Editor

The first screen that appears when creating an excursion is the “Welcome screen” where users have to choose a title, description, tags and a thumbnail for their excursion. Apart from the existing thumbnails, users can upload their own avatar by clicking on the dedicated button, .

There is also a beginner’s tutorial button that they can revert to every time they need help. This same button will be available in many places in the excursions’ creator to offer help.

Once users have filled in the “welcome screen” they have to click on “continue”. The “welcome screen” will disappear and the “main screen” will come into view.

In the main screen users can find three zones: a toolbar, a pages area and a thumbnails bar. All sections will be explained in more detail in the following subsections.

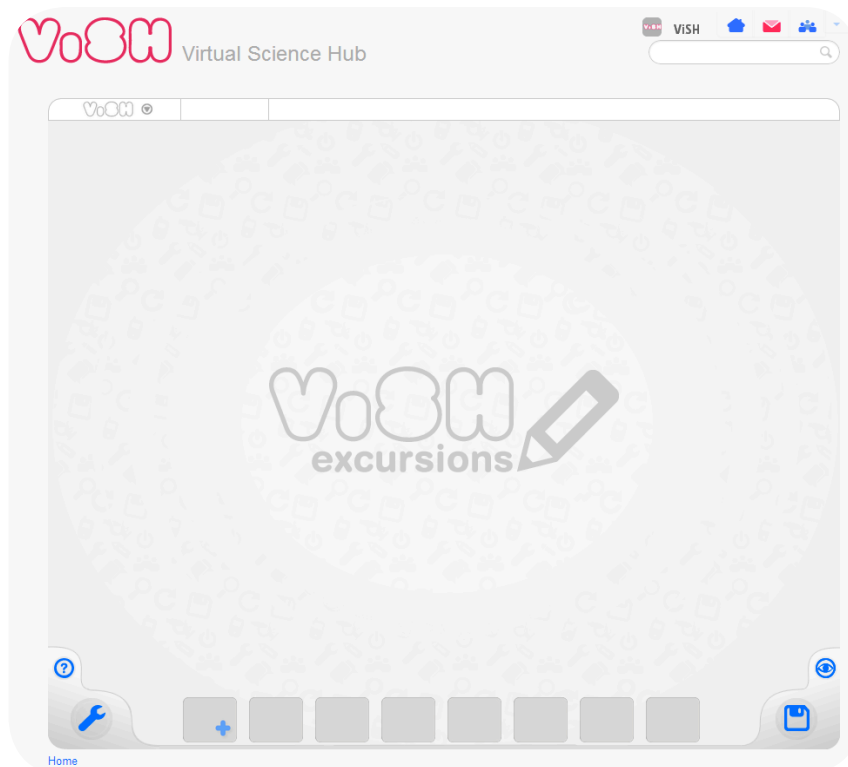


FIGURE 12. ViSH Editor main screen

3.2.1 Toolbar

The toolbar has three zones. The first one includes a drop down menu with options to save the excursion, preview it, convert it to flashcard and get help.




The “templates” icon, , allows users to choose the template they wish to use from a variety of already existing ones. Users just need to click on the template of their choice which is then will be throughout their excursion.



FIGURE 13. Template choice

The second zone has only one button is the main composition area. Users can put together their own slides by clicking on the first slide, , and following the instructions. The last zone offers a number of actions for the selected area. This is a variable zone and it can contain buttons to edit the text, to zoom in/out the image or video or to create a web snapshot, depending on the type of object that the selected zone contains.

One very important feature that users need to keep in mind is the possibility to save a draft copy of their work. As soon as they click on the “Save” button, , users are asked whether they want to Publish, Draft or Cancel their work. By selecting the “Draft” option, users can save their work and come back later in order to complete it.

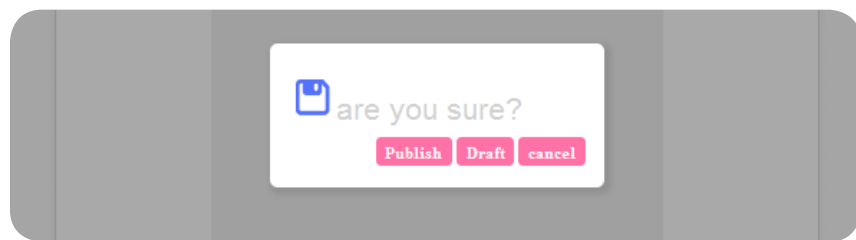


FIGURE14. Saving your excursion

Important note: The “Draft” option is available to Registered users only.

3.2.2 Pages area

The pages area takes up most of the available space. This area will show the excursion pages as the user completes them. The pages are composed of areas that allow them to add different kind of objects or resources, i.e. text, images, flash objects, web pages, HTML5 and flash videos, and live content (such as a microscope or a live webcam).

The user will be the one in charge of choosing the adequate resources to compose the excursion. These resources can be searched in the ViSH repository, in external services such as Flickr or YouTube or directly uploaded to the ViSH when creating an excursion.

At the time-being, nine ready-made templates are available to create excursions. Once an excursion has been created, the user can convert it to a flashcard (information graphic). In this way, an excursion can be converted to a type of picture that blends data with design.

