

Creative Box: Promoting the innovative approaches to building educational formats in youth work

“Educational experiment: implementation of innovative solutions in youth education”

Developed by: CCIF Cyprus



This project has been funded with support from the European Commission.

Project №: 2021-1-PL01-KA220-YOU-000028673

This communication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



Co-funded by the
Erasmus+ Programme
of the European Union

Topic 1: Experiments in education and how to efficiently conduct them

For this topic we are going to present how the educational field evolved, especially focussing on the pandemic era and its changes.

We are going to illustrate new educational innovations and how the new method of “classroom experiments” changed the way of learning.

(Webinar 1)

Finally, we are going to show how to do an efficient classroom experiment.

(Presentation 1)

Topic 2: Innovation and education

For this topic we are going to try to define the term “Innovation” in order to clarify its meaning.

(Webinar 2)

We are going to illustrate what are innovative solutions and how they effected the educatinal field. Finally we are going to suggest some ways to achieve a good-quality e-learning.

(Presentation 2)

Topic 3: CONDUCTING A CLASSROOM EXPERIMENT ABOUT THE INTRODUCTION OF TECHNOLOGY IN CLASSROOMS

The AIM is to understand the aspects of innovative solutions such as classroom experiments and the changes brought up in education by new technologies.

We will ask learners to create a functional and creative classroom experiment; we are going to select the best 3 and make the report on them.

References

- ▶ Kenneth B. Khan, School of Business, Virginia Commonwealth University, 301 W. Main Street, Richmond, VA 23284-4000, U.S.A.
- ▶ Abu Talib, M., Bettayeb, A.M. & Omer, R.I. Analytical study on the impact of technology in higher education during the age of COVID-19: Systematic literature review. *Educ Inf Technol* 26, 6719-6746 (2021). Retrieved by <https://doi.org/10.1007/s10639-021-10507>
- ▶ <https://serc.carleton.edu/sp/library/experiments/how.html> (retrieved on 05/09/2022)
- ▶ <https://www.embibe.com/exams/how-is-technology-changing-education/> (retrieved on 05/09/2022)
- ▶ Shailendra Palvia, Prageet Aeron, Parul Gupta, Diptiranjana Mahapatra, Ratri Parida, Rebecca Rosner & Sumita Sindhi (2018) Online Education: Worldwide Status, Challenges, Trends, and Implications, *Journal of Global Information Technology Management*, 21:4, 233-241, DOI: 10.1080/1097198X.2018.154226
- ▶ How Is Technology Changing Education: Improve Learning, 2022 (retrieved by embibe.com on 05/09/2022)
- ▶ Richardson W., Five Ways Traditional Education Has to Change - National Institute for Student-Centered Education, 2014 (retrieved by nisce.org on 02/09/2022)
- ▶ Five ways the education system should improve - Acton Academy Miami South, 2019 (retrieved by actonmiamisouth.com on 02/09/2022)

Creative Box: Promoting the innovative approaches to building educational formats in youth work

Thank you

Contact us:

**CCIF Cyprus - Cross Culture International Foudation
Cyprus**

Contact:

Email: ccifcyprus@outlook.com

This project has been funded with support from the European Commission.

Project N°: 2021-1-PL01-KA220-YOU-000028673

This communication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



Co-funded by the
Erasmus+ Programme
of the European Union

Creative Box: Promoting the innovative approaches to building educational formats in youth work

“Educational experiment: implementation of innovative solutions in youth education”

Devaloped by: CCIF Cyprus

This project has been funded with support from the European Commission.

