Integrative online tools for learning and teaching biochemistry

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FEBS Education Committee coopted member

Italian Education Group meeting of SIB
19th September 2022

F2F

Human interaction centered

VIRTUAL

Freed from the frame of time and space

BLENDED

Best of both!

Blended learning

While students still attend a class with a teacher present, **face-to-face classroom practices are combined with computer-mediated-activities** regarding content and delivery.

Online tools in F2F teaching

PROS

Student centred
More dynamic
Saves time to teachers
Less effort in the end

STUDENTS LOVE IT!

CONS

Sharing control of the process
New skills to develop
Time to adjust
Lots of effort in the beginning

NEW STUFF TO LEARN!

Fact!

Implementation of online tools
to F2F teaching
is an adaptation
to the needs of students.

Fact!

it makes them happy
i.e.
it makes us happy

- available on line
- completely free
- low technology support needed
- easy to use

- student centred
- dynamic
- interactive

- save time
- save effort

BEFORE YOU START USING THE ONLINE TOOLS …

LEARN HOW TO USE THEM

LEARN WHEN TO USE THEM

“Everyone who remembers his own education remembers teachers, not methods and techniques.
The teacher is the heart of the education process.“

Sidney Hook

The tools are just spices!

Where to use online tools?

1

Pre-class communication

Increase students' interest in the topic.

2

In-class teaching

Shape classes in a more dynamic and student-centred way.

3

Post-class communication

Share a self-assessment tests (quizzes) or perform a quality control survey.

4

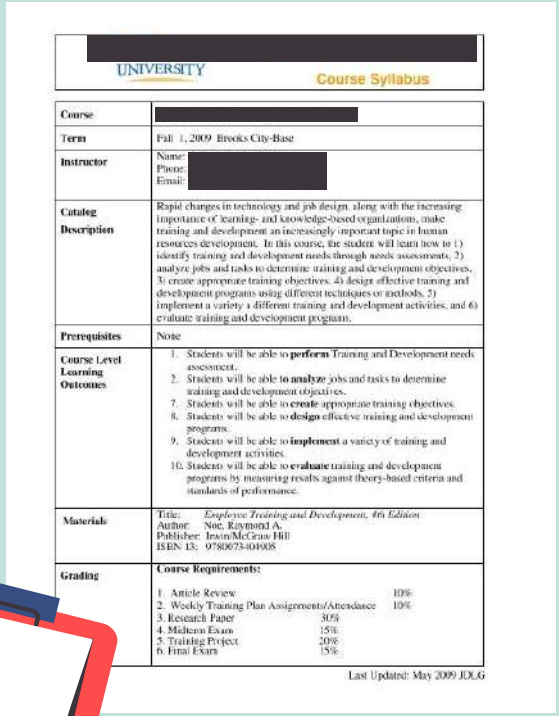
Out-of-class teaching

Make learning materials available anytime all the time.

1

Pre-class communication

Increase students' interest in the topic.



[redacted] UNIVERSITY

Course Syllabus

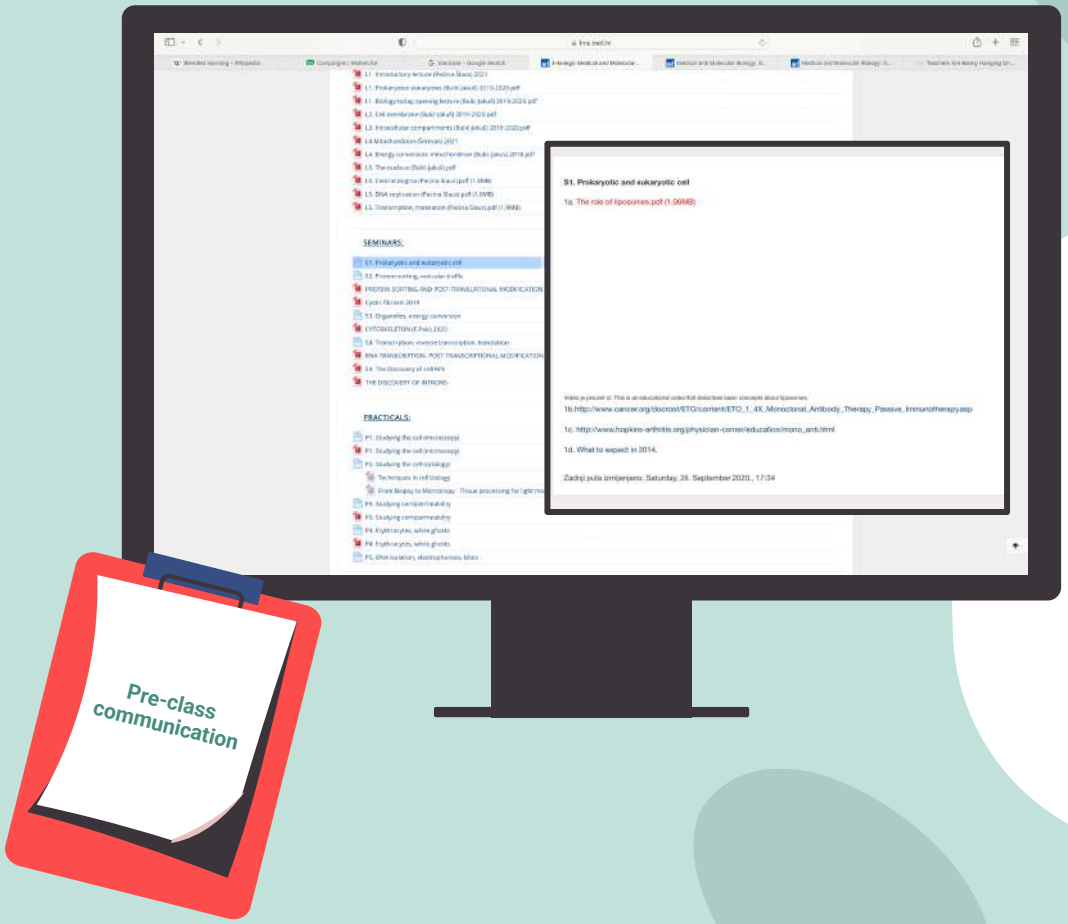
Course	[redacted]
Term	Fall 1, 2009 Brooks City-Base
Instructor	Name: Phone: Email: [redacted]
Catalog Description	Rapid changes in technology and job design, along with the increasing importance of learning- and knowledge-based organizations, make training and development an increasingly important topic in human resources development. In this course, the student will learn how to 1) identify training and development needs through needs assessments, 2) analyze jobs and tasks to determine training and development objectives, 3) create appropriate training objectives, 4) design effective training and development programs using different techniques or methods, 5) implement a variety a different training and development activities, and 6) evaluate training and development programs.
Prerequisites	None
Course Level Learning Outcomes	1. Students will be able to **perform** Training and Development needs assessment. 2. Students will be able to **analyze** jobs and tasks to determine training and development objectives. 7. Students will be able to **create** appropriate training objectives. 8. Students will be able to **design** effective training and development programs. 9. Students will be able to **implement** a variety of training and development activities. 10. Students will be able to **evaluate** training and development programs by measuring results against theory-based criteria and standards of performance.
Materials	Title: *Employee Training and Development, 4th Edition* Author: Noe, Raymond A. Publisher: Irwin/McGraw Hill ISBN-13: 9780073404905
Grading	**Course Requirements:** 1. Article Review 10% 2. Weekly Training Plan Assignments/Attendance 10% 3. Research Paper 30% 4. Midterm Exam 15% 5. Training Project 20% 6. Final Exam 15%

