

Cooperative Learning





COOPERATIVE LEARNING

MAHFUZAH MOHAMAD





CREATIVE EDUCATOR | UTEM
TS. DR. SITI NURUL MAHFUZAH MOHAMAD
mahfuzah.weebly.com | mahfuzah@utem.edu.my





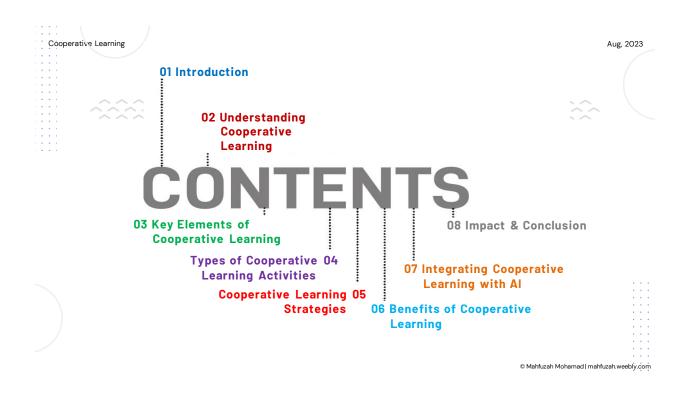






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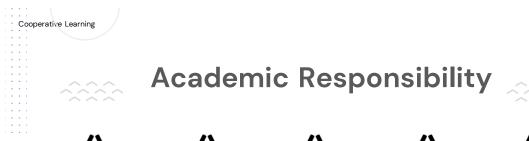
Aug, 2023





01 INTRODUCTION

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Teaching & Learning



Research & **Publication**



Leadership

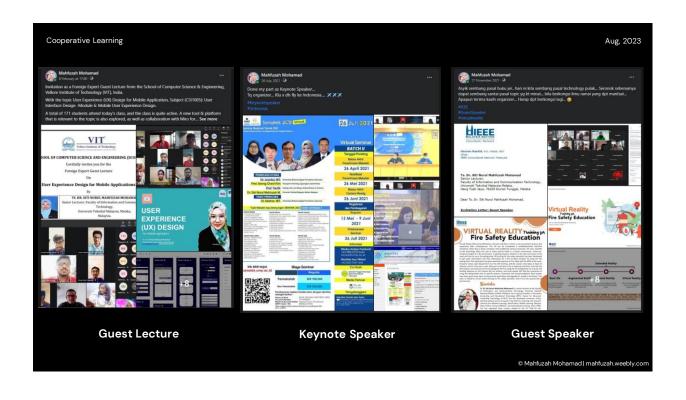


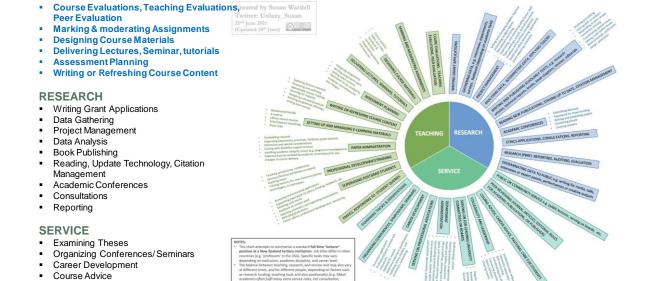
Community Service



Consultation

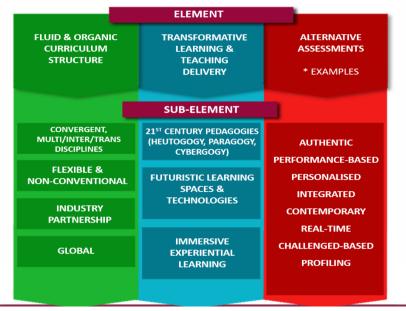






TEACHING

Peer Review, Editorial Board etc Community Services ACADEMIC LIFE: WHAT DOES A "LECTURER" DO?



MOE Future Ready Curriculum Framework

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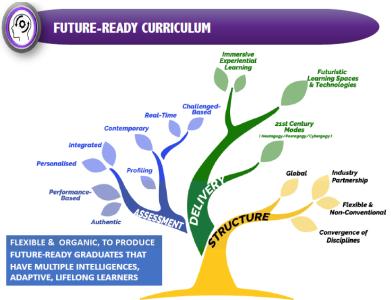
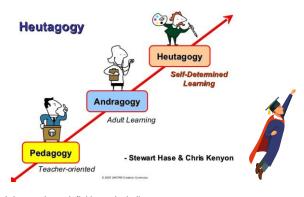
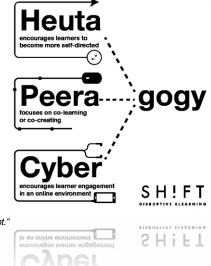


Figure 4.3 Fluid and Organic Curriculum Structure
Source: Framing Malaysian Higher Education 4.0 Future-proof Talent (MOHE, 2018).



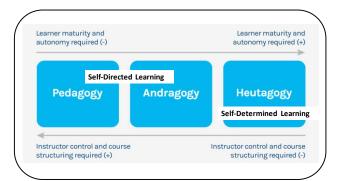
It has various definitions, including:

"the way teachers deliver the content of the curriculum to a class."
"the method of teaching, both as an academic subject or theoretical concept."
"refers to the method of how educators teach in practice and theory."
"the way of teaching students."



