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):
  - Rich, combining observations from several teachers or observers
  - Factual, precise
  - Relevant, with reference to explicit assessment criteria
- To provide students with an objective and fair skill assessment (summative assessment)
  - Consistent with feedbacks provided during formative assessment
  - Objective, with reference to known assessment criteria
  - 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.

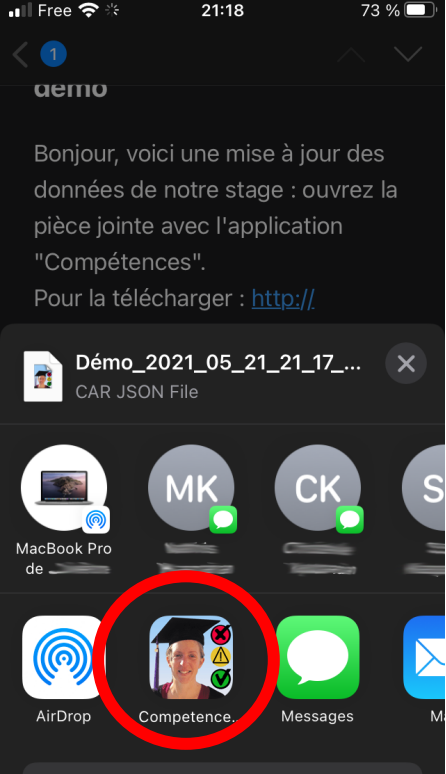http://competences.kasparian.eu/index_en.html

Usage scenario 1. Competence-based assessment

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

Pedagogical preparation

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Trainers define a learning objective in terms of skills, each one detailed in objective, easily observable capacities. The assessment will rely on the observation of the students showing these capacities.	For example, a session dedicated to the oral presentation of a project will rely on following **skills** and *observable capacities*, described as actions.
	
	Present a project
	  Speak clearly
	  Use slides adapted to the argument
	  Structure a presentation
	  Respect the timing
	  Answer questions clearly and have a deep understanding of the subject
	  Captivate the audience
	Design a research project
	  Ask a clear research question
	  Choose relevant methods
	  Define a new and relevant subject
	  Design a realistic project

Technical preparation

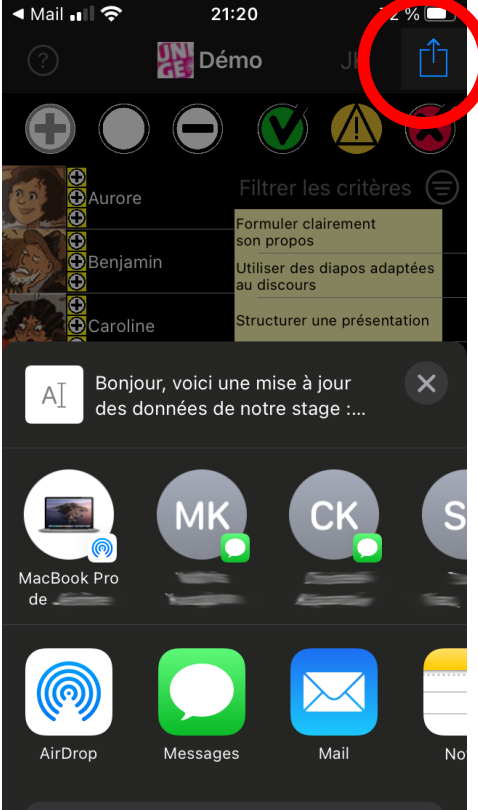|	
A trainer creates the session: students, observers (the trainers), list of skills, and shares it with all fellow trainers.	See appendix
Each trainer opens the session in the Skill by skill app…	
… which opens on the Observe page	

