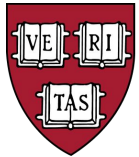




FeedbackFruits

Make every course engaging.



Harvard Division of
Continuing Education

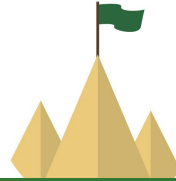
January 9th, 2023

Agenda

1. Introductions
2. FeedbackFruits mission
3. A learning journey with FeedbackFruits
 - a. With demo in Canvas
4. Q&A



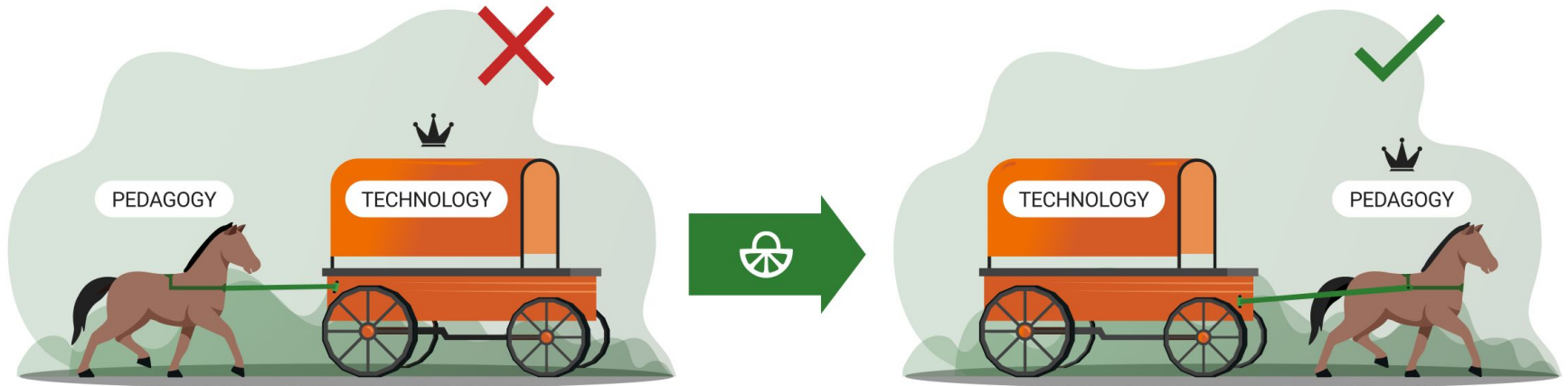
Our mission



Allowing everyone to deliver **effective learning experiences**,
regardless of **scale** and **context**







Pedagogy over technology

How do we want to achieve our mission?







FeedbackFruits Integrated Teaching and Learning System




Feedback & Assessment

-  Group Member Evaluation
-  Peer Review
-  Skill Review
-  Assignment Review
-  Automated Feedback
-  Self-Assessment

Collaborative learning and student discussion

-  Interactive Study Material
-  Comprehension
-  Discussion on work
-  Discussion on Topic

Synchronous learning

-  Interactive Presentation
-  Quiz
-  Team Based Learning



These tools can be added to your **Canvas courses**



The screenshot shows a Canvas course interface. The top navigation bar includes a hamburger menu, the course title "Demo > Modules > (Peer) Fee...", and a subtitle "Promote student accountability & identifying free riders - with Group Member Evaluation". The left sidebar contains navigation options: Home, Account, Admin, Dashboard, Courses, Calendar, Inbox, History, Commons, Programmatic Assessment, and Help. The main content area is titled "Promote student accountability & spot free riders - with Group Member Evaluation". It features a section for "Overall student progress" with three metrics: "1 of 12 students have completed this", "3 average number of comments per group", and "118 min average time spent per review". Below this is a "Statistics per active student" dropdown and an "EXPORT ANALYTICS" button. The "Instructions" section is marked with a "1" in a purple circle and contains a video thumbnail of a woman, followed by text: "Dear students, Please evaluate the work with your group members and reflect on the received feedback. You can check the rubric criteria in the attached document. Your grade will be individualized according to the received feedback provided by your peers. Good luck!"

- Students automatically have access to the activity
- It's possible to sync:
 - Groups and sections
 - Grades
 - Deadlines
- You can copy and share existing activities



An example learning journey in **8** steps

using the  Feedback**Fruits** toolsuite

During class

synchronous

Often on campus, paced by the teacher or online learning using video calls.