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The Difference

 $\underline{https://www.powerschool.com/blog/heutagogy-explained-self-determined-learning-in-education/approximation.}$

Pedagogy:

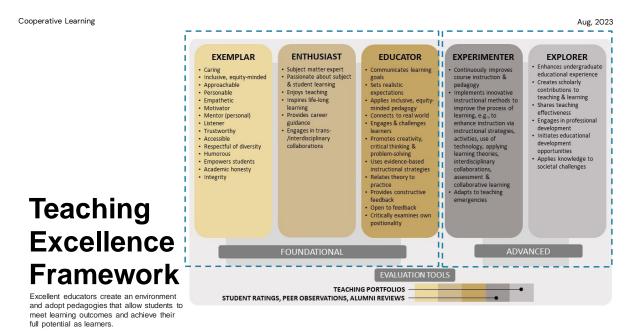
Teachers decide what students will learn and how they'll learn it in pedagogical environments. Students rely on their teachers and learn topics in the order they present them.

Andragogy:

In contrast, students in andragogical environments use the **teacher** as a **mentor** or guide. Still, they aim to find solutions to the teacher's tasks independently.

Heutagogy:

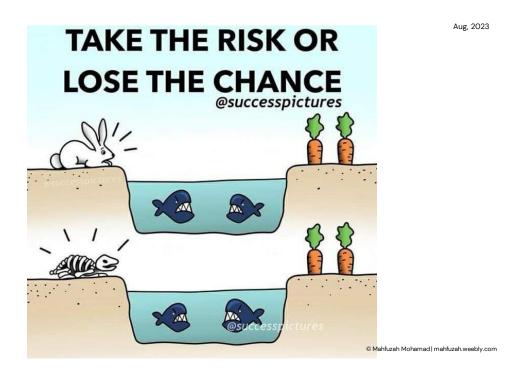
- Encourages students to find problems and questions to answer themselves.
- Students have voice and choice in seeking out areas of uncertainty and complexity in the subjects they study.
- Educators help by supplying context to students' learning. They create the opportunities to explore topics fully.

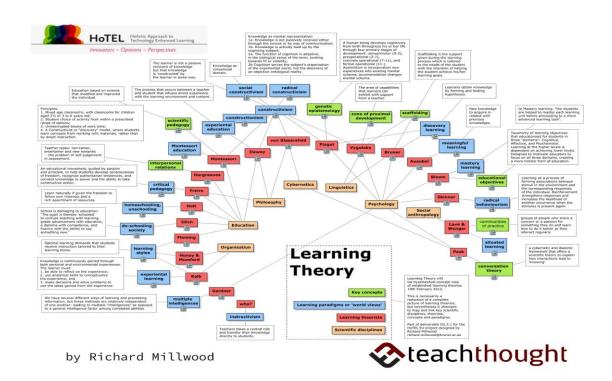


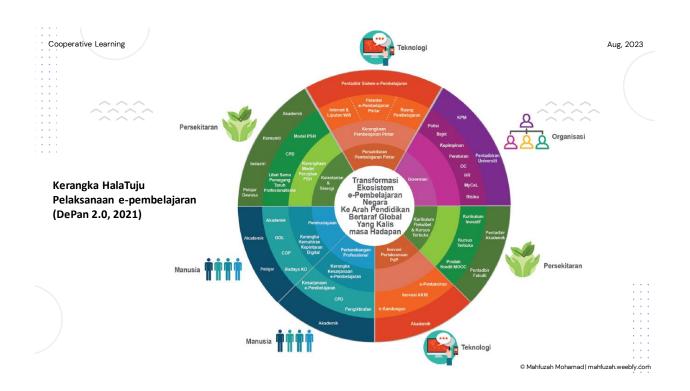
https://www.purdue.edu/provost/teaching-excellence/defining/

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Department of Higher Education, Ministry of Higher Education 2021

	e-Kandungan	Pedagogi Dalam Talian	Governans	Infostruktur & Infrastruktur	Perkembangan Profesional	Pembudayaan
2U2I atau 3U3I	~	~		~	~	
Kurikulum Tersedia Masa Hadapan	~	~				
Penyampaian Pengajaran & Pembelajaran Transformatif untuk Pendidik 4.0	~	~	~		~	~
Pentaksiran Alternatif		~			~	~
Service Learning Malaysia (SuLAM)	~		~			
Pindah Kredit MOOC	~	~				
Ruang Pembelajaran				~		
Pembelajaran Berasaskan Hasil Kebangsaan (NOBLe)	~					
Malaysia English Asessment	~					
Pentauliahan Bertingkat (Stackable Credential)	~					
ePortfolio untuk Pelajar						
eUsahawan	~					
Sijil Profesional untuk Sijil ePembelajaran	~				~	
Pendidikan Jarak Jauh & Pembelajaran Terbuka Jarak Jauh (PJJ &ODL)	~					

Rajah 13 Pemetaan Halatuju e-Pembelajaran Negara dan DePaN 2.0

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Bahagian 1: Cadangan Pemurnian Dasar e-Pembelajaran Negara (DePaN)



Tollan Pelaksanaan dan Pemarihan Daar e-broadelalarin Segara

Department of Higher Education, Ministry of Higher Education 2021

B1-2.3.4.5 e-Kandungan

e-Kandungan adalah kandungan kursus yang dibangunkan dalam pelbagai bentuk untuk penyampaian kursus secara dalam talian seperti Open Educational Resources (OER), Massive Open Online Course (MOOC) dan Open CourseWare (OCW).

