





ABC Learning design

Analysis of your practices

François Gochel Delphine Hanus

ABC Learning design

Method created by Ms. Perovic and M. Young (UCL 2015).

Its objective: To be a way to engage teams in developing or redesigning courses but above all to encourage a better educational conversation.

This principle is:

- Fast,
- Focused on student activities,
- Visual (storyboard),
- Suitable for all disciplines,
- Collaborative

Behind the ABC method, we find the "conversational framework and types of learning model" theory of Prof. D. Laurillard (UCL 2012). ABC Cards aims at operationalizing this theory by focusing on its 6 types of learning.

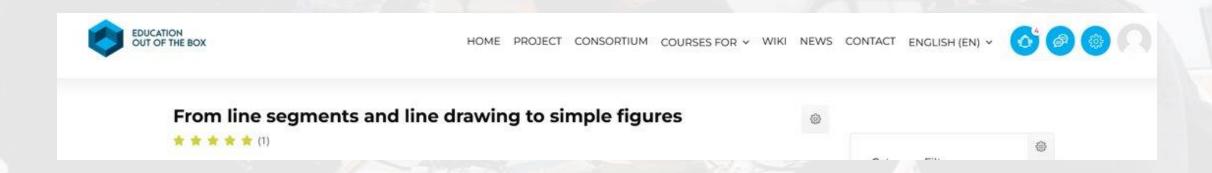
The secondary objectives of this approach are:

- To allow development of "active learning" as 5 of the 6 cards refer to it,
- To integrate the digital dimension into our teaching (blended learning),

ABC analysis

"From line segments and line drawing to simple figures"

https://education-outofthebox.eu



1. Set course framework



Step n°1: **Tweet your course** (5 to 7 min)

You have to summarize in a few characters (140 max), the objective of your sequence. It is not recommended to use the title of the sequence.

Identify and draw simple figures in geometry

Acquisition

Learning by acquisition is implemented when the learner **listens** to information provided by an expert, by a student or by the teacher; **reads** a book, a WEB page; **watch** videos



Collaborative learning mainly includes negotiation, practice and team production activities that must agree and lead to consensus.

Learners build their knowledge collectively.



Discussion

Learning through discussion requires the learner to **formulate their ideas** and questions, and to **share** and **argue** with the teacher and/or their peers.



nvestig

The learner has the opportunity to explore, compare and critique documents or other resources that reflect the concepts and ideas targeted during the teaching.



Practice

Learning by doing allows the learner to train, experiment and adapt their actions to the objectives to be achieved and use feedback to improve the next action.

Feedback can come from self-reflection, from peers, from the teacher or from the activity itself as soon as it shows how to improve the result of its action to achieve the set goal.



Production

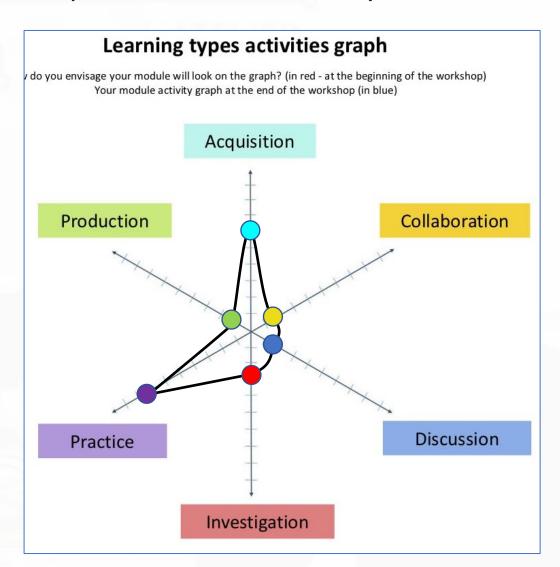
During learning by production, the teacher motivates the learner to consolidate their knowledge. The latter expresses, through a creation, his understanding and integration of the concepts taught.



Step n°2: Draw the module's learning outcomes (5 min)

You have to plan how much time students will spend on each axis and you have to write

it down.