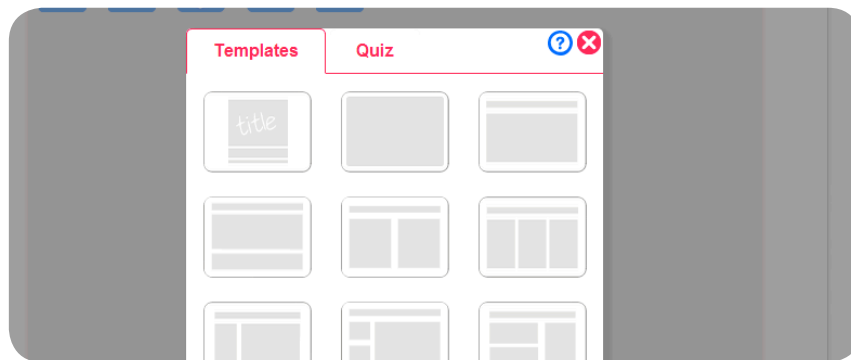


FIGURE 15. ViSH templates

3.2.3 Thumbnails bar

At the bottom of the excursions creator tool we can find a thumbnails bar that will grow as we add new pages with the “+” button. In this bar we can also find a settings button that will display the excursion settings to modify them and a save button to store the excursion in ViSH. Finally we can find an eye button to show a preview of the excursion that the user will be able to see when finished.

3.2.4 Flashcard

Excursions can easily be converted to Flashcards. To do so users first need to open one of their excursions and go to Edit mode by clicking on the appropriate button . Once they are in that mode and at the top of the excursion page, they need to click on the little arrow and from the available options choose “Convert to” and the “Flashcard” as shown in Figure 16.

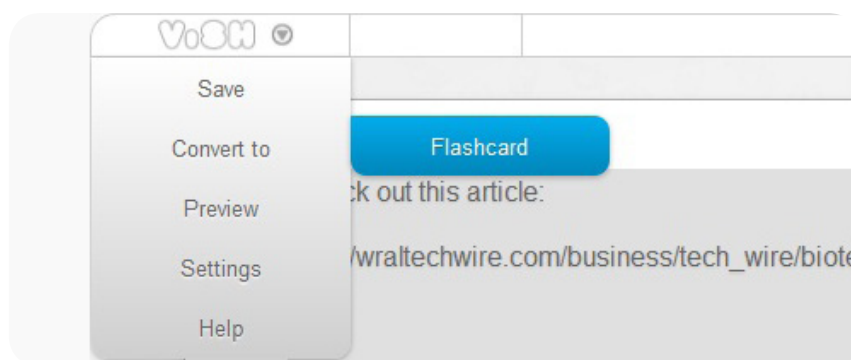


FIGURE 16. Convert to Flashcard

4 Resources

4.1 Type of resources

ViSH supports a set of resources that can be uploaded to the platform and be made available for all the users. More specifically, we have:

- Images.
- Objects (flash objects).
- Videos.
- Live objects: webcams or microscopes provided by the e-Infrastructures.

These resources can be accessed following the same tab approach used for the virtual excursions, but now this zone is called the “Resources” box.

“Network” tab

“Network” tab shows a selection of resources that members of a user’s network have contributed to the ViSH so far. Resources are presented in the form of thumbnails accompanied by short information on:

- Title of the resource.
- Name of the composer/user that has contributed or uploaded this resource.
- Number of times this resource has been used by other users.
- Number of times this resource has been marked by a user as a favourite (star).

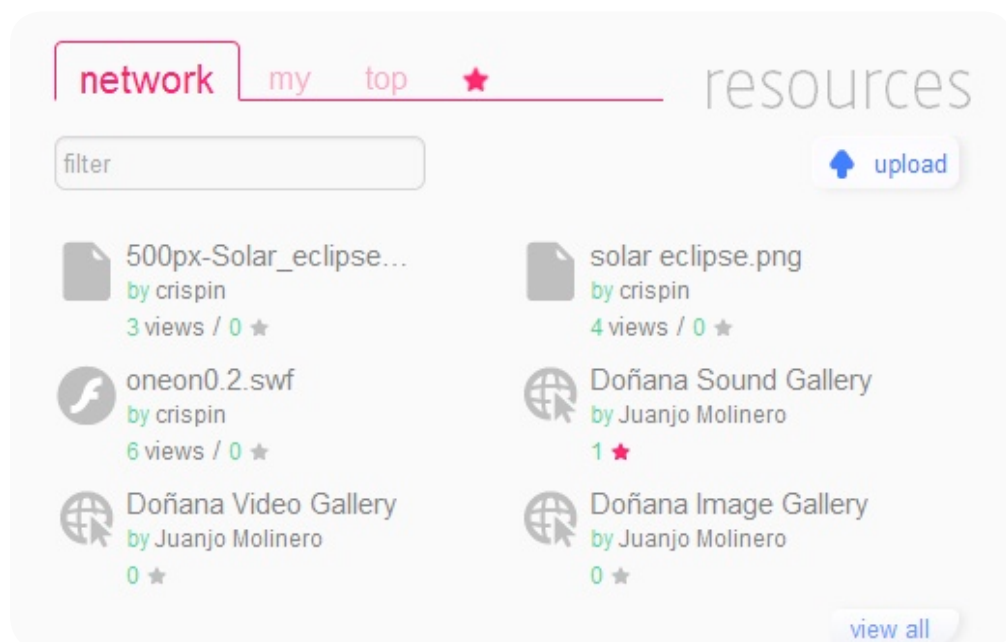


FIGURE 17. Network resources

“My” tab

“My” tab offers a quick entry point to the resources that the user has contributed to the ViSH.



FIGURE 18. My resources

“ForMe” tab

“ForMe” tab takes into account user’s interests, as they have been expressed during registration and throughout the ViSH activity, and recommends a number of resources that might be of interest for the specific user.