- a) Pembangunan dan pelaksanaan e-Kandungan PPT PERLU:
 - memenuhi hasil pembelajaran melalui penggunaan pelbagai peralatan, aplikasi dan teknologi terkini (seperti Web 2.0, Web 3.0, Web 4.0, aplikasi mudah alih dan teknologi pendidikan 4.0).
 - ii. mematuhi reka bentuk e-Kandungan terbuka dan inklusif yang dibangunkan berdasarkan model Reka Bentuk Pembelajaran Sejagat (*Universal Design Learning*) dan sesuai untuk memberi pengalaman pembelajaran imersif melalui pelantar e-Pembelajaran pintar.
- iii. membenarkan capaian sumber dan capaian yang tidak terhad kepada batas lokasi (seperti laman web, VR, AR, Hologram, Al, IoT, video interaktif dan sidang video).
 - b) Pembangunan dan pelaksanaan e-Kandungan PPT **DIGALAKKAN**:
 - menggunakan kaedah penyampaian secara perkongsian dengan rakan kerjasama pemberi kursus dan pengajian melalui pelantar e-Pembelajaran pintar bersesuaian.
 - mendapat perlindungan hakcipta dan perlesenan piawaian kebangsaan/antarabangsa (contohnya Creative Commons).

B1-2.3.4.6 Inovasi PdP dalam Mod Pembelajaran

Mod pembelajaran terbahagi kepada mod konvensional iaitu PdP secara bersemuka sepenuhnya dalam bentuk kuliah/ tutoria/Jamali (termasuk pembelajaran di industri) yang dikendalikan mengikut tempoh pengajian atau dengan pembelajaran teradun (bended learning) antara 30% hingag 79%; dan mod Pembelajaran Terbuka dan Jarak Jauh (Open and Distance Learning, ODL) iaitu PdP yang dikendalikan dengan komponen kursus yang dilaksanakan secara dalam talian melebih 79%. (Rujuk: Garis Panduan Pembelajaran Teradun Gantian (PTG), 2019).

- a) Pendekatan penyampaian pengajaran PERLU disesuaikan dengan mod pembelajaran yang:
- i. dipelbagaikan seperti pembelajaran diperibadikan, pembelajaran berasaskan pekerjaan, pembelajaran berasaskan servis, pembelajaran autentik, pembelajaran berorientasikan masalah, pembelajaran berasaskan kerja/projek.

3

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Kajian Pelaksanaan dan Pemurnian Dasar e-Pembelajaran Negara

Kajian Pelaksanaan dan Pemurnian Dasar e-Pembelajaran Negara

- diinovasikan mengikut keperluan semasa yang mengarah kepada pendidikan fleksibel.
- melibatkan kaedah-kaedah yang menerapkan elemen pendidikan kalis masa hadapan serta melibatkan industri dan komuniti.
- iv. inklusif dan mengambil kira kepelbagaian pelajar.
- dijalankan secara segerak dan tidak segerak berdasarkan keperluan hasil pembelajaran dan kekangan pelajar.
- b) PPT **PERLU** mewujudkan:
 - i. pelbagai pilihan mod pembelajaran dan pelaksanaan kaedah penyampaian berkualiti.
 - ii. pelaksanaan latihan bagi membudayakan penggunaan kaedah penyampaian yang bersesuaian bagi setiap mod pembelajaran.
 - iii. penyediaan garis panduan kaedah penyampaian dan garis panduan kompetensi staf akademik.
 - iv. perkongsian amalan baik kaedah penyampaian yang bersesuaian bagi setiap mod pembelajaran.
 - pemantauan berterusan daripada aspek kuantiti dan kualiti ke atas kursus yang dijalankan bagi setiap mod pembelajaran.
- c) Sekiranya berlaku keadaan kritikal/kecemasan seperti, kehilangan data dan berlaku bencana, PPT **PERLU**:
 - fleksibel di dalam pelaksanaan mod pembelajaran bagi membolehkan proses PdP tidak terjejas.
 - menjalankan kajian tahap ketersediaan dan memastikan persediaan dari segi capaian internet dan PdP dalam talian kepada staf akademik dan pelajar.
 - menyediakan garis panduan pelaksanaan penyampaian dan pentaksiran yang jelas untuk rujukan semua pemegang taruh.
 - iv. menyampaikan makluman sebarang keputusan kepada semua pemegang taruh dengan jelas, adil, cekap dan cepat dari semasa ke semasa.

B1-2.3.4.7 e-Pentaksiran

e-Pentaksiran adalah kaedah pentaksiran dalam talian atau digital yang boleh dilaksanakan secara konvensional atau secara pentaksiran alternatif. e-Pentaksiran konvensional adalah penilaian secara dalam talian seperti kuiz, ujian, projek individu atau berkumpulan dan lain-lain. e-Pentaksiran alternatif adalah pengukuran pencapaian hasil pembelajaran selainnya melalui bahan tugasan seperti e-Portfolio, persembahan poster dan lain-lain yang dijalankan secara dalam talian (Rujuk Lampiran B: Teknologi untuk e-Pentaksiran Alaf Baru Berdasarkan lima (5) Prinsip).

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The creative educator must constantly come out with a new idea to provide interactive teaching materials relevant to the updated technology. In future, educators can update the digital content easily and makes students enjoy learning teaching materials and also use the appropriate 4.0 technology.

WHY CARE?