1. List of students
2. Badges for evaluating observations
3. List of capacities
4. Record observation
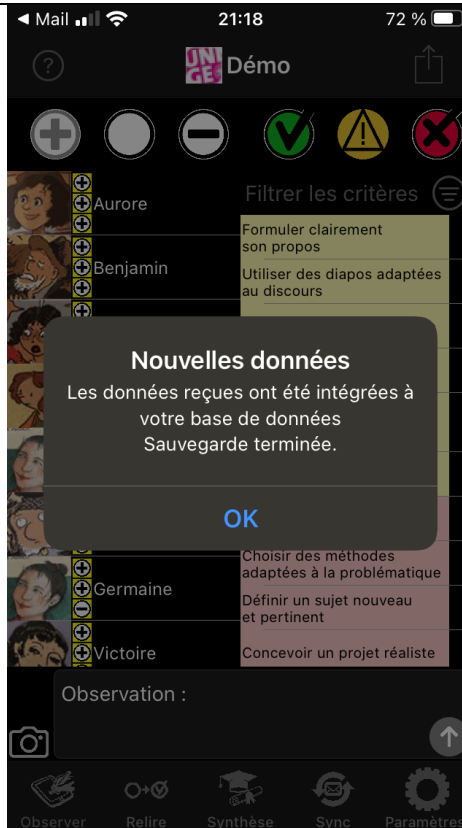
Facing the students: Observing

During the course, trainers will observe the actions of the students, write them down and relate them to one or several 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, 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) Note: Steps 2 and 3 can be skipped during the session. The observations link to capacities can be done a posteriori.

After the course: share observations among the teaching team

| Each trainer shares their observations with the whole team, using e-mail, instant messaging, bluetooth sharing or shared drive.	

[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.
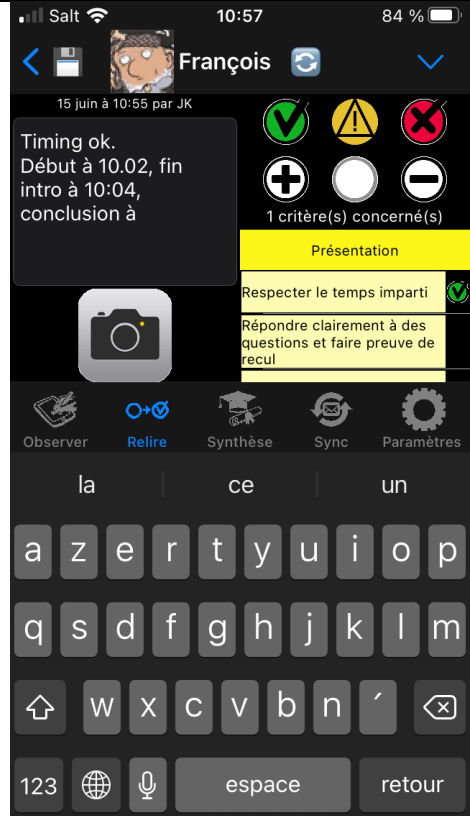
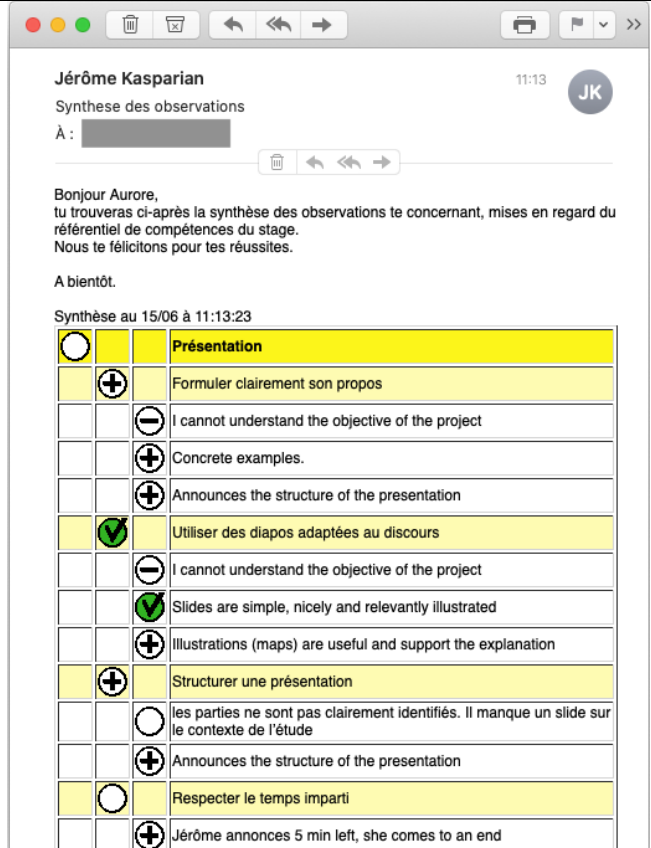|	
The data are imported in the app of each other trainer…	
… and can be reviewed by the teaching team, to - ensure all trainers have the same information, in particular if the group was divided into sub-groups - share and homogenize the qualification of observations.	
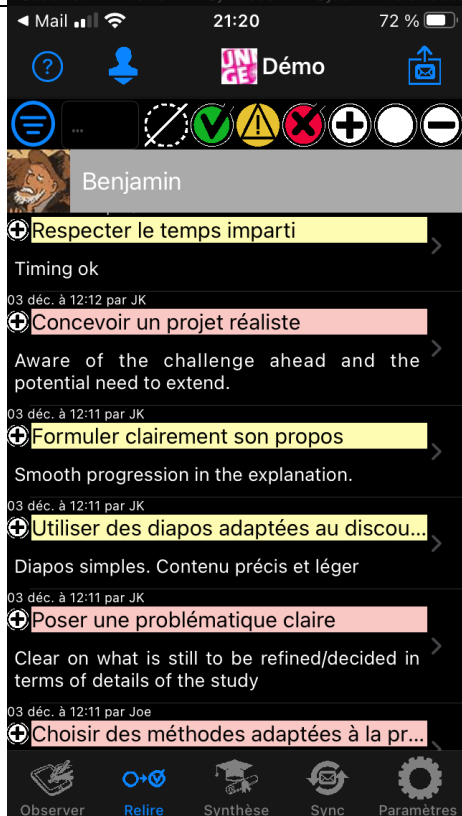
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- Correct, add text to observations, and/or connect them to the expected capacities.	
Then, a new share among the teaching team allows each trainer to have an up-to-date observation record.	

