



next lab

21st CENTURY SKILLS II

Teacher Event



PART A

- Awareness, Assessment and Reflection
 - Why?
 - For whom?
 - How?
- Next-Lab features to support Awareness, Assessment and Reflection
- Hands-on activity



Awareness, Assessment and Reflection

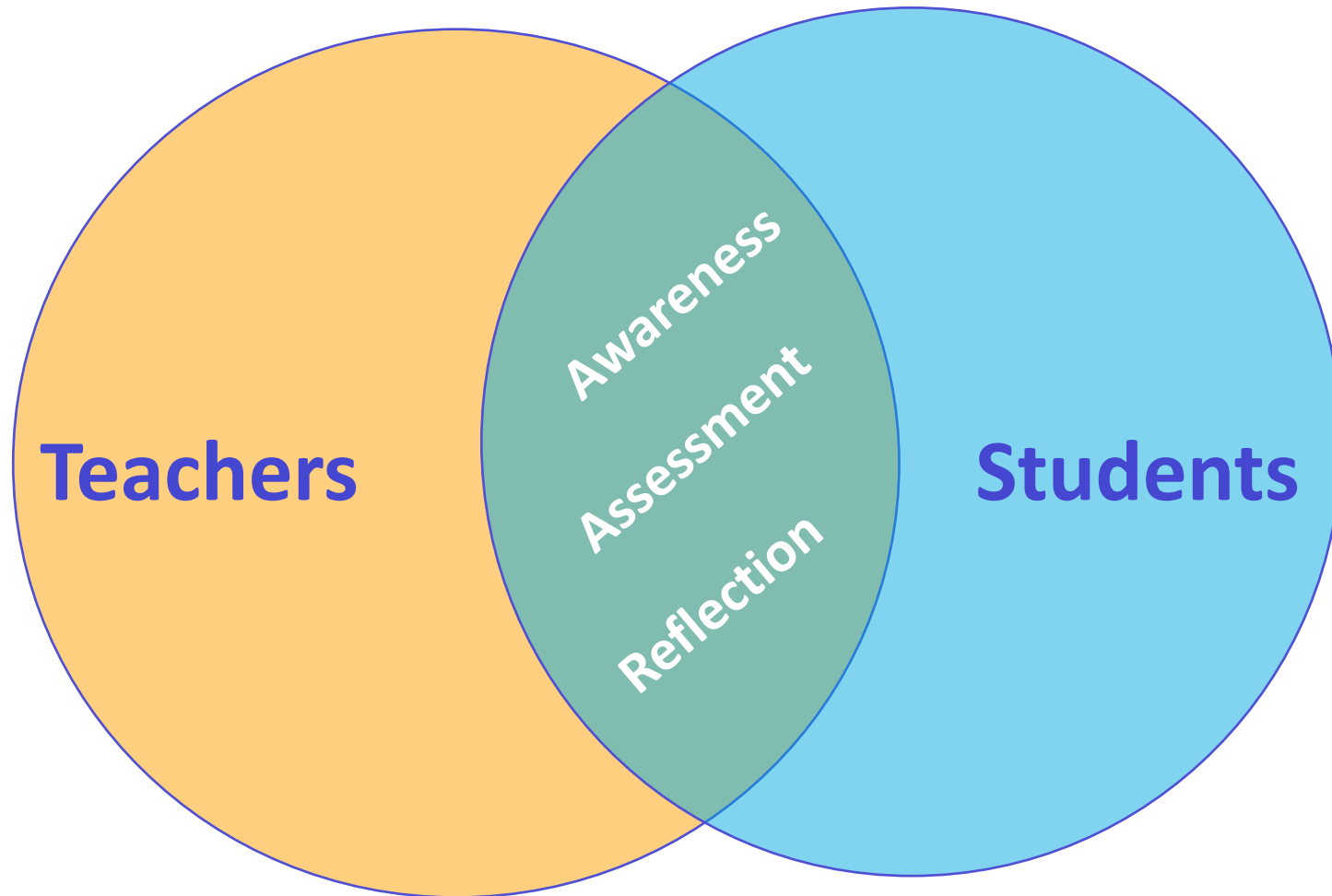


Why?