Last Updated: May 2009 JDLG

Pre-class communication

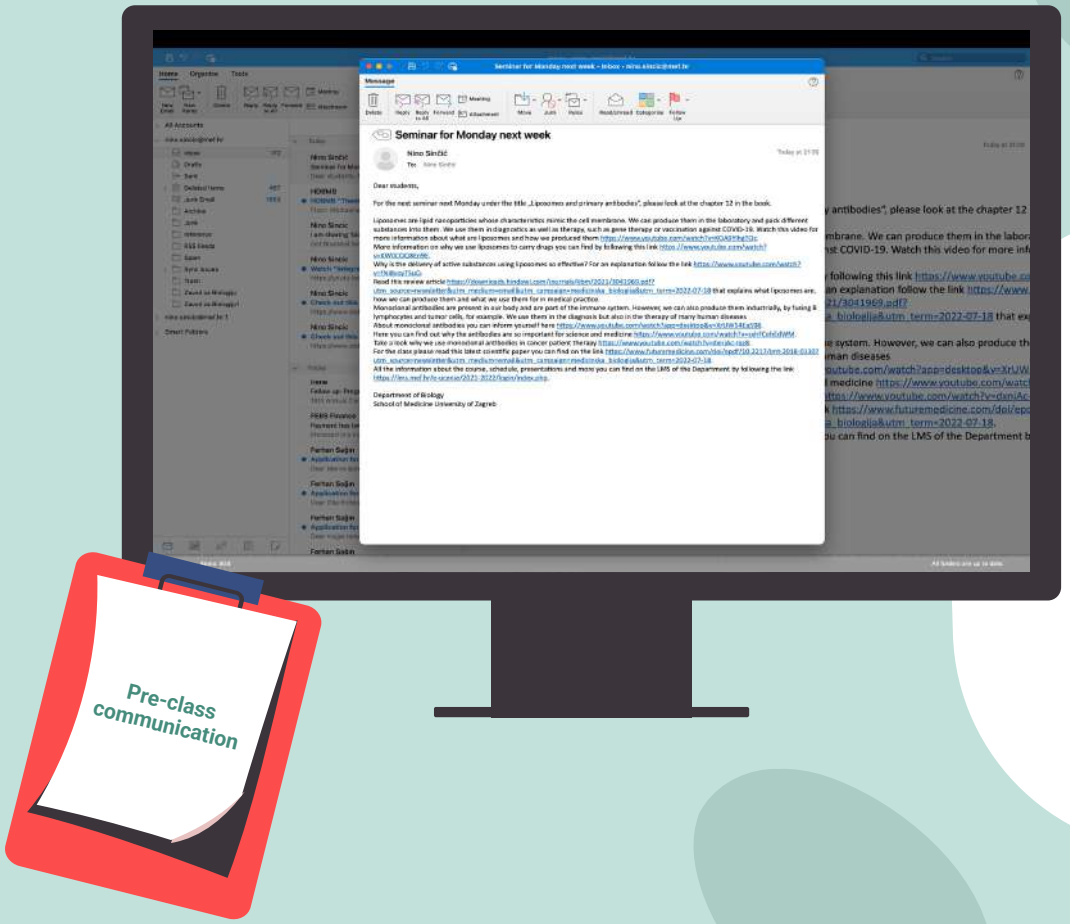
Syllabus

- No real communication
- Depersonalized
- Ineffective



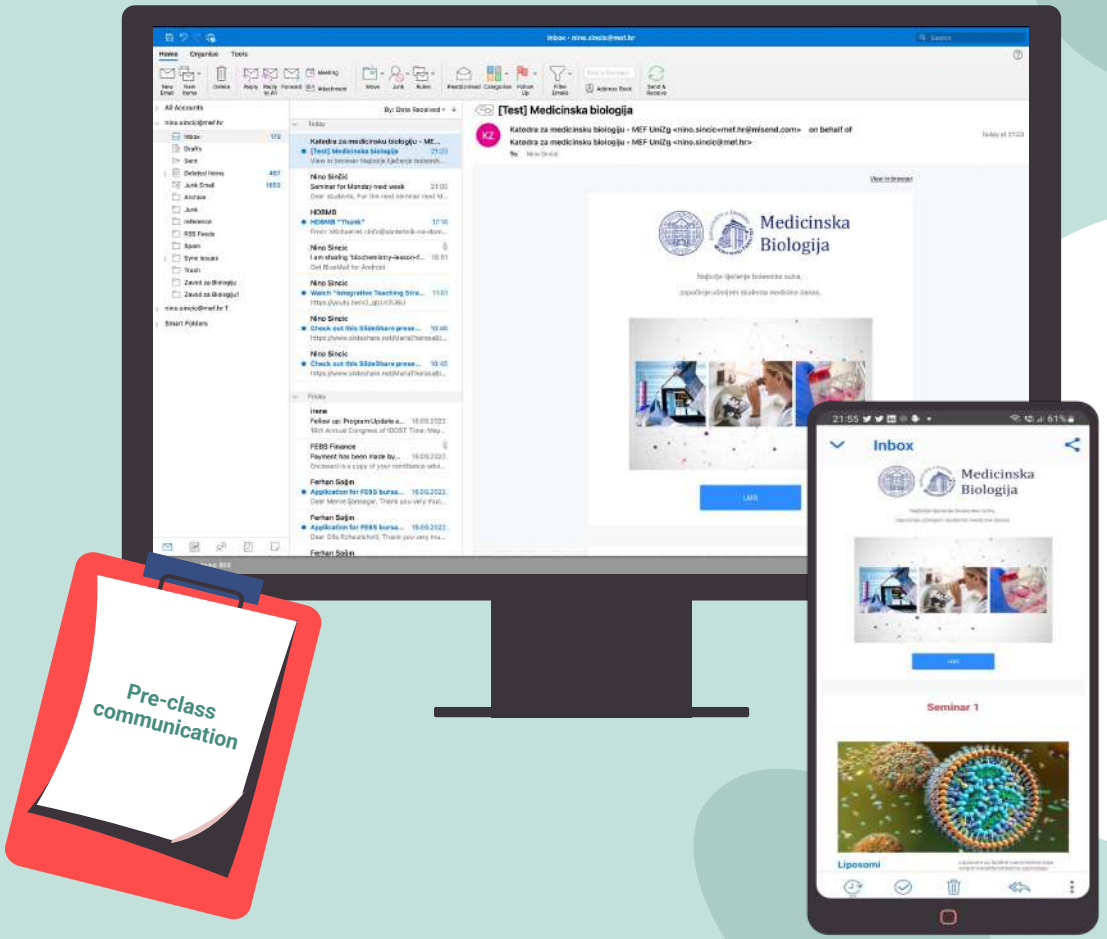
