

Provide feedback and high-quality assessment: the Skill by skill app

Beyond knowledge, skills play an increasing role in educational targets, and therefore in assessment. Moreover, like for students, teamwork in teaching offers complementary profiles and skills, different viewpoints, and therefore a richer teaching.

In this context, it is essential

- To provide students with high-quality feedback and assessment (formative assessment):
 - o Rich, combining observations from several teachers or observers
 - o Factual, precise
 - o Relevant, with reference to explicit assessment criteria
- To provide students with an objective and fair skill assessment (summative assessment)
 - o Consistent with feedbacks provided during formative assessment
 - o Objective, with reference to known assessment criteria
 - o Offering transparency and traceability on observations, therefore based on writing

These pedagogical requirements imply a technical need: easily combine observations from different observers,

- To coordinate the work of the teaching team
- To provide a synthetic assessment from multiple detailed observations

The Skill by skill app has been designed to meet these needs. The two following usage scenarios illustrate the options it offers in various contexts.

http://competences.kasparian.eu/index_en.html



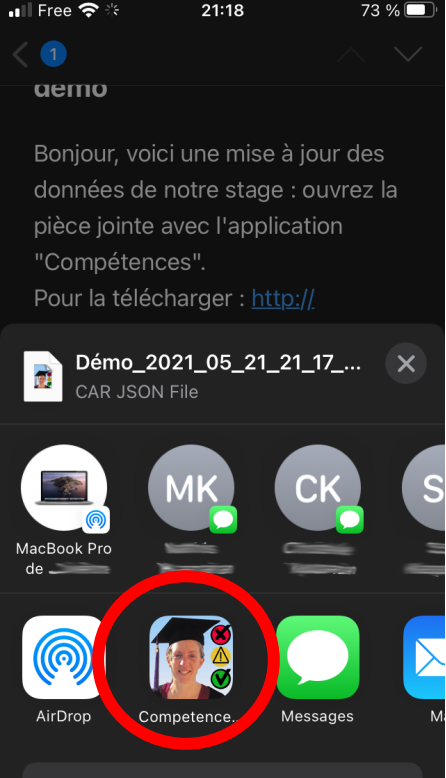
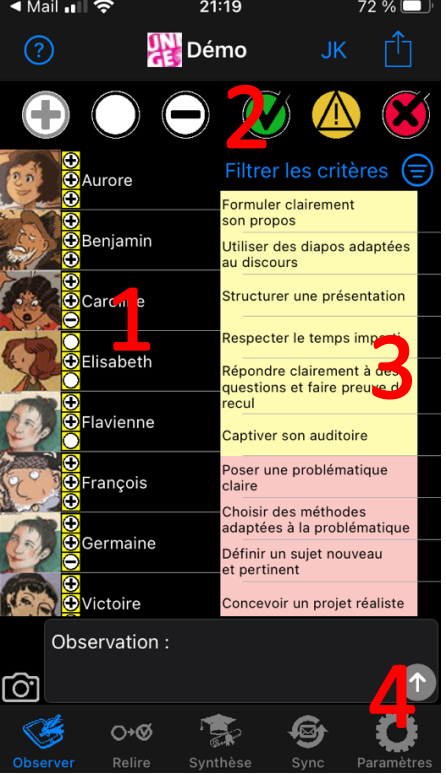
Usage scenario 1. Competence-based assessment

Example: train students to design a research project and present it publicly







Pedagogical preparation

<p>Trainers define a learning objective in terms of skills, each one detailed in objective, easily observable capacities.</p> <p>The assessment will rely on the observation of the students showing these capacities.</p>	<p>For example, a session dedicated to the oral presentation of a project will rely on following skills and <i>observable capacities</i>, described as actions.</p> <p><i>Present a project</i></p> <ul style="list-style-type: none"><i>Speak clearly</i><i>Use slides adapted to the argument</i><i>Structure a presentation</i><i>Respect the timing</i><i>Answer questions clearly and have a deep understanding of the subject</i><i>Captivate the audience</i> <p><i>Design a research project</i></p> <ul style="list-style-type: none"><i>Ask a clear research question</i><i>Choose relevant methods</i><i>Define a new and relevant subject</i><i>Design a realistic project</i>
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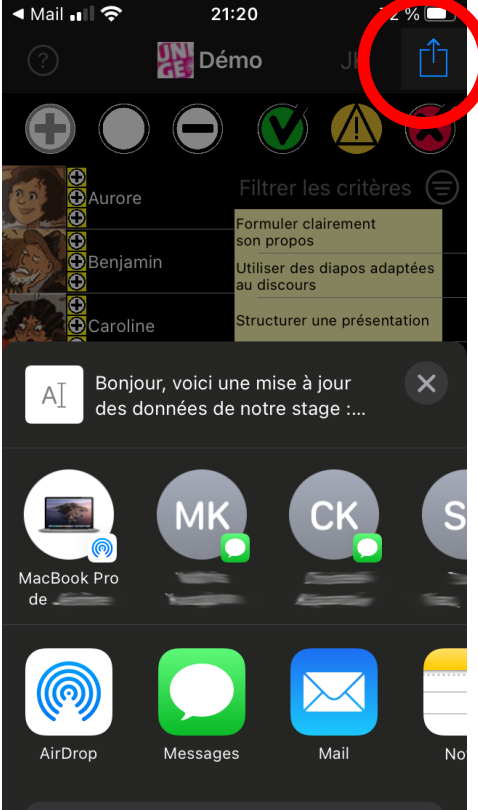
Technical preparation