Project N°: 2021-1-PL01-KA220-YOU-000028673

This communication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



Co-funded by the
Erasmus+ Programme
of the European Union

**CROSS CULTURE INTERNATIONAL
FOUNDATION CYPRUS**

EDUCATIONAL EXPERIMENTS

HOW TO DO A CLASSROOM EXPERIMENT

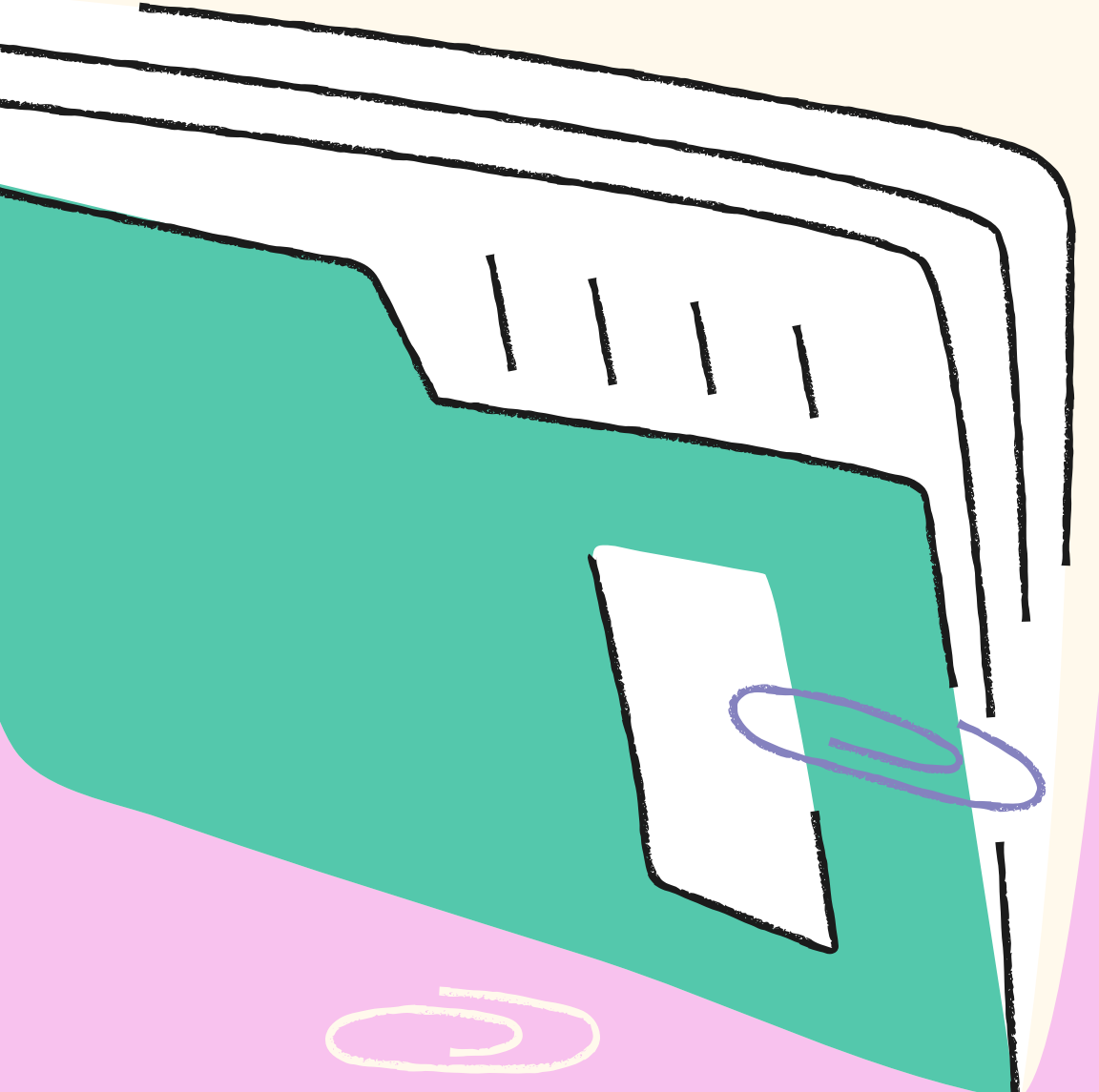