LMS/Moodle

- Static
- Not really interactive
- ”Boring”
- Not so effective



E-mails

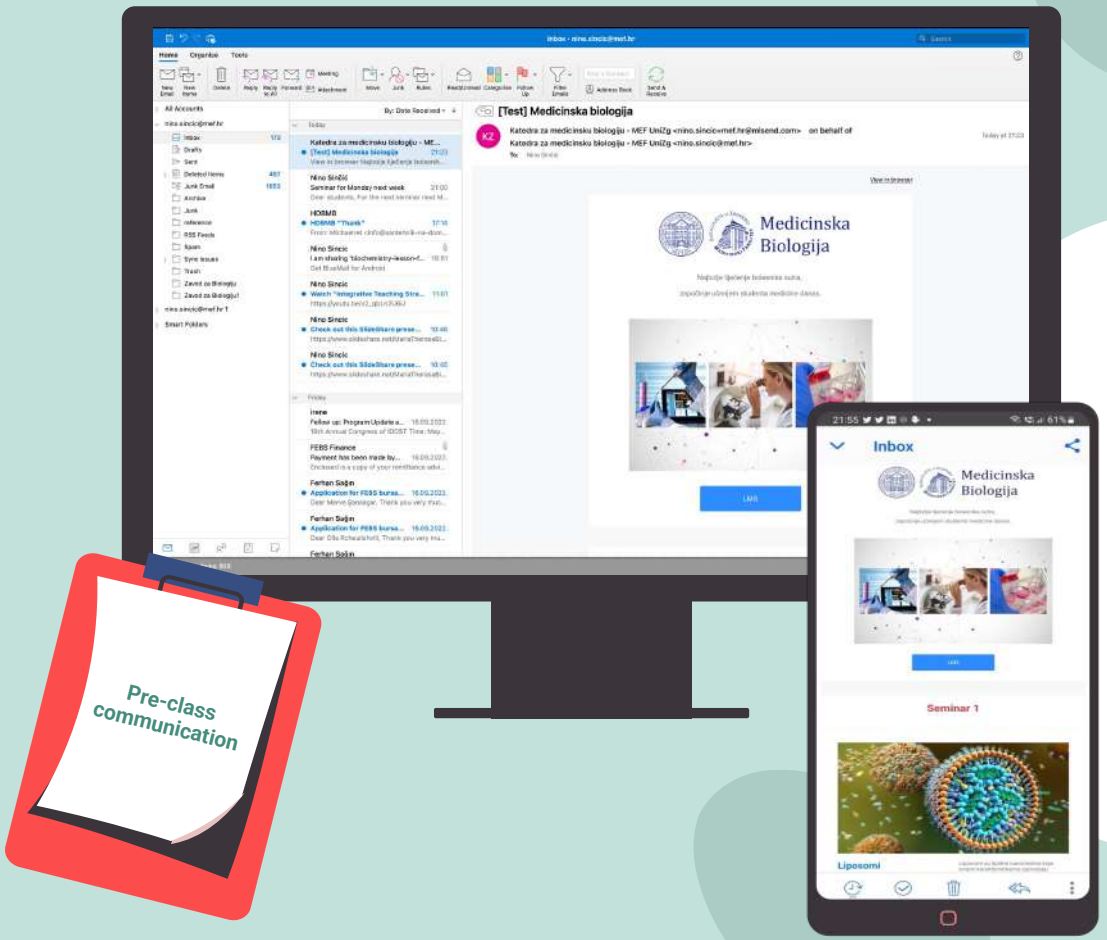
- One of many
- Not appealing
- ”Boring”
- Not so effective



