

ACTIVE LEARNING IN THE BLENDED LEARNING MODE

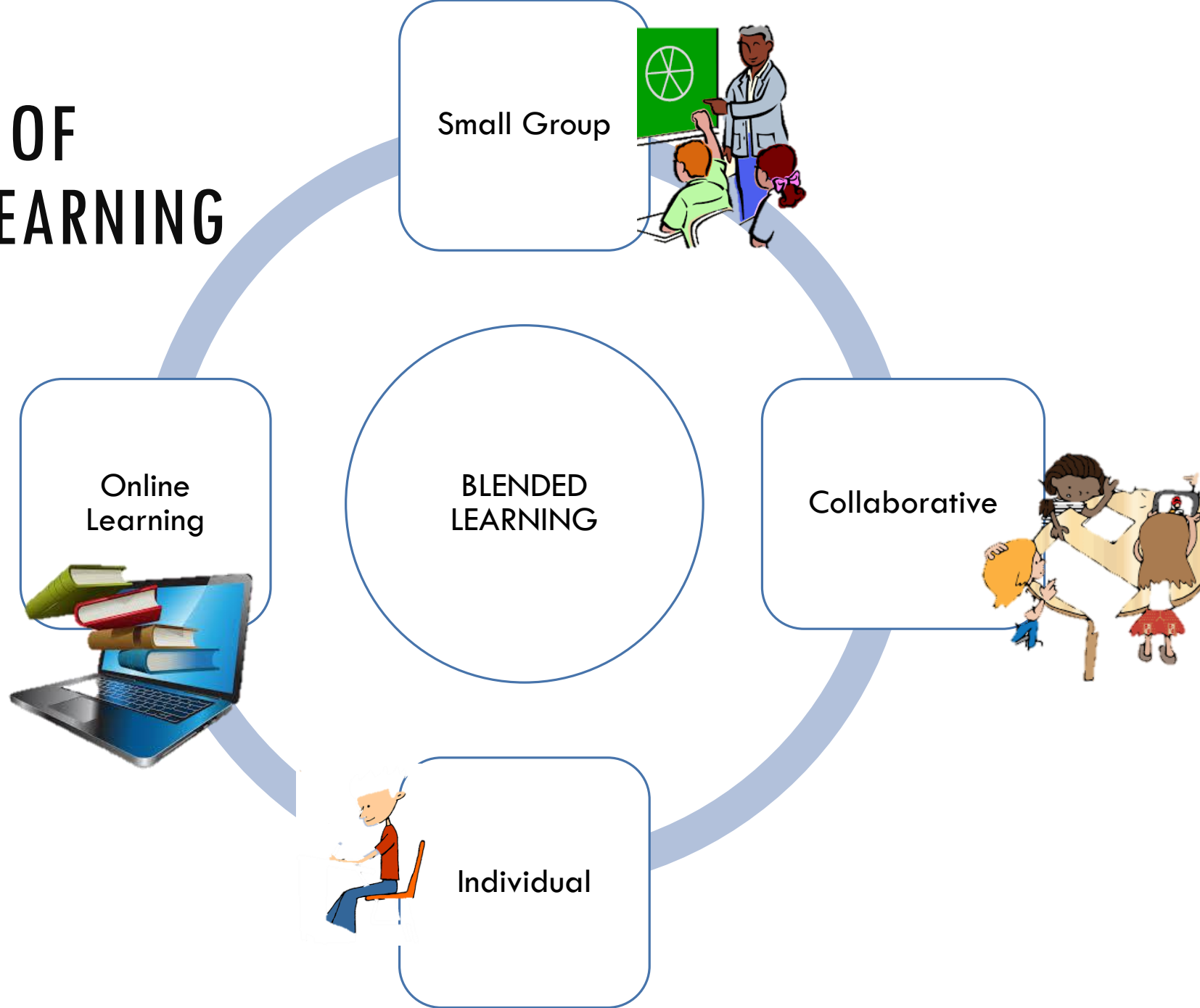
By
Dr. Maneesha S.
Wanasinghe-Pasqual



WHAT IS BLENDED LEARNING

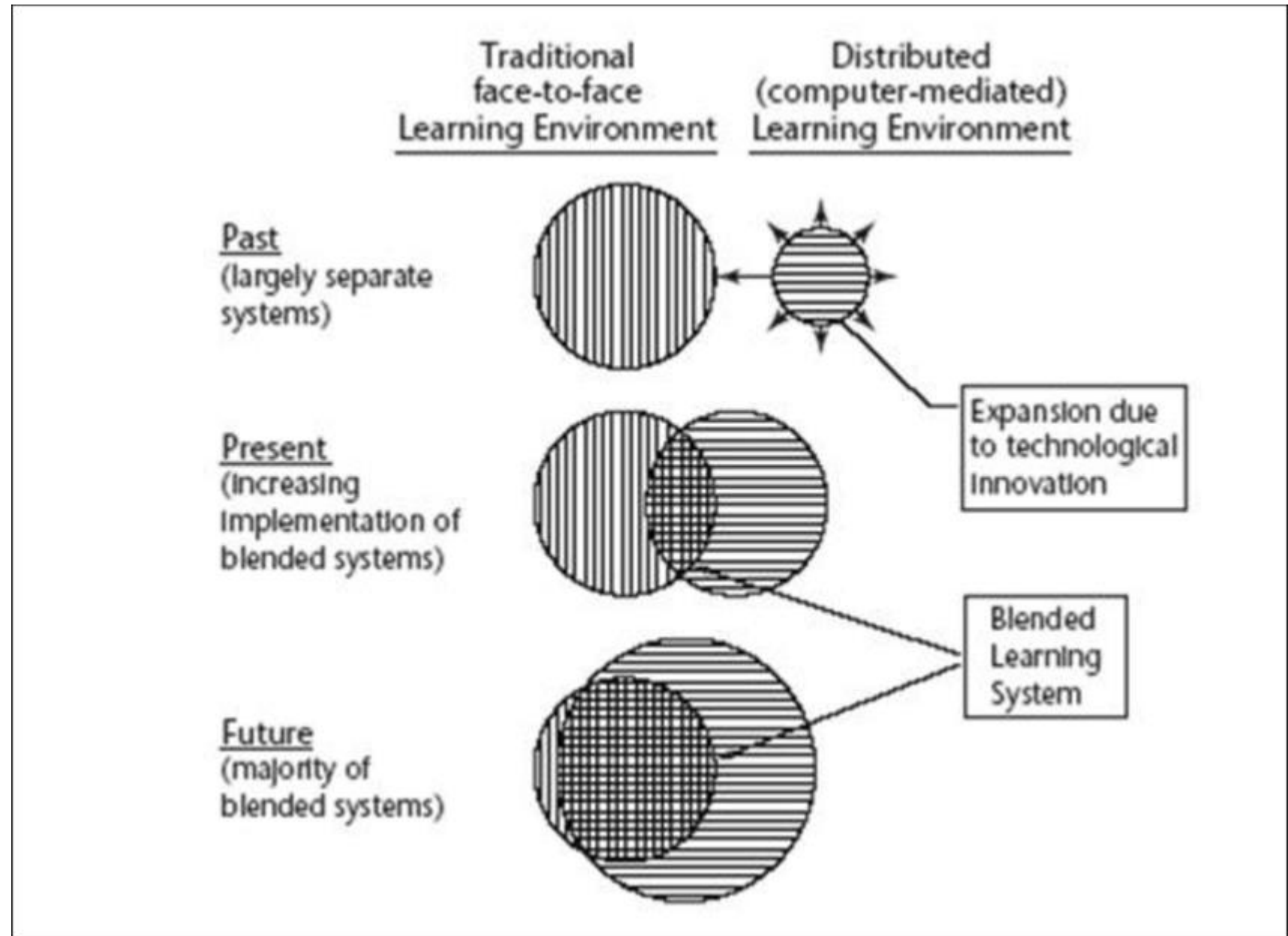
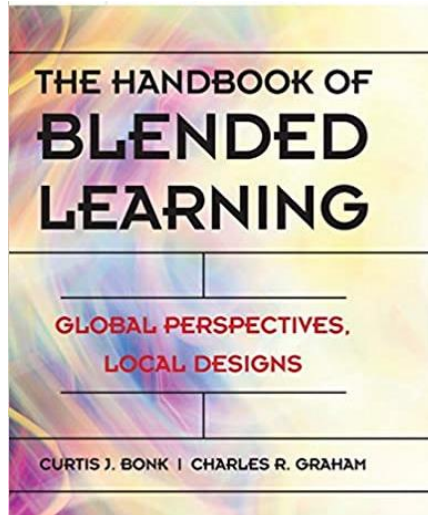