Outside of class

asynchronous

Often at the student's own pace and time, e.g. at home or at a campus group workspace

Let's get started



Interactive Class

Activate students in class

Dive deeper into the content covered prior to class time, by discussing and answering questions with students that were posted in interactive document, audio or video.



Boost engagement for high knowledge uptake before class

Students explore course material, interactive study material ensures that students engage with material before class, and are able to ask questions.



Students work on their project

Students work on the draft version of their project (e.g. essay, case study), either individually or in a small team.



Interactive Class

Reflect on the common themes of improvement

The teachers uses the analytics to spot the common themes of improvements that arose during peer feedback process, and provides in-class reflection time on how to tackle them.



Peer Review

Encourage students to learn from each other

Stimulate critical reading skills, and self-regulatory learning through peer review. Encourage a dialogue around feedback.



Students iterate to improve deliverable

The group gathers again to improve their product based on the peer-feedback and teacher insights they received



Students iterate to improve deliverable

The group gathers again to improve their product based on the peer-feedback and teacher insights they received



Assignment Review

Final hand-in and teacher feedback

Students hand in their group assignments, and receive teacher feedback based on a set of criteria



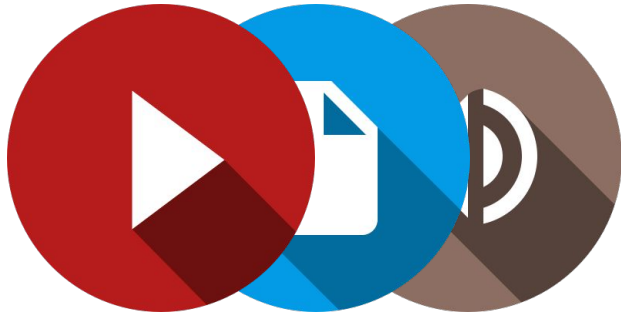
Group Member Evaluation

Reflection on collaboration process

If students worked on the project in teams, they can get the opportunity to give feedback on their team members' collaboration skills.



Finished



Interactive Study Material

Interactive Document, Video, Audio

Engage students by letting them interact with the study material, for example by answering questions or discussing with each other

Pedagogical challenge:

Passive consumption of study material

Why use **Interactive Study Material?**



Interactive Document

- Article / book chapter with questions
- Case study
- Asking questions about the lecture (slides)
- Students create exam questions

Interactive Video

- Knowledge clip / recorded (micro) lecture
- TED talk / news item

Interactive Audio

- Podcast discussion

Boost engagement with required questions



The screenshot shows a video player interface with a central question overlay. The question is "How many pictures did they label?". The overlay is titled "Open question" and has a close button (X) in the top right corner. Below the question, it says "Answer submitted" and "Answering locked. Your answer is received". The correct answer is highlighted in green and is "1 billion" by Annika Borgstede. Below that, a user named Emily Collins has submitted "1 million" and has a thumbs-up icon next to it. At the bottom of the overlay, there are three buttons to rate the answer: "CORRECT" (green), "ALMOST" (orange), and "WRONG" (red). The video player background is dark with a large image of a person's face. At the bottom of the video player, there is a "More videos" section with several video thumbnails. The video progress bar shows 7:17 out of 18:03. There are also icons for volume and settings at the bottom right.

Open question

How many pictures did they label?

Answer submitted
Answering locked. Your answer is received

Correct answer

Annika Borgstede
1 billion

Emily Collins
a few seconds ago
1 million

Rate your answer to finish

CORRECT
ALMOST
WRONG

More videos

7:17

18:03



Comprehension

Students improve their understanding of a text by annotating a document based on predetermined topics

Pedagogical challenge:

Inefficient reading strategies of students

Why use **Comprehension?**



Students annotate a text based on:

- Concepts that are discussed during class
- The structure of a scientific paper (“what is the academic relevance?”)
- Supporting / counter arguments discussed in the text

Test knowledge consumption with social annotations



Students received one point for each of their correct answer in the pre-test and post-test. Scores of the students ranged from 0 to 16 in the multiple-choice test. In order to answer research questions, descriptive statistics, Shapiro-Wilk test, independent t-test and the Mann Whitney U test were used for the data analysis.

3. Results

The descriptive analyses of pre-test and post-test results of participants are presented in the Table-1.