- Awareness promoting collaboration among **students**
 - allow **teachers** to overview students progress
- Assessment promoting collaboration among **students**
 - allow **teachers** to provide face-to-face feedback to individual or groups of students
- Reflection allow **students** to think critically of their own learning process
 - allow **teachers** to monitor students' work



For whom?



How?

- Privacy and ethics policy for teachers and students
 - User traces and created content will be stored to support awareness, assessment and reflection

Set of learning analytics apps

- e.g., showing on-line users, measuring the time spent in the different learning phases, the transitions or the used apps

Learning outcome

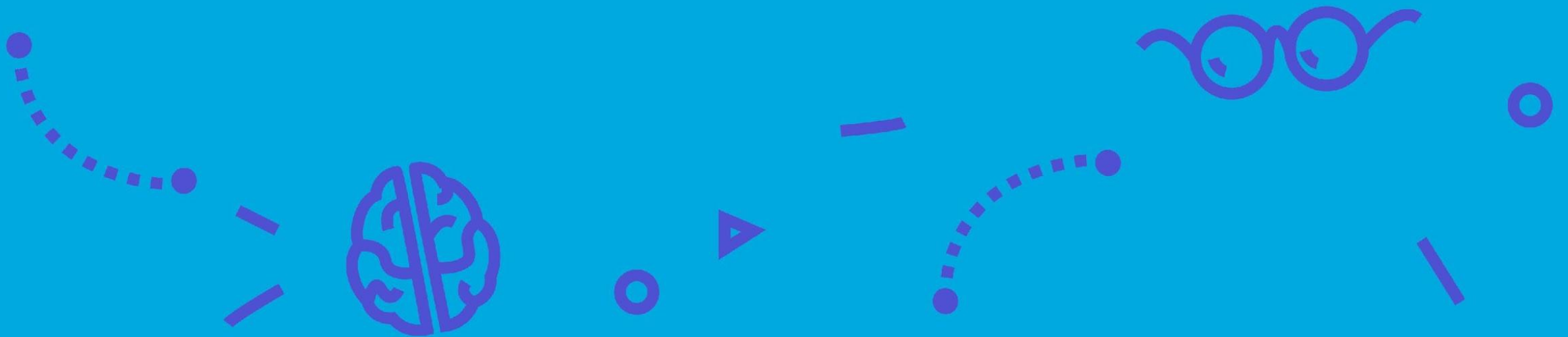
- Teachers will have access to the production of their students during and after the session

Formative assessment

- e.g., collaboration channels and dedicated apps enabling teachers to give feedback



Next-Lab features to support awareness, assessment and reflection



www.golabz.eu/apps

GO-LAB Search Online Labs **Apps** Inquiry Spaces Big Ideas Support About Forum

Apps

Apps, also known as tools or widgets, are small web based software applications supporting specific learning or teaching goals and tasks in online labs. Apps can be added to a Inquiry Learning Space together with online labs. Apps are grouped within inquiry learning spaces according to their functionalities and purposes, and used to support particular experimenting and learning activities in online labs.

Hypothesis Scratchpad

The Hypothesis Tool helps learners formulate hypotheses. Predefined domain terms can be combined to form a hypothesis, using drag and drop. Learners can also add their own terms using the Type your own box. As a teacher you can change the... [Read more](#)

Category: Go-Lab inquiry apps
App type: OpenSocial gadget

Experimental Error Calculator

This tool allows students to calculate experimental errors that stem from real experimental setups. Using this tool, students may learn about the different sources of error that occur when performing experiments and about the different types of... [Read more](#)

Sort and filter by:

Sort by: Most popular

Categories

- Go-Lab inquiry apps (18)
- Learning analytics apps (12)**
- Collaboration apps (8)
- General apps (8)
- Math related support apps (5)
- Domain specific apps (2)