PEDAGOGY OF BLENDED LEARNING

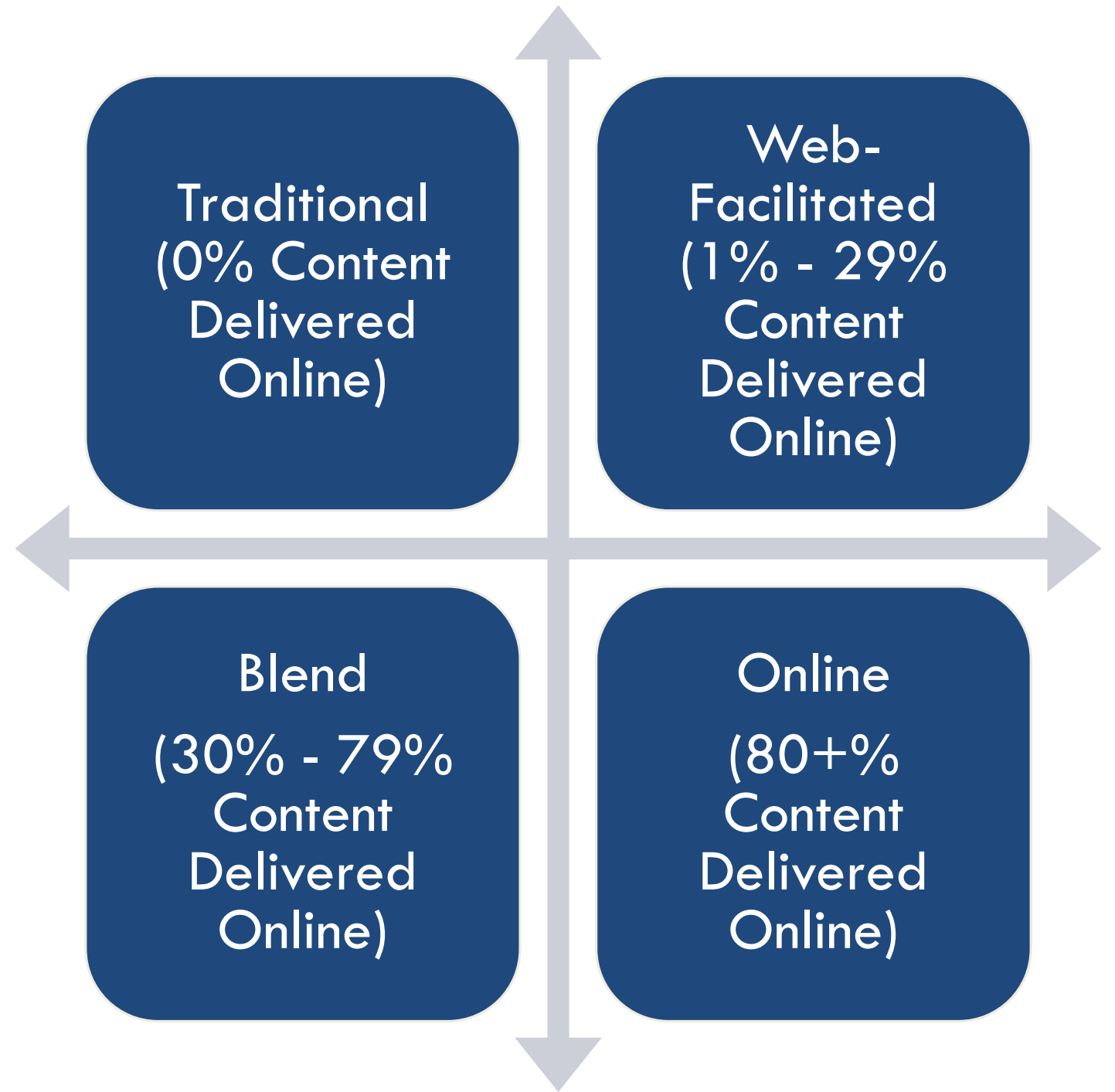


PAST- PRESENT- FUTURE(?)