Feedback to students – formative evaluation

The app automatically generates a list of observations regarding each student, sorted by skill, and can send it by e-mail.	

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).	
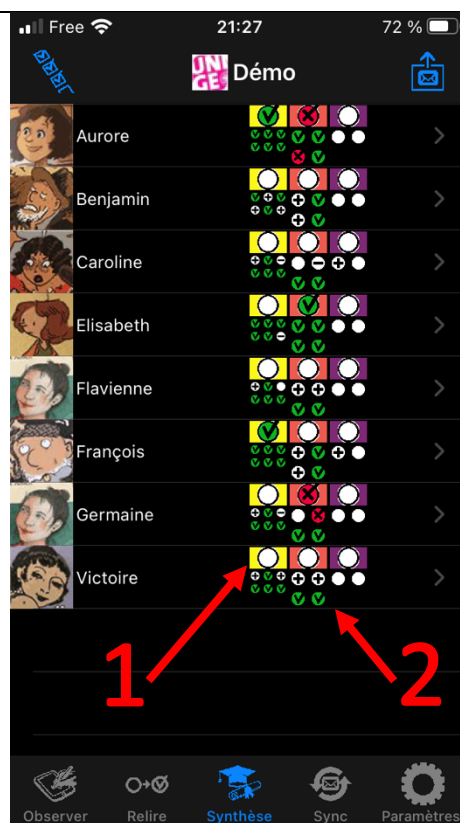
The dashboard gathers observations by compiling their qualifications into a general assessment
 	