<p>A trainer creates the session: students, observers (the trainers), list of skills, and shares it with all fellow trainers.</p>	<p>See appendix</p>
<p>Each trainer opens the session in the Skill by skill app...</p>	
<p>... which opens on the Observe page</p>	 <ol style="list-style-type: none"> 1. List of students 2. Badges for evaluating observations 3. List of capacities 4. Record observation

Facing the students: Observing

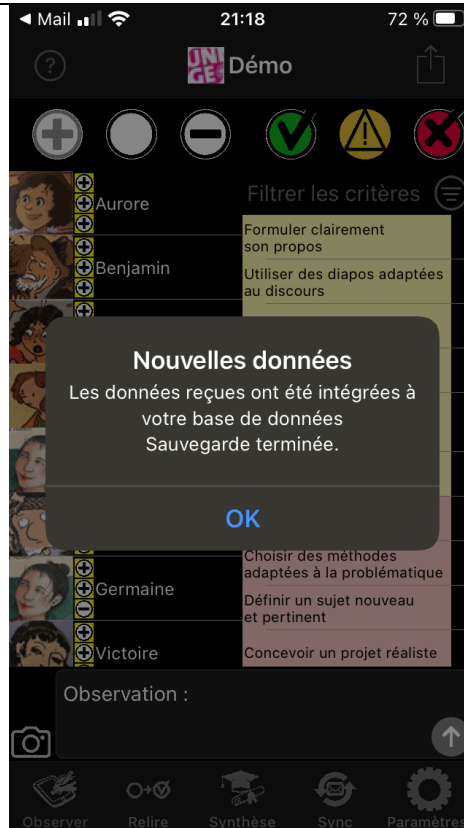
<p>During the course, trainers will observe the actions of the students, write them down and relate them to one or several capacities.</p> <p>The app offers several tips to help real-conditions note-taking: keep a student selected while selected for a task, integrated timer... Discover these tips in the video tutorial on the help page of the app.</p>	<p>In practice</p> <ol style="list-style-type: none"> 1. Select a student 2. Select a « badge » to rate the observation, from validating  to invalidating , via positive , neutral , and negative  ¹ 3. Select the capacities(s) related to the observation 4. Write down the observation and record it ( button) <p>Note: Steps 2 and 3 can be skipped during the session. The observations link to capacities can be done a posteriori.</p>
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After the course: share observations among the teaching team

<p>Each trainer shares their observations with the whole team, using e-mail, instant messaging, bluetooth sharing or shared drive.</p>	
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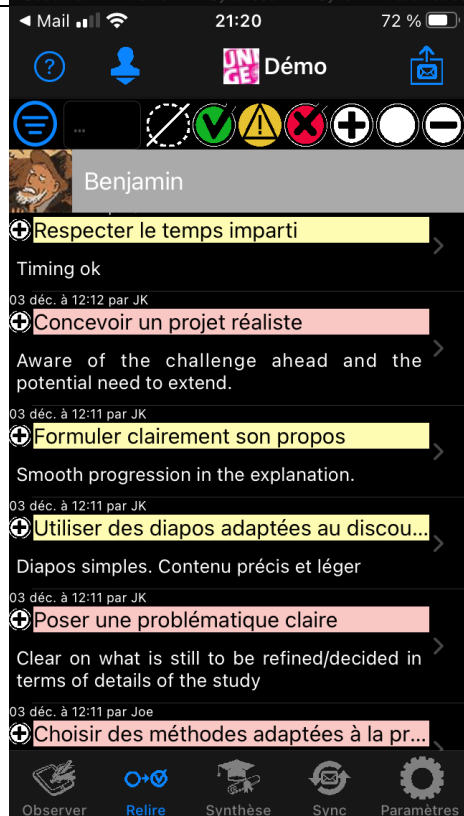
¹ The  badge targets situations where the skill should have been observed but could not, without indicating the student to miss this skill: absence, request to delay an assessment, technical problem..., therefore requiring new observations sessions.