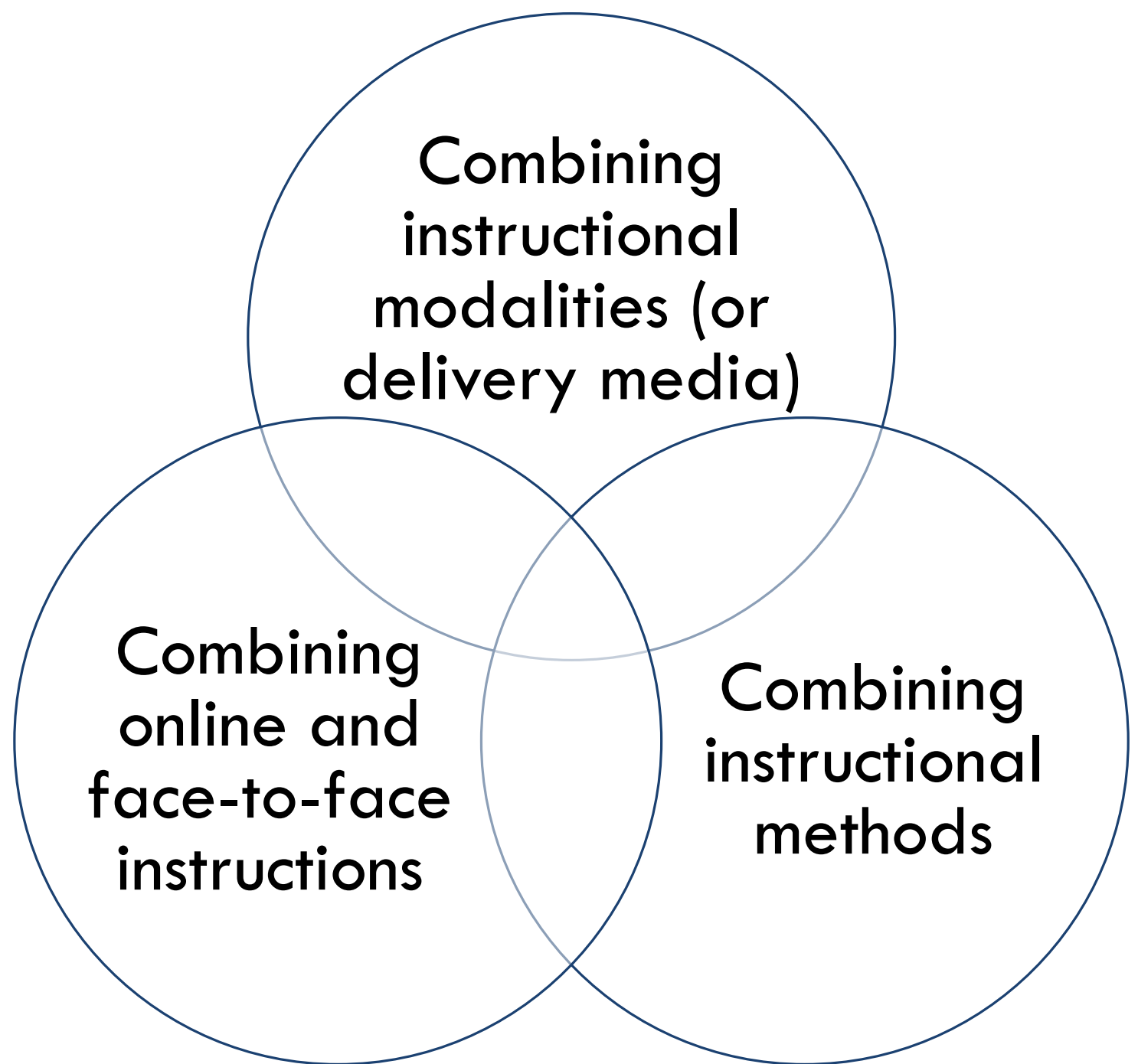
BONK & GRAHAM
2009/2012/2021



CLASSIFICATION OF BLENDED LEARNING



WHAT IS BLENDED LEARNING



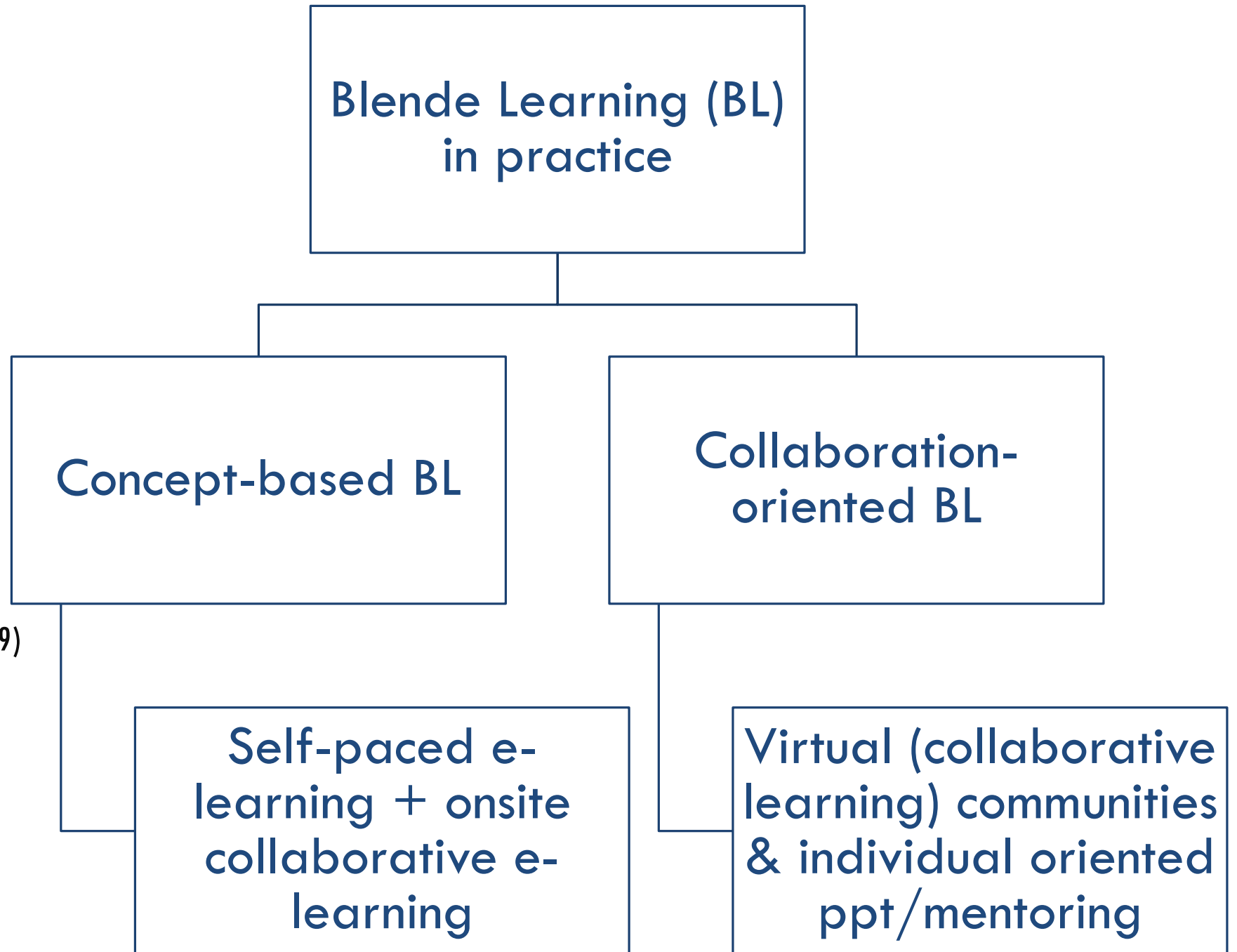
Combining
instructional
modalities (or
delivery media)

Combining
online and
face-to-face
instructions

Combining
instructional
methods

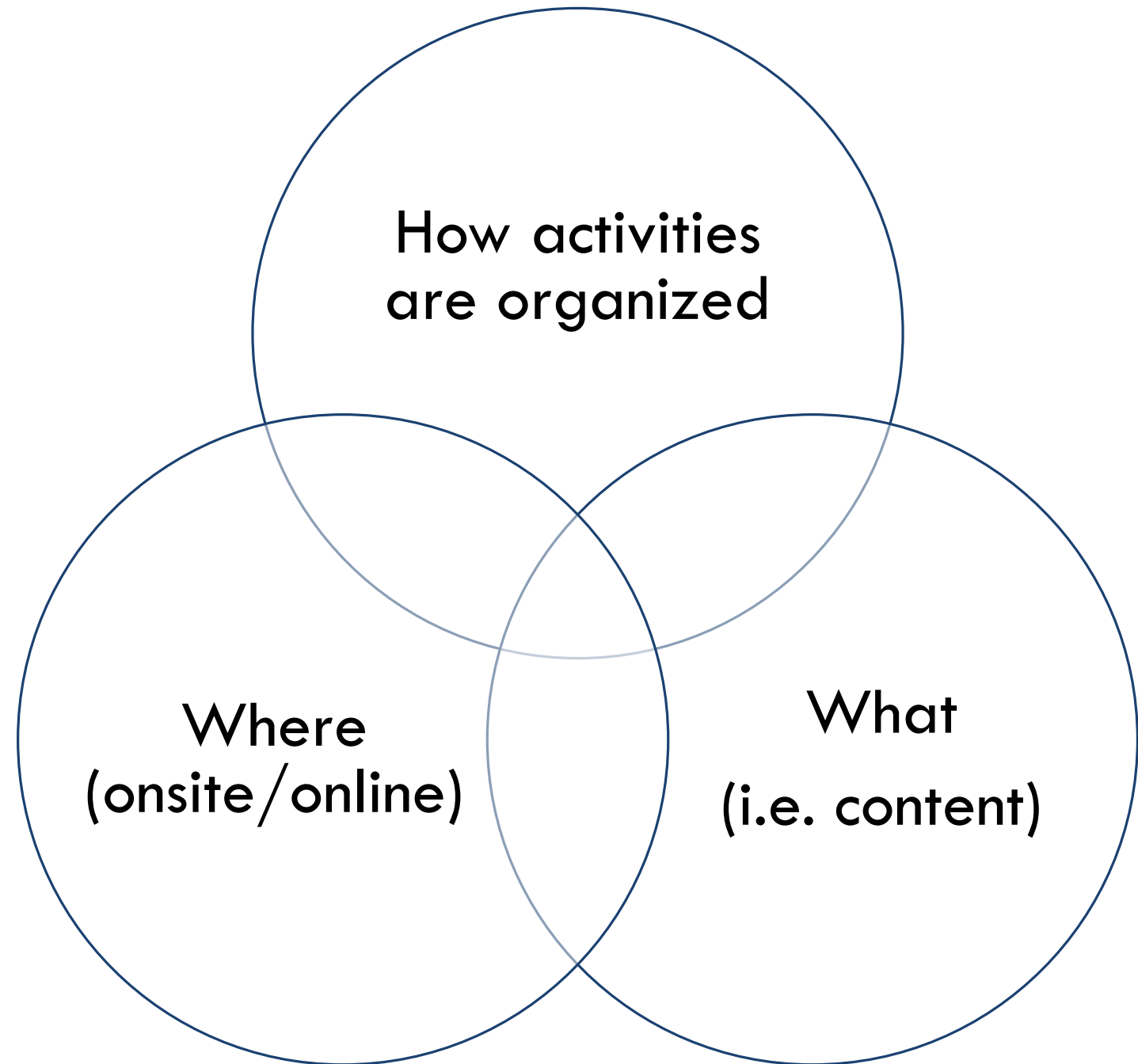
TYPES OF BLENDED LEARNING

KUDRIK, LAHN, & MORCH (2009)