Experiments in the classroom seek to involve students in a decision making environment and allow them to explore the outcomes of their decisions.



The first time you try one, it is probably a good idea to use an experiment that someone else has prepared!





STEPS FOR A CLASSROOM EXPERIMENT

1

Instructor preparation

2

Students preparation

3

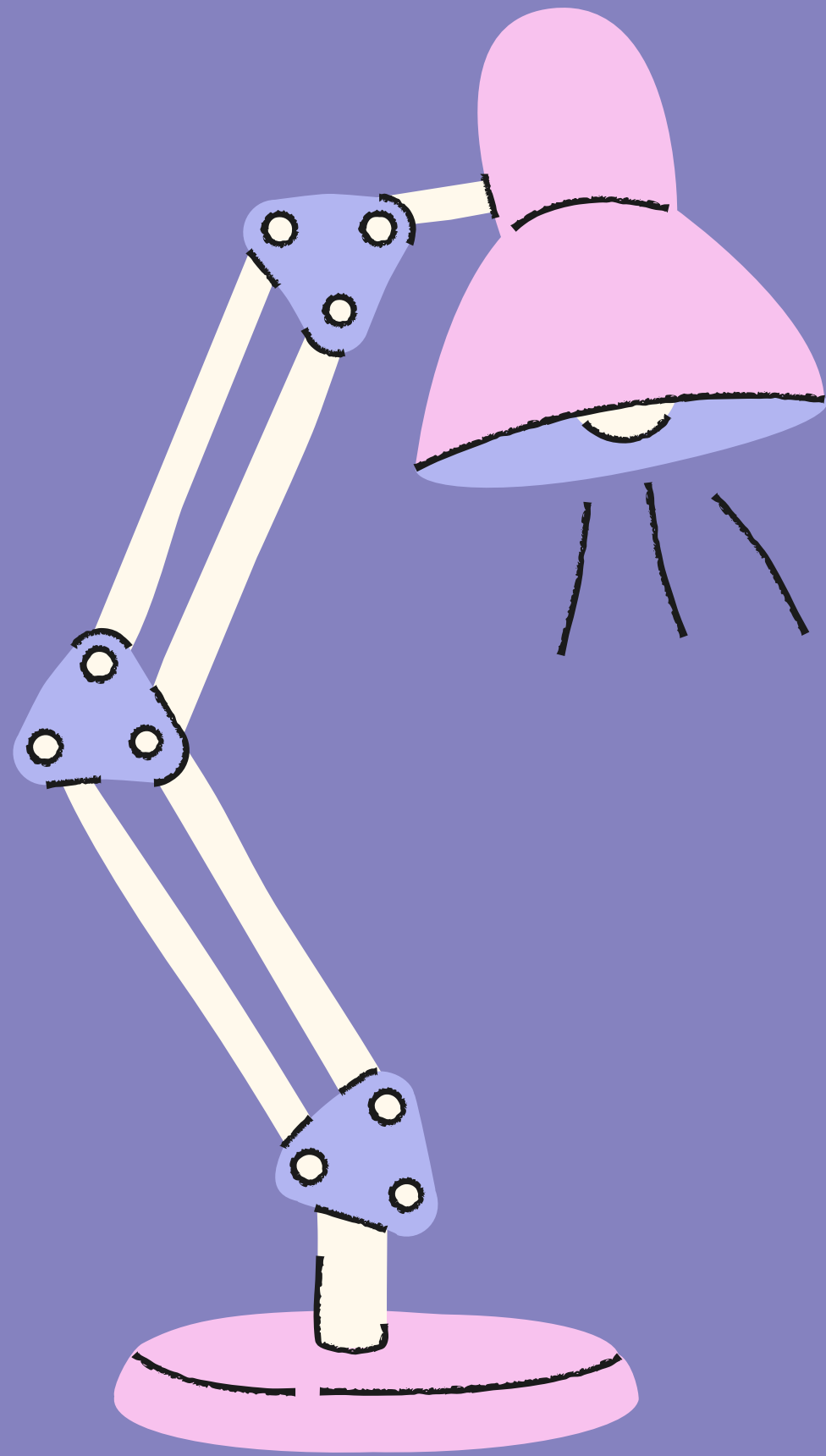
Conducting the experiment and collecting data