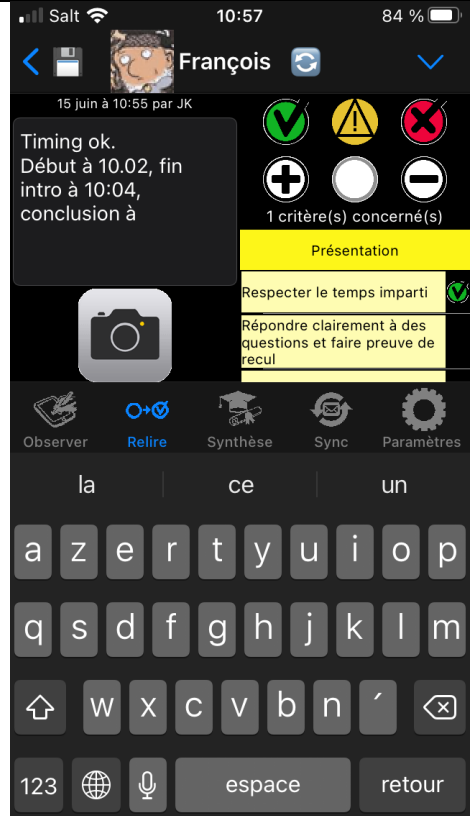
The data are imported in the app of each other trainer...



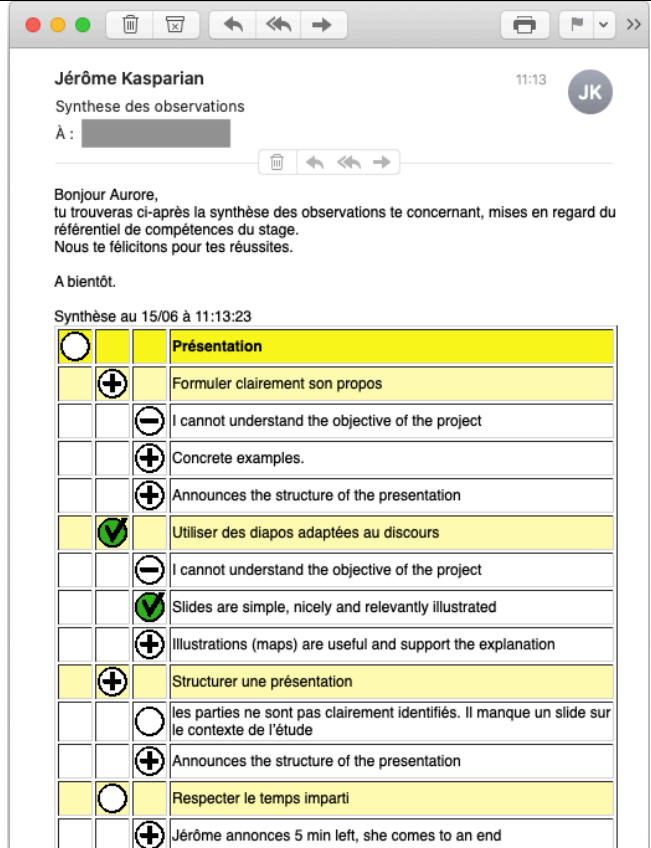
... and can be reviewed by the teaching team, to

- ensure all trainers have the same information, in particular if the group was divided into sub-groups
- share and homogenize the qualification of observations.



<p>- Correct, add text to observations, and/or connect them to the expected capacities.</p>	
<p>Then, a new share among the teaching team allows each trainer to have an up-to-date observation record.</p>	

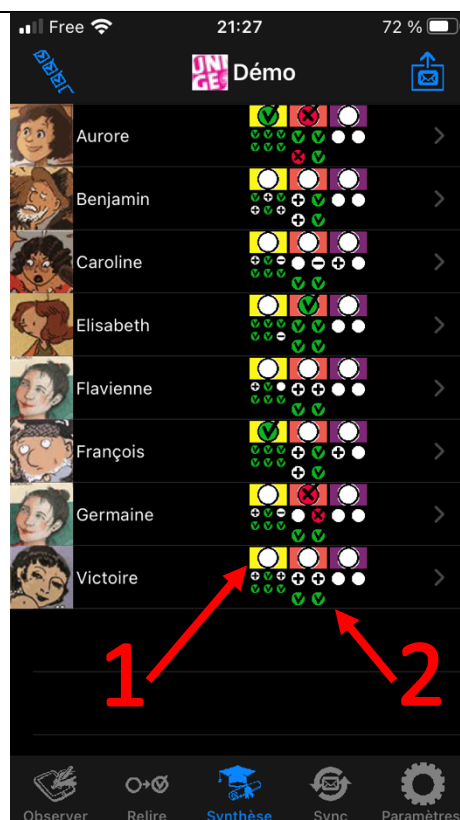
Feedback to students – formative evaluation