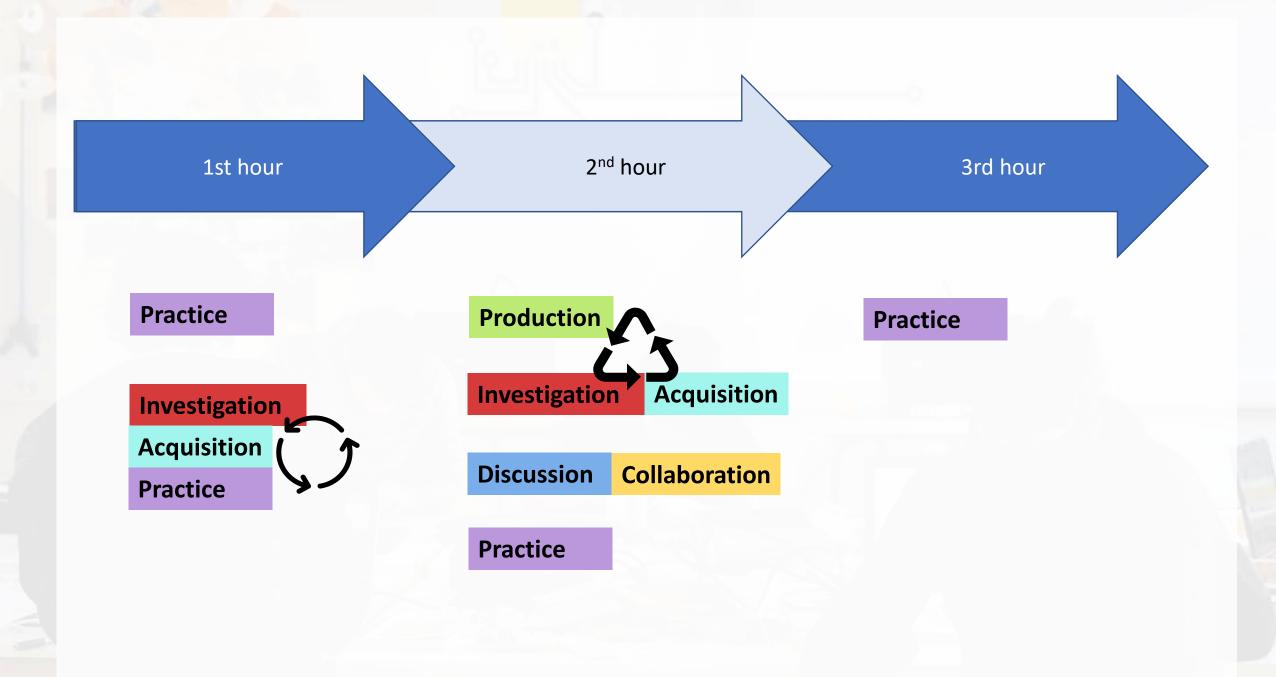


Step n°3: **Draw up the storyboard** (10 min)

You have to choose the appropriate time scale. Then you must use the cards to build your sequence (be careful, we only base ourselves on **the actions of the children**). It's best to stay at the level of the learning types and not worry about the activity types for now.

https://education-outofthebox.eu







Acquisition

	Guided	Autonomy	Estimated working time
Classroom			
At home			

WITHOUT ICTE/ WITHOUT DIGITAL TOOLS

Reading/browsing/discovering books, documents, articles,	Readin ressour
Listening to the teacher	Followi
Listening to experts' lectures	Watchi
•••••	•••••
•••••	••••

Reading/browsing/discovering digital ressources, multimedia, websites
ressources, martimedia, websites
Following podcasts or webcasts
Watching videos, animations
•••••









	Guided	Autonomy
Classroom		
At home		

WITHOUT ICTE/ WITHOUT DIGITAL TOOLS

- Meeting during specific activities/workshops
- Leading to consensus from peers productions
- ☐ Building a production collectively

Meeting during class projects using
digital tools: forums, wikis, chats,

- ☐ Leading to consensus from peers productions using digital tools such as : plickers,...
- Building a digital production collectively









	Guided	Autonomy
Classroom		
At home		

WITHOUT ICTE/ WITHOUT DIGITAL TOOLS

- Formulating ideas during discussion groups
- Exchanging and argumenting during a class
- Tutoring peers
- **_**