Table-1: The Descriptive Analysis of the Pre-test and the Post-test Results of Participants

		N	Mean	Std. Deviation
Pre-test	Experimental Group	20	8.25	2.67
	Control Group	15	6.66	2.25
Post-test	Experimental Group	20	15.3	0.73
	Control Group	15	12.26	1.98

Before testing the hypothesis, the tests of normality were conducted to determine which types of test were going to be used for analysis. The results of the Shapiro-Wilk test (see Table-2) revealed that only the post-test scores of the experimental group are not normally distributed. Therefore non-parametric test was used for hypothesis testing when the post-test scores of the experimental group are analyzed.

Table-2: The Results of the Shapiro-Wilk test

	Shapiro-Wilk		
	Statistic	Df	Sig.
Ex_pretest	.885	15	.056
Ex_posttest	.783	15	.002
Cont_pretest	.964	15	.756
Cont_posttest	.937	15	.342

* This is a lower bound of the true significance.
a. Lilliefors Significance Correction

Initially student knowledge was compared in the experimental and the control groups. The result of the independent t-test revealed that there was not any significant difference between the pre-test scores of the experimental and control groups (see Table-3). This finding shows that before the study of "Atom's structure" is not different from the study of "Atom's structure" in the experimental and control groups.

Introduction

Methodology

Results

Discussion

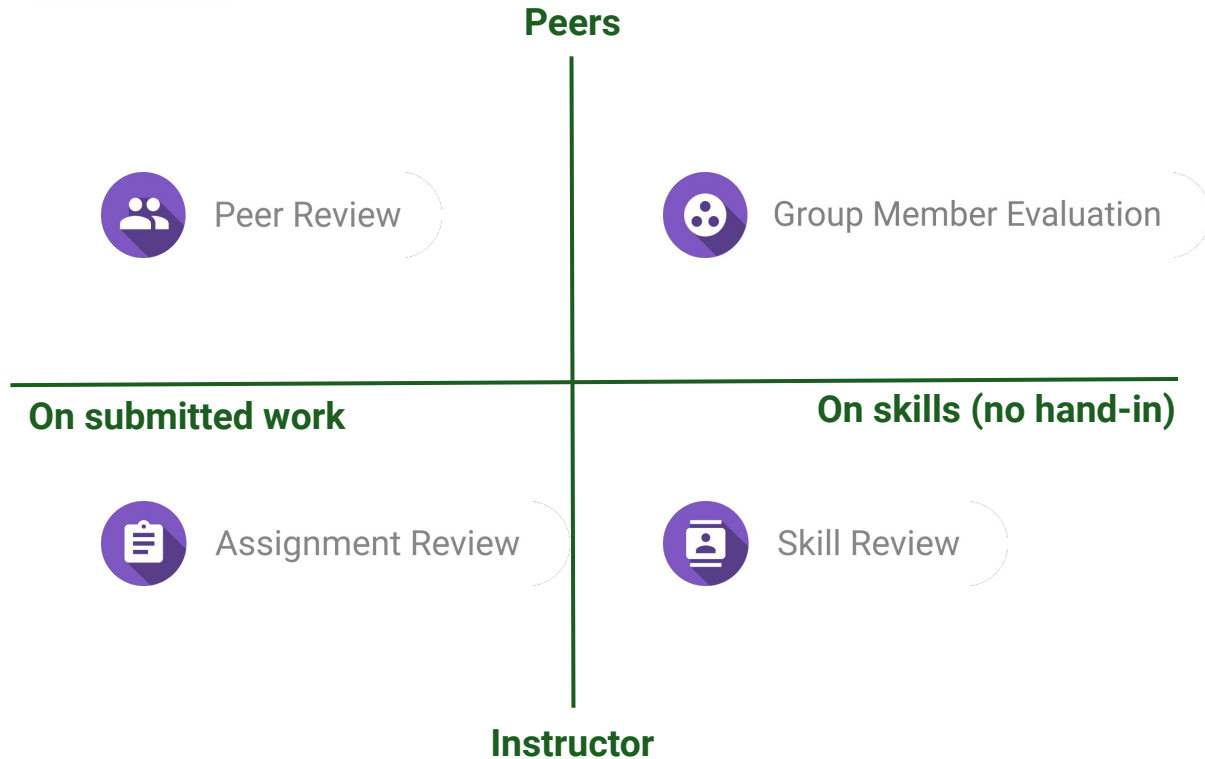
Conclusion

Experimental and Control Groups

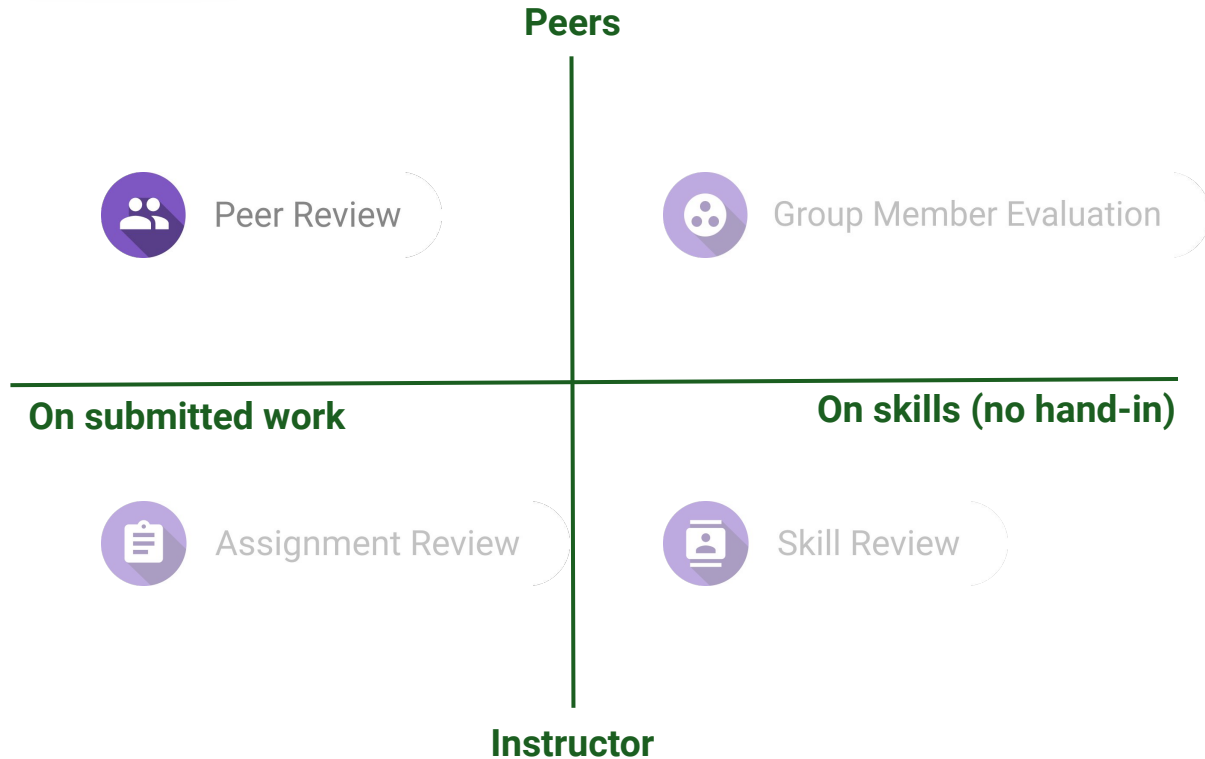
	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Pre-test	8.25	2.67	1.85	33	0.073

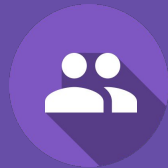
These exercises embedded in the instruction improves the students' knowledge. The post-test scores of students in the experimental and control groups of the Mann-Whitney U- test revealed that there is a

(Peer) Feedback



(Peer) Feedback





Peer Review



What is Peer Review?

A tool to activate peer learning by allowing students to review each other's work on the basis of customizable feedback criteria



What is Peer Review?

Students review the work of:

- other individuals
- other groups
- fellow group members

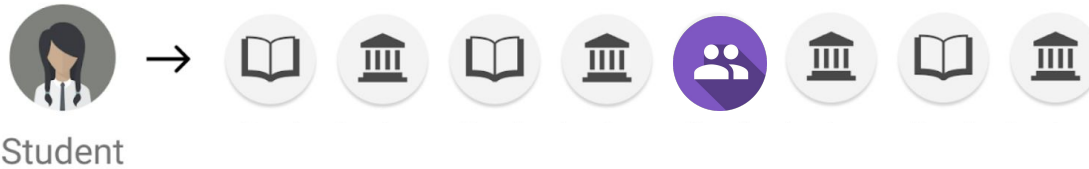
Common use cases: essay or report draft, video projects, recorded presentations or demonstrations