<p>The app automatically generates a list of observations regarding each student, sorted by skill, and can send it by e-mail.</p>	
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Plan the progress of the students and give them opportunities to acquire skills

Ideally, each skill is addressed in several sessions, in identical or different contexts. The process (observations, sharing between trainers, feedback to students) will then be repeated for each session or group of sessions.

The app helps preparing the next sessions by providing a dashboard displaying the progress of each students and of the whole group, sorted by skill (1) and observable capability (2).








The dashboard gathers observations by compiling their qualifications into a general assessment

On this basis, trainers can

- Adapt the contents of the courses to come
- Target specific students needing help for a given skill

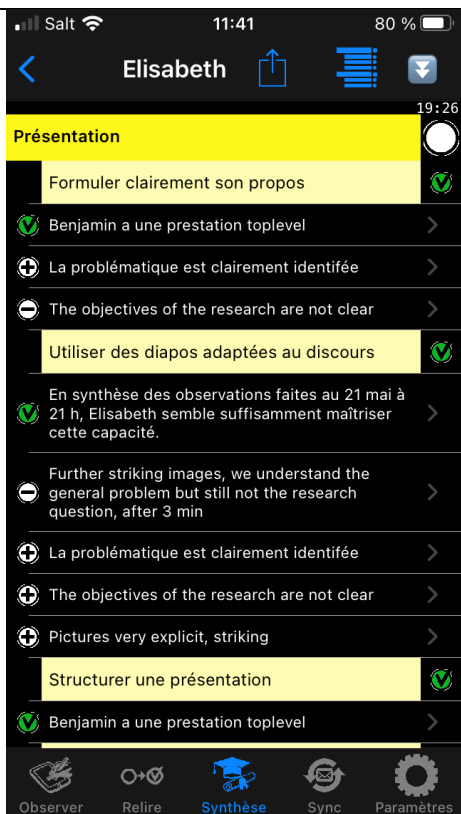
The assessment of observations is performed as follows:

- At the observable capability level:
 - If observations are validating  or invalidating , the latest is retained. The goal is to assess whether a capability has been demonstrated.
 - If only white badges are present, the most frequent is retained.
- Then, each skill
 - Is validated  if all its capabilities are. The goal is to assess that all aspects of the skill has been demonstrated.
 - Is invalidated  if at least one of its capabilities is
 - Is pending  in all other cases.

Assessing skills – sommative assessment

The dashboard (see previous step) is continuously updated. It provides a synthesis of the students' and of the group's progress on each skill and each capability. This dashboard helps the teaching team to perform the summative evaluation at the end of the training, and decide if each skill is adequately mastered by each student.

A detailed list of all observations regarding each student helps in making this decision.



Usage scenario 2: Peer assessment

Learning objective

- Provide more and richer feedback to students
- Help students familiarize with the assessment criteria, by using them
- Help students have a critical view of their achievements, by observing others'
- Enhance the pedagogical challenge of a course, beyond what a trainer alone would be able to observe