4

Analysing the data

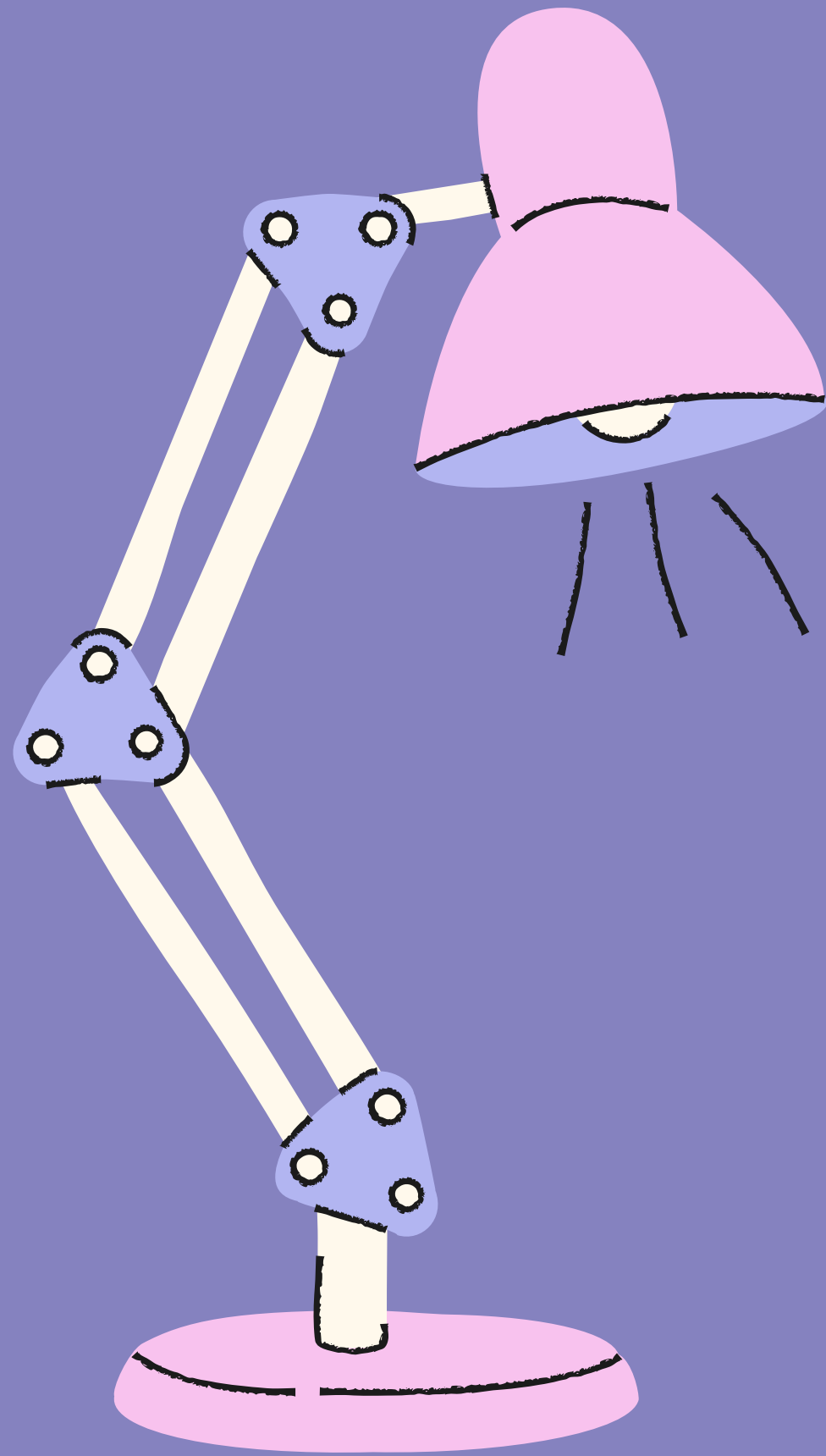
5

Assessing students achievement of learning goals



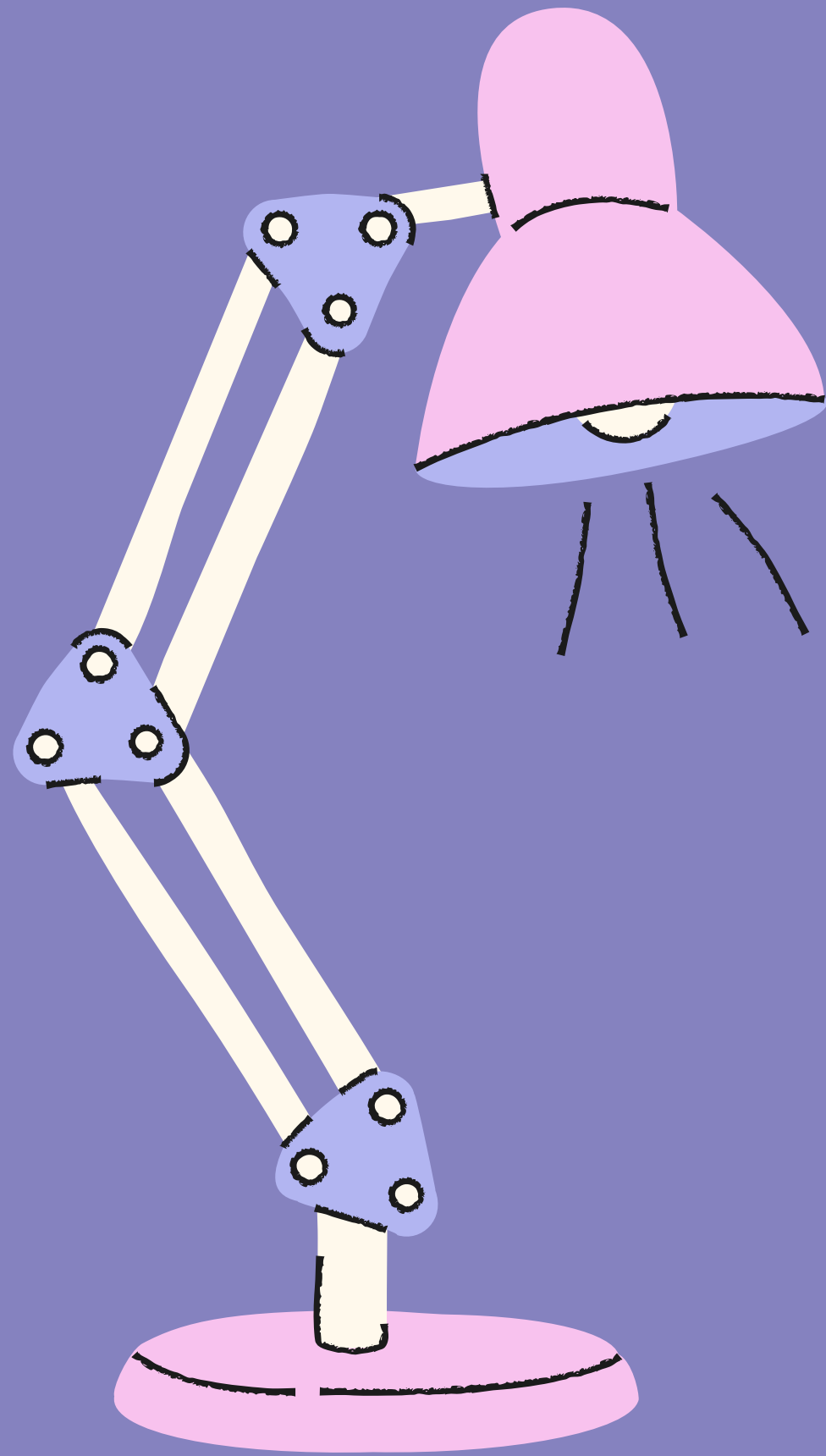
Instructor preparation

- Designating an **appropriate amount of time** for the experiment
- Matching the experiment to the **class level, course atmosphere and the personalities and learning styles** of students
- Choosing a **strategy** for dealing with the classroom environment