mailer lite

E-Letters

- Prominent
- Appealing
- Interactive
- Fun
- Effective

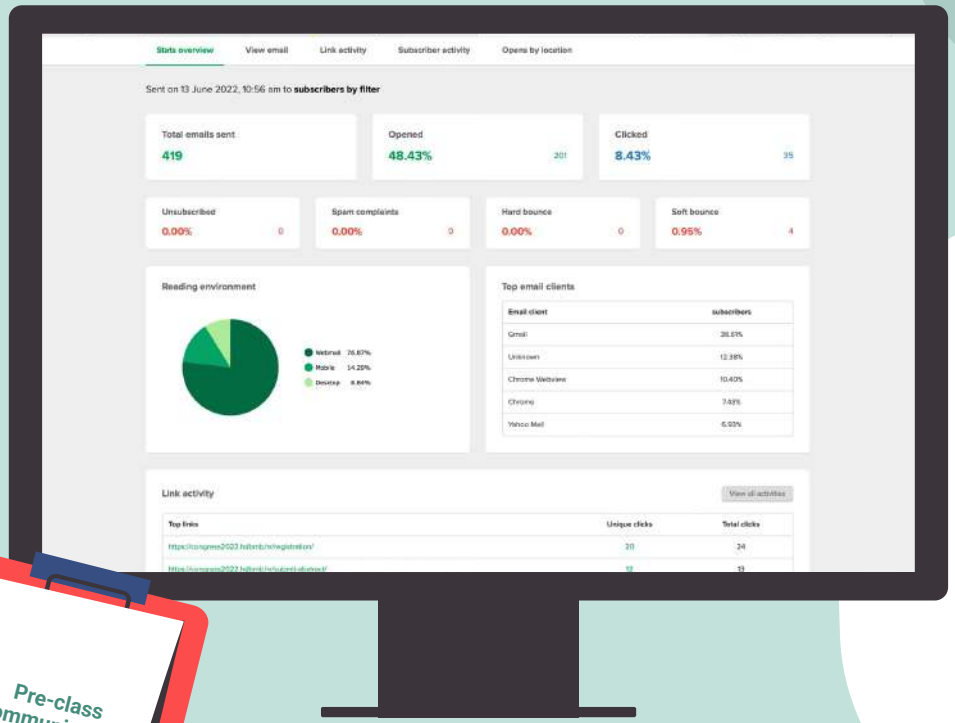


SCAN ME

mailer lite

E-Letters

- Prominent
- Appealing
- Interactive
- Fun
- Effective



mailer lite

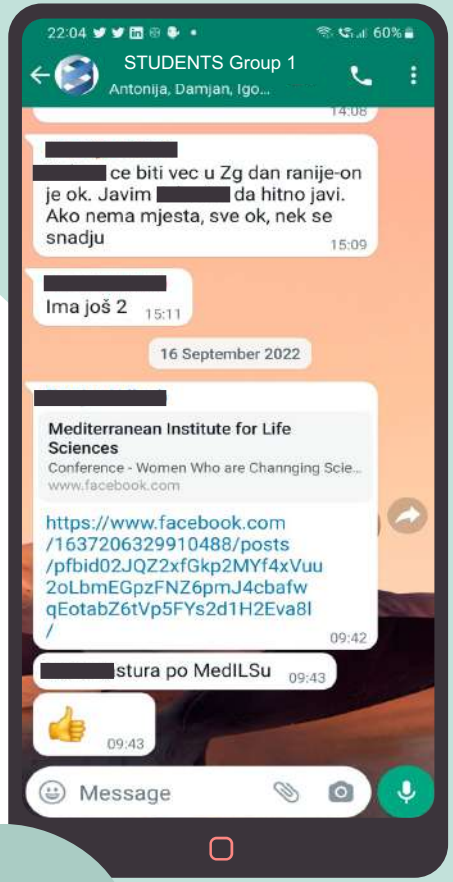
E-Letters

- Prominent
- Appealing
- Interactive
- Fun
- Effective