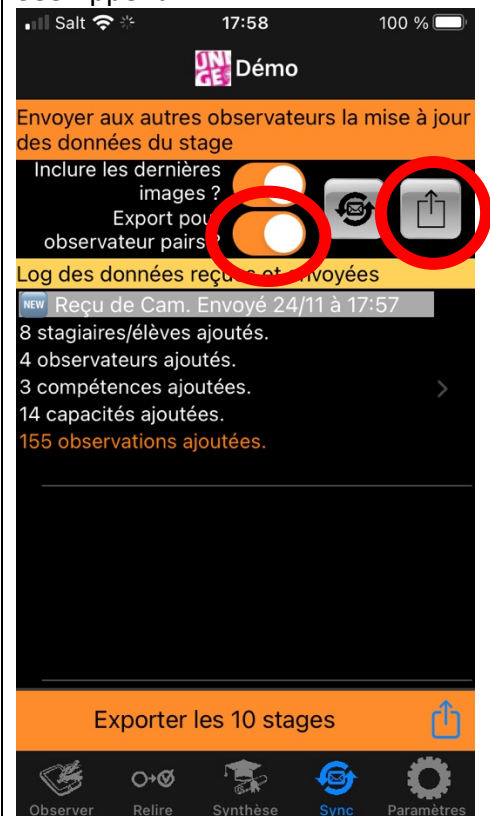
Pedagogic preparation

<p>Trainers define a learning objective in terms of skills, each one detailed in easily objectivable observable capacities. The assessment will rely on the observation of these capabilities by students themselves.</p>	<p>example, a session dedicated to the oral presentation of a project will rely on following skills and <i>observable capacities</i>, described as actions.</p> <p>Present a project</p> <ul style="list-style-type: none"><i>Speak clearly</i><i>Use slides adapted to the argument</i><i>Structure a presentation</i><i>Respect the timing</i><i>Answer questions clearly and have a deep understanding of the subject</i><i>Captivate the audience</i> <p>Design a research project</p> <ul style="list-style-type: none"><i>Ask a clear research question</i><i>Choose relevant methods</i><i>Define a new and relevant subject</i><i>Design a realistic project</i> <p>Others</p> <ul style="list-style-type: none"><i>Observe actions by peers, write them down and interpret them as contributions to skills assessment</i>
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Technical preparation

A trainer creates the session: Students, observers (the trainers¹), list of skills, and shares it with peer student observers, by checking the corresponding switch.

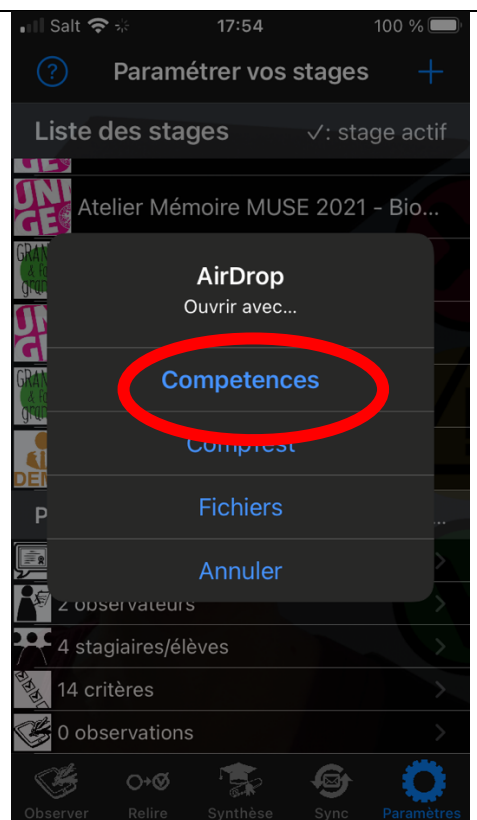
See Appendix



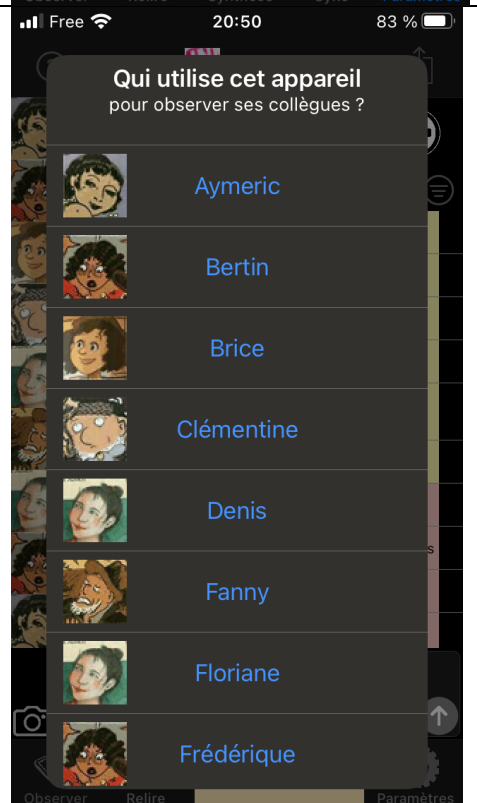
¹ Student observers will be added automatically when they provide their first observations to the trainer.

With the students: preparation

Each observer-student opens the session in the Skill by skill app.



They select their name as observer¹...