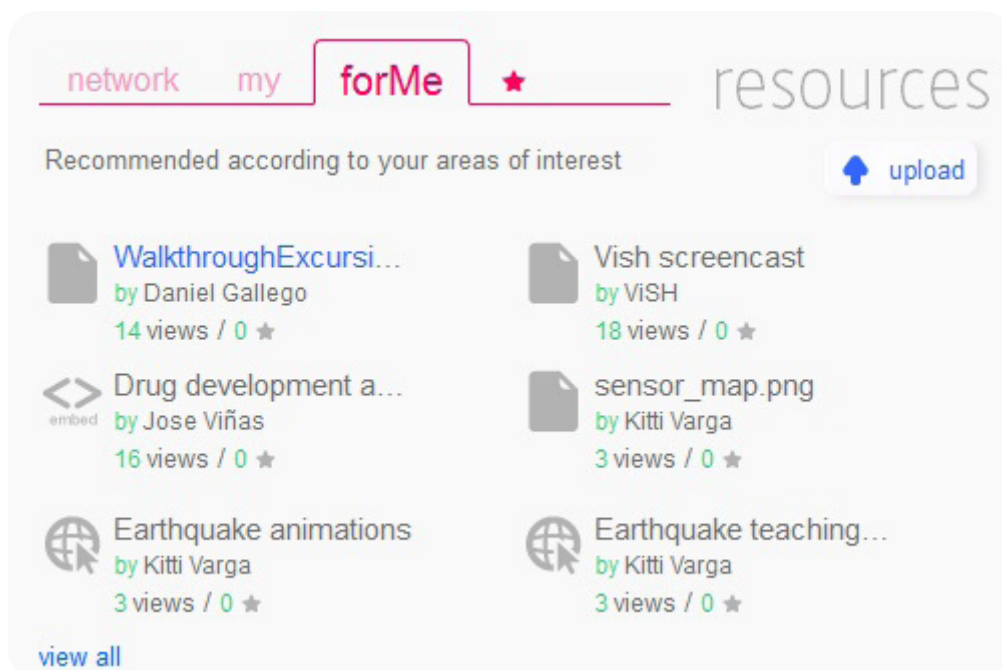


FIGURE 19. ForMe resources

“*” tab

The “*” shows those resources that the user has previously marked as favourites.

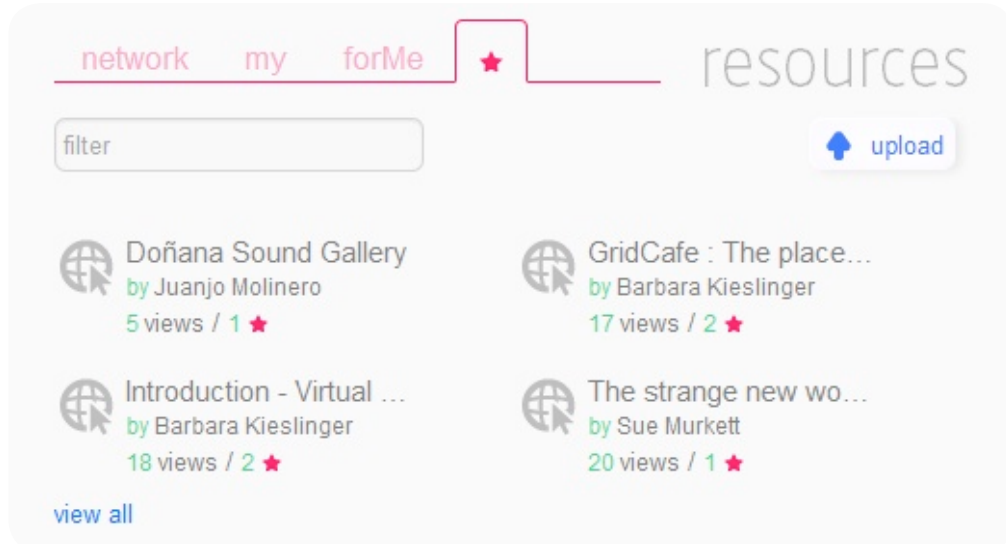


FIGURE 20. Starred resources

4.2 “Upload” function

If a user or e-infrastructure provider wants to add a resource to ViSH, the following steps need to be followed after having pressed the “Upload” button:

1. Click on documents, links or embed tab.
2. If you want to upload a document, click on browse to choose a file from your computer. If your resource is a link or embed code, you can paste it into the text box.
3. Type a title and description.

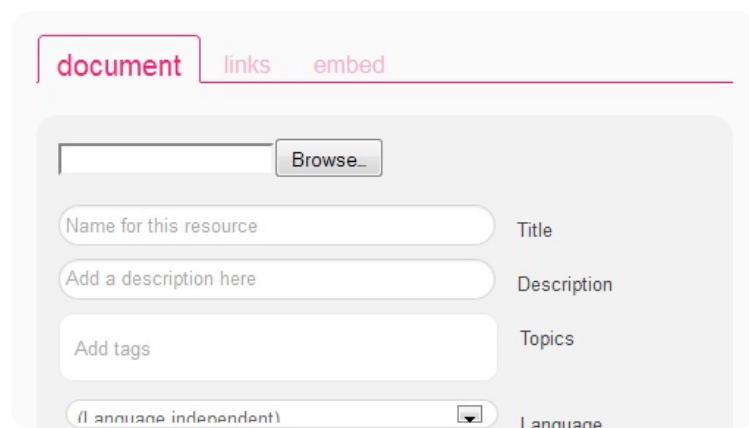


FIGURE 21. Upload resources

4. Add related tags to your resource in order to specify the topics related to it. Your areas of interest have been assigned by default. However, you can delete them or add new topics. This information is crucial for recommendation purposes.
5. Choose a required language, if necessary.
6. Select an age range. This information will be used for recommendation purposes.
7. If you want to embed a live streaming video, click on Live option in the embed tab.
8. Finally, click on save button to upload your resource.