Statistics

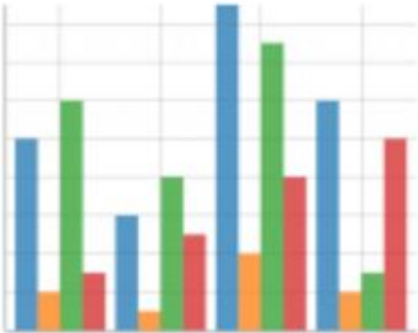
The repository contains:

- 471 Labs.
- 582 Inquiry Spaces.
- 42 Apps.



- How can teachers be aware on how have students used the ILS?

Action Statistics



Online users visualization



Student time spent

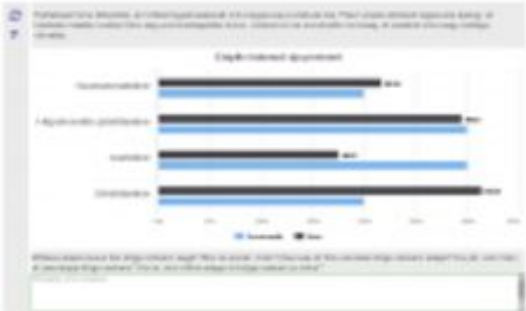


Timeline



- How can students be aware and reflect on their process?

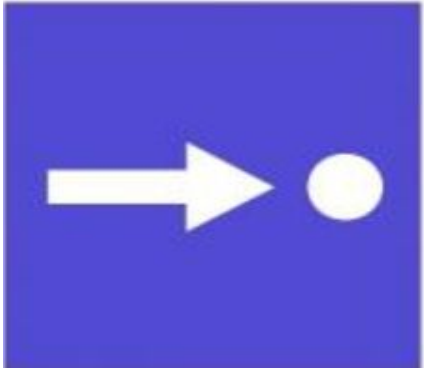
Reflection Tool



Reflection Tool (transitions)



Progress Bar

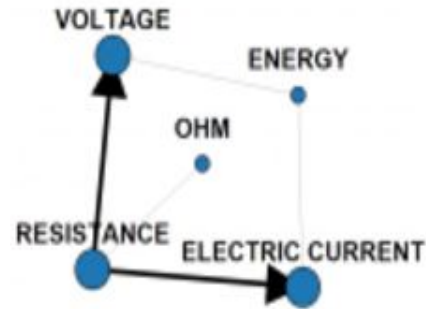


- Learning analytics related to the concept map activity

Concept Cloud



Concept Map Aggregation



Concept Map Dashboard



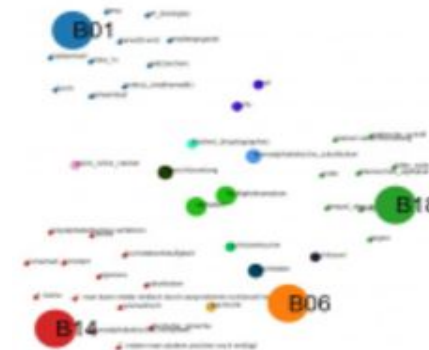
- Other Learning analytics

Submitted files in ILS

Please, place this app in an inquiry space to visualise the resources submitted by users in inquiry phases.

4 students submitted files	
Alice (1 file)	- Report_Alice.pdf in Investigation 19 minutes ago
Bob (1 file)	- Report_Bob.pdf in Conclusion 11 minutes ago
Charlie (1 file)	- Report_Charlie.pdf in Conclusion 4 minutes ago
David (2 files)	- Report_David.pdf in Conclusion 1 minutes ago - AppendixA_David.md in Discussion a few seconds ago