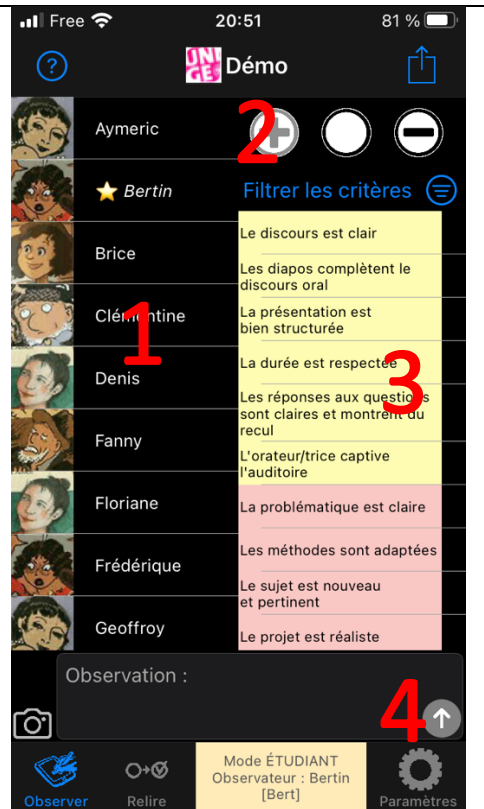
¹ Their name will then be italicized and marked with a star in the students list.

... and the observation page opens.

Trainers can review with the students

- Assessment criteria
- How to provide useful feedback
- The use of the app (test run)
- The deontology of observation (no judgement, data conservation rules...)

1. Students list
2. Badges to rate observations
3. List of capacities
4. Record observation



With the students: Observing

During the session, the observer students will observe the action of their peers, write them down and relate them to capacities.

The app offers several tips to help real-conditions note-taking: keep a student selected while selected for a task, integrated timer... Discover these tips in the video tutorial on the help page of the app.

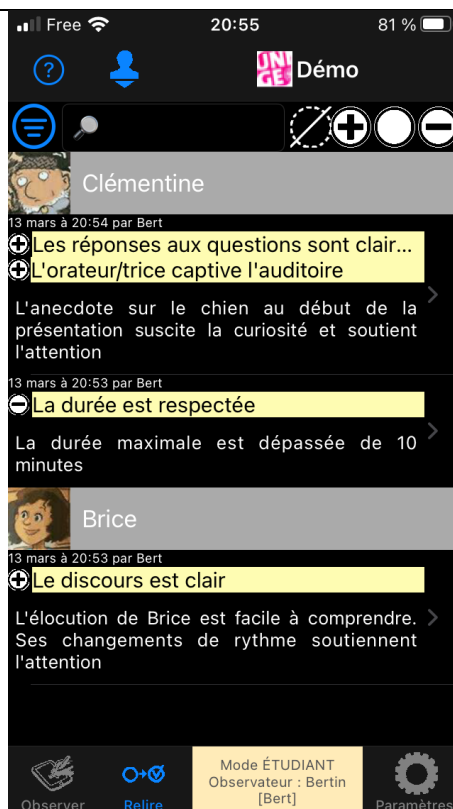
In practice

1. Select a student
2. Select a « badge » to rate the observation: positive (+), neutral (○), or negative (−)
3. Select the capacity(es) related to the observation
4. Write down the observation and record it (↑ button)

Note: Steps 2 and 3 can be skipped during the session. The link between observations and capacities can be done a posteriori.

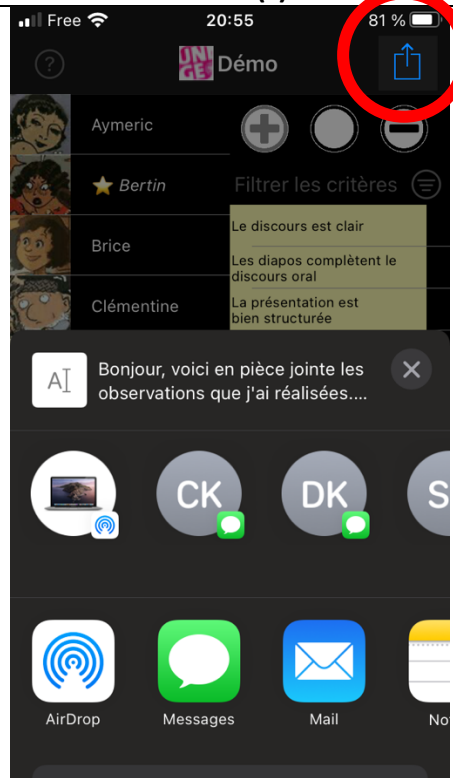
At the end of the session, each student can

- Review the observations he/she did
- Correct, rephrase, clarify them
- Revise and correct the associated rating (badges)