- Feedback

WA group

- Dynamic
- Personal
- Engaging
- Effective

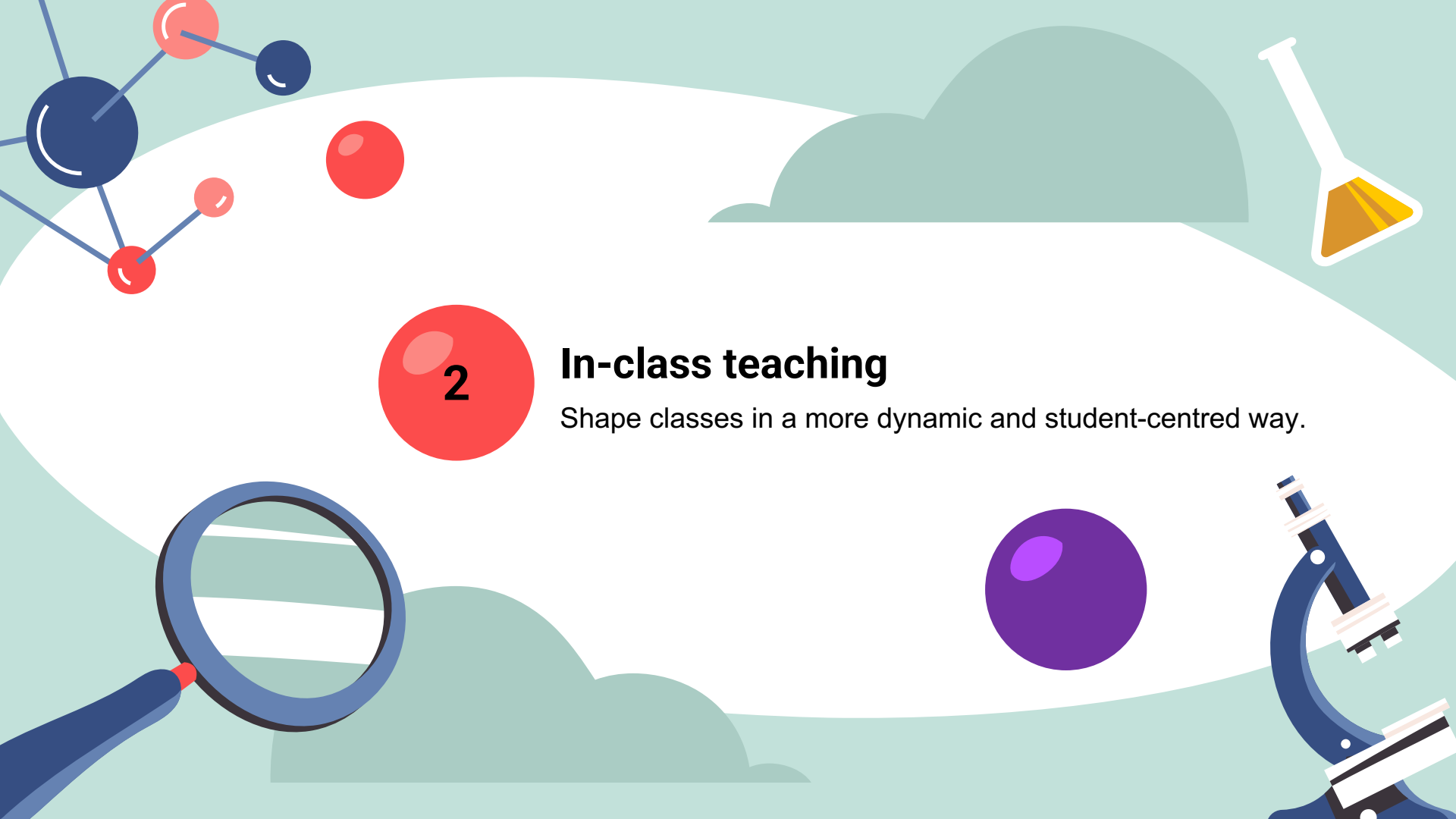
- Controversial



Social Networks

- Dynamic
- Personal
- Engaging
- Effective

- Controversial



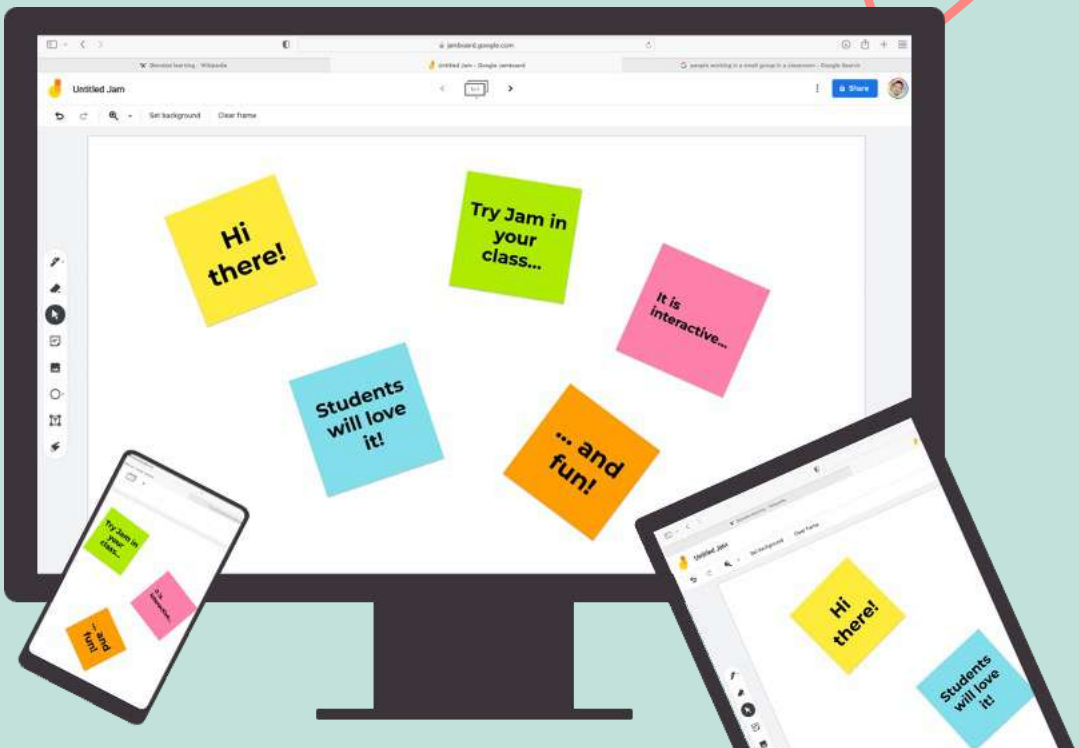
In-class teaching

Shape classes in a more dynamic and student-centred way.

