# E-Assessment at the BFH

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## Objective

In this project, E-Assessment focused digital testing or, more generally, assessing students' competences with the help of ICT, both in supporting learning processes or determining grades. The aim of the project was to digitise the entire process from the creation of an examination to its archiving. To this end, solutions have been developed and implemented in various study programmes at the BFH.[1]

## General Framework

The project focused on several phases of E-Assessment, based on a lifecycle model (Figure 1).

Projects have been conducted to support the (orange) lifecycles phases

- "Consultative Self-Assessment",
- "Placement Tests",
- "Formative Examination" and
- "Summative Examination".

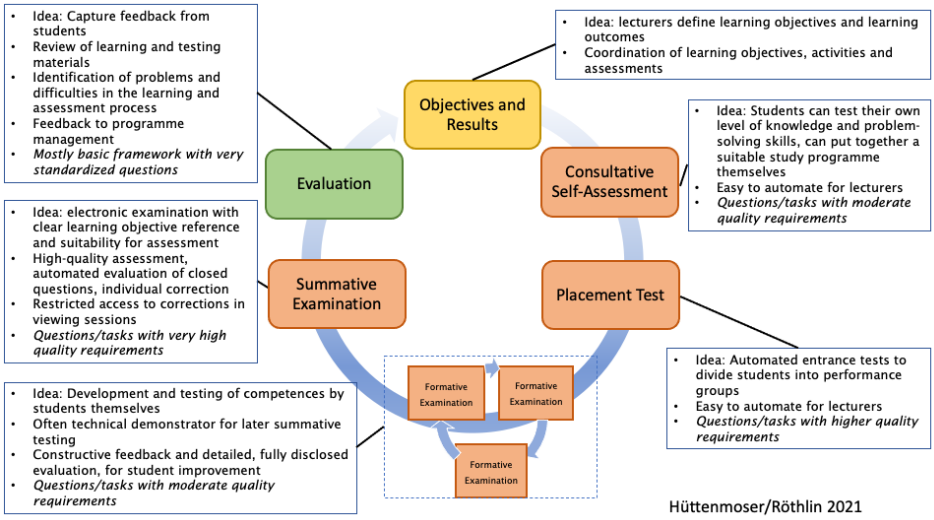


*Figure 1: E-Assessment Lifecycle.*

## Initiatives and Results

1. Integration of Safe Exam Browser (SEB, safeexambrowser.org) into Moodle (moodle.org)
   a. Objective: Configuration and control of SEB-supported exams in Moodle
   *b. Result: Co-designed, -implemented, part of Moodle core functionality since version 3.9*
2. Consultative Self-Assessment in the Master of Science in Engineering programme (MSE)
   a. Objective: Enable students to assess their entry competencies and choose modules
   *b. Result: In production since mid-2021, used by lecturers and students of the MSE*
3. Placement test: Java vs. Kotlin in the BSc Computer Science programme
   a. Objective: Select students with sufficient Java knowledge for Kotlin alternative module
   *b. Result: In production since autumn 2020*
4. Implementation of Think-Pair-Share in distance and classroom settings
   a. Objective: Design attractive online instruments for distance and presence teaching
   *b. Result: Implemented and demonstrated to lecturers on multiple occasions*
5. Examination sessions Spring 2020/Autumn 2021/Spring 2021 with E-Assessment in the MSE
   a. Objective: Support (COVID situation-driven) distance and presence exams with E-A
   *b. Result: development and execution of a standardised management solution for over 50 E-As, with accompanying webinars*
6. Verbalfeedback: structured assessment of presentations in presence and distance learning
   a. Objective: Develop a Moodle plugin for E-A in presentations, with prepared but editable text elements, PDF document generation with spider diagrams, and instant, on-demand feedback to students
   *b. Result: Plugin developed and in production since November 2021 at BFH Moodle.*

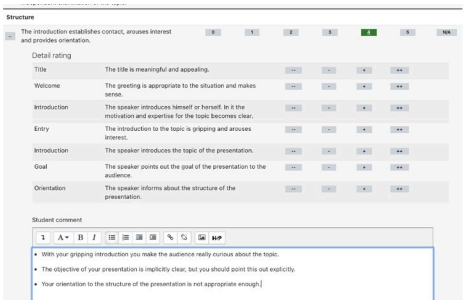


*Figure 2: Verbalfeedback Moodle Activity.*

[1] https://www.bfh.ch/de/forschung/forschungsprojekte/2019-635-461-246/