CARE is in line with several national policies and initiatives related to community engagement. These include the National Community Policy and the Rural Development Policy. The Ministry of Higher Education has also identified Service Learning as the High Impact Educational Practices (HIEPs) strategy, and introduced the University for Society (U4S) initiative to enhance student learning experience through community engagement.



HIEPs - Service Learning Malaysian Education Blueprint (HE) 2015-2025 (MoHE, 2015)



National Community Policy (MHLG, 2019)



Redesign University Higher Education: University, Industry and Community Engagement (MoHE, 2017)



Rural Development Policy (KPLB, 2019)

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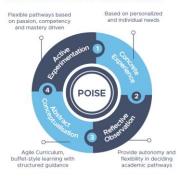
WHAT IS POISE?

POISE is a curriculum structure that expands access to a range of high-quality higher education options.

POISE provides students with diverse interests in obtaining academic qualifications with opportunities for lifelong learning.

POISE provides learners in HEIs with industry-driven learning materials, agile curriculum material, and buffet-style learning with standardised guidance.

PERSONALISED EXPERIENTIAL LEARNING



SCENARIO

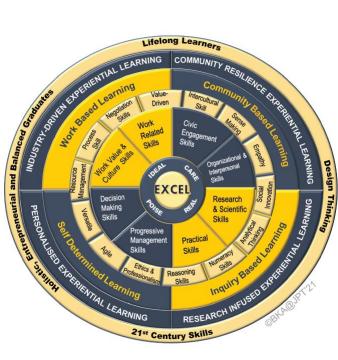
A popular singer would like to pursue passion in business, management or arts. As a popular singer he/she has good income and is not looking for mastery or competency in a specific area. Rather he/she would like to explore the potential area for him/her to further expose to various areas for his/her future focus or lifestyle.

SCENARIO

The shop assistant/walter can also start with his/her study within an area which is not related to his/her current job. They can start with an area of their passion (e.g. Arts) and then they can pursue for competency-driven or mastery-driven in Arts (e.g focusing on Product Design) based on credit hours taken in the selected area.

SCENARIO

After taking 40 credit hours in a particular knowledge area, the singer can also decide to be competent the area by adding another 40 credit hours in the same area, or she/he can opt to explore other areas (one or two knowledge areas) for another 80 credit hours.



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to CHANGE.

UNDERSTANDING OUR WORLD REQUIRES LEARNING AND **TEACHING FOR THE FUTURE - PROSPECTIVE ORIENTATION**

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https://me-qr.com/m7hHqOm5

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9h ⋅ 3 A violinist played for 45 minutes in a New York subway. A handful of people stopped, a couple

A violinist played for 45 minutes in a New York subway. A handful of people stopped, a couple clapped, and the violinist managed to raise about \$30 in tips.

No one knew this, but the violinist was Joshua Bell, one of the best musicians in the world. In that subway, Joshua played one of the most intricate pieces ever written with a violin worth 3.5 million dollars.

Two days before he played in the subway, Joshua Bell sold out a theater in Boston and the seats averaged about \$100.

The experiment proved that the extraordinary in an ordinary environment does not shine and is so often overlooked and undervalued.

There are brilliantly talented people everywhere who aren't receiving the recognition and reward they deserve. But once they arm themselves with value and confidence and remove themselves from an environment that isn't serving them, they thrive and grow.



There are brilliantly talented people everywhere who aren't receiving the recognition and reward they deserve. But once they arm themselves with value and confidence and remove themselves from an environment that isn't serving them, they thrive and grow.

Your gut is telling you something. Listen to it if it's telling you that where you are isn't enough!

Go where you are appreciated and valued. Know Your Worth





02Understanding Cooperative Learning

Cooperative learning is a strategy used within groups of learners and aims to improve their learning experience and understanding of a learning subject

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DEFINITONS OF COOPERATIVE LEARNING

Cooperative learning is an instructional strategy in which small groups of students work together to achieve a common goal or complete a shared task. It promotes active learning, engagement, and interaction among students, fostering a sense of community within the classroom.

Principles and Benefits

POSITIVE INTERDEPENDENCE: Students rely on each other's contributions, fostering a sense of mutual support and teamwork.

INDIVIDUAL ACCOUNTABILITY: Every student is responsible for their learning and contributions to the group, reducing free-riding.

GROUP PROCESSING: Regular reflection and discussion within groups enhance understanding and cooperation.

SOCIAL SKILLS DEVELOPMENT: Students learn communication, problem-solving, and conflict-resolution skills.

21st CENTURY LEARNING ENVIRONMENTS

Educators are in a unique position to influence and shape the world through future generations.

Nelson Mandela famously said, "Education is the most powerful weapon which you can use to change the world." To effect change, we must consider:

- How do children learn in today's world?
- Have our education systems kept current with the types of skills required to thrive in a modern society?
- What digital tools will help our children make sense of the world around them?
- What is the future of education?



21st CENTURY EDUCATORS

Teaching in the 21st century requires committed professionals who are constantly updating their own knowledge and skills.

21st century educators must accept that change is constant and be open to:

- New technologies
- New learning theories
- New assessment techniques

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Key Elements of Cooperative Learning

Positive Interdependence

- Students' success is linked to the success of their group members.
- Encourages collaboration and peer support, fostering a sense of shared achievement.

Individual Accountability

- Every student is held responsible for their learning and participation.
- Ensures that each student actively contributes to the group's success.

Group Processing

- Regularly scheduled group discussions about how effectively the group is functioning.
- Allows for self-assessment, problem-solving, and improvement within the group.