5 Contacts

“Contacts” is mainly related to the people that a user is somehow connected with. There are two (2) different levels of involvement.

5.1 “Following”

“Following” tab lists the ViSH users that you have decided to closely follow their activities and actions within ViSH.

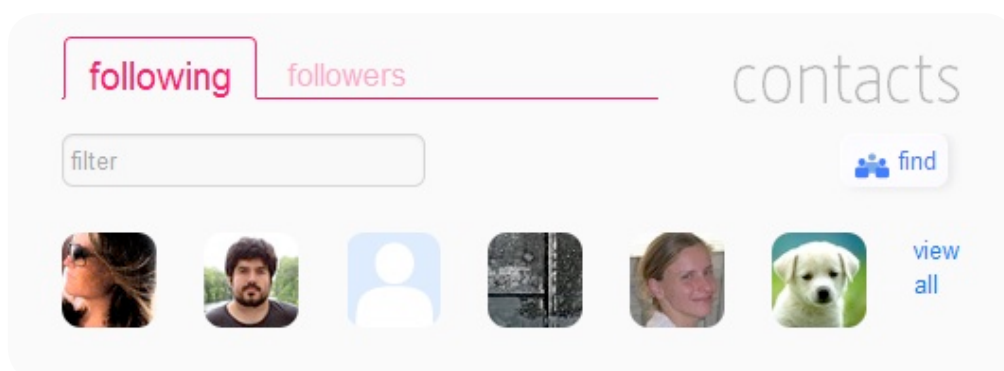


FIGURE 22 . Following contacts

5.2 “Followers”

“Followers” tab, lists the ViSH users that have opted for following your activities and actions within ViSH. These users usually share the same or similar interests with you and are interested in keeping up to date with your activities.

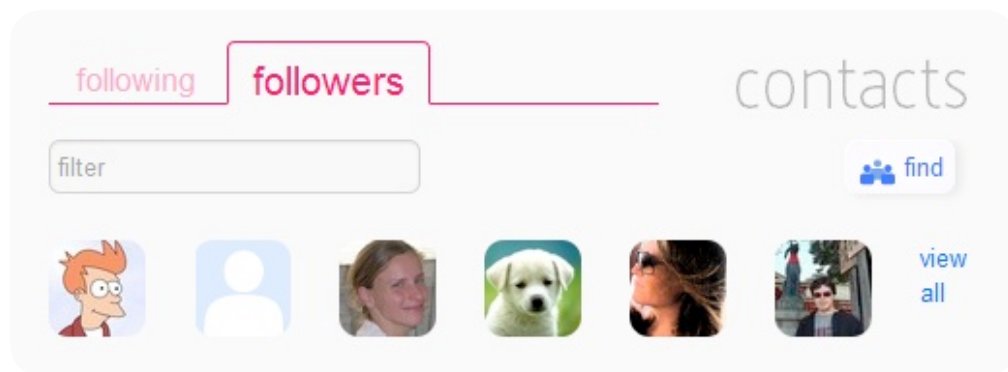


FIGURE 23. Followers

A mouse over people's thumbnail reveals their name. Clicking on it takes the user to a short profile (Figure 24), providing him/her with some basic information on the person in question.

A more detailed profile can be accessed by clicking on the "See details" button which can be found at the bottom right of the same window.

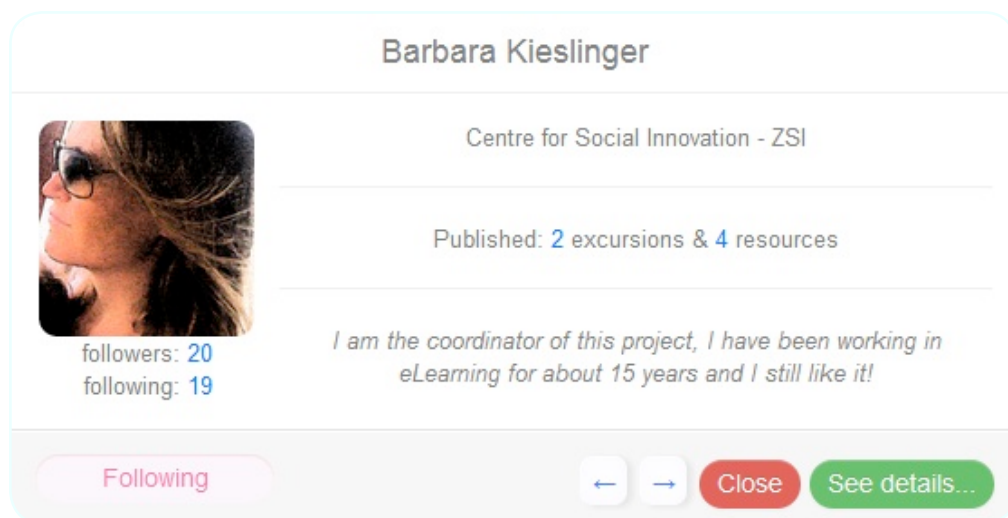


FIGURE 24. User profile

"Find" function

By pressing the "Find" button, users in the platform can be searched by name. The "Find" tool will be explained in section 2.3.8 Search functionality in more details.

6 Timeline

“Network”

In this tab, you can obtain an overview of the latest activities that yourself and the people you are following, have recently performed within ViSH. All users' names are clickable which allows you to easily navigate through other users' profiles and discover other interesting people, excursions and resources.