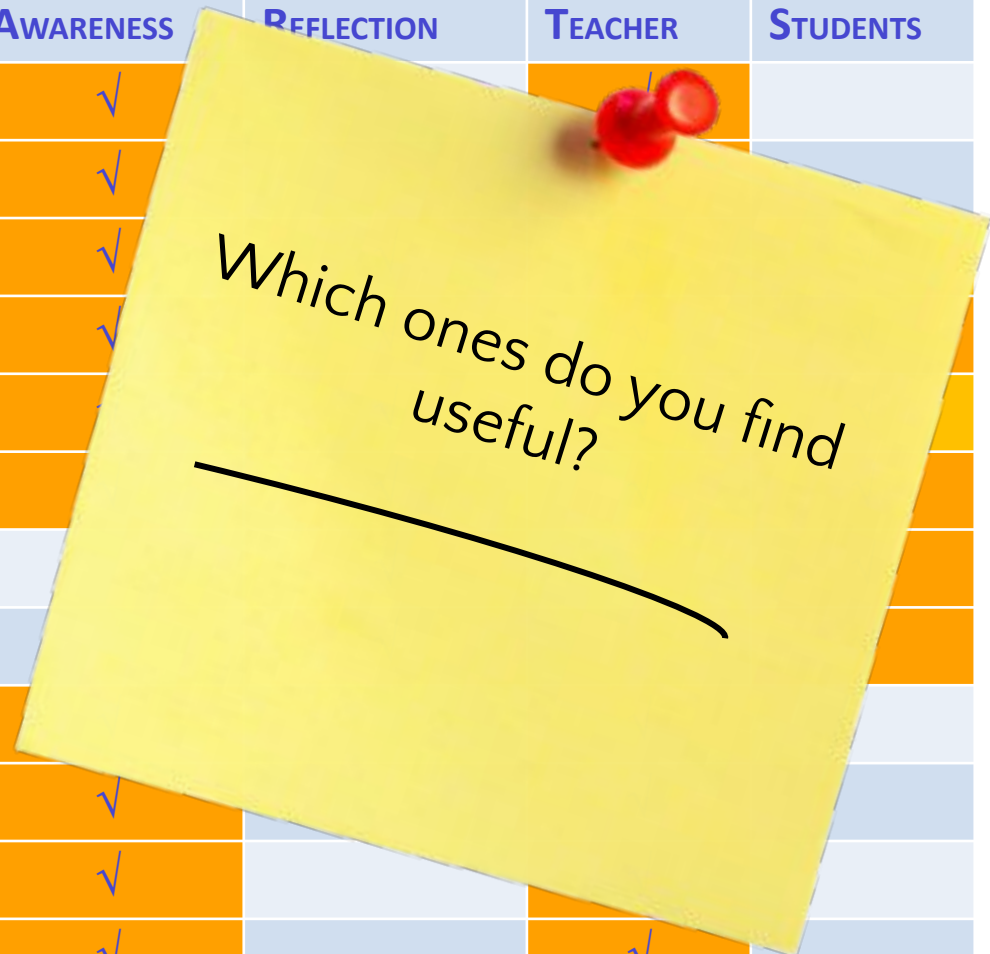
Semantic group formation



Learning Analytics Apps



NAME	FOR WHAT PURPOSE?		FOR WHO?	
	AWARENESS	REFLECTION	TEACHER	STUDENTS
Action Statistics	✓			
Concept Map Aggregation	✓			
Concept Map Dashboard	✓			
Concept Cloud	✓			
Online users visualization				
Progress Bar				
Reflection Tool				
Reflection Tool (transitions)				
Semantic Group Formation App				
Student time spent	✓			
Submitted files in ILS	✓			
Timeline	✓		✓	



Teacher's online feedback

Members
Private: Only members can view this space

Add member using name or email

Owners

- Nikoletta Xenofontos (owner)

Editors

- AngeLA - Go-Lab Analytics Services (editor)

Standalone Users

- Nikoletta (standalone user)
- Student 1 (standalone user)**

REVIEW MODE. Warning: Changes to the content will be saved.

Learning Analytics Apps Student 1

Orientation Conceptualisation Investigation Conclusion Discussion

Terms

IF THEN increases decreases is larger than is smaller than is equal to remains

Type your own! length mass time electric current thermodynamic temperature amount of substance luminous intensity

Hypotheses

Drop and arrange your items here.