TYPES OF BLENDED LEARNING:

ROSSET & FRAZEE 2006



3 & 7 MINUTES WRITING EXERCISE

What is Blended Learning

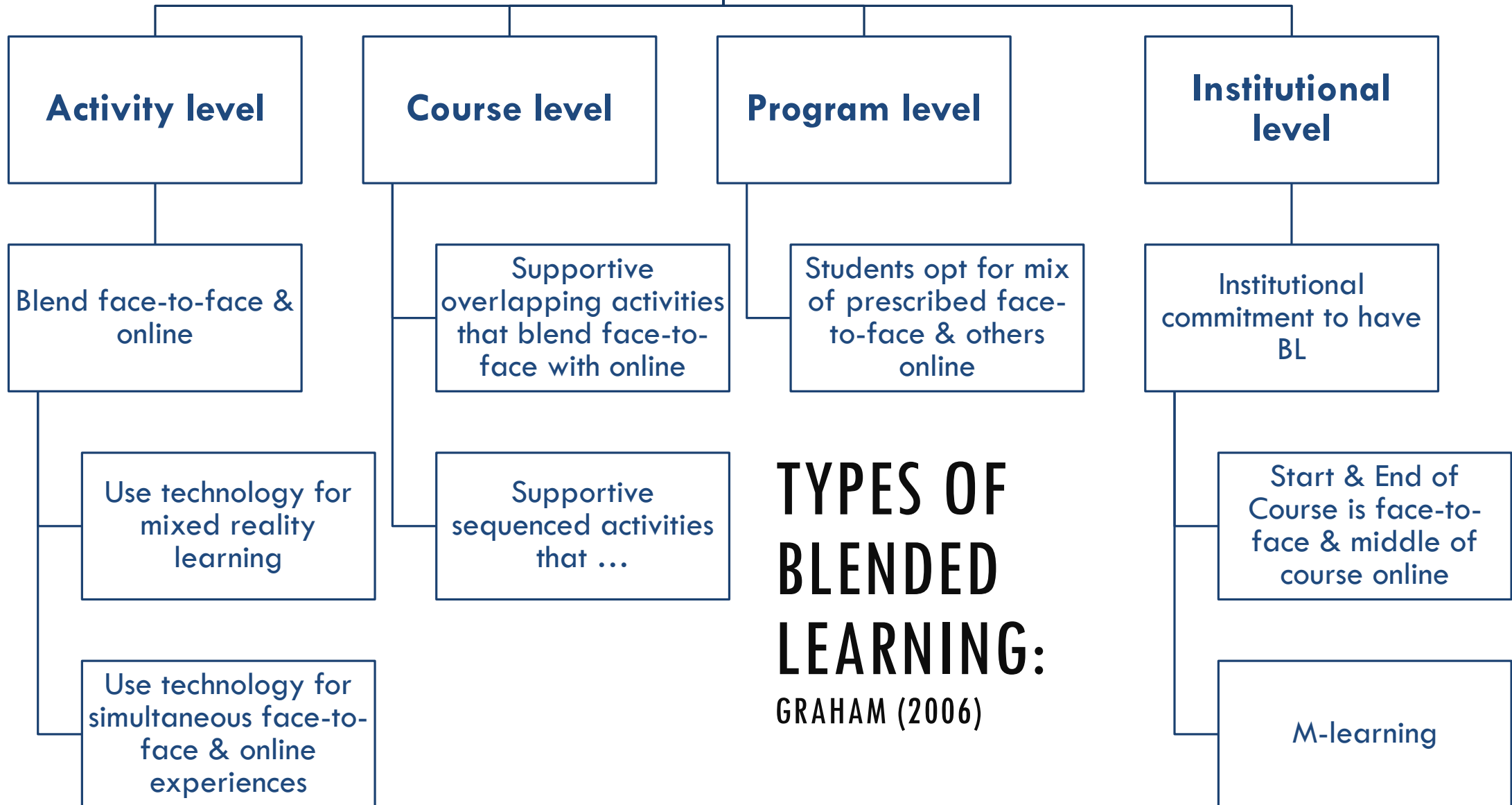
- Go to the Breakout Rooms
- Write your definition silently and exactly for 3 minutes
- Read your definition out loud to each other
- Comment on what is different/missing/similar
- Discuss how to define the term together
- Prepare to present to whole group



BLENDED LEARNING

“Blended learning is a formal education program in which a student learns at least in part through delivery of content and instruction via digital and online media with some element of student control over time, place, path, or pace.”
Friesen & Norm (2012)

Four Levels



TYPES OF BLENDED LEARNING:
GRAHAM (2006)

Students **can** control one/some of these dimensions

Time

Learning is no longer restricted to the school day or the school year.

Place

Learning is no longer restricted to the walls of the classroom.