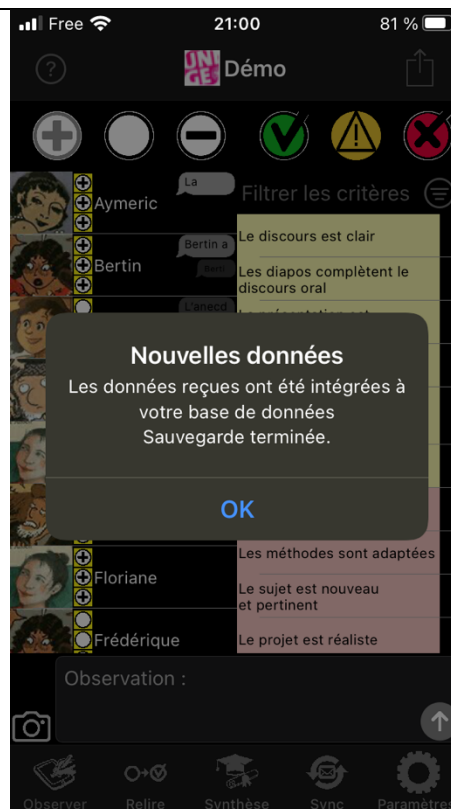
End of the session: Students transfer their observations to the trainer(s)

Each student observer shares their observations with the trainer, via direct Bluetooth link, shared disk, e-mail, or any messaging system.



After the session: Gather observations

The observations from students are imported in the trainer's app...



... who can review them to ensure the students' observations (which appear in *italics* over a coloured background) are clear and match the requirements: constructive, respectful, helpful, factual...

...and validate them, or if necessary, edit or suppress peer observations that do not match the deontological rules.

Once validated, the students' observations recover a standard background.



Feedback to students – Peer assessment

The app automatically generates a list of observations regarding each student, sorted by skill, and can send it by e-mail. In this export, observations are not signed, so that student observers stay anonymous.

This feedback can be supervised: explanations, empathic listening to emotions when receiving the observations...

It can be used for small- or full-group work on how each student could progress.

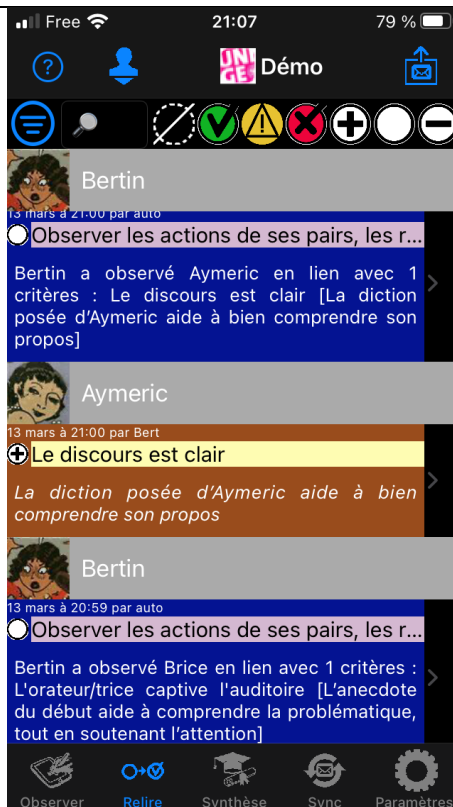
The screenshot shows a mobile app interface for peer assessment. At the top, there's a header with a user profile for Jérôme Kasparian (JK) and the title 'Synthèse des observations'. Below this, a message reads: 'Bonjour Aymeric, tu trouveras ci-après la synthèse des observations te concernant, mises en regard du référentiel de compétences du stage. Nous te félicitons pour tes réussites. A bientôt. L'équipe de formation.' The main content is a table titled 'Synthèse au 13/03 à 21:04:09'.

		Présentation
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Le discours est clair
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Difficile de donner un avis si le sujet est réaliste tant cela n'est pas encore très bien défini
<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Les diapos complètent le discours oral
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Difficile de donner un avis si le sujet est réaliste tant cela n'est pas encore très bien défini
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Attention beaucoup de texte
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	La présentation est bien structurée
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Difficile de donner un avis si le sujet est réaliste tant cela n'est pas encore très bien défini
<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Attention beaucoup de texte

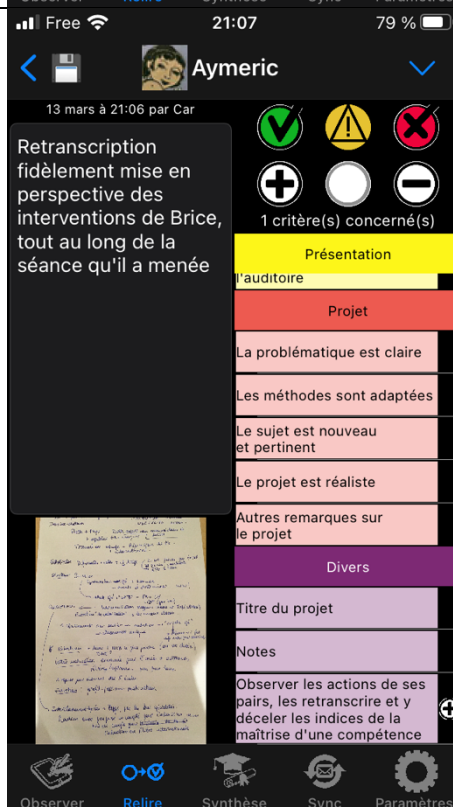
Observing is also a skill in itself

Providing factual and constructive observations and provide a synthesis to the concerned person are also skills, that can be worked on and assessed on the basis of the observations performed on peers.

