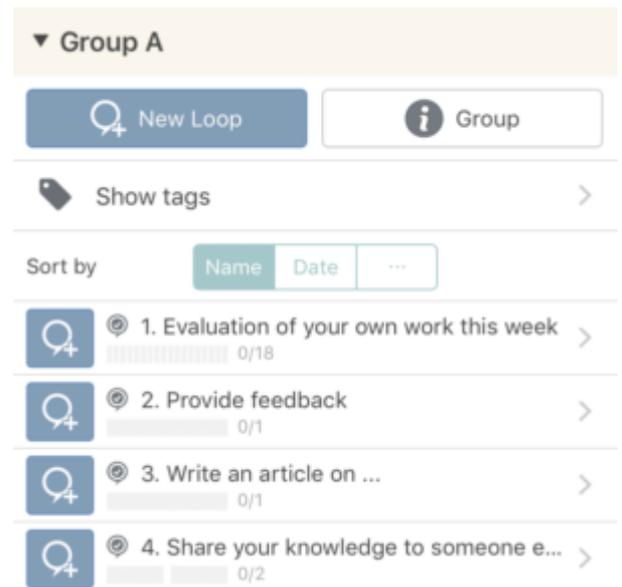


LoopMe

What it is: LoopMe is a formative e-assessment tool consisting of a digital and mobile communication platform that allows for simple and relevant one-to-one dialogues between teachers and learners. The teacher defines mandatory action-oriented tasks that learners perform and then reflect upon.



How it works: Teachers can use LoopMe to design an action-based learning experience by breaking it down into manageable tasks. This clarifies goals and prompts learners to take action and reflect upon each action. Each task that learners are required to do is specified in the LoopMe. Tasks are constructed by employing constructive alignment principles¹, i.e. by letting learners do those tasks they need to do in order to learn what teachers want them to learn. Once the tasks are distributed to all learners and they are instructed to get started doing them, the progress for the entire cohort of learners can be followed in real-time.

Benefits: Through the real-time feedback from student reflections on each completed task, teachers get an overview of how their teaching works in practice. Students getting stuck can be identified through their negative reflections on tasks, and be given support. Teachers can also use information from students for fact based discussions among colleagues on how their teaching works. For students LoopMe represents an appreciated digital channel for feedback to and from their teachers and for sensitive discussions with their teachers when necessary. LoopMe thus leads to a better relationship

between teachers and students without causing information overload for the teacher.

Challenges: One challenge is that LoopMe requires each student to have access to a smartphone or computer in the learning environment. Being a new kind of assessment tool, it also requires teacher training in order to get started. It is furthermore difficult for teachers used to more traditional pedagogy to design action-oriented and authentic tasks that are appropriate for social learning.

Relevance for entrepreneurial teaching: LoopMe was built as part of a research program on entrepreneurial education. The tool is therefore designed specifically to support entrepreneurial teaching, such as experiential and action-oriented assignments. On the website www.LoopMe.io there are a number of ready-made task packages tailored for use in entrepreneurial education.

Applied assessment methods: LoopMe is an example of an e-assessment tool that emphasizes feedback assessment. It is also based on performance assessment through its reliance on authentic tasks to perform, and on reflective assessment through the mandatory reflections on completed tasks. Other theoretical foundations of LoopMe include experience sampling and learning analytics.

Examples from practice: LoopMe has been used on all levels of education since 2014. In the Erasmus Plus project 'ELAN – Entrepreneuria Learning Assessment Network' LoopMe was used to facilitate entrepreneurial education in lower secondary schools in Sweden, Norway and Turkey. Teachers found LoopMe to be useful for formative assessment and dialogue around critical learning events triggered by entrepreneurial pedagogy. Another example is from higher education, where a teacher professional development course at Linnaeus University, where 80 teachers were assigned action-oriented tasks requiring them to apply novel pedagogical theories in

their own classrooms.