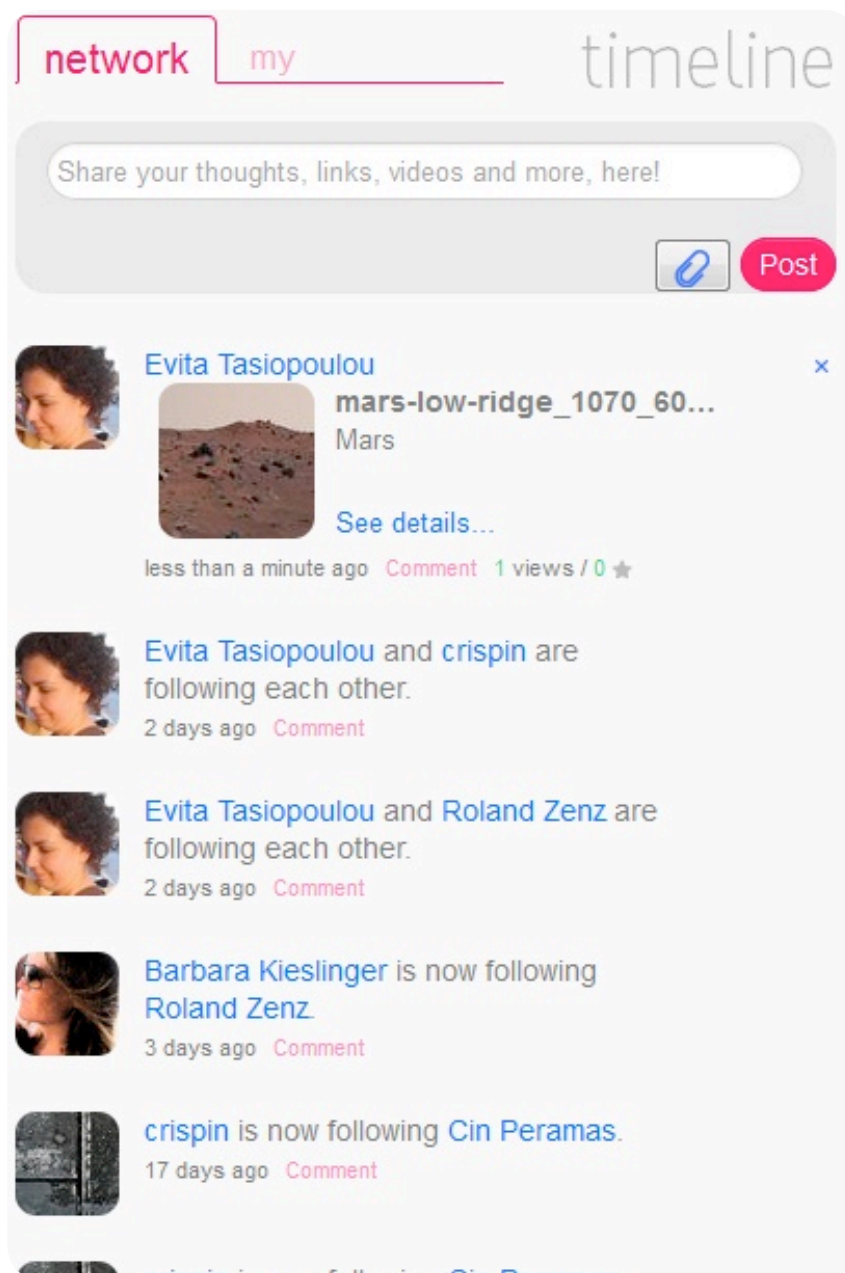


FIGURE 25. Network timeline

“My” timeline

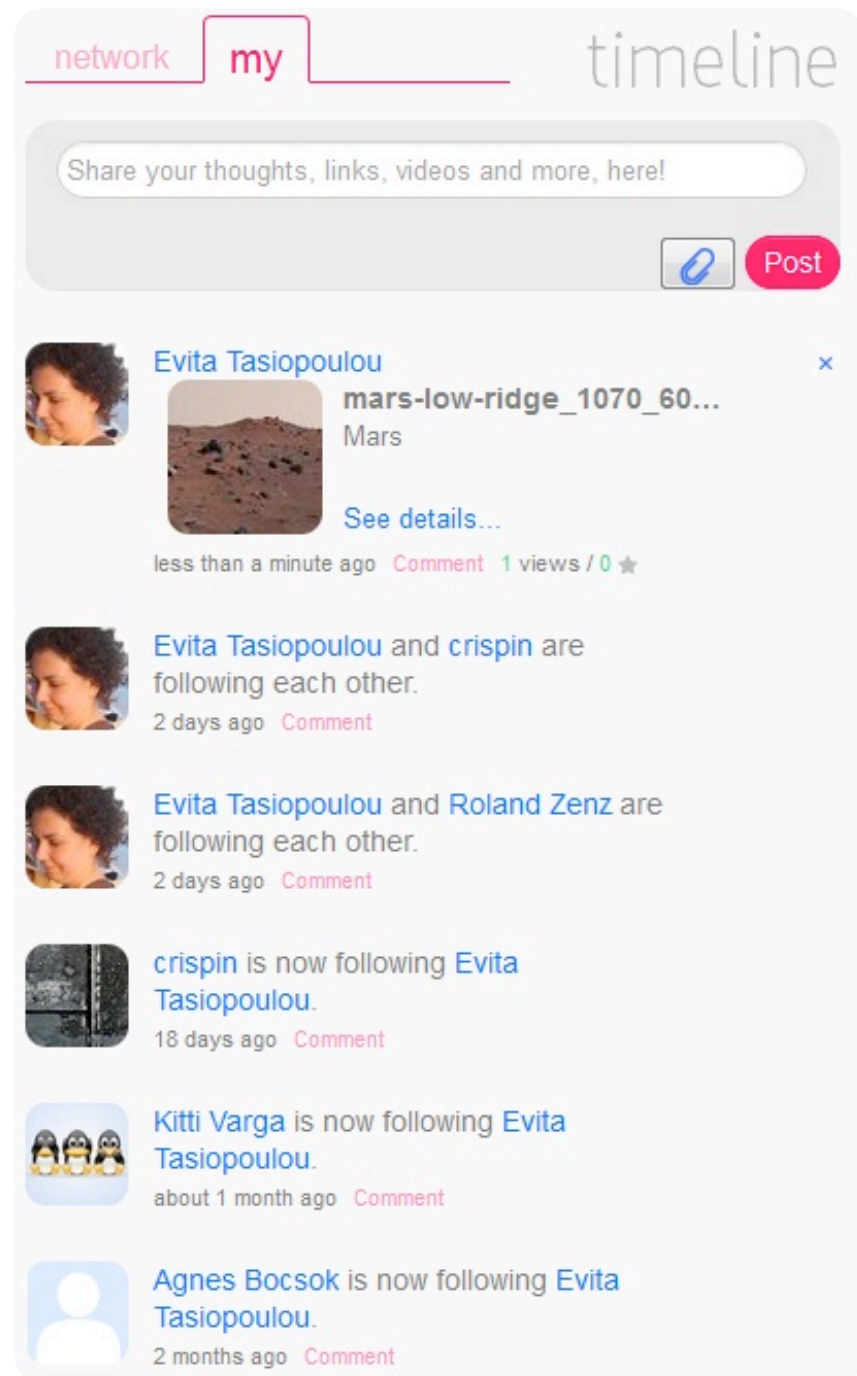

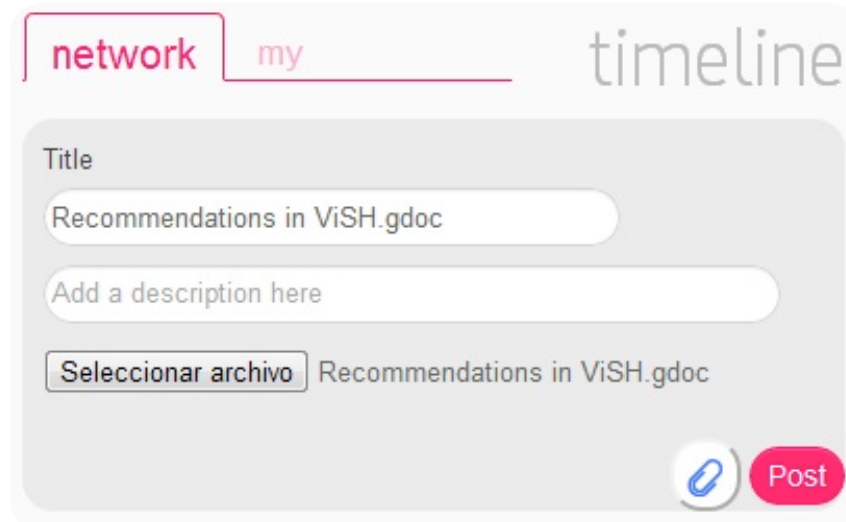


FIGURE26. My timeline

“My” tab collects and displays all the activities and actions that users have performed since they started working on ViSH. In this way, users are provided with a summary of their activities to which they can easily revert to and use as a reference.

Attach


Like all social networks, ViSH also provides users with the possibility to post some text/status on their timeline. On top of this, users are also able to attach a file, picture or document to go with their status update. To do so, users need to click on the appropriate icon , browse and find the file they wish to attach to their network and finally fill in the description field.






The screenshot shows a user interface for creating a post on a network. At the top, there are three tabs: 'network' (highlighted in red), 'my', and 'timeline'. Below the tabs is a form area with a 'Title' field containing 'Recommendations in ViSH.gdoc', a description field with the placeholder 'Add a description here', and a file selection area. The file selection area includes a button labeled 'Seleccionar archivo' and the text 'Recommendations in ViSH.gdoc'. At the bottom right of the form, there is a blue circular icon with a white paperclip and a red 'Post' button.

FIGURE 27. Attachment

Post

As soon as the user has completed the composition of his status and attaching the file of his choice (if needed), he is then ready to post his activity on his network. To do so, users just need to click on the Post button .

7 Private messages

As in many social networks, ViSH allow private communication among users by sending private messages. To do so, the user has to press the envelope icon  in the upper right corner that is placed between the home  and the network icon .

Following a common interface for this kind of tools, four (4) options are available:

- New message: to create and send new private messages.
- Inbox: to manage the new messages received. A number between brackets indicates the number of unread messages.
- Sent box: shows the private messages previously sent.
- Trash: shows the erased messages.