Dear student 1, you haven't

Learning Analytics Apps Student 1

Orientation Conceptualisation Investigation Conclusion Discussion

Terms

IF THEN increases decreases is larger than is smaller than is equal to remains

Type your own! length mass time electric current thermodynamic temperature amount of substance luminous intensity

Hypotheses

Drop and arrange your items here.

Dear student 1, you haven't formulated a hypothesis yet. Before proceeding to the Investigation phase, you will need to state your ideas about the potential relation between the variables you are about to investigate.

Ensure that AngeLA is in your ILS



A screenshot of the NextLab Learning Analytics Apps interface. The main area displays a grid of application tiles: Orientation, Conceptualisation, Investigation, Conclusion, Discussion, About, Vault, Action Statistics, Progress Bar, and Online users visualisation. On the right side, there is a 'Members' panel. The 'Members' panel shows a search bar, a dropdown menu set to 'Private: Only members can view this space', and a list of members. The 'Editors' section is highlighted with a red box, and a red arrow points from the main title to the 'AngeLA - Go-Lab Analytics Services' entry in this list. The entry shows a profile picture of a cartoon character, the name 'AngeLA - Go-Lab Analytics Services', and the role 'editor'. Below the 'Editors' section, the 'Standalone Users' section lists 'Nikoletta' as a 'standalone user'.

Hands on activity!



Hands on activity!!

- Visit www.golabz.eu and search for the learning analytics apps
- Read the description and explore the preview of each app.
- Search for ILs which include some Learning Analytics App.
- Add learning analytics apps in one of your ILs.

Share your thoughts!





PART B

- About peer assessment
- Hands-on activity
- Teachers' role
- Share your thoughts

About peer assessment



Why is peer assessment important?

- Peer assessment has been for decades an indispensable practice for evaluating scientific work!

A word cloud illustrating key concepts related to peer assessment. The words are:

 Review, Scientific, Feedback, Communication, Validity, Improvement, Research, Share, Quality, and Work.



Why should peer assessment be implemented in the classroom?



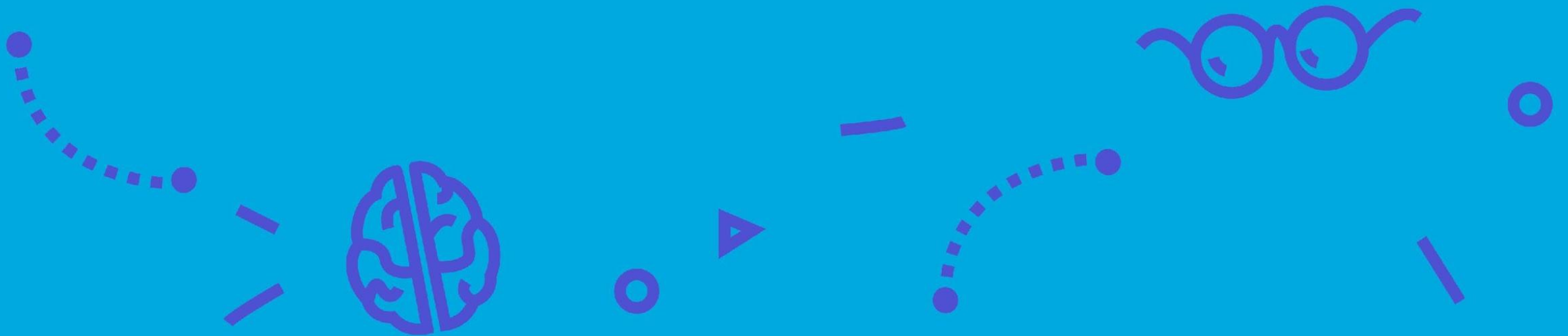
- It offers a valuable complement to teacher assessment
- It is a type of collaborative learning and it promotes fruitful interaction among peers
- It promotes reflection and metacognitive skills
- It fosters the active involvement of students in the learning process
- It improves the quality of learning, overall.