On this basis, trainers can
- Adapt the contents of the courses to come
- Target specific students needing help for a given skill
	The assessment of observations is performed as follows:
	- At the observable capability level:
	  o If observations are validating ✅ or invalidating ❌, the latest is retained. The goal is to assess whether a capability has been demonstrated.
	  o If only white badges are present, the most frequent is retained.
	- Then, each skill
	  o Is validated ✅ if all its capabilities are. The goal is to assess that all aspects of the skill has been demonstrated.
	  o Is invalidated ❌ if at least one of its capabilities is
	  o 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.
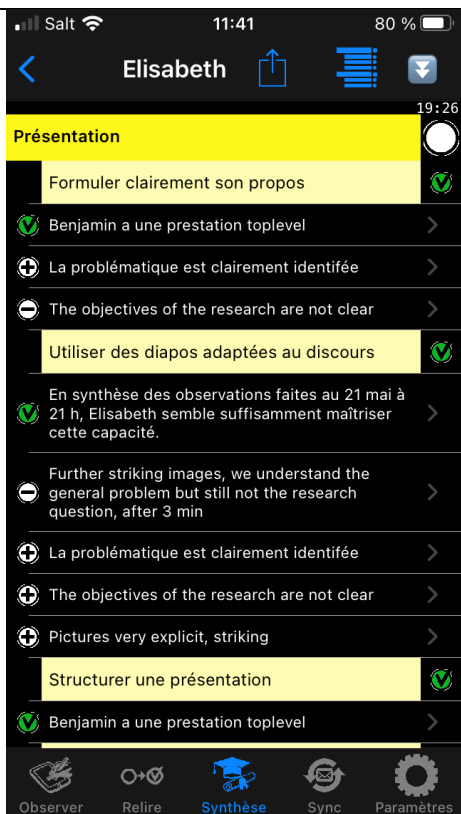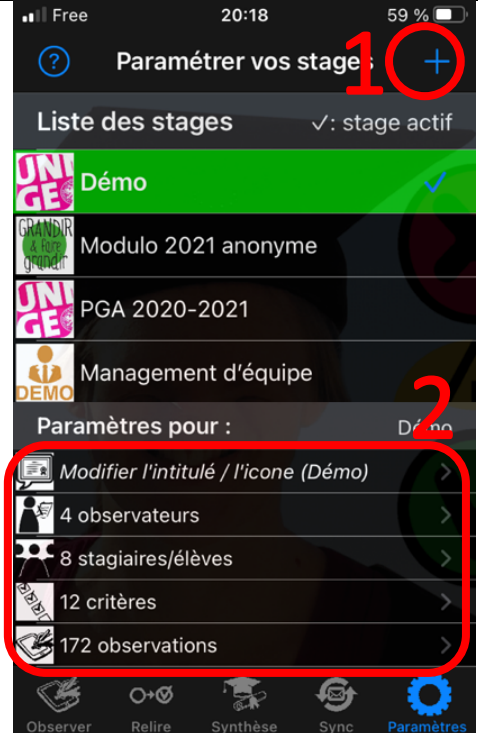
Appendix: Create a session

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).

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
    a. The session title, and if relevant its icon
    b. Observers (trainers only[1])
    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.
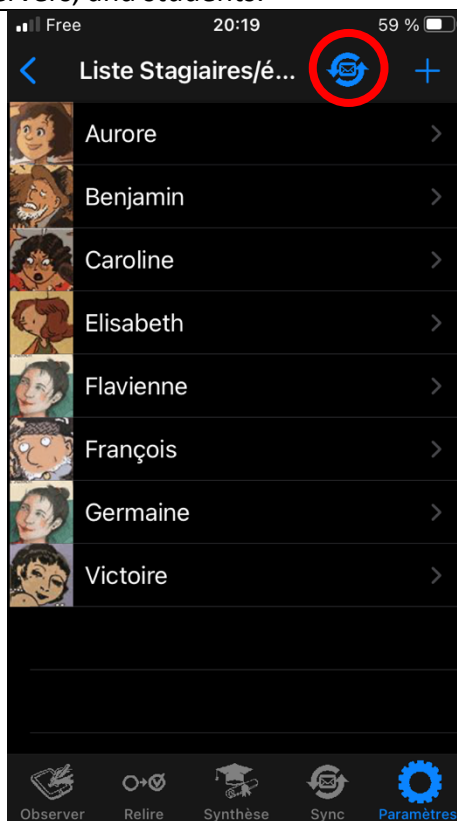
Parameters will be imported as CSV files. Export sample lists of students, observers, and skills. Sample data can then be replaced by the actual data of the session to configure. The CSV files are then recorded…	(screenshot: Liste Stagiaires/é… with list of names: Aurore, Benjamin, Caroline, Elisabeth, Flavienne, François, Germaine, Victoire)
… 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.	(screenshot: "Fichier CSV reçu – Choisissez le stage auquel affecter ces données." with options: Démo-Fin-DeStage – multi-critères, Exemple : ASF - BAFA Base, Exemple : RUSF - Suivi d'unité, Ex: Permis de Conduire, Exemple : DSF/BAFD : Visite de camp, Exemple : DSF / Base BAFD, Exemple : ASF - Stage Pratique BAFA, Exemple : ASF – Appro BAFA, Annuler, Créer un nouveau stage)