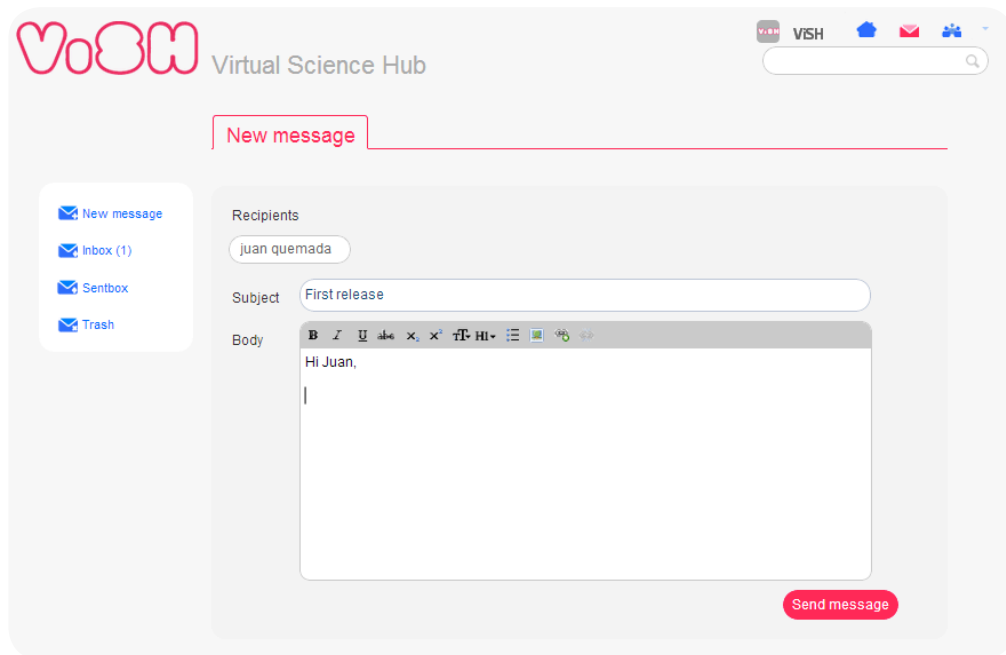


FIGURE 28. Private messages creation

8 User Profile

By pressing in a user's avatar and clicking the "see details" button, the user profile screen is shown. This screen provides information about the activity of the user, like the excursions and resources he/she has created; his/her timeline, the followers/following contacts and the possibility of viewing his/her detailed profile.

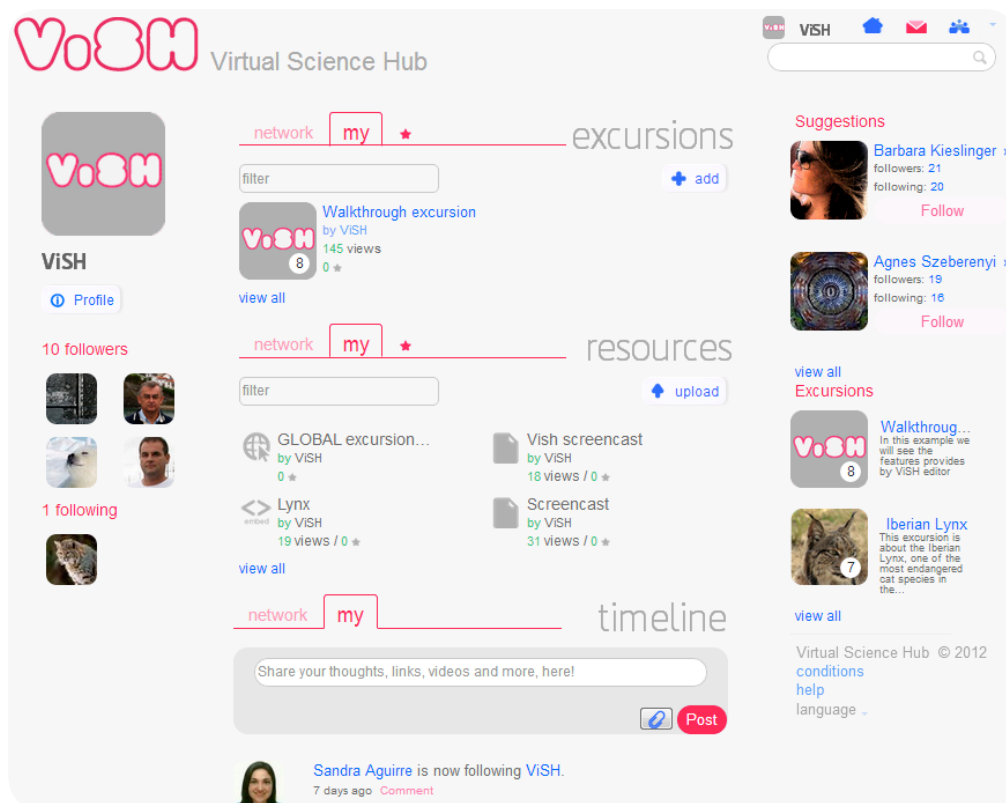


FIGURE 29. User profile

It is important to stress though that there are some differences between viewing your own profile and viewing other users' profile. Figure 25 illustrates a user's profile; while Figure 26 depicts the screen a user sees when he/she is viewing another user's profile. As we can see, options to send a message to that user and to start/stop following him/her appear.