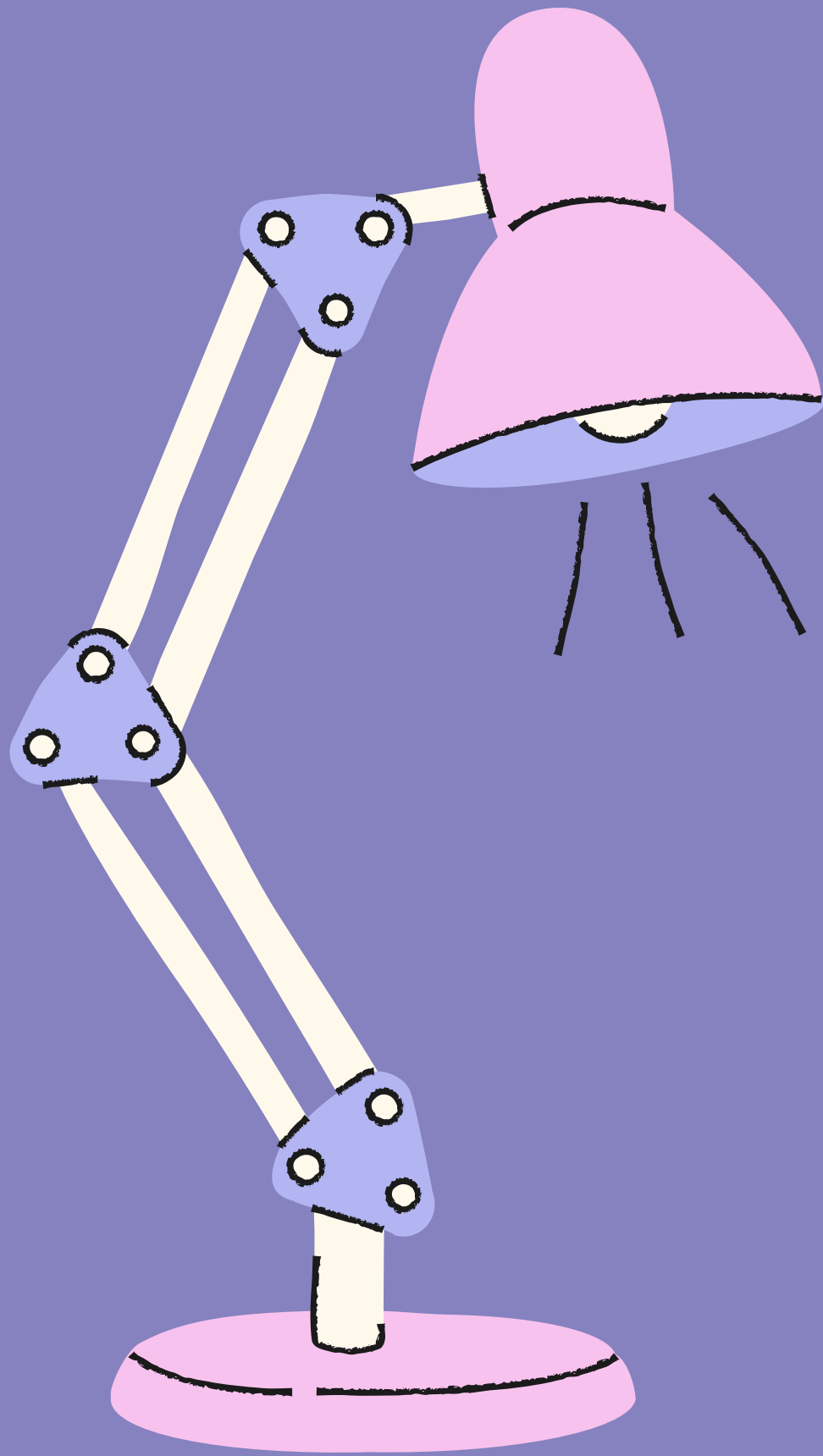
Students preparation

- Read **instructions** that explain the experiment and the student's role
- Complete a **pre-class reading** and/or write about their role in the experiment
- **Make predictions** about the outcome of the experiment



Conducting the experiment and collecting data

- Working through the **logistics** of carrying out the experiment can be key to students having a successful experience
- It is often helpful to have a teaching **assistant** present during an experiment to help answer questions and keep things moving



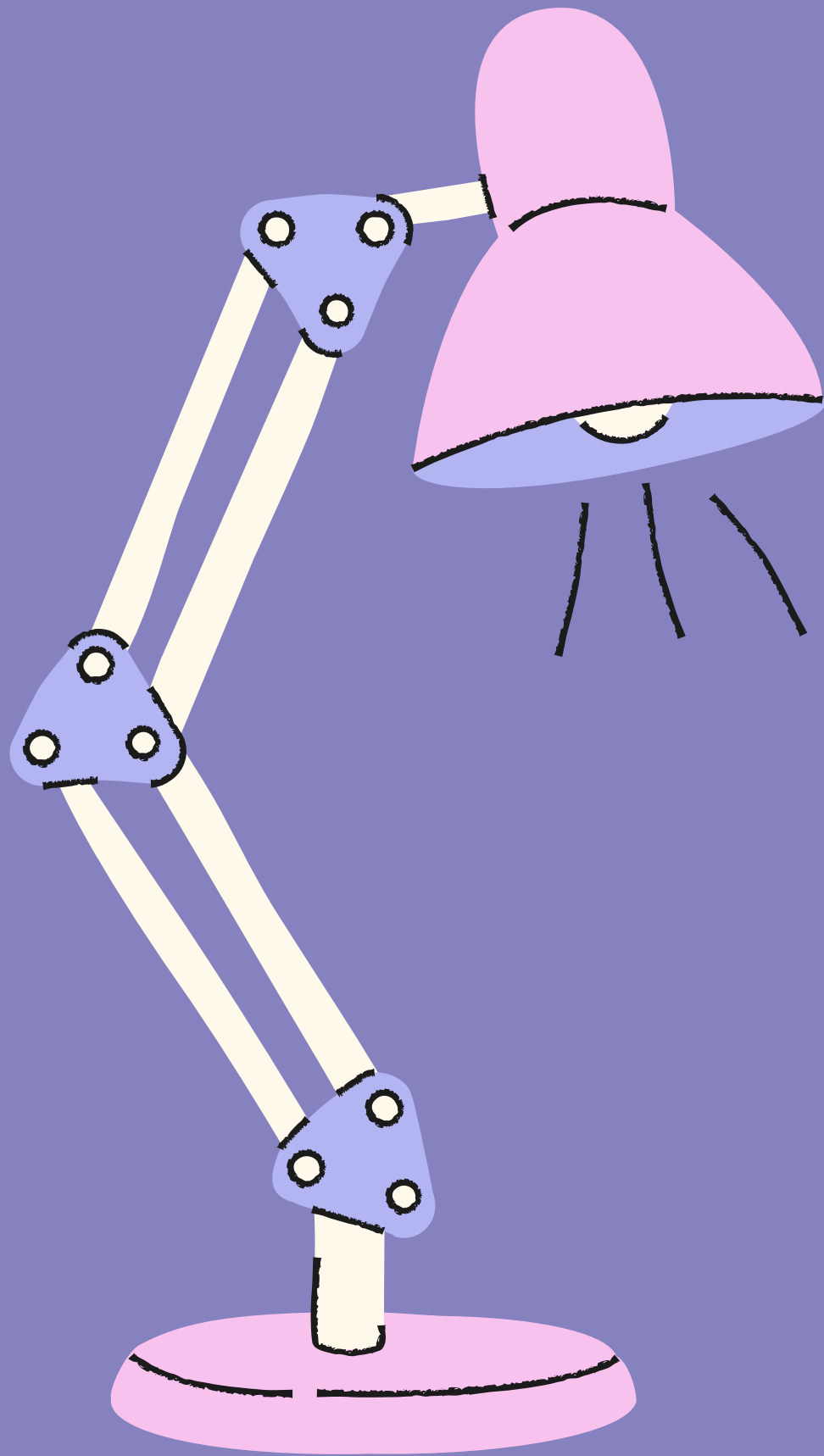
Analyzing the data

- Once you collect the data, **communicating the results** to students and linking it to what they are learning in class is very important. Just doing the experiment isn't enough!