Jamboard

- **Digital whiteboard**
- Google app
- Integrated in any google account
- Free

- Dynamic
- Interactive
- Simple
- Fun
- Smart



Jamboard

- **Digital whiteboard**
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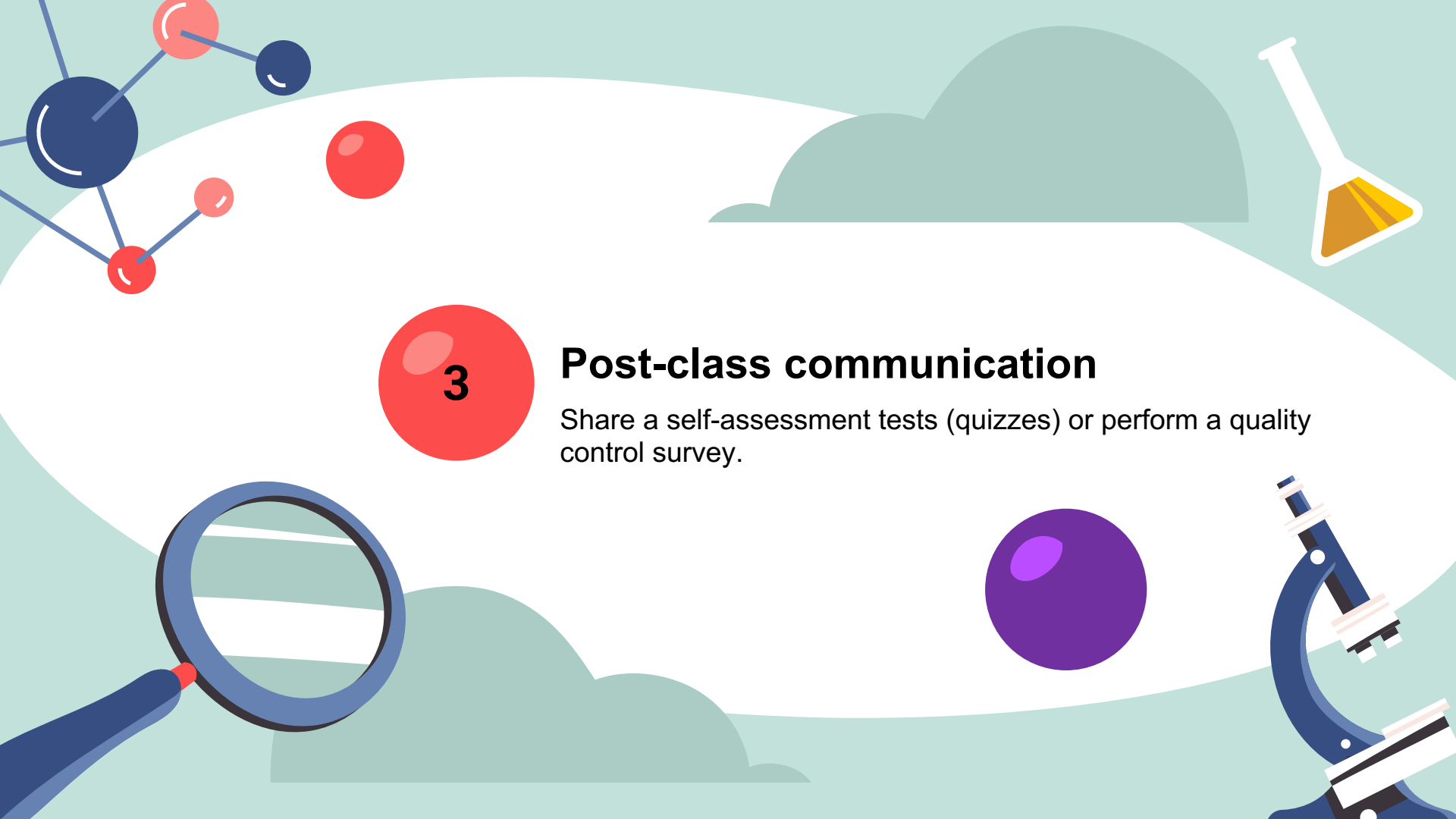
- Dynamic
- Interactive
- Simple
- Fun
- Smart