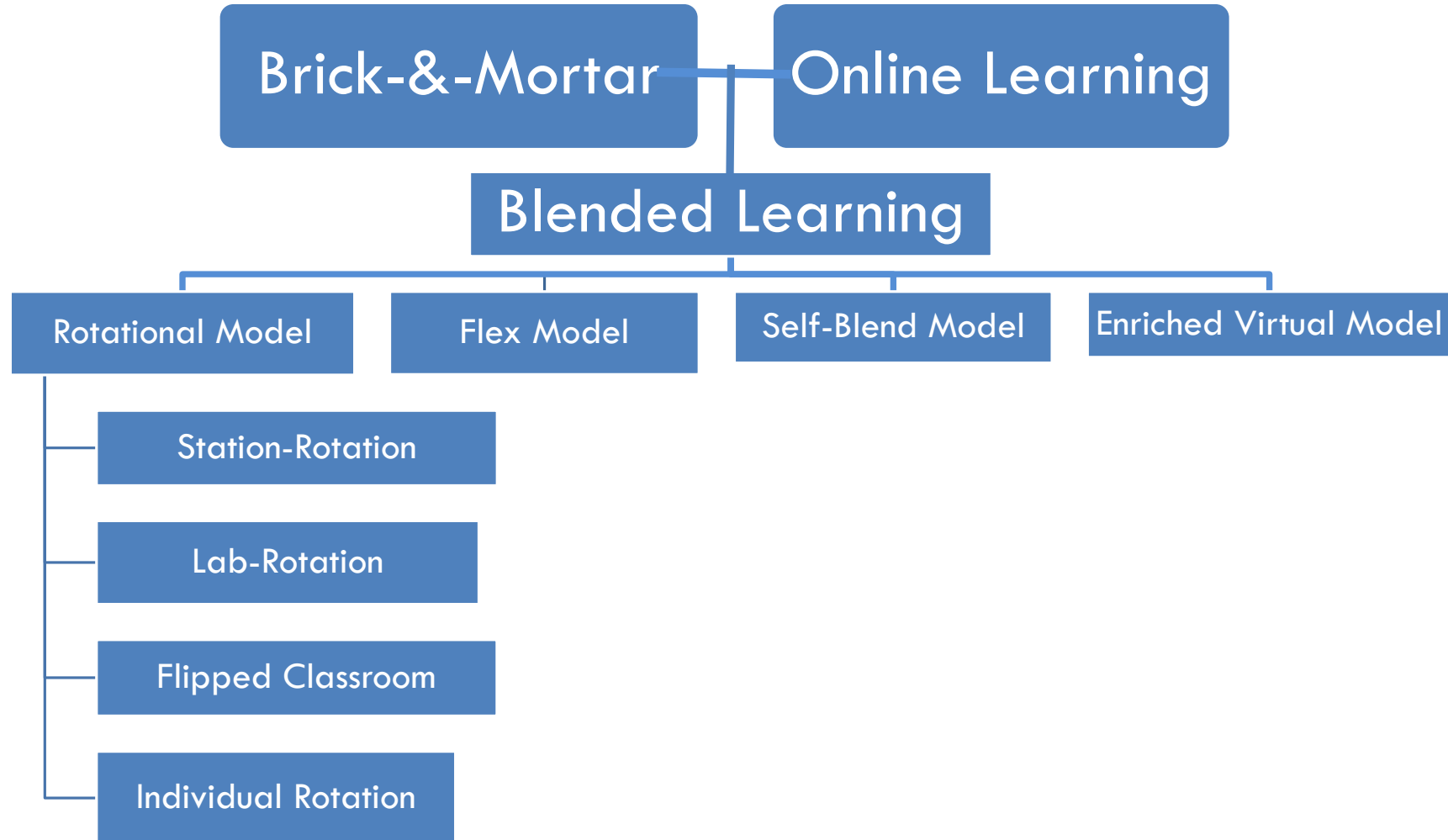
Path

Learning is no longer restricted to the pedagogy used by the teacher. Interactive and adaptive software allows students to learn [in a method that is customized to their needs].

Pace

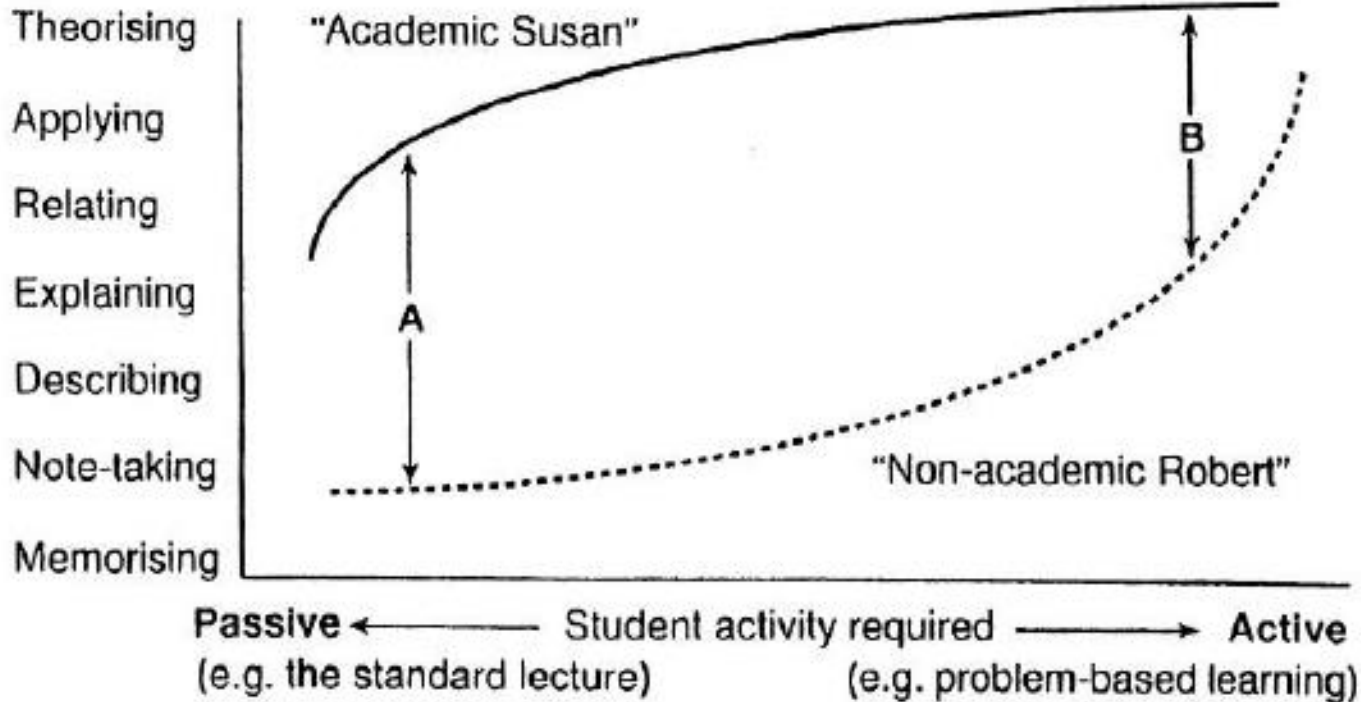
Learning is no longer restricted to the pace of an entire classroom of students

TAXONOMY OF BLENDED LEARNING MODELS



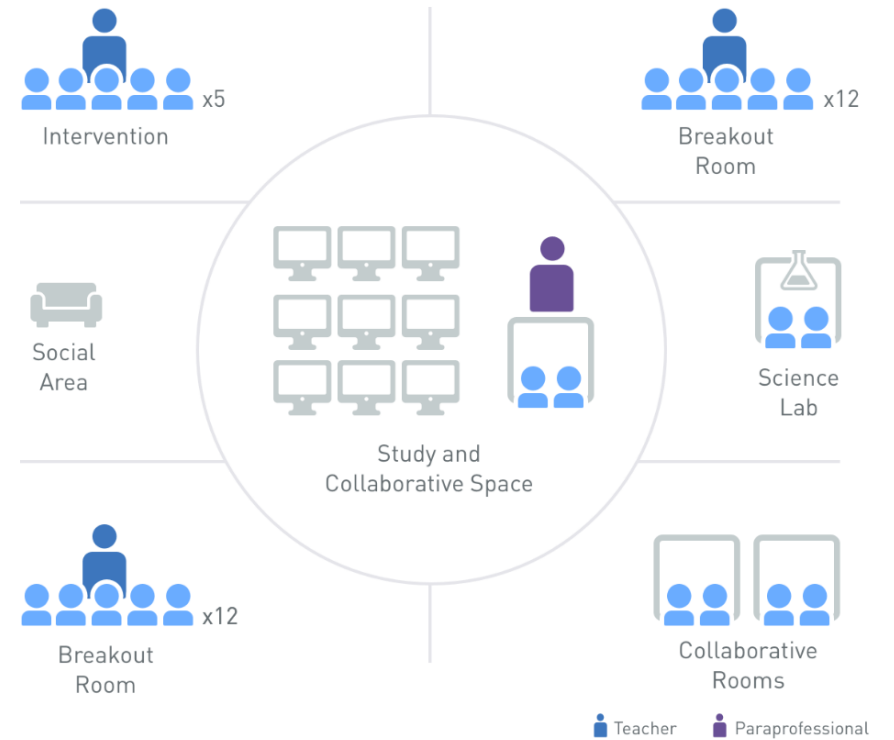
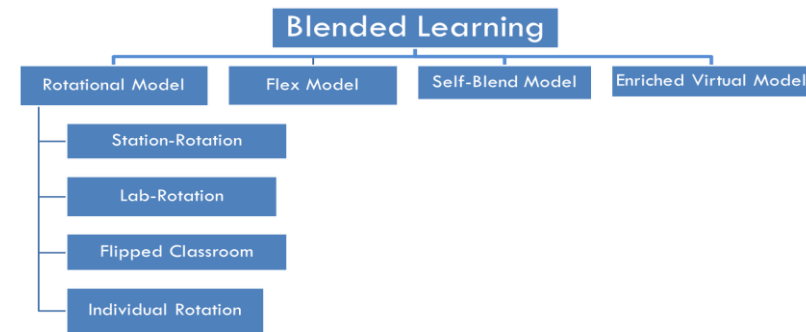
FLEX MODEL