You need to guide students through the process of interpreting and learning from what happened

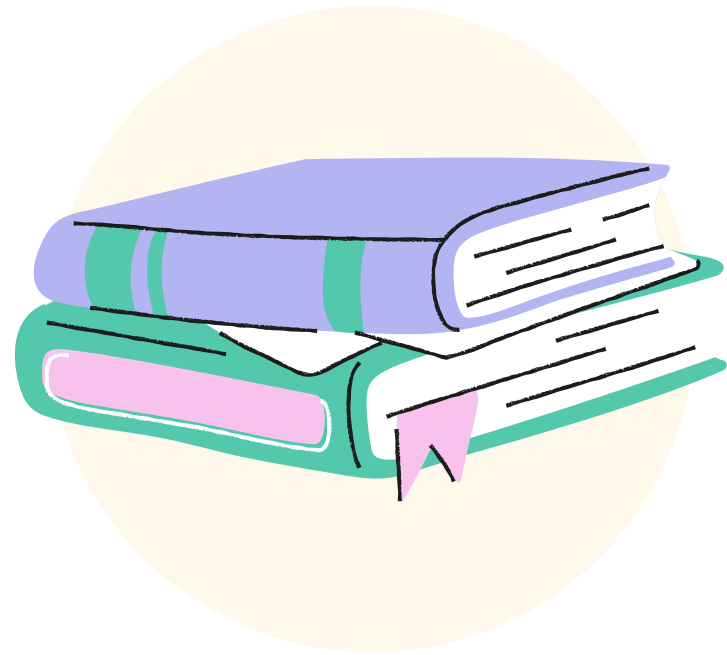
- The classroom experiment experience isn't just about that moment in class. It can often be successfully used as a **shared experience** that anchors material that is covered later in the course

Assessing students achievement of learning goals



- With quiz, tests, homework assignments
- **Make Open Ended questions that allow students to reflect on their experience and give you an idea of what they did and did not get from the experiment**

"What if things don't go as I planned?"



Improvise if you can!

This might seem hard before your first experiment but it gets more natural with experience.

Talk about how the "mistake" affected the experiment and try to analyze both what did happen and what was supposed to happen.



Bring results from a similar experiment

Either a published research experiment or data from a previously conducted classroom experiment.

Since the students have already read the instructions you can have a **discussion about what they expect to happen and then show them the data.**

Classroom Experiments keep learners active in a number of ways

- A** generating, analysing data, examples, models
- B** answer leading questions and compare them
- C** work together in groups to solve problems, devise strategies or understand concepts
- D** predict how changing the experiment will change the outcomes
- E** compare experimental results to classroom theories
- F** confirm or critique the theories

RESOURCES

- <https://serc.carleton.edu/sp/library/experiments/what.html> (last visited on 5/09/2022)
- <https://www.embibe.com/exams/how-is-technology-changing-education/> (last visited on 05/09/2022)

Creative Box: Promoting the innovative approaches to building educational formats in youth work

“Educational experiment: implementation of innovative solutions in youth education”

Devaloped by: CCIF Cyprus

This project has been funded with support from the European Commission.

Project N°: 2021-1-PL01-KA220-YOU-000028673

This communication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



Co-funded by the
Erasmus+ Programme
of the European Union

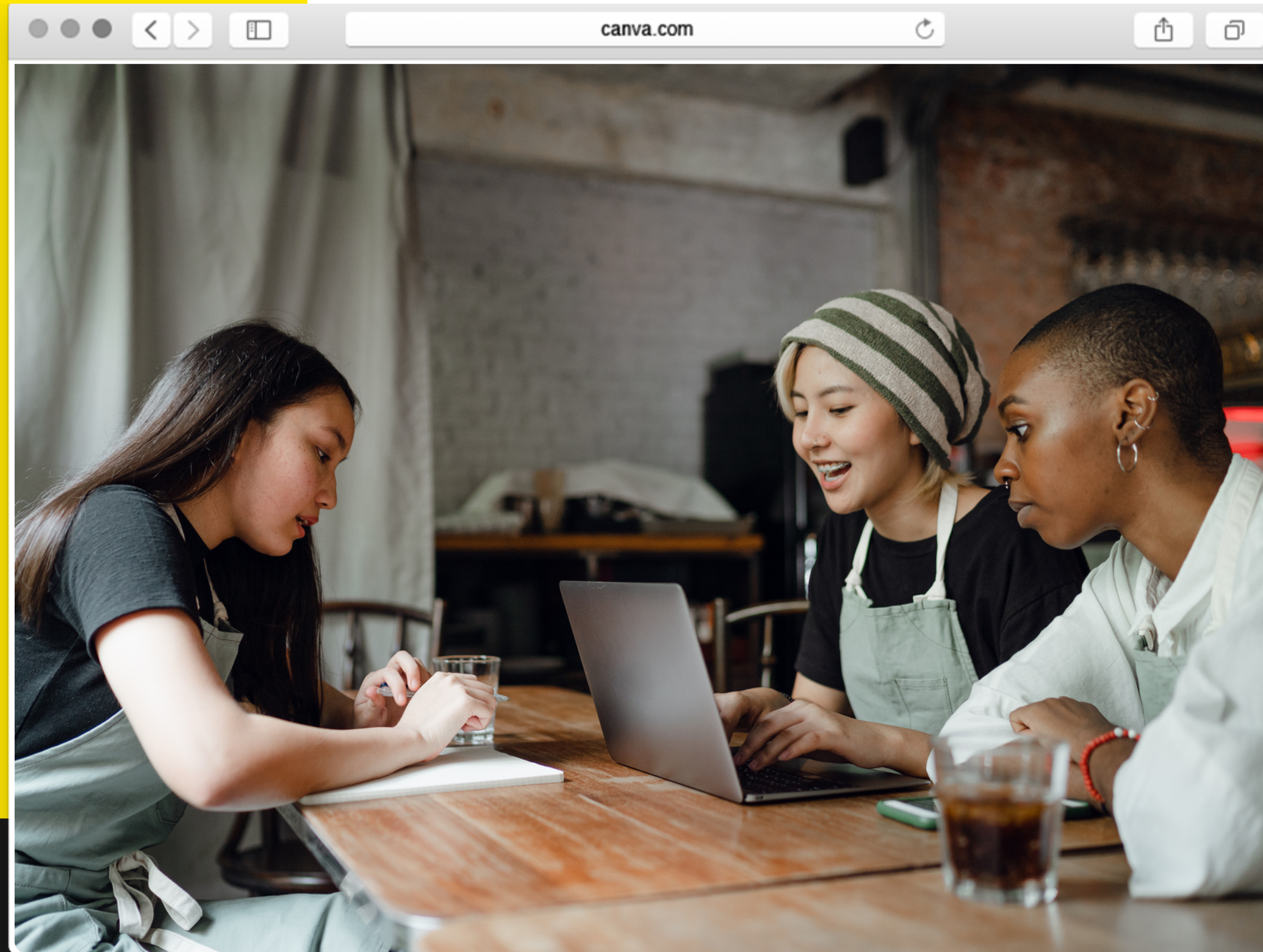
CROSS CULTURE INTERANTIONAL
FOUNDATION CYPRUS