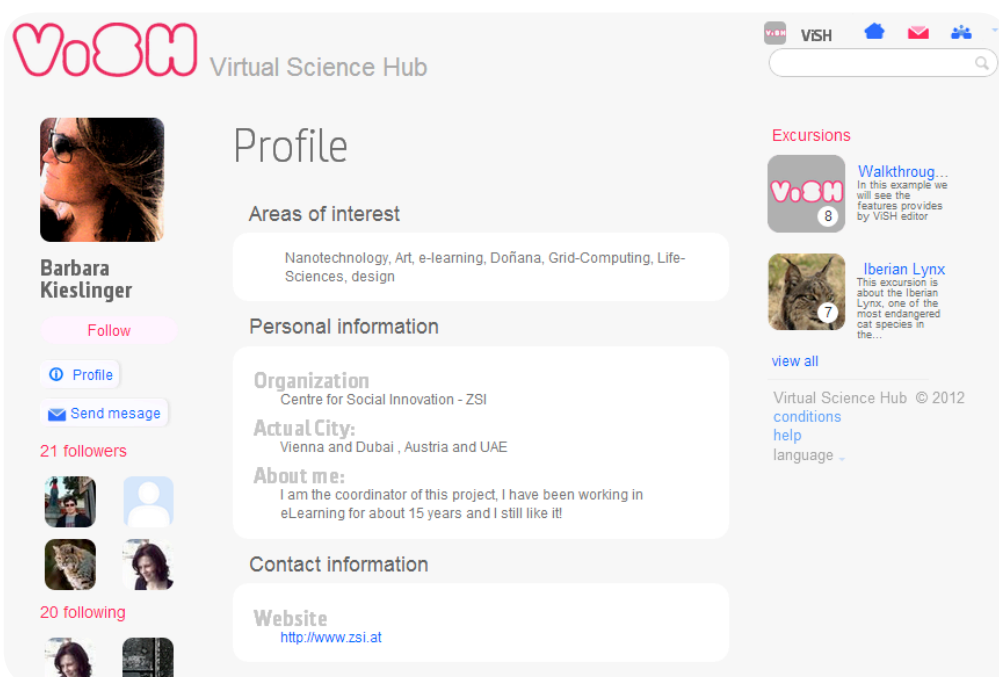


FIGURE 30. Viewing other user's profile

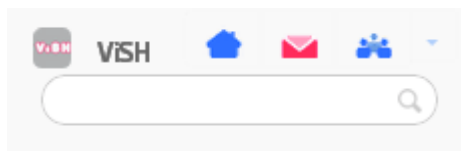
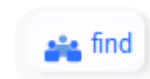
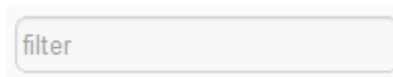
With regard to the detailed personal information, it is also important to say that trying to fill in the areas of interest will be very important to help the recommender engine working correctly, as the more ViSH knows about you, the more personalized will be the recommendations provided.

9 Search functionality

Bearing in mind the great variety of educational content (i.e. virtual excursions and resources) and users existing in ViSH, a search tool is needed to help users find easily whatever/whoever they are looking for.

Search function can be reached from various places and in various ways:

- Using the “filter” inputs related to the excursions, resources and contacts boxes
- Using the “find” button in the contacts box
- Using the generic “search bar” that is in the upper right corner of ViSH, below the user name and home/messages/network buttons



Therefore, a user can search a specific item/user in the methods described above, or he/she just have to press enter while he/she is in the input bars in order to go to the general search tool illustrated by Figure 27.

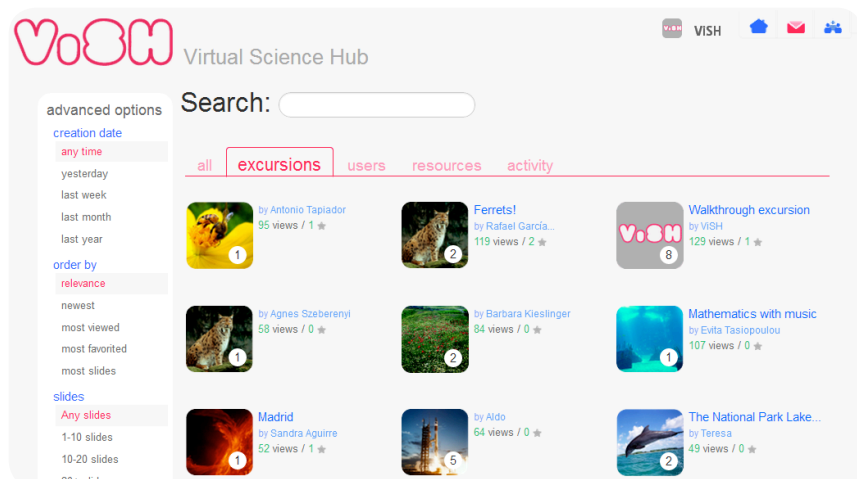


FIGURE 31. Search content and people

The search engine is really powerful. It can either look through all types of items or just search into a specific type (i.e. excursions, users, resources and activities).

In addition, there is a panel called “advanced options” to allow users filter all the results by creation date, and the results related to excursion, resources and activities also by their relevance or novelty and by their type.

10 Technical requirements

Since ViSH has been developed according to the latest web standards, it is compatible and supported by any modern browser. The currently supported browsers are:

- [Mozilla Firefox](#)
- [Google Chrome](#)
- [Internet Explorer \(version 9 or later\)](#)
- [Safari](#)

ViSH supports a huge variety of devices. In addition, a specific interface for mobile users is available. This interface provides a better user experience for mobile users, including not only a set of views optimized for the device, but also content (e.g. recommendations) which can specifically be consumed on mobile devices. As a result, ViSH supports mobile phones (i.e. Android and iPhone), tablets (i.e. Android and iPad) and desktop computers.

On the other hand, the ViSH Editor and the Viewer have been developed according to the HTML5 standard, and for that reason they will be supported by any browser that fully supports HTML5. The creation of excursions (ViSH Editor) is only available through desktop computers and tablets because of the limited screen size of mobile devices.

ViSH Viewer is also responsive, so, it supports a huge variety of devices. It is currently supported on iPhone and Android mobile phones, Android tablets and iPad.

Last but not least, it is important to mention that the ViSH Editor allows the integration of third-party learning objects that are not based on HTML5 standards (e.g. flash objects, java applets, etc.). Therefore, some additional software might be needed in the cases where these non-HTML5 based objects are used to create virtual excursions. However, the flash plugin or the java runtime environment is usually installed in every desktop computer.