High level engagement



Low level engagement

Teaching method

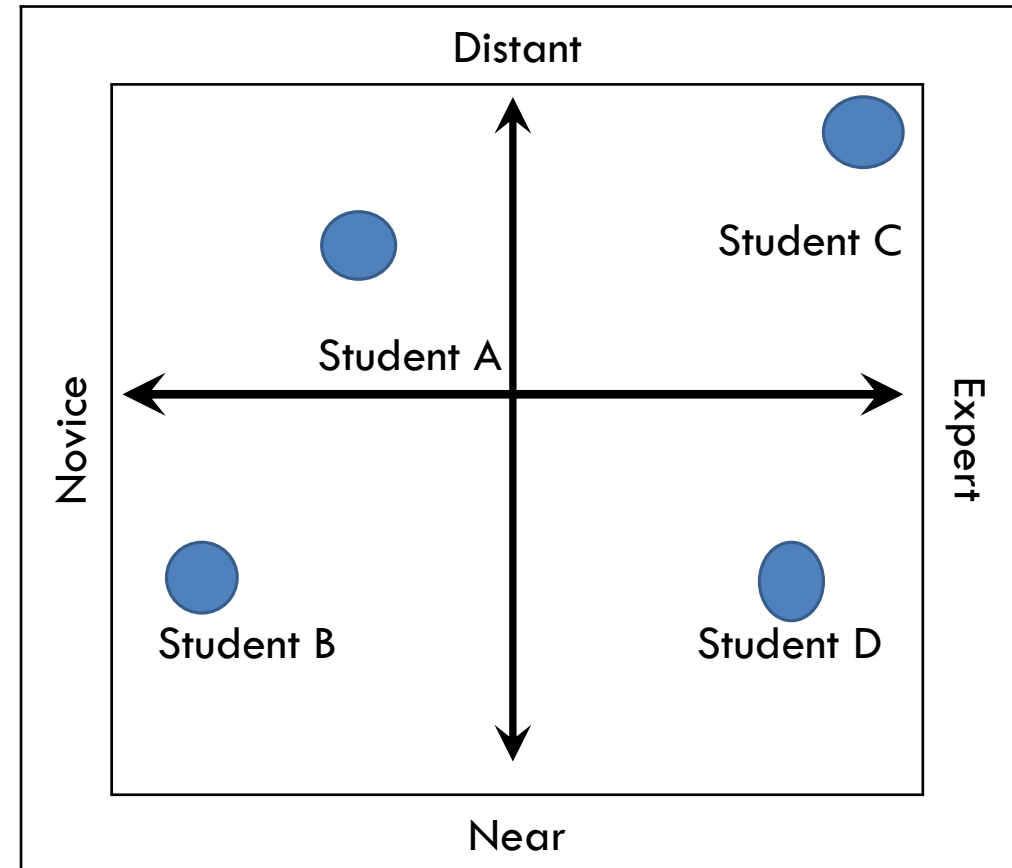


Student A has minimal experience of e-learning and is quite distant from campus – requires a blend that introduces e-learning gradually; quite dependent on using e-learning.

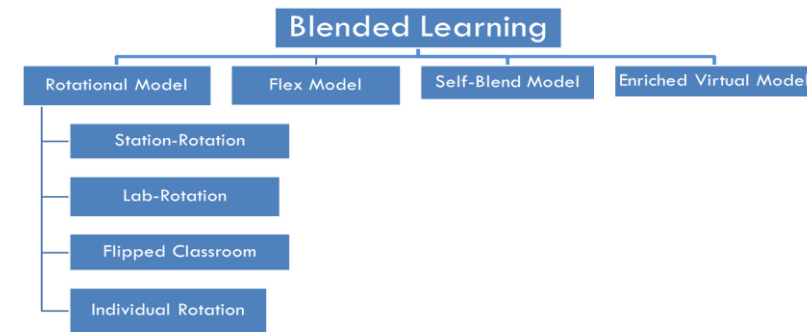
Student B is a novice e-learner, learning mainly on-campus – requires a blend that introduces e-learning gradually; not very dependent on using e-learning, and may use on-campus alternatives.

Student C is a very experienced e-learner, very distant from campus – can use e-learning competently without introduction; large distance and high expertise would suit e-learning.

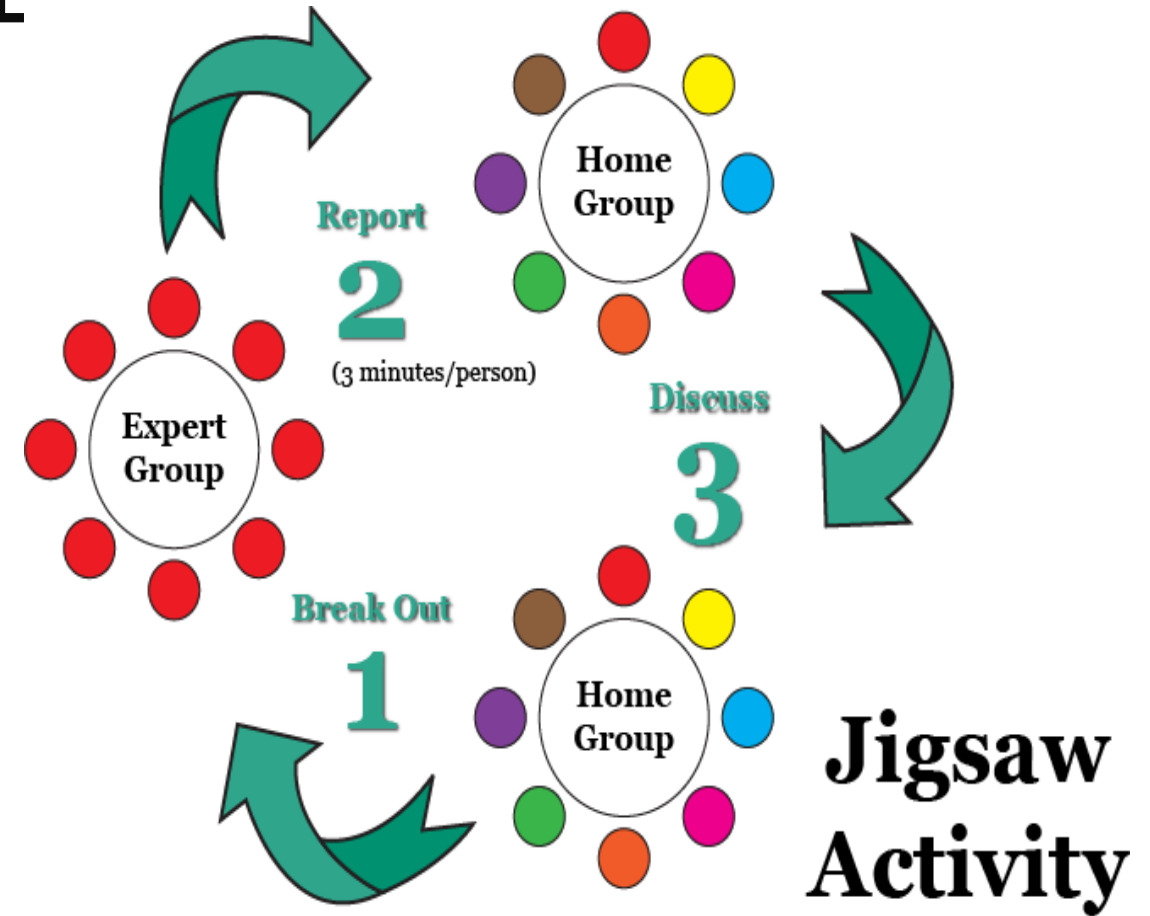
is highly experienced but able to learn mainly on-campus – can adapt to extensive use of e-learning from start of course, but also has choice as regards on-campus delivery; the best of both worlds.