- ☐ Formulating ideas via emails
- ☐ Exchanging and argumenting during online discussions such as forums
- Online tutoring
 - **]**









	Guided	Autonomy
Classroom		
At home		

WITHOUT ICTE/ WITHOUT DIGITAL TOOLS

- ☐ Exploring multiple ressources
- Applying research methods defined by the teacher
- Collecting and analyzing data coming from multiple sources
- Comparing and criticizing collected information

- ☐ Exploring online ressource with the help of digital tools such as : Decodex
- ☐ Applying online research methods defined by the teacher
- ☐ Collecting and analyzing digital data coming from multiple digital sources : short videos, animations,....
- Comparing and criticizing information acquired by using digital tools









	Guided	Autonomy	Es
Classroom			
At home			

WITHOUT ICTE/ WITHOUT DIGITAL TOOLS

Practicing	with	multiple	exercises

Experimenting through	learning
games,	

- role-playing games (RPG),
- ☐ field trips,
- ☐ hands-on experience,
- **....**
- **....**
- Adapting the practices to achieve the objective

WITH ICTE / WITH DIGITAL TOOLS

\neg	D	• • •	1 •	•
	Practicing	with	online	exercises
	1 1 d C C C C I I I G	VVICII		CACICISCS

Experimenting through o	าline
learning games,	

- online role-playing games,
- □ virtual field trips,
- ☐ hands-on experience,
- **....**
- **....**

Adapting the practices to achieve the objective with online simulations









	Guided	Autonomy	
Classroom			
At home			

WITHOUT ICTE/ WITHOUT DIGITAL TOOLS

Pro	oduce :	Prod	duce and store with digital tools:
	Comments		Comments
	Reports	□ F	Reports
	Objects		Shows
	Models / prototypes	□ \	Virtual Objects
	Shows	□ \	Virtual models / virtual prototypes
	Sounds	□ F	Pictures
	Models (design, drawings)	□ \	Videos
	Presentations	□ €	e-portfolios
	Speeches		sound recordings
	••••••	.	••••••







Learning types activities, V- Visible learning A - can be assessed (F or S)

Investigation

Web search (forum, wiki) V
OER resources (external)
Literature reviews and critiques
(forum/blog/wiki/RSS) V
Field/lab observations (media/blog/wiki) V
Action research V
Authentic research / data analysis – write a paper
V
Lead a group project V

Acquisition

Guided readings (library resources)
OER resources (external)
Podcast (media) V if students do it
Webinars (virtual classroom) V
Q&A forum (forum, where teachers answer
student questions) V
Video lectures (webcast),
YouTube videos (external)
Field/lab observations (media/blog/wiki) V
MCQs - formative with automatic feedback V
Portfolios (MyPortfolio) V

Practice

MCQs - formative with automatic feedback V/A
Online role play (forum, virtual classroom)
Reflective tasks – group or individual (forum) V/A
Case studies (forum, lesson) V/A
Rapid-fire exam questions (forum) V/A
Advanced role play – you are the consultant etc. V

Collaboration

Collaborative wiki - what do we know about ...?

V/A
Develop a shared resource library
(database/glossary/wiki) V
Social networking – participate (external) V
Special interest groups - share on a topic (forum) V

Discussion

Mentor other learners V

Interview an expert (forum/chat) V
Webinars (virtual classroom) V
Model answers/examples of previous work
(forum)
Analyse chat text (in course or uploaded) V
Job/professional reflections (blog) V/A
Group discussions on the topic, problem, reading
(chat/blog/wiki) V/A
Social networking – participate (external) V
Reflective tasks – group or individual (forum) V/A
Special interest groups - share on a topic (forum) V
Lead a group project V/A

Production

Interview an expert (video/forum/chat) V Literature reviews and critiques (forum/blog/wiki/RSS) V/A MCQs - formative with automatic feedback V/A Develop a shared resource library (database/glossary/wiki) V/A Shows/demonstrates learning (displays, posters, presentations) V/A Portfolios (MyPortfolio) V/A Case studies (forum, lesson) V/A Summarisation tasks (upload texts - individual or group) V/A Rapid-fire exam questions (forum) V/A Concept mapping (external) V Create video of performance (media) V/A Audio commentary of performance (media) V/A Skype or virtual classroom 'viva' V/A Make and give a presentation (external) V/A Video blog (external) V/A Write a report (external) V/A Make an analysis (external) V/A Case studies V/A Advanced role play – you are the consultant etc. V Action plan for workplace V/A Action plan for further study V/A Authentic research / data analysis – write a paper V/A Prepare professional briefing V/A Create, make a case (study) V/A Create podcast (media) V/A Work assignment (blog/report) V/A Interview professional colleagues V/A Lead a group project V/A