The screenshot displays a peer review interface. On the left, a document titled "The Role of the Firm in Business & Society" with the subtitle "Prioritizing Stakeholders" and ID "5432ABC" is shown. The document contains several paragraphs of placeholder text. A section titled "Introduction" is highlighted with a purple selection box, and a feedback comment is being written over it. The comment text reads: "am eu tellus elit. Aliquam maesuada libero non eros condimentum, id imperdiet nibh aliquam. Praesent tempus nulla quam, eget dignissim arcu facilisis ut. Sed consequat non eros id consequat. Maecenas et eros fermentum, ornare orci quis, sollicitudin erat. Morbi bibendum interdum quam, id posuere nisi pharetra non. vivamus tristique nulla ac imperdiet porta. Vestibulum arcu dui, dignissim ac vestibulum sit amet, tincidunt et felis. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam commodo tempor sodales. Curabitur pretium erat nec felis accumsan fringilla. Mauris sed odio rhoncus, blandit sapien ac, scelerisque ex. Proin lacus massa, suscipit et consequat quis, elementum vitae augue. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam commodo tempor".

On the right, a "Write feedback comment" form is visible. It includes a dropdown menu for "Select applicable criterion" with "Development" selected. Below this, there is a section for "page 1" with a "Write your feedback" prompt: "Remember to start off with a strong topic sentence". There are two buttons: "Compliment" and "Suggestion", with "Suggestion" being the active one. A "POST" button is at the bottom of the form. The interface also shows a vertical scrollbar on the left and a page number "5" at the bottom right.



Why use Peer Review?



- Save time
- Solve logistical problems (e.g. large class size)
- Facilitate peer learning
- Improve students' feedback-giving skills
- Get insight into the peer review process

Peer Review | **Summary slide**



- Students review handed in work
- Self-assessment can be switched on
- Students automatically receive work to review
- Feedback criteria is customizable
- Activities and feedback criteria are reusable
- Both students and teachers can respond to the feedback
- Review process can be anonymous
- Formative and summative grading options

(Peer) Feedback





Group Member Evaluation



What is Group Member Evaluation?

A tool to guide students in assessing the soft skills or performance of their peers or fellow group members



What is Group Member Evaluation?

Students to evaluate the skills and contribution of:

- their group members (*in-group*)
- other groups (*out-group*)
- other classmates (*individual*)

Common use cases: group work, presentations, simulations

Criteria	Self-assessment Melinda MacTurnit	All reviews received by Melinda MacTurnit
Contributions	<p>Beginning 0 points Emerging 1 point Proficient 2 points Experi... 3 points</p> <p>Requirements for Experienced (3 points) In large- and small-group discussions, shares he... Read more...</p> <p>0 COMMENTS</p>	<p>Beginning 0 points Emerging 1 point Proficient 2 points Experi... 3 points</p> <p>4</p> <p>Requirements for Experienced (3 points) In large- and small-group discussions, sh... Read more...</p> <p>1 COMMENT</p>
Time management	<p>Beginning 0 points Emerging 1 point Proficient 2 points Experi... 3 points</p> <p>Requirements for Emerging (1 point) May put things off, but turns assignments in on... Read more...</p> <p>0 COMMENTS</p>	<p>Beginning 0 points Emerging 1 point Proficient 2 points Experi... 3 points</p> <p>4</p> <p>Requirements for Emerging (1 point) May put things off, but turns assignment... Read more...</p> <p>1 COMMENT</p>
Problem solving	<p>Beginning 0 points Emerging 1 point Proficient 2 points Experi... 3 points</p> <p>Requirements for Experienced (3 points) In large- and small-group discussions, shares he... Read more...</p> <p>0 COMMENTS</p>	<p>Beginning 0 points Emerging 1 point Proficient 2 points Experi... 3 points</p> <p>4</p> <p>Requirements for Experienced (3 points) In large- and small-group discussions, sh... Read more...</p> <p>1 COMMENT</p>



Why use Group Member Evaluation?



- Promote accountability and prevent freeriding
- Insight into the group-work and feedback process
- Facilitate peer learning
- Enhance feedback-giving skills

Group Member Evaluation | **Summary slide**



- Students review skill, performance, or contribution of peers
- Self-assessment can be switched on
- Feedback criteria is customizable
- Activities and rubrics are reusable
- Both student and teacher can respond to the feedback
- Reviewers can be anonymous
- Get unique insight into group dynamics
- Prompt self-reflection among students
- Formative and summative grading options

Questions?



Chat with Support



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More information and contact for help:

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- [Help articles](#) per tool and LMS
- [Use cases](#) from other teachers

- Support chat or mail to: helpme@feedbackfruits.com



Thanks for your participation!