Innovative solutions in education

→ Innovations and their outcomes in the
educational field



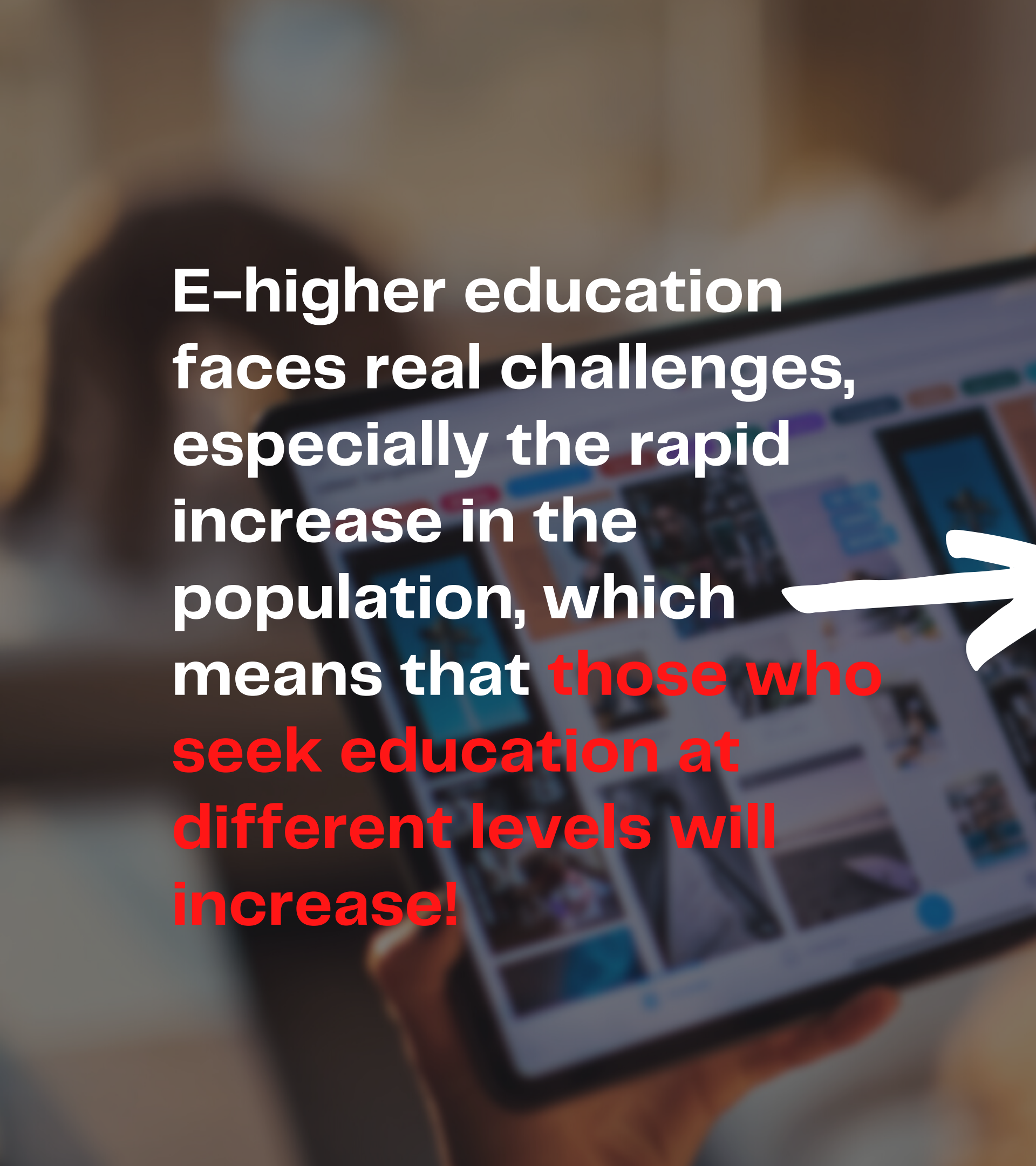
**The world is
witnessing an
expansion of
distance
learning
models**




→
The **information revolution**
has made educational
institutions able to offer to
students:

- e-learning
- flexible learning
- many open learning environments

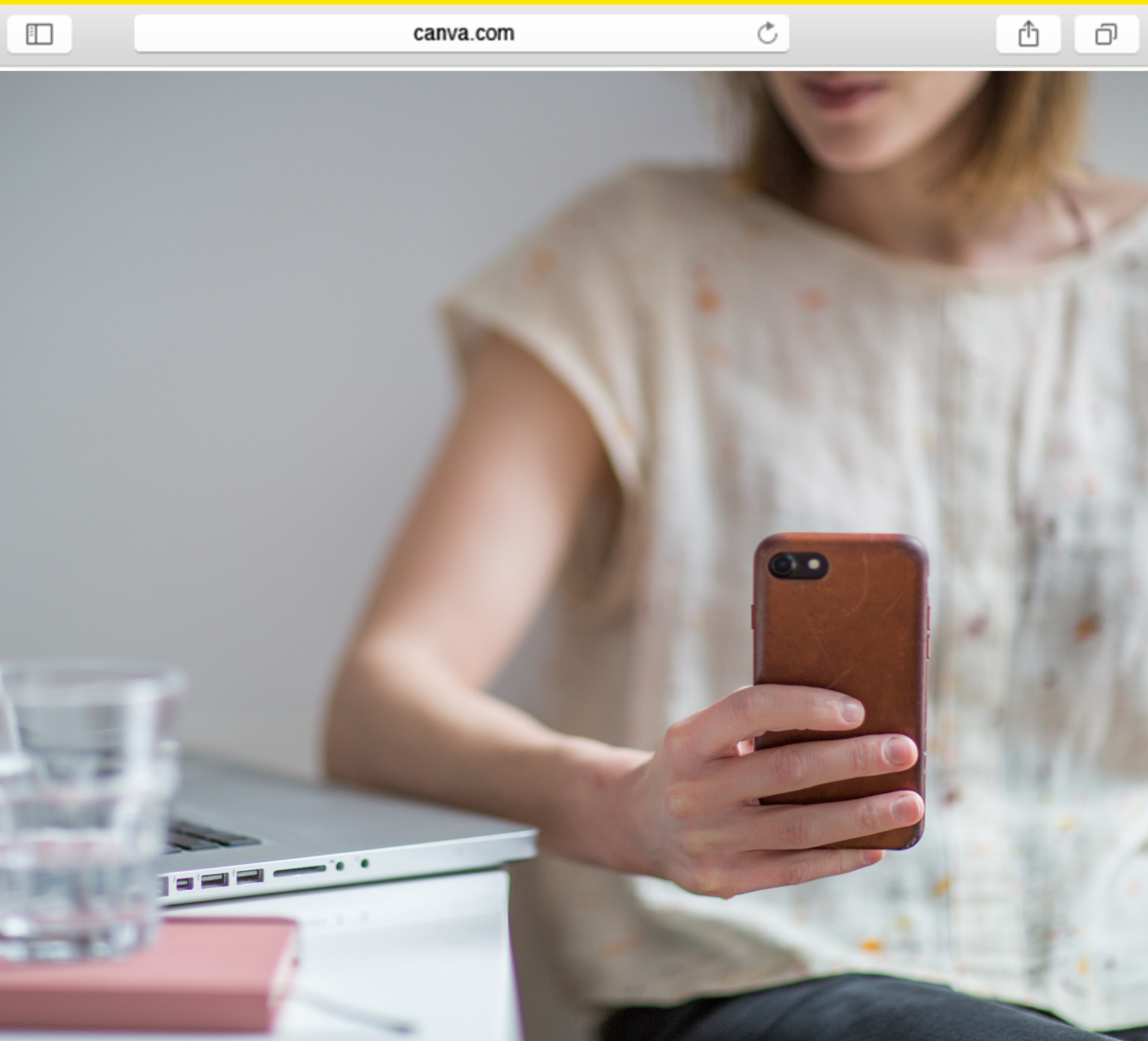




E-higher education faces real challenges, especially the rapid increase in the population, which means that **those who seek education at different levels will increase!**



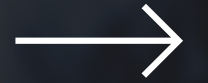
Distance learning and e-learning will continue to increase and expand as global Internet networks are seen as new innovations to solve higher education problems



E-learning helps in providing opportunities for higher education and may be the alternative available or proposed to face the growing demand for education, forcing educational institutions to provide **training** to teachers

- on how to research educational media
- modify and change the ways of organizing and communicating knowledge

However, many educational institutions are not expanding sufficiently to provide the demand for higher education



E-learning environments have been characterized by:



possibility and freedom of access to digital knowledge using technological tools



access to rapidly changing information, sharing information and building knowledge



modern technology provides the learner with many options, instead of remembering and learning by heart

There are many innovative solutions that help increase innovation in the application of the e-learning process:



Technology culture

the ability to use modern media to access information effectively.

Culture of information

the ability to collect, organize, evaluate and make the right decisions.

Medium production

The ability to produce content commensurate with the learner's level.

Global culture

the ability to interact and collaborate successfully in different cultures.

Culture and responsibility

attention to the responsibilities imposed by societies such as in electronic classrooms when students have all the tools and devices to interact with the e-learning curriculum, and teachers are well trained in the electronic process in education and work make them ready to provide guidance and guidance at any time.

Here are some steps to achieve several elements to achieve qualitative e-learning when the learner is the focus:

1

Building knowledge, not transforming it.

2

Students take full responsibility for their learning.

3

Provide motivation and will to learn.

5

Match the style and method of learning students with the learning activities appropriately.

4

Provide the course for a wide area of responses.

6

Identify and design previous erroneous knowledge.

7

The ability of the teacher to guide the learning process

Resources

- Kenneth B. Khan, School of Business, Virginia Commonwealth University, 301 W. Main Street, Richmond, VA 23284-4000, U.S.A.
- Shailendra Palvia, Prageet Aeron, Parul Gupta, Diptiranjana Mahapatra, Ratri Parida, Rebecca Rosner & Sumita Sindhi (2018) Online Education: Worldwide Status, Challenges, Trends, and Implications, Journal of Global Information Technology Management, 21:4, 233-241, DOI: 10.1080/1097198X.2018.1542262