Social Skills Development

- Communication, teamwork, leadership, and conflict resolution skills are cultivated.
- Students learn to value and respect diverse perspectives.

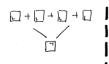


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COOPERATIVE V. COLLABORATIVE

By John Spencer @spencerideas



COOPERATION

. Mutual respect

. Transparency

. Shared goals . Independent and

dependent

· Loose network

. Short-term

. Sharing of ideas as a group

· engagement



COLLABORATION

. Mutual trust

. Vulnerability

. Shored vision and values

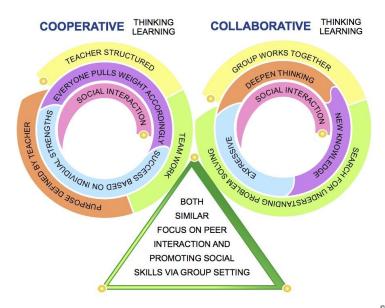
. constant state of interdependence

. Tight culture

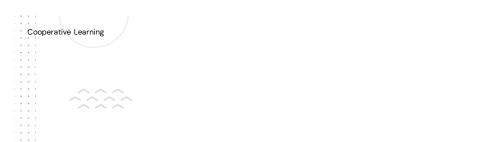
. Long-term . Generation of new ideas as a group

· empowerment

	COOPERATIVE	COLLABORATIVE				
-	Teacher centered	Student-centered				
FOCUS	More on individual achievement	More on collective achievement				
	Predefined/imposed (not always)	Negotiated/agreed				
ROLES /RESPONSIBILITIES	Limited responsibility (each person for a portion of the work)	Community (participants work together to solve a problem)				
	Delegation of sub-tasks	Common tasks				
MISSION	Different goals	Common goals				
	Closed assignments	Open assignments				
WORK	Predictable processes	Unpredictable processes				
	Static	Dynamic				



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04

Types of Cooperative Learning Activities

Cooperative Learning

Give Pop Quiz

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TYPES OF **COOPERATIVE LEARNING**



JIGSAW METHOD

Each student becomes an "expert" on a specific topic, then regroups with others who studied different topics to share knowledge and complete a task.

teams to



ROUNDTABLE DISCUSSION **GROUP PROJECT**

Small groups discuss a topic with Students work in each member contributing their research, plan, and execute a perspective, promoting critical thinking and diverse viewpoints. project or presentation, combining their skills and knowledge.

observing the discussion



THINK PAIR SHARE

Students think individually about a question or prompt, then discuss their thoughts with a partner before sharing with the whole class.



PEER TEACHING

Students take turns teaching each other about specific concepts, deepening their understanding by explaining to others.



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Cooperative Learning Aug, 2023 **JIGSAW ACTIVITY** Steps: Step 4 Give students time to Divide the read lesson into 5-6 segments Each students learns Divide students into 5-6 one segment person in a group and Step 7 assign a group leader Step 5 Step 6 Step 8 Discuss the main points Bring students back to jigsaw in expert group Float from group to group, group & each student present her segment

Cooperative Learning

Jigsaw exercise worksheet Topic: Climate Change

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Jigsaw Activity... Can we do it online?

Yes, of course, you can. Today with have a Jigsaw exercise through Webex (Home Group) & Google Meet (Expert Group). This activity was first introduced by Aronson.... is a cooperative learning technique that promotes better learning, improves student motivation, and increases enjoyment of the learning experience.

To understand the jigsaw step, feel free to visit this website (https://www.jigsaw.org/). Overall, during the presentation time, it can be a benefit to other students and learn something new. Through the synchronous session actually, improve the confidence levels of students.

So, today I act as a Prof Karim student. Really love this session with other passionate educators.

#cooperativelearning #jigsawactivity

www.jigsaw.org

The Jigsaw Classroom

The jigsaw technique is a cooperative learning approach that reduces racial conflict among school children, promotes better learning, improves student motivation, and incre...

9:39 PM

https://www.jigsaw.org/

Sub- topic	Topic	Notes
1	Chapter 1 - Basics of Climate Science Some locus prints for your guidance: - What is climate change? - What should we care about climate change? - What should we care about climate change? - What should we care should crimate and weather and causes of the greenhouse (global warming) effect? - How do energy balances word? - Global circulation systems - Parts Climate Agreement	
2	Chapter 2 - Carbon Footprint. Some Bocus points for your guidance: - Definition of carbon footprint - Feedback mechanisms and the carbon cycle - Emissions Scenarios - Stabilizing carbon disoxide (COZ) concentrations	
3	Chapter 3 - Adaptation and Méligation. Some locus porties for your guidance: - Marcha Chapter Scheller Schelle	
4	Chapter 4 - How to Engage with Local Government and Community. Some boos points for your guidance: - Why should the local government be involved? - How to engage the local government effectively? - What roises can they play?	
5	Chapter 5 - Climate Change Education. Some locus points for your guidance: The importance of environmental literacy and awareness. Climate change obtacion as part of UNESCO's Education for Sustained Development (ESD) programme. Climate change education in the school curriculum. Engagement with society.	

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ROUNDTABLE DISCUSSION

Round table is a form of academic discussion. Participants agree on a specific topic to discuss and debate. Each person is given equal right to participate, as illustrated by the idea of a circular layout referred to in the term round table.

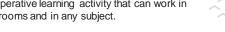




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THINK - PAIR - SHARE

Think-Pair-Share (TPS) is a cooperative learning activity that can work in varied size classrooms and in any subject.