Long-term benefits of peer assessment

- Enhancing responsibility during inquiry-based learning
- Developing trust among peers
- Facilitating collaboration and constructive support among students
- Fostering self-confidence and motivation for learning



Students as peer assessors and assesseees

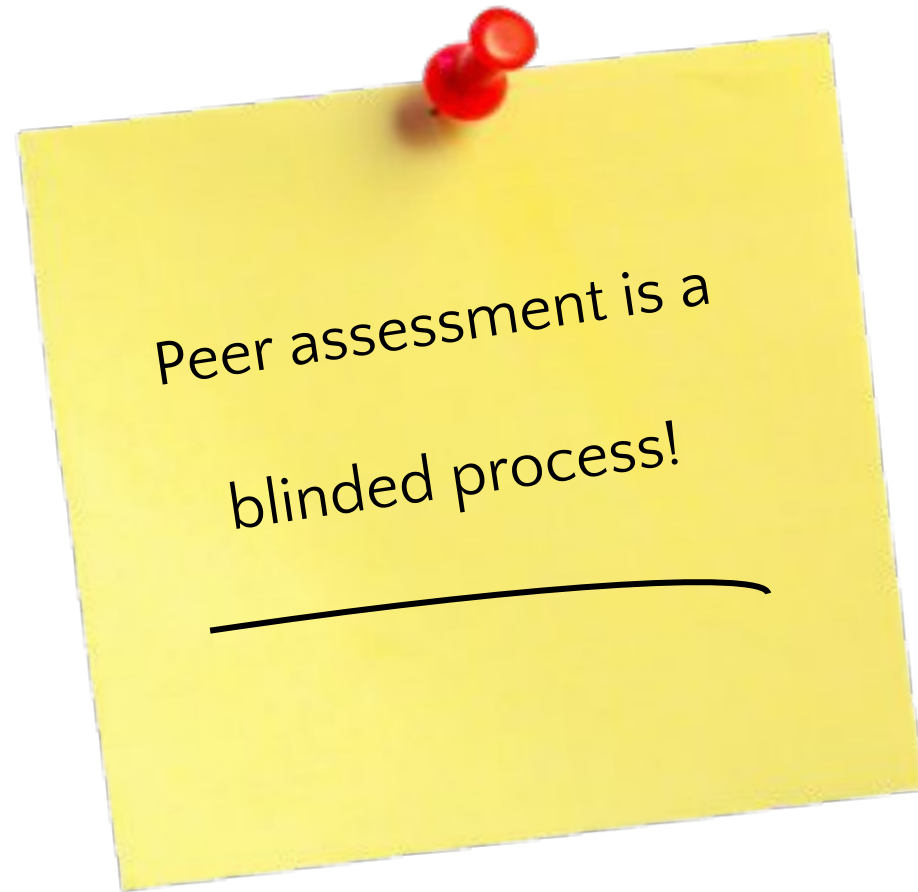


Peer assessment setting

- Reciprocal arrangement of roles
- Each assessor would need to have undertaken learning activities that lead to learning products to be assessed



Peer feedback (assessors' role)



- Quantitative feedback; scoring learning products according to assessment criteria (rubric)
- Qualitative feedback; comments and suggestions for improvements/changes

Revisions/reflection (assessee's role)