Performance assessment

Definition: Let students perform meaningful and hands-on real-life tasks and assess them based on their task accomplishment¹.

Traditional assessment	Performance assessment
Written and oral tests and exams	Performance in authentic contexts
Select a response - "know what"	Perform a task - "know how"
Recalling lower-order knowledge and skills	Applying higher-order knowledge and skills
Knowledge is determined first	Tasks are determined first
The curriculum drives the assessment	Assessment drives the curriculum

Description: *Performance assessment* is about assessing students based on their active hands-on demonstration of knowledge and skills. This should preferably take place in authentic settings. The approach is different from traditional assessment where students talk or write about what they have learned², see table. *Performance assessment* is common in arts education (dance, music, arts, crafts, etc) and in vocational education (construction, plumbing, hairdressing, vehicle repairs, etc). *Performance assessment* should be designed so that the relevant real-life performance is emulated as realistically as possible³. Tasks could be designed in accordance with constructive alignment principles; what do the students need to do in order to reach desired learning outcomes?

Benefits: *Performance assessment* has been described as a way to assess and foster more complex and higher-order learning. It requires students to be active, and to apply critical

thinking and problem-solving skills. This leads to more motivated and engaged students and improved learning. It is also a more inclusive assessment approach for students struggling with written exams.

Challenges: *Performance assessment* has shown to be difficult to design and time-consuming to deploy. It is also often difficult to discriminate between poor, average and excellent performance. Teachers have also found performance assessment to be subjective, especially compared to the objectivity of determining whether a reply is simply right or wrong.

Applied to entrepreneurial teaching: Entrepreneurial teaching allows for a large number of learning activities that can be formulated as hands-on tasks that students could learn from doing. Examples include developing an idea for a new business through a workshop format, presenting a business idea to an external audience, asking external stakeholders for commitment to take part in developing the idea and making a budget for required resources needed to realize the idea. If the entrepreneurial teaching leans on a broad definition of entrepreneurship viewed as not only starting a business, other tasks could be relied upon. Students could be asked to develop answers to the question "For whom could this knowledge be valuable?", contact external stakeholders to verify a hypothesis about how valuable something might be, or simply educate the general public on an issue of importance to society. Generic kinds of performance tasks include interacting with external stakeholders, helping others, presenting something to others and working in teams to create something of value to an external stakeholder based on curriculum content.

Peer and Self-Assessment

Definition: *Peer and self-assessment (PASA)* is when students assess each other and themselves against set assessment criteria provided by the teacher and or with their own input in order to evaluate own performance and of their peers. Through this, students can learn from previous mistakes, identify strengths and weaknesses and learn to target their learning accordingly.



Description: *PASA* can be used either formatively or summatively, or both. Use as formative assessment is more common. However, even when not used directly in summative assessment, peer and self-assessment can inform summative marking. Getting students actively involved in their assessment can make the assessment process a means to learn and develop. Assessment criteria must be clearly and fully described so students understand exactly what is expected of them. Allowing students to contribute to the assessment criteria can transfer ownership to them, fostering deeper engagement with assessment and learning. Self-assessment helps students become self-regulated learners.

Benefits: *PASA* can encourage students to take greater responsibility for their learning, for example, by encouraging engagement with assessment criteria and reflection of their own performance and that of their peers. This can help to change students' perception of learning as being a passive process to an engaging and self-constructing process. If students are participants rather than receivers they are more likely to engage with their learning. *PASA* can increase motivation and engagement encouraging students to learn more deeply, building up their understanding, not just their

knowledge of facts. They also gain insight into their own approach to an assessment task in comparison to their peers and set criteria. This makes *peer and self-assessment* an important component of Assessment for Learning rather than just a means of measuring performance. *Peer and Self-assessment* can support students to develop judgement skills, critiquing abilities and self-awareness.