Kahoot

- **Quiz app**
- Free

- Dynamic
- Interactive
- Simple
- **Fun**



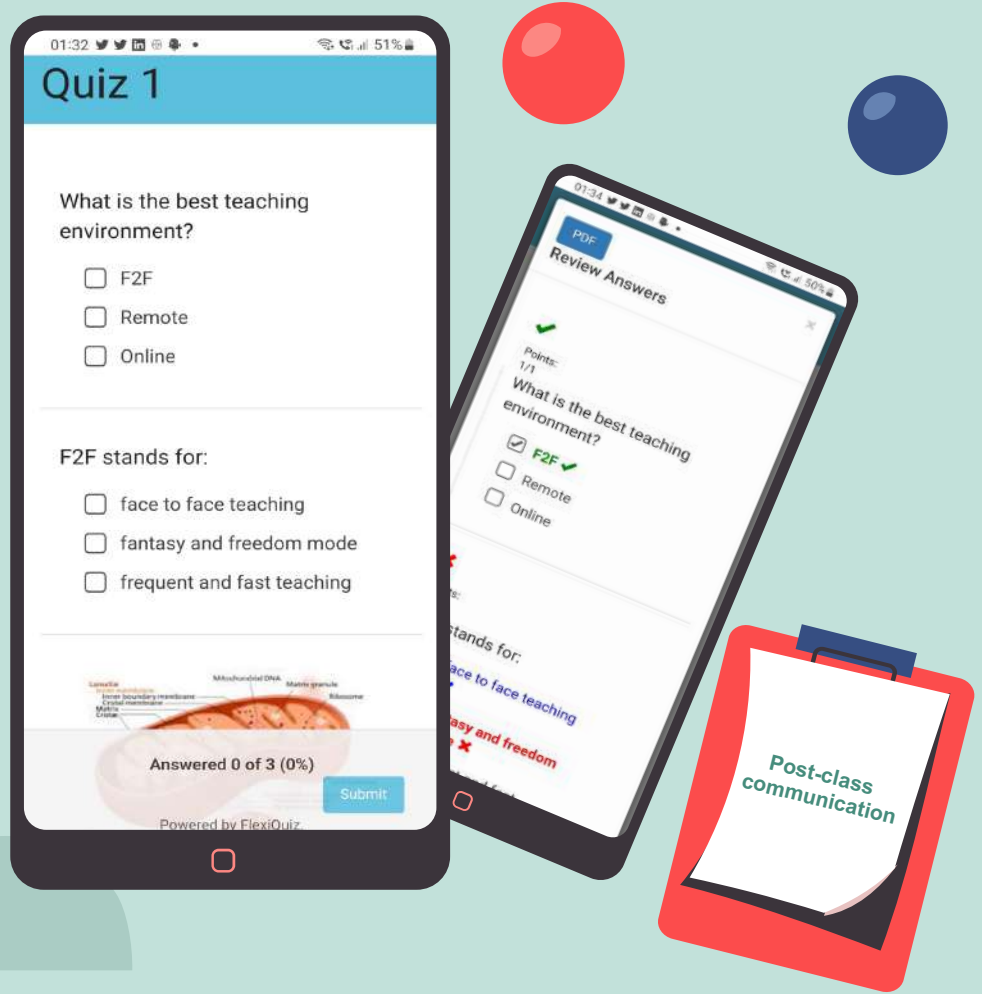
Post-class communication

Share a self-assessment tests (quizzes) or perform a quality control survey.

FlexiQuiz

- **Quiz builder**
- Interactive self assessment
- Free

- Simple
- Interactive



SCAN ME

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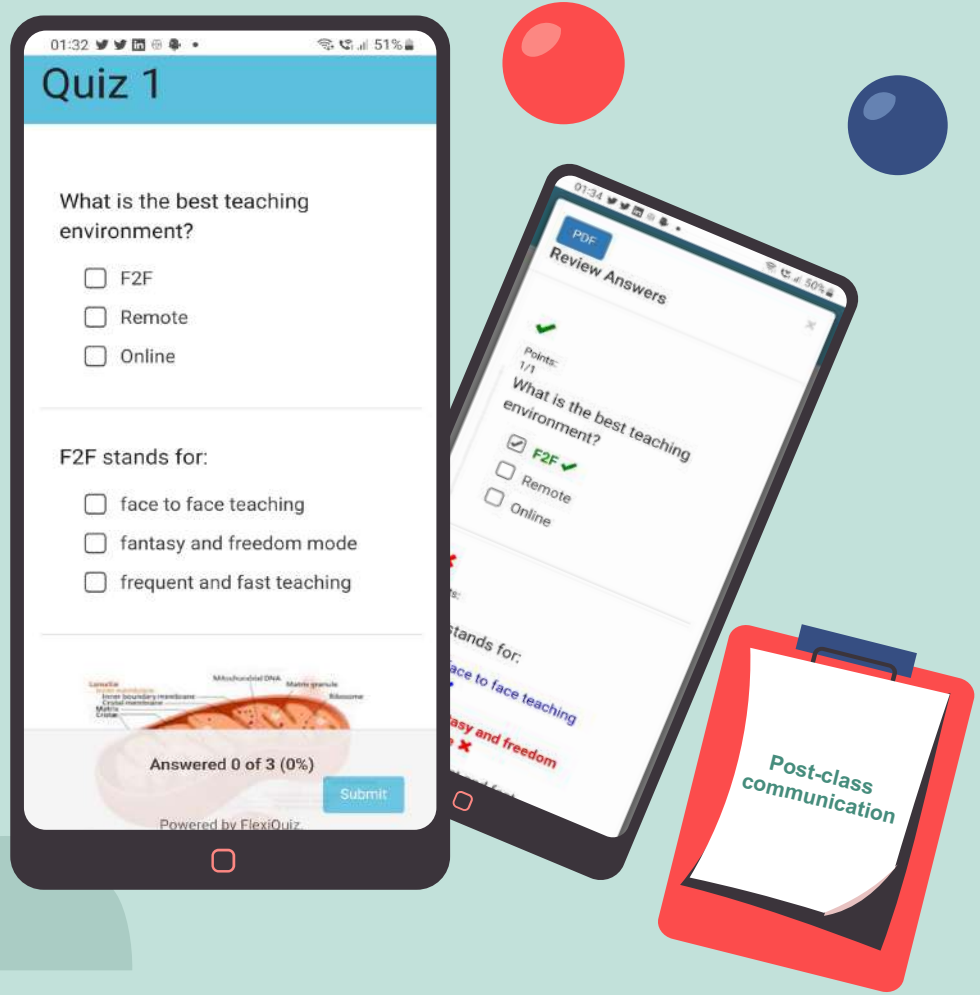
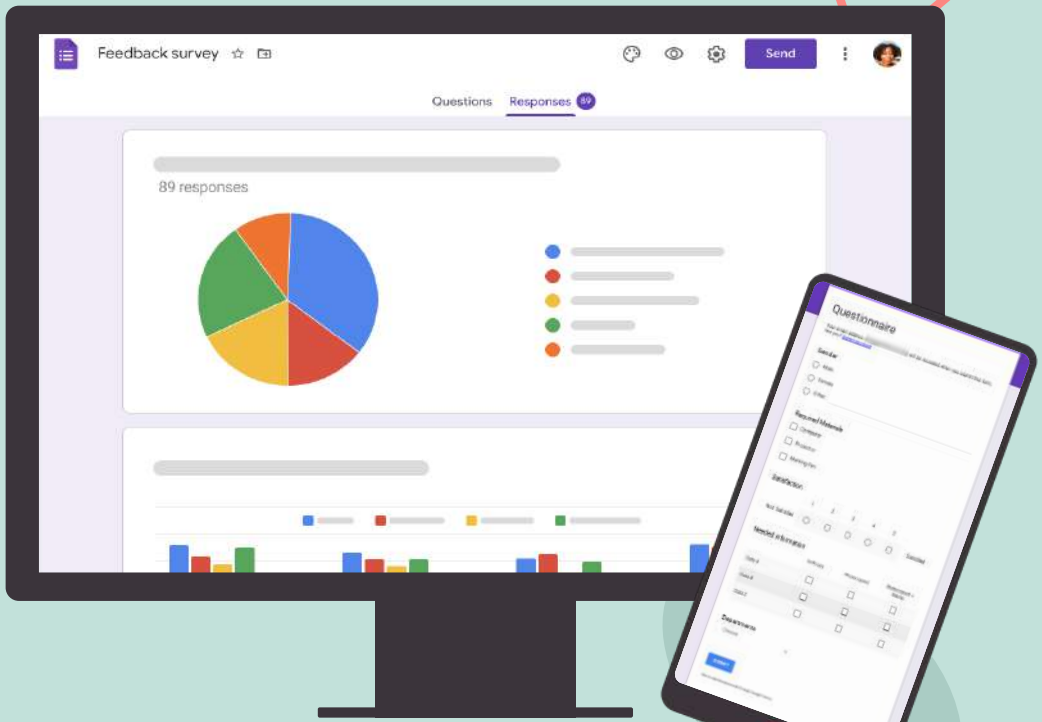