Each time a student produces an observation on a peer, the app automatically creates a “meta-observation”, displayed on a blue background till it is validated, regarding the student observer.



Like any observation, the trainer can edit and/or rate this observation in the Review page.



Appendix: Create a session

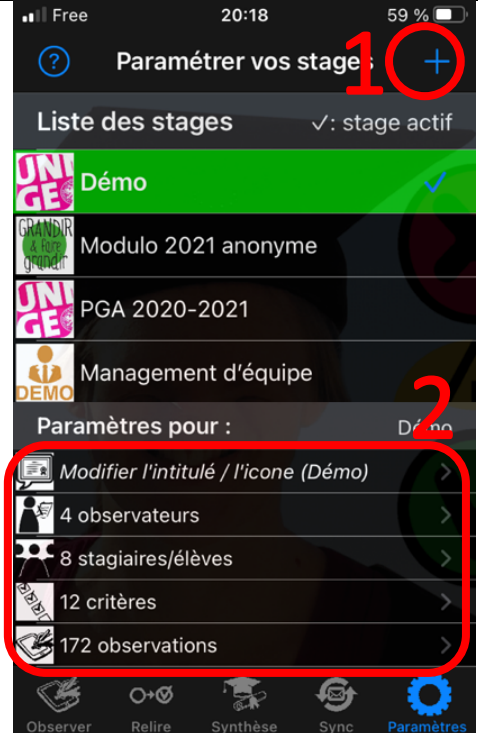
A session is defined by four parameters

- A title, possibly associated with an icon
- A list of observers
- A list of students
- A list of skills, each detailed as observable capacities

The Skill by skill app offers two ways to create a session: direct input of the data, or importing a CSV file.

Method 1: Direct input of the data in the app

This method is faster to create a simple session, with few skills, observers, and students. It also allows to easily modify an existing session (e.g., add a student).

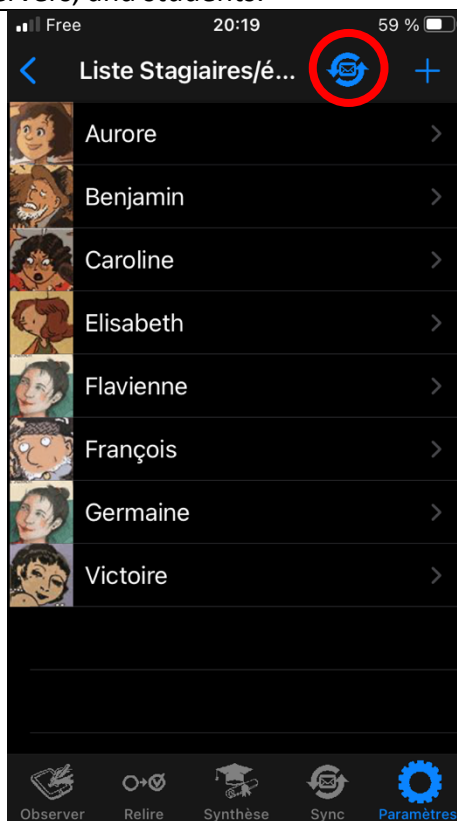
<ol style="list-style-type: none">1. Create a new session The app offers the opportunity to duplicate parameters from an existing session. The newly created session then appears in the list.2. Browse parameters to enter<ol style="list-style-type: none">a. The session title, and if relevant its iconb. Observers (trainers only¹)c. Students (name and picture)d. Skills and observable capacities	
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¹ Student observers will be added automatically when they provide their first observations to the trainer.

Method 2: Importing CSV files

This method is faster for long lists of skills, observers, and students.

Parameters will be imported as CSV files.
Export sample lists of students, observers, and skills.
Sample data can then be replaced by the actual data of the session to configure. The CSV files are then recorded...



... and imported in the app

1. The first file (e.g., the list of students) will be assigned to a new session to be created (1).

The new session will then appear in the list of sessions (2).

2. Subsequent files will be assigned to the chosen session (2)
3. Students' pictures can be added later via drag-and-drop on the students' list.