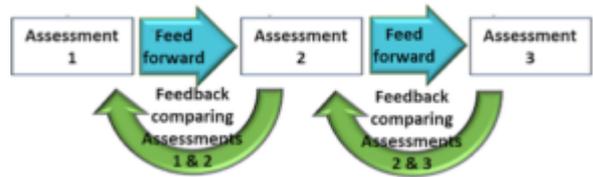
Challenges: The validity and reliability of students having responsibility for awarding summative grades to their peers has been a concern. Self-assessment does not come naturally to many but can be taught. Teacher feedback and self-assessment are related activities. Using rubrics is a helpful strategy.

Applied to entrepreneurial education: *PASA* can be effective in supporting the development of generic or transversal skills. The ADEPTT rubric¹ (and adaptations) is an example of a self-assessment rubric used for students of different ages (pg. 14) The assessment rubric provides a number of descriptions of achievement for the different learning outcomes; these are not meant to be judgemental but a measure of participants' confidence to generate novel ideas.

Reference: 1. Moss, C.M., & Brookhart, S.M. (2009) *Advancing Formative Assessment in Every Classroom: A Guide for Instructional Leaders*. Alexandria, VA: ASCD. 2. University of Reading. (N.d.). *Peer and self-assessment. Engage in Assessment*. Retrieved from <https://www.reading.ac.uk/engageinassessment/peer-and-self-assessment/eia-peer-and-self-assessment-main.aspx> 3. Black, P., Harrison, C., Lee, C., Marshall, B., & William, D. (2003). *Assesment for learning: Putting it into practice*. Maidenhead: Open University Press

Ipsative Assessment

Definition: An *ipsative assessment* compares a learner's current performance with previous performance either in the same field through time or in comparison with other fields, resulting in a descriptor expressed in terms of their 'personal best'.¹



Description: You are surely familiar with the term “personal best” in athletics. That’s a good example of *ipsative assessment*. It is typically used in informal and practical learning such as sports, music teaching and more recently in online gaming. It works as an iterative process where teachers and students work together to diagnose particular individual strengths and weaknesses, set some achievable goals or targets against which progress will be assessed in the short or medium-term and articulate a clear actionable plan to make them happen.

Benefits: By definition, it’s a highly personalized form of assessment where progress is measured against the needs and goals of the individual, not in comparison to external standards or performance of peers. Thus, it improves self-esteem and confidence, particularly for those who do not achieve high grades or put off by competitive environments. Continued dialogue between learner and teacher secure better engagement with feedback It does also give tutor and students a longer- term view of assessment.

Challenges: *Ipsative assessment* is inevitably subjective and not amenable to comparisons (low validity) or standardisation. From a teacher’s perspective, it may feel like an additional

burden to teachers' workload and it requires extra-effort to get familiar with it. On the other hand, students may be reluctant to quit a longstanding habit of comparing their performance with others. At some point a standard is needed for an award so perhaps a "blend" of ipsative and criteria-referenced approaches will be more realistic.

Applied to entrepreneurial education: *Ipsative assessment* may be a good way to facilitate feedback on development of generic or transversal skills². *Ipsative assessment* may contribute to a more coherent assessment particularly at a time when clear models of progression or standards on the acquisition of entrepreneurial skills are largely missing. Discussion of progress will be greatly enriched if it takes place across subjects. Again this requires establishing a clear sense of direction and greater coordination among teaching teams. The good news is that the idea of *ipsative assessment* is already implicit in some pedagogic techniques that are becoming common currency in Entrepreneurial Education such as learning journals, reflection on practice and coaching. This is a relatively radical and new approach that holds promise for a more inclusive assessment. Further practice and research will be needed to determine its full potential.

1 Isaacs, T., Zara, C., Herbert, G., Coombs, S. J. & Smith, C. 2013. Key concepts in educational assessment, London, UK, Sage Publications.

2 Hughes, G. (2011). Towards a personal best: A case for introducing ipsative assessment in higher education. *Studies in Higher Education*, 36(3), 353-367.