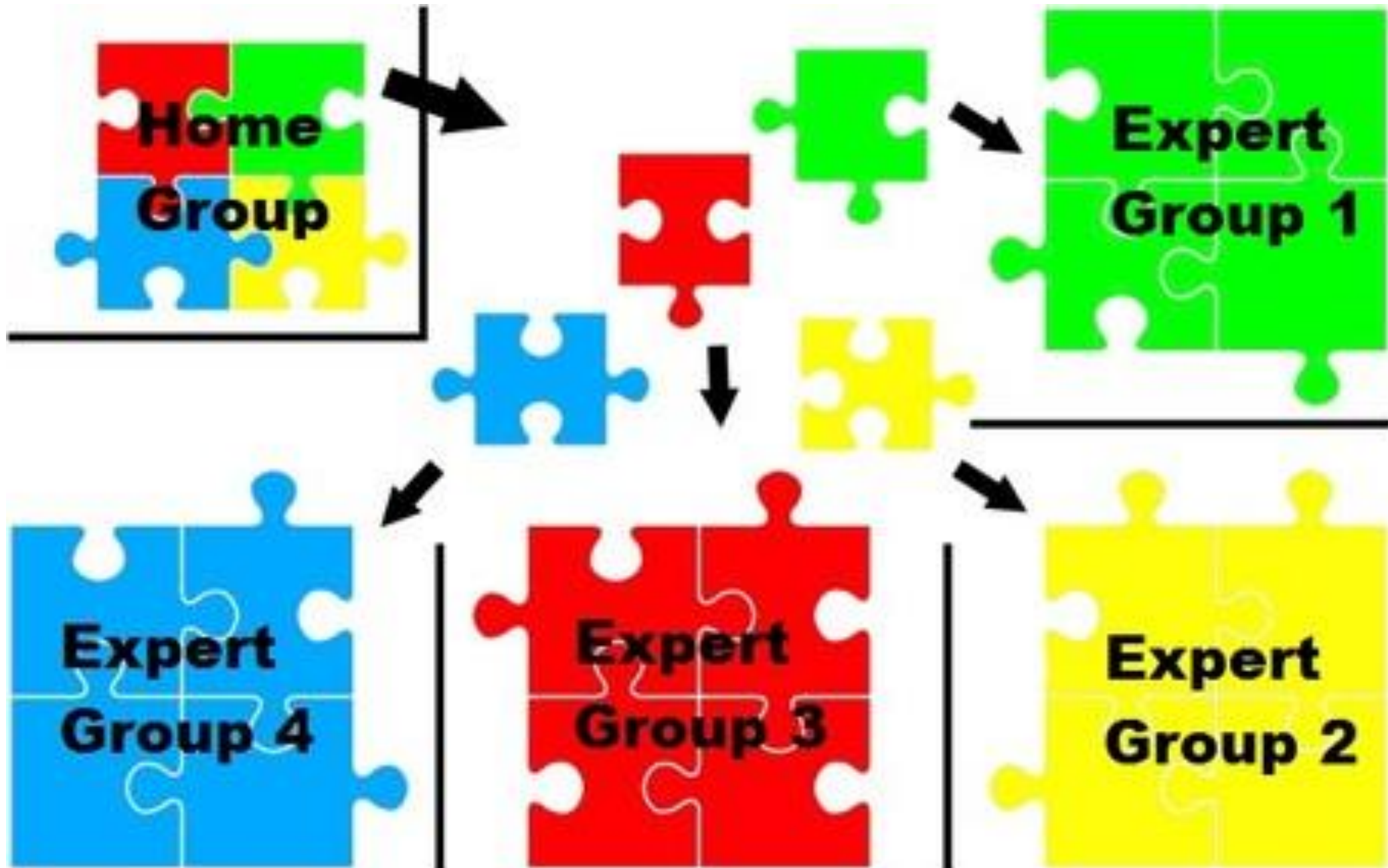


ROTATIONAL MODEL: FLIPPED CLASSROOM MODEL



Jigsaw activity





PENANG



Renewable energy sources



Solar power
10%

Wind power
10%

Hydroelectric power
10%

Geothermal energy
10%

Biofuel
10%

Tidal power
10%

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IMAGE ID: 373662874
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Renewable energy

What is renewable energy?

- Renewable energy comes from sources that won't run out, including:
 - the wind
 - the sun
 - the waves and tides
 - natural underground heat
 - energy crops, wood and waste.
- We can use renewable energy to provide electricity and heat for homes and businesses.

Why do we need renewable energy?

- Most of the electricity we use in the UK comes from non-renewable sources, such as coal and gas.
- These 'fossil fuels' are running out.
- Burning them to provide energy also releases gases that contribute to climate change.
- Renewable sources of energy don't run out or pollute the environment.

Why don't we get all our electricity from renewable energy?

- It is important to have a mix of energy sources so, if one fails, another can be used. Also, many renewable technologies are still being developed.

Wind energy

Giant machines, called wind turbines, can be used to make electricity in windy places.

Groups of wind turbines – or wind farms – are being built on land and out at sea.

Hydroelectric energy

Hydroelectric energy means energy from moving water.

Water flowing from a reservoir to a river through a hydroelectric dam can be used to make power.

Biomass energy

Biomass is plant and animal matter (e.g. wood, straw, sewage and waste food), or trees grown for fuel.

We can burn biomass to produce heat and electricity.

Solar energy

Solar energy means energy from the sun. The sun's light and heat can be captured by solar panels and turned into electricity or used to heat water.

Hydrogen fuel cells

Hydrogen fuel cells make 'clean' electricity from hydrogen gas. They work like batteries, and can power cars or buses.

Geothermal energy

Geothermal energy means the natural heat of the Earth. Geothermal power stations use heat from deep underground to generate electricity.

Tidal energy

Every day, the tide at the seaside goes in and out, as the sea rises and falls. Marine turbines can use this movement to generate electric power.

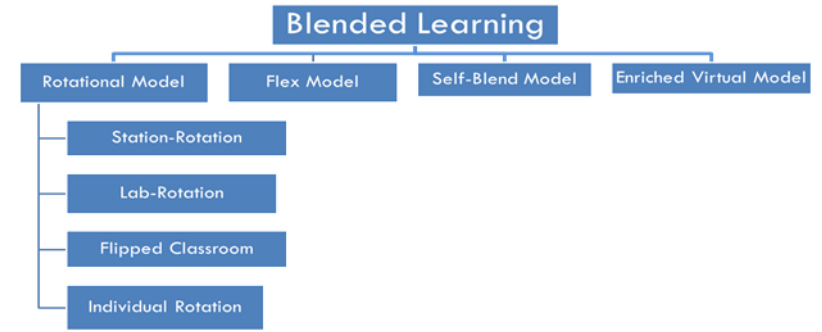
Wave energy

Waves are made when wind blows across the sea. The energy in waves can be used to make electricity by new technology such as the Pelamis wave machine.

It's Only Natural

See www.dti.gov.uk/renewables/schools

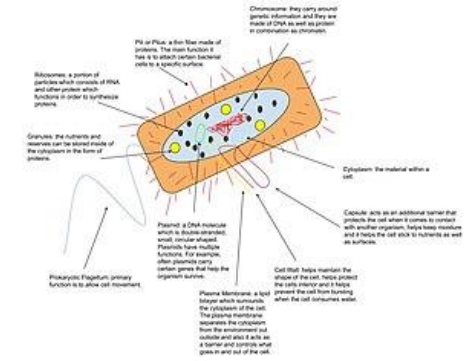
ROTATION MODEL: STATION-ROTATION MODEL



REVIVAL OF MAMMOTHS IN SIBERIA

Mammoth Genome Project

- Cloning
- Artificial insemination to artificial womb
- Gene editing
- Prehistoric Park in Siberia (Pleistocene Park)

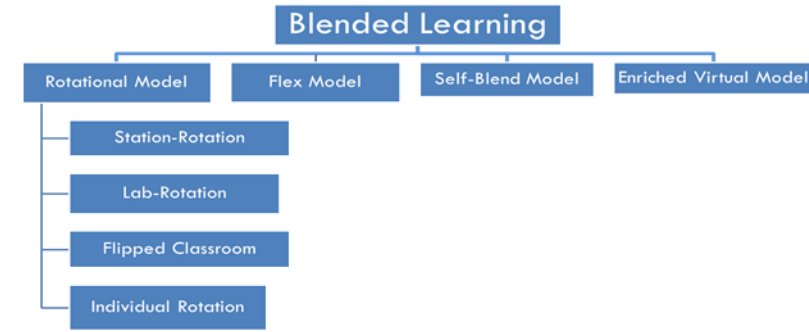


HOW WOULD THIS TASK AID STATION-ROTATION MODEL?