Step n°4: **Identify activities** (10 min)

Once you are satisfied with your storyboard, you can flin the cards and select some of the

learning activities or imagine

ઉ		Practice	
	ハイ		

	Guided	Autonomy
Classroom		
At home		

Estimated working time

30 min

1. Realize the challenges.

The challenges are spread over quarter sheets and can k needed.

I find that some students prefer this pace of work (especithose who need movement).

The student must put his first name for the correction and grid holding.

I am available for the understanding of the procedure coout.

A self-correction is proposed if I am ever overwhelmed by corrections as I go. The student then deposits it in the baccalaureate "To be corrected".

WITHOUT ICTE/ WITHOUT DIGITAL TOOLS

- Practicing with multiple exercises
- Experimenting through learning games,
 - role-playing games (RPG),
 - field trips,
 - hands-on experience,
 -
- Adapting the practices to achieve the objective
- **....**

- ☐ Practicing with online exercises
- Experimenting through online learning games,
 - online role-playing games,
 - virtual field trips,
 - hands-on experience,
 - **」**
- ☐ Adapting the practices to achieve the objective with online simulations
-

2. In case of concern.



Investigation

Guided	Autonomy	Estimated working time
Classroom	X	10 min
At home		10 11111

WITHOUT ICTE/ WITHOUT DIGITAL TOOLS

- Exploring multiple ressources
- Applying research methods definied by the teacher



Acquisition

WITHOUT ICTE/ WITHOUT DIGITAL TOOLS

- Reading/browsing/discovering books, documents, articles,...
- Listening to the teacher
- ☐ Listening to experts' lectures
- **_**
- **」**.....

WITH ICTE / WITH DIGITAL TOOLS



Class At ho

Practice

	Guided	Autonomy	Estimated working time
Classroom		X	10 min
At home			10 111111

WITHOUT ICTE/ WITHOUT DIGITAL TOOLS

- Practicing with multiple exercises
- Experimenting through learning games,
 - ☐ role-playing games (RPG),
 - field trips,
 - hands-on experience,
 -
- Adapting the practices to achieve the objective
- **_**

- ☐ Practicing with online exercises
- Experimenting through online learning games,
 - online role-playing games,
 - virtual field trips,
 - hands-on experience,
 - **_**
- Adapting the practices to achieve the objective with online simulations

Activity #2 Analysis and synthesis



	Guided	Autonomy
Classroom		
At home		

☐ Comments

■ Virtual Objects

Guided

Reports

☐ Shows

Pictures

Videos

Classroom

At home

Estimated working time **30** min

Estimated working time

We start from the principle of bloom's taxonomy (2003 version

WITHOUT ICTE/ WITHOUT DIGITAL TOOLS

ask the students, on a lined sheet, to write what they think c

Comments

Produce:

- Reports
- Objects
- Models / prototypes
- ☐ Shows

Autonomy

□ Sounds Estimated working time

15 min

Acquisition

WITHOUT ICTE/ WITHOUT DIGITAL TOOLS

- Reading/browsing/discovering books, documents, articles,...
- Listening to the teacher

A straight line

A right angle

"A half-line"

A line segment Parallel lines

An obtuse angle

Listening to experts' lectures

┙										,

WITH ICTE / WITH DIGITAL TOOLS

- Reading/browsing/discovering digital ressources, multimedia, websites
- Following podcasts or webcasts
- Watching videos, animations

1										

Guided

Classroom

At home

•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

TAL TOOLS

urces

ods definied

data coming

g collected

15 min

WITH ICTE / WITH DIGITAL TOOLS

WITH ICTE / WITH DIGITAL TOOLS

Produce and store with digital tools:

☐ Virtual models / virtual prototypes

- ☐ Exploring online ressource with the help of digital tools such as: Decodex
- ☐ Applying online research methods definied by the teacher
- Collecting and analyzing digital data coming from multiple digital sources: short videos, animations,....
- ☐ Comparing and criticizing information acquired by using digital tools

Activity #2 Analysis and synthesis

WITHOUT ICTE/ WITHOUT DIGITAL TOOLS

Practicing with multiple exercises

Experimenting through learning

role-playing games (RPG),

Adapting the practices to achieve the

hands-on experience,

We start from the principle of bloom's taxonomy (



	Guided	Autonomy
Classroom	**	
At home		

forums

Online tutoring

Estimated working time **25 min**

ask the students, on a lined sheet, to write what

- A straight line
- A line segment

Practice

field trips,

.......

- Parallel lines
- A riaht anale

games,

objective



- Formulating ideas during discussion groups

	Guided	Autonomy	Estimated working time
Classroom		*	10 min
At home			10 111111

WITHOUT ICTE/ WITHOUT DIGITAL TOOLS

- - Exchanging and argumenting during a

WITH ICTE / WITH DIGITAL TOOLS

- Practicing with online exercises
- ☐ Experimenting through online learning games,
 - online role-playing games,
 - virtual field trips,
 - hands-on experience,
- ☐ Adapting the practices to achieve the 'ely objective with online simulations



Estimated working time 10 min

OOLS

ers

WITH ICTE / WITH DIGITAL TOOLS

WITH ICTE / WITH DIGITAL TOOLS

during online discussions such as

☐ Formulating ideas via emails

Exchanging and argumenting

- ☐ Meeting during class projects using digital tools: forums, wikis, chats, ...
- Leading to consensus from peers productions using digital tools such as: plickers,...
- ☐ Building a digital production collectively

Activity #3 Evaluation

Tools: Challenges 11 to 20 and Evaluation Grid

Description:

To evaluate this sequence, I propose the challenges 11 to

Practice

20 but this time without the envelopes and aids to the

process.

र्भुञ्ज Practice	Classroom At home		X	25 min	
Practicing with multiple exercises	□ Pi	WITH ICTE / WITH DIGITAL TOOLS ☐ Practicing with online exercises ☐ Experimenting through online learning games, ☐ online role-playing games, ☐ virtual field trips, ☐ hands-on experience, ☐			
 □ Experimenting through learning games, □ role-playing games (RPG), □ field trips, □ hands-on experience, □ 					
☐ Adapting the practices to achieve the objective	□ A	Adapting the practices to achieve the objective with online simulations			

Autonomy

Estimated working time

Guided

2. Discussion

Step n°5: Let's discuss about the process (5 + 12 min)

You have to discuss about the process on the story board. If a misunderstanding appears or a step is misplaced, take the time to exchange and to modify or move your cards.

Step n°6: Evaluation(s) (15 min)

Usually, evaluation is not required with the ABC method which focuses on the learning process.