Instructors pose a question, students first THINK to themselves



Discuss with a person sitting near them



The groups SHARE out what they discussed to the entire class

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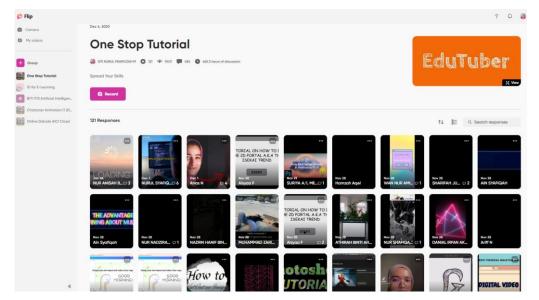
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PEER TEACHING

Students feel more comfortable and open when interacting with a peer. Peers and students share a similar discourse, allowing for greater understanding.

Gain new perspectives Accelerate learning Advantages of Peer Create Learning feedback Improve communication skills

https://padlet.com/sfwanasazali/manipulation-poster-ttb4gzyeg25p



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05Cooperative Learning Strategies

Cooperative Learning

DEBATE

This strategy works by having two parties go head-to-head in a debate. The members form two groups with one opposing and the other one supporting the proposition. The groups are forced to debate by justifying reasons as to why the proposition should be implemented or not.

As the saying goes, "a problem solved is a problem halved." The members are forced to think about the proposition as a group rather than an individual. The proposition can be a current challenge or a new idea.

https://padlet.com/pujah1112/design-issues-debate-gfearulwlvcl



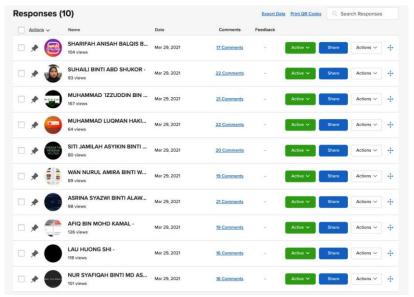
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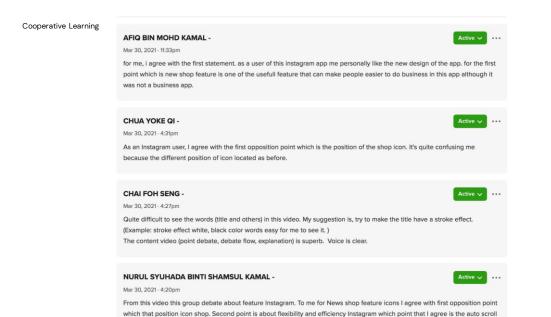
 $\underline{https://padlet.com/drmahfuzah89/debate-hci-wearable-technology-72ynbjcgepv0ps6d}$



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video and story. Lastly, the third point is New Reels feature which point that i agree is reels is reupload the video tiktok.

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WRITEAROUND

This strategy involves groups of **3-5** discussing a topic that each students has had access to, maybe through watching a video, listening to a speaker during a meeting or connect via online whiteboard.

This information is made available to every member before going into groups. Each member gets some time to write a comment. The points indicated by the members are then discussed among the group.

This strategy mainly focuses on topics or issues that can be solved through multiple solutions. It also gives an students a chance to detect any misunderstandings among employees. This strategy can be used to bring in new ideas.





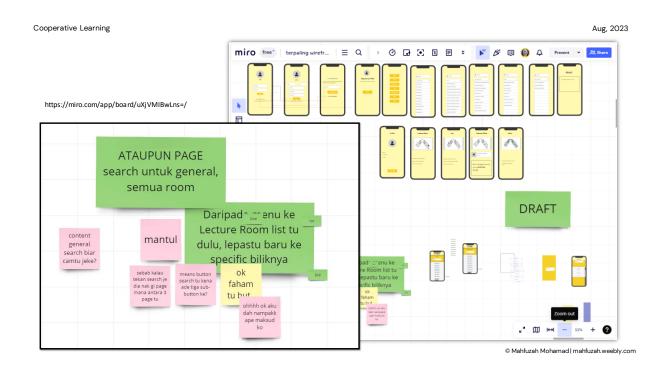












CO-RESEARCH

Example: Students in a university hospitality management course work together to design a customer satisfaction survey, then administer it to students at the school cafeteria and later analyze the results.

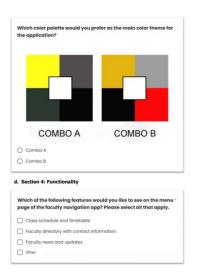
c. Section 3: Design



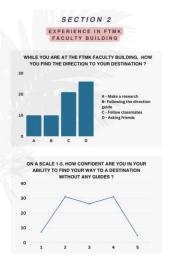
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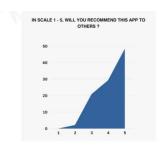
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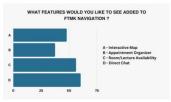












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Group Interview: Interview with staff UTeM Parcel.

Staff 1

Name: Encik Zulkifli bin Hussin

Email: zulkifli.hussin@utem.edu.my

Position: Pembantu Operasi – Pejabat Pendaftran

Staff 2

Name: Abdul Halim Bin Abdul Mokte

Email: halimmokte@utem.edu.my

Position: Pembantu Operasi – Pejabat Pendaftran

Staff 3

Name: Asshari Bin Abbas

Email: asshari@utem.edu.my

Position: Pembantu Operasi – Pejabat Pendaftran



Figure 1: Interview with staff parcel UTeM

Interview: Interview with UTeM Parcel user (student).

Student 1

Name: Nurul Atiqah Binti Sharif

Faculty: FTMK

Year: 1st year student



Figure 2: Interview with Nurul Atiqah (Student)

Script:

Adulla: Good morning! Hi, Tim Adulla. Thank you for your time. Here I would like to interview you to gather information about the parcel system that is currently in use in UTeM. To ensure the movement of UTeM parcels can be carried out in a better and orderly manner we plan to build an application related to UTeM Parcel. Here we would like to interview you to get feedback regarding our efforts in building this application. Here we also include wareframes of our application to give an overview of our application.



Figure 3: User faculty.

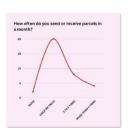


Figure 4: Number of parcels user sends / receive in a month.



Figure 5: The method chosen by the user to send or receive parcels.

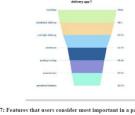
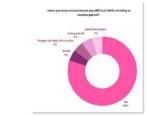


Figure 7: Features that users consider most important in a parcel delivery app.



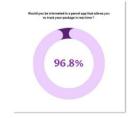


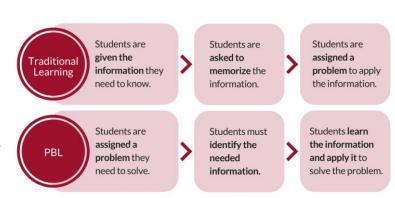
Figure 6: Difficulties encountered by users when sending or receiving pare: Figure 8: User interest in a parcel app that allow them to track their packages in

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PROBLEM-**BASED LEARNING**

PBL increases student engagement, improves higher-order thinking and communication skills, fosters cooperative learning and mutual responsibility, and produces long-term retention of content.



ROUND ROBIN

Students are sitting with groups (3-4 students), and they teacher asks them a question or gives them a problem to solve. The questions or problems are deliberating chosen, in that there are multiple ways to solve the problem and multiple points for discussion. Students in their groups take turns answer and sharing their ideas with each other, working together to come up with an answer that they all agree on (Colorado, 2015).



In pairs, students alternate generating brief oral responses.

Examples:

- List adjectives to describe the character.
- · List inert elements.
- Share steps of the experiment.
- · Describe an event from the story.



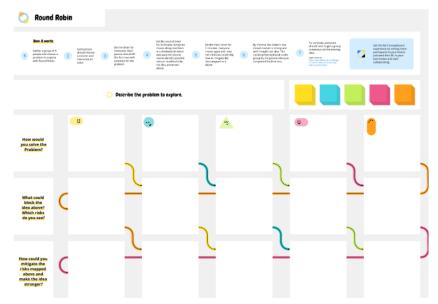
In pairs, students share with a partner for a predetermined time while the partner listens. Then partners switch roles.

Examples:

- What is the key thing that you learned?
- What is one literary technique you plan to use in your writing and how will you use it?

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https://conceptboard.com/blog/round-robin-brainstorming-technique/

List Of Additional Cooperative Learning Strategies

- Expert Jigsaw Group Work Rotation
 Method
- · Three-Step Interview Method
- · Round Robin Method
- · Numbered Heads Together Method
- Pair Check (60-second peer review)
- · Fishbowl Discussion Strategy
- · Choose your own Adventure
- · Group Investigation

- · Think-Write-Pair-Share
- Inner/Outer Circle (Speed Dating)
 Method
- · Quiz-Quiz-Trade Method
- · Reciprocal Teaching Method
- · Escape Room Activities
- Peer Editing
- · Team Scavenger Hunt

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U6Benefits Of Cooperative Learning

CLEAR LEARNING OBJECTIVES

- Group Formation and Dynamics
- Monitoring and Facilitation
- Assessing Individual and Group Performance

ADDRESSING CHALLENGES

- Managing Unequal Participation
- Handling Conflict within Groups
- Time Management

BEST PRACTICES AND TIPS

- Creating a Supportive Classroom Environment
- Providing Clear Instructions
- Incorporating Diverse Learning Styles
- Using Technology to Enhance Cooperative Learning

REAL-LIFE EXAMPLES

- Case Studies of Effective Cooperative Learning
- Student Testimonials

ASSESSMENT AND EVALUATION

- Formative and Summative Assessment
- Rubrics for Group and Individual Performance
- Reflection and Self-Assessment

RESOURCES AND FURTHER READING

- Books, Articles, and Websites
- Online Communities for Educators

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- Communication Skills: enhanced communication skills. They learn to listen as well as explain their views more concisely and accurately.
- Conflict Resolution Skills: working in groups inevitably leads to disagreements. Students can learn how to resolve disagreements in a positive and constructive manner.
- Leadership Skills: one or more students may take on a leadership role, which will give them experience allocating tasks and resources and help them develop other project management skills.
- Deep Learning: sometimes students process information at a much deeper level when going at their own pace or working in a group, as opposed to a more passive mindset that occurs when listening to a teacher's lecture.

Benefits of cooperative Learning

Strategies for

Implementation

Successful

- Independence: students learn to not rely on teacher supervision to keep themselves on task. This helps them develop self-discipline and personal responsibility.
- Teamwork: by working with others, students learn that team members
 offer different strengths to a project. They learn the value of relying on
 and helping team members and the importance of cooperation to reach
 a common goal.



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07 Integrating Cooperative Learning with Al

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Al can enhance cooperative learning experiences by providing personalized recommendations, resources, and feedback to each student.

Adaptive learning platforms powered by Al analyze student performance and adapt content to address individual needs.

HARNESSING AI FOR COOPERATIVE LEARNING

Positive Interdependence through AI

- •Al-powered collaborative projects: Students work together on Al-driven projects, such as coding a simple game or analyzing data, leveraging each other's skills.
- •Al facilitates group decision-making by processing large datasets, allowing students to collectively draw conclusions.

Individual Accountability with Al

- •Al-assisted assessments: Al evaluates individual contributions to group projects, ensuring fairness and accountability.
- •Students use Al-driven self-assessment tools to reflect on their participation and contributions within the group.

Group Processing Enhanced by Al

- •Al-driven discussions: Online platforms use AI to moderate and summarize group discussions, helping students reflect on shared insights.
- •Al algorithms provide data on group dynamics, aiding educators in identifying areas for improvement.

Social Skills in a Digital World

- *Collaborative coding: Students use AI coding platforms to solve problems together, practicing teamwork and communication.
- ·Virtual teamwork: Students engage in Al-mediated virtual collaboration, developing digital communication skills.

Al and Real-World Application

• Explore Als impact: Assign cooperative research on Als influence in various industries, fostering critical thinking and collaborative research.

Sample Activity: Al-Powered Debate

- ·Assign teams to debate the ethical implications of Al. Use Al to gather data on arguments, fostering well-informed discussions.
- •Teams present findings, reflecting on the benefits of Al-mediated research and group dynamics.

Sample Activity: Al-Enhanced Problem Solving

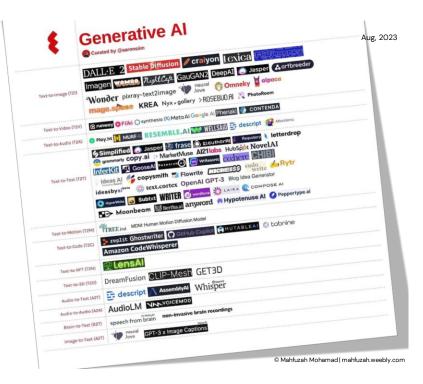
•Provide a complex problem. Students collaborate to design an Al-driven solution, utilizing diverse perspectives and Al capabilities.

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Generative Artificial Intelligence

Generative AI essentially produces content (e.g., text, images, audio, video), which can have huge cost reduction benefits.



30 AI tools to use in the classroom



















































- Al-powered platforms and tools that can be used for cooperative learning activities in the
- 1. Google Workspace for Education: Google Docs, Sheets, and Slides offer real-time collaboration features that allow students to work together on documents, spreadsheets, and presentations.
- 2. Microsoft Teams: This platform enables group discussions, file sharing, and collaboration on projects. It also integrates with other Microsoft Office tools.
- 3. Padlet: A virtual bulletin board where students can collaborate by adding notes, images, and links. It's great for brainstorming and sharing ideas.
- 4. Miro: A collaborative online whiteboard where students can work together to visualize concepts, brainstorm, and organize ideas.
- 5. Edmodo: A learning management system that allows educators to create collaborative groups, share resources, and facilitate discussions.
- 6. Kahoot!: An interactive quiz platform that promotes group engagement and learning through gamified quizzes and challenges.
- 7. Flipgrid: A video discussion platform where students can respond to prompts and interact with each other's video responses.
- 8. Peergrade: A tool for peer assessment and feedback on assignments, helping students evaluate and learn from each other's work.
- 9. Nearpod: An interactive presentation tool that allows educators to engage students with polls, quizzes, and collaborative activities.
- 10.Twiddla: An online collaborative whiteboard that supports real-time drawing, text, and image annotations for group discussions and brainstorming.
- 11.Mentimeter: A platform for interactive presentations, polls, and quizzes, fostering engagement and participation among students.
- 12.Buncee: A multimedia presentation tool that allows students to collaborate on creative projects with images, videos, and text.
- 13. VoiceThread: A platform for creating and sharing multimedia presentations that can include voice, video, and text comments. 14.Collaborize Classroom: An online platform designed for collaborative discussions, debates, and
- 15.Scribblar: A virtual classroom and collaborative whiteboard where students can work together on diagrams, drawings, and problem-solving.

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Instructional Design for E-learning

.lul.	2022

Updated 9.22.21	Backchanneling & Polling	Presentation	Posters, Ads, & Infographics	Interactive Lessons	Video Creation	Collaboration	Audio Recording & Podcasting	Photo Editing & Collage Creators	Animation & Storyboarding	AR / VR	Interactive Whiteboards	Word Clouds	Formative Assessmen
	Backchannel Chat	Canva	Canva	EdPuzzle	Loom	Voice Thread	Vocaroo	ThingLink	Storyjumper	JigSpace	Whiteboard.fi	Answer Garden	Deck Toys
Created By:	Padlet	Nearpod	Adobe Spark	Voice Thread	Unscreen	Google Docs	Sound Recorder (windows 10)	Remove.bg	Storyboard That	CoSpaces EDU	Whiteboard.chat	Mentimeter	Quizlet
Dr. Jordan Cotten Website:	YoTeachApp	Prezi	Lucid Press	PlayPosit	Screencastify	Google Slides	Audioboom	PixIr	Toony Tool	MetaVerse	Google Jamboard	Word Cloud for Docs