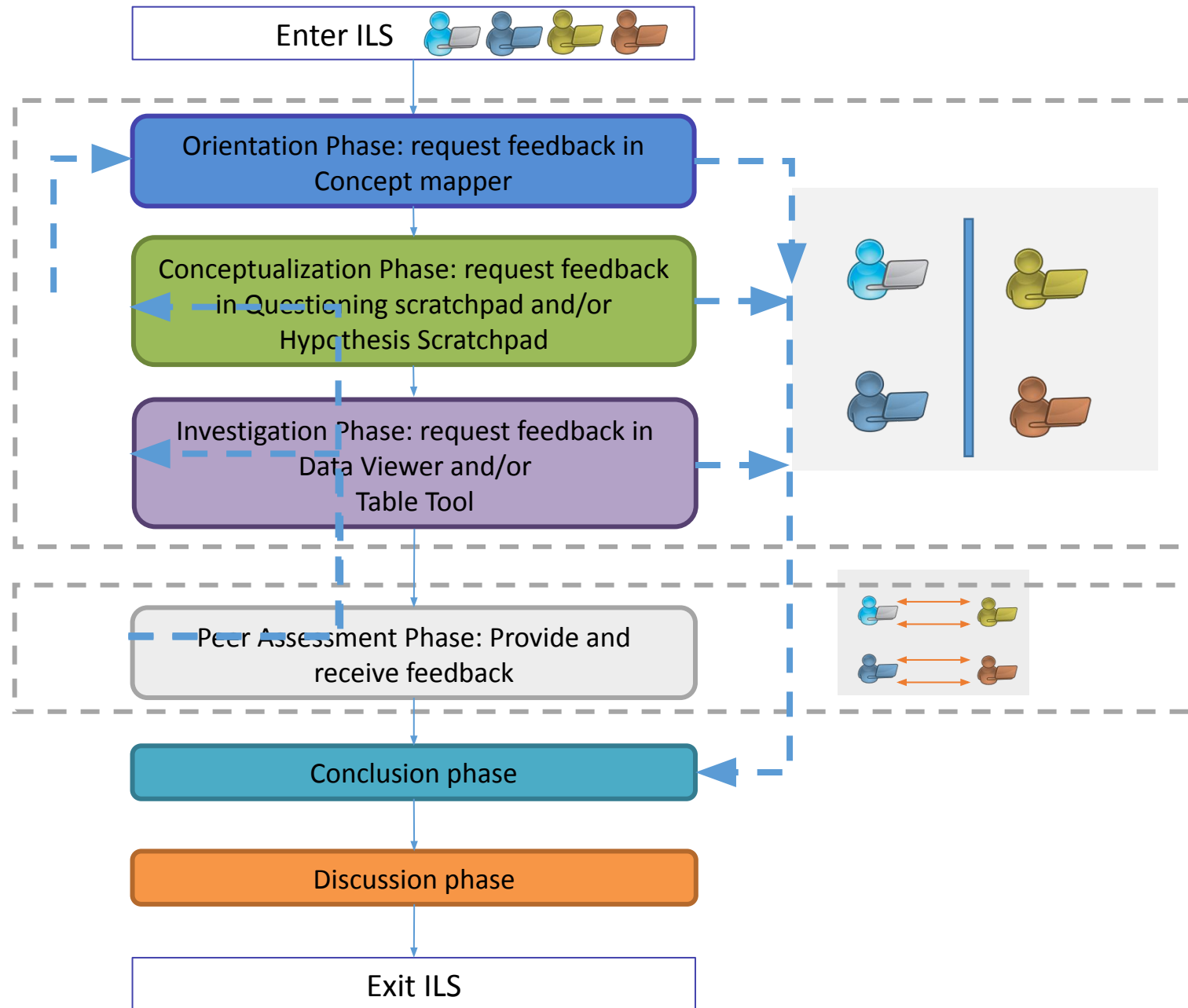


- Screening peer feedback and re-working of learning products
- Comparison between different versions of the same learning product