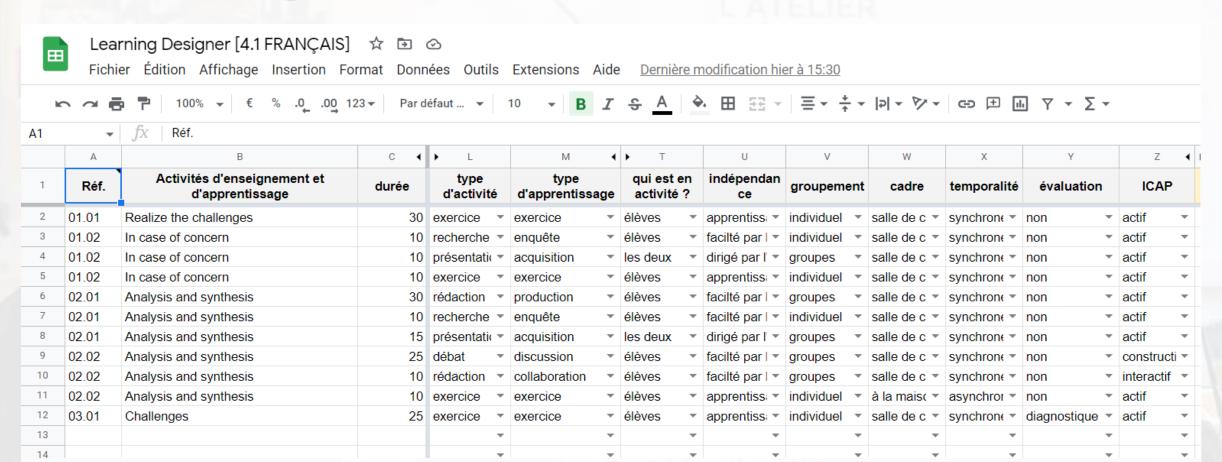
In this case, there are assessments

- --> add a star next to the activities that are assessement:
 - a silver star for formative assessment
 - and a gold star for certificative assessment

3. Sharing time

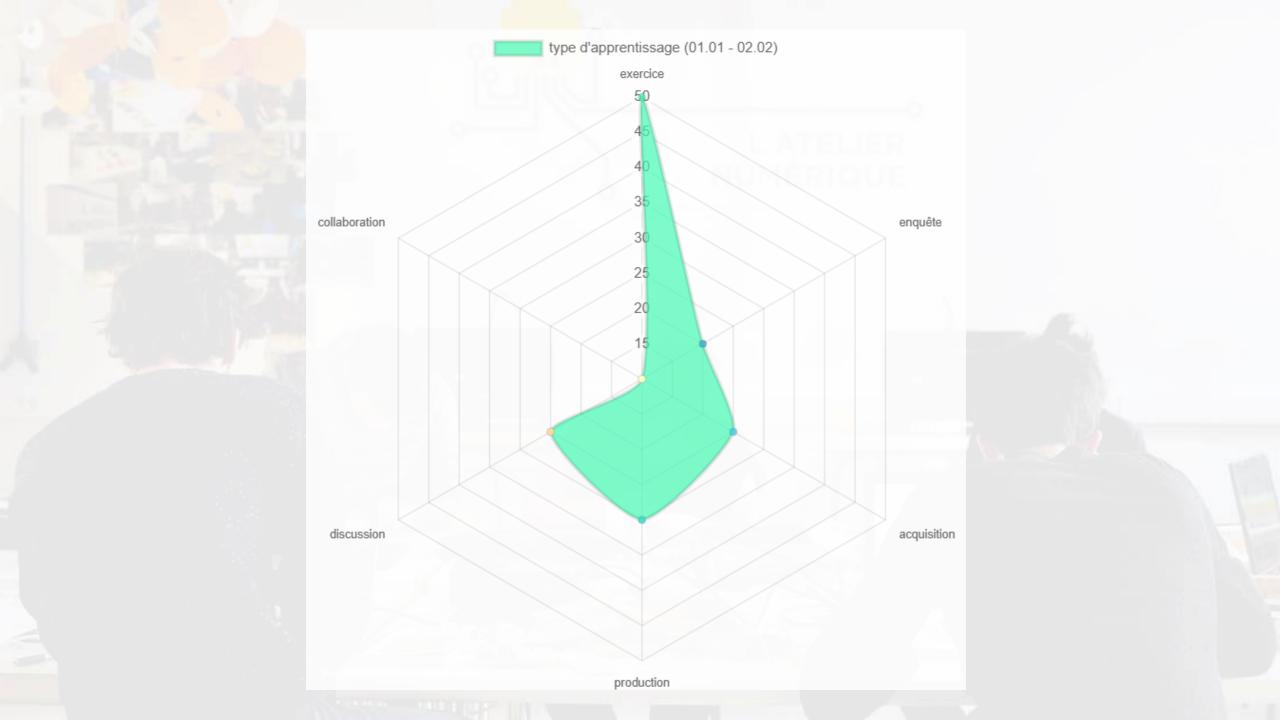
• Bring your flipchart sheet and present the group's work

4. Encoding in Excel



type d'apprentissage





5. Improving the process

Digital tools specific to "From line segments and line drawing to simple figures":

Geogebra : https://www.geogebra.org/
Draw your game : https://www.draw-your-game.com/

Digital tools to create a poster :

Canva: https://www.canva.com/