Google form

- **Digital survey**
- Google app
- Integrated in any google account
- Free

- Dynamic
- Interactive
- Simple

4

Out-of-class teaching

Make learning materials available anytime all the time.

Any cloud can do the job!

LMS

Institutional support is advised.

Complex.

Interactive.

G-Drive

Simple.

Free.

Not interactive.

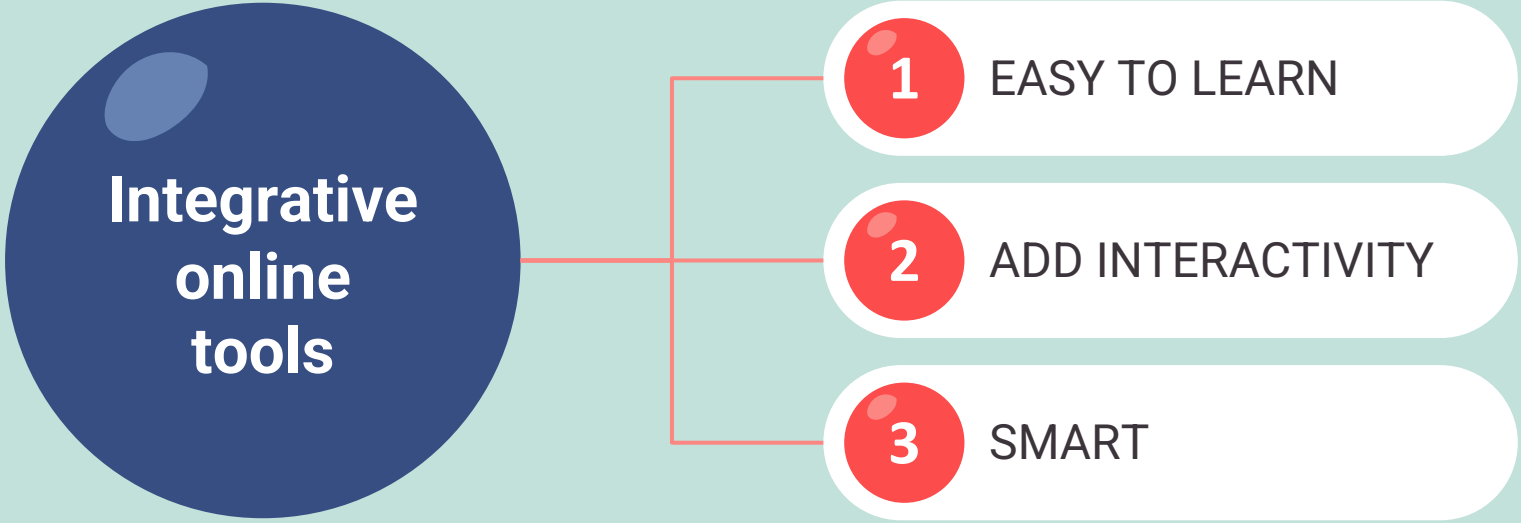
Teams
G-Classroom

Simple.

Free.

Can be interactive.

In short:


Integrative online tools
1
EASY TO LEARN
2
ADD INTERACTIVITY
3
SMART

Bonus tip

Use the QR codes in a ppt in your class:

- Easy to make
- Easy to use
- Fast transition to other resource

https://me-qr.com/

Thank you!

Any questions?

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