Peer assessment through Go-Lab



Workflow during the peer assessment through the Go-Lab inquiry cycle



Peer assessment app and request for peer feedback

The screenshot displays the 'Peer assessment' section of the app. At the top, a blue header reads 'Peer assessment'. Below it, a message states 'There are no feedback requests assigned to you'. A vertical sidebar on the left contains icons for a document, a pencil, a speech bubble, a play button, a comment bubble, and a question mark. The main content area is divided into two sections: 'Terms' and 'Hypotheses'. The 'Terms' section features a row of buttons for logical connectors and relationships: 'IF', 'THEN', 'increases', 'decreases', 'is larger than', 'is smaller than', 'is equal to', 'remains', and 'length'. Below this is a 'Type your own!' input field and a row of buttons for physical quantities: 'mass', 'time', 'electric current', 'thermodynamic temperature', and 'amount of substance'. The 'Hypotheses' section shows a partially constructed hypothesis: 'IF mass increases THEN'. A modal dialog box titled 'Ask for feedback' is overlaid on the interface, containing the text: 'Are you sure you want to ask for feedback? Until the feedback is given, you cannot edit the content.' and two buttons: 'Request' and 'Cancel'. At the bottom of the app, there is a navigation bar with icons for a document, a speech bubble, a question mark, and a plus sign.

Peer assessment

▼ **Hypotheses** in phase Hypotheses scratchpad

You can rate the hypothesis/hypotheses of your peer to each one of the following criteria. You may provide comments to your peer to justify your ratings. You may also suggest changes that have to be made in the hypothesis/hypotheses.

IF mass increases THEN

Each hypothesis contains at least one dependent variable. *

Each hypothesis contains one and only one independent variable. *

Each hypothesis indicates a relationship between one independent variable and at least one dependent variable. *


The independent variable of each hypothesis can be manipulated in the laboratory. *


The dependent variable in each hypothesis can be measured in the laboratory. *

Each hypothesis addresses the initial problem of the lesson. *


Peer assessment


▼ **Hypotheses** in phase Hypotheses scratchpad ✓

IF mass increases THEN 


Each hypothesis contains at least one dependent variable. 


 You must add the dependent variable.

Each hypothesis contains one and only one independent variable. 


Each hypothesis indicates a relationship between one independent variable and at least one dependent variable. 

 The hypothesis is incomplete.

The independent variable of each hypothesis can be manipulated in the laboratory. 

The dependent variable in each hypothesis can be measured in the laboratory. 

 There is not dependent variable.

Each hypothesis addresses the initial problem of the lesson. 

 Without a dependent variable I can't see anything about this.

Received feedback is shown in the original tool

Terms

Type your own!

Hypotheses

IF mass increases

remains length

Feedback

- Each hypothesis contains at least one dependent variable.
- You must add the dependent variable.
- Each hypothesis contains one and only one independent variable.
- Each hypothesis indicates a relationship between one independent variable and at least one dependent variable.
- The hypothesis is incomplete.
- The independent variable of each hypothesis can be manipulated in the laboratory.
- The dependent variable in each hypothesis can be measured in the laboratory.
- There is not dependent variable.
- Each hypothesis addresses the initial problem of the lesson.
- Without a dependent variable I can't see anything about this.

1 ✕



hands-on

ACTIVITY



Teachers' role



Configuration of the peer assessment app

The screenshot shows the 'Peer assessment' configuration window. At the top, there are navigation links for 'Table tool in phase Table tool' and 'Hypothesis scratchpad in phase Hypotheses scratchpad'. The main area is titled 'Peer assessment tool configuration' and contains several sections:

- Peer assessment tool options:** A row of five icons representing different tool types: Concept map, Hypotheses, Questions, Data graph, and Table.
- Explanation for student:** A rich text editor with bold (B), italic (I), and underline (U) buttons, followed by list and indent icons. The text area contains placeholder text: 'Explanation for concept map, Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.'
- Questions:** A list of three questions in text input fields:
 - Do you like the concept map? (highlighted with a green border)
 - Do you like the colors? Lorem ipsum dolor sit amet, cor
 - Do you mis concepts?
- Settings:** On the right side, there are checkboxes for 'Required' and 'Show comment'. The 'Type' is set to '3 smileys' and the 'Initial comment' is 'initial 1 ...'.
- Number of assignees per feedback request:** A dropdown menu with a question mark icon.

At the bottom right of the configuration window, there are icons for saving and closing the window.

Share your thoughts!





Thank you for your feedback!

nextlab