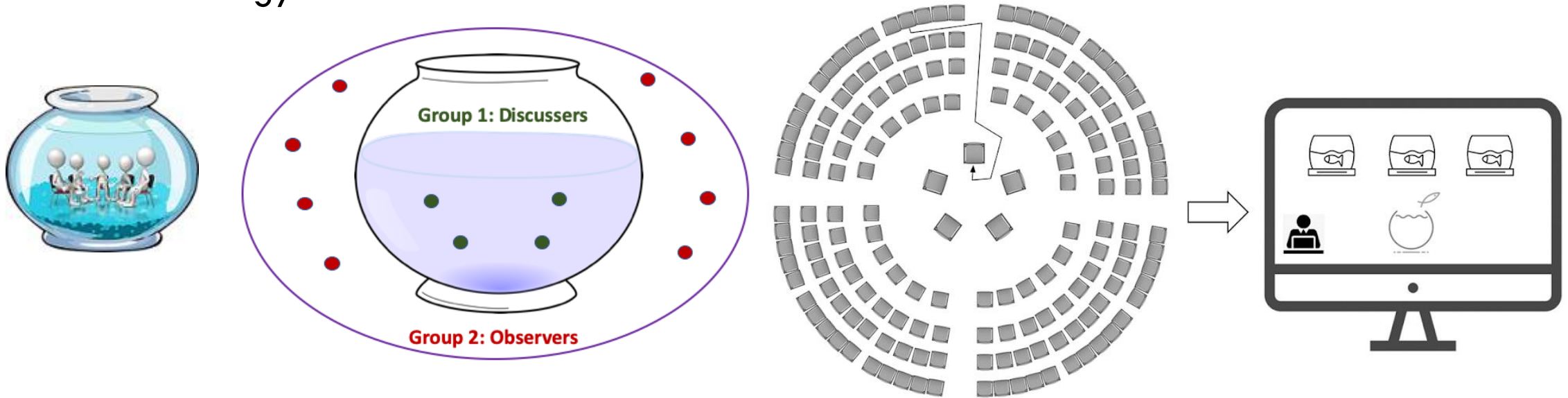
To create a news page on the Mammoth Project's success.

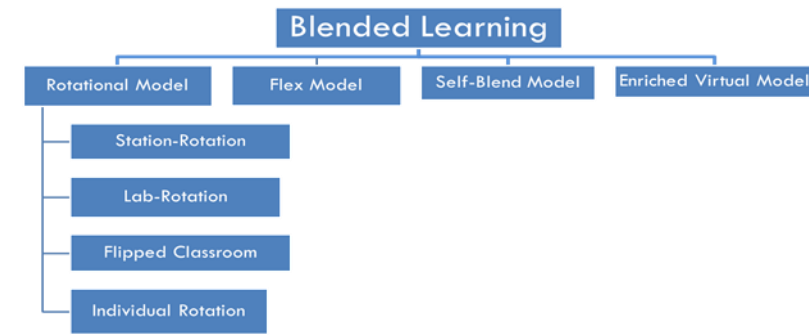


ROTATIONAL MODEL: INDIVIDUAL ROTATION MODEL



Fishbowl strategy



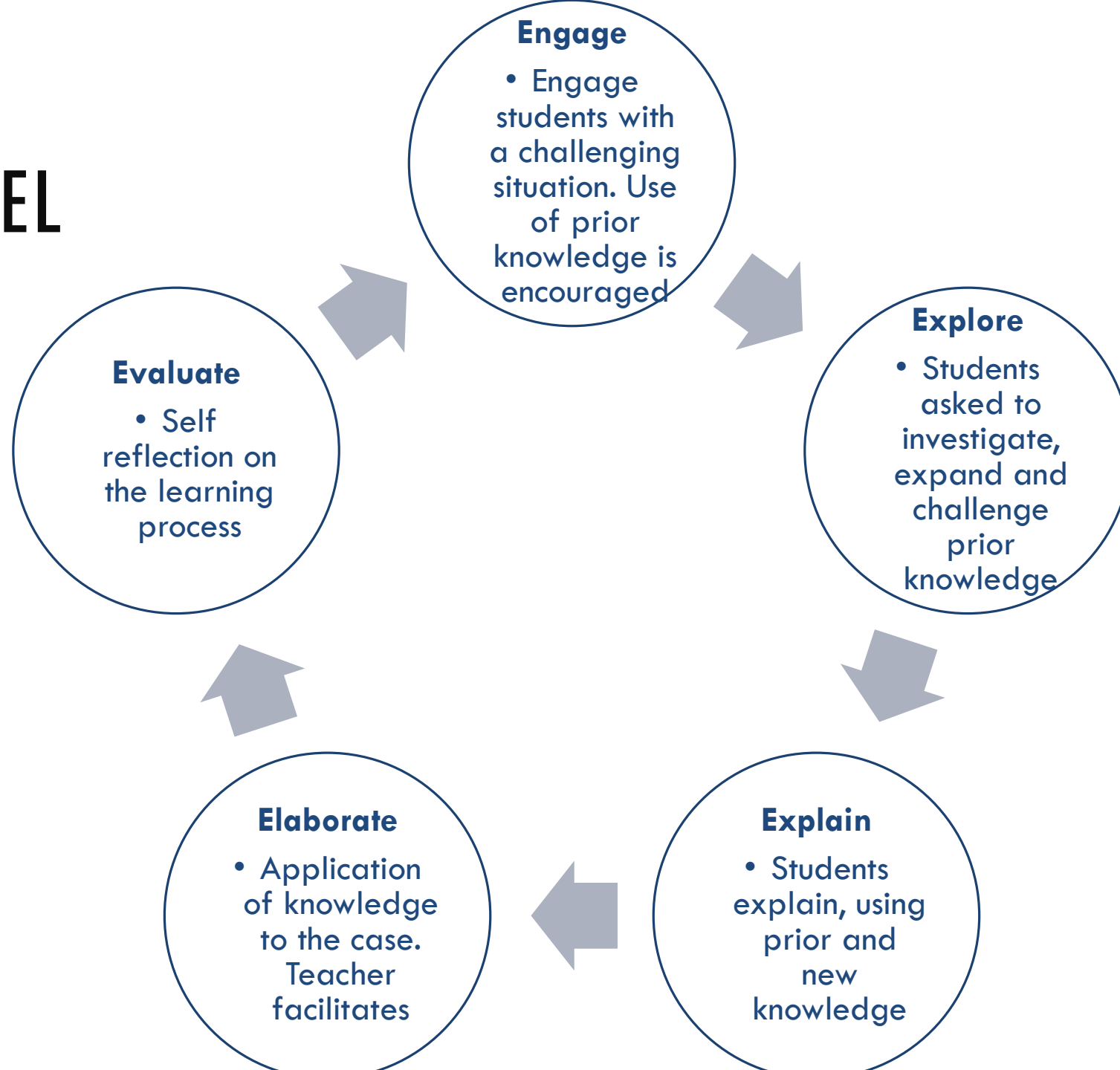


ROTATION MODEL: LAB-ROTATION MODEL

In-Class activities being analysed
in a lab setting

- In-class learning of World Wars
- At the Lab analysis of films depicting world wars with a comparison of actual events

5E MODEL





ACTIVITY

Areas to focus

- Environment
- Food
- Health
- Socio-cultural
- Politics

How will
you, as
experts,
help take
humanity to
the new
world

PROBLEM-BASED ACTIVE BLENDED LEARNING

How can you
convert this
activity to a
blended
one?

What aspects
of knowledge
are you
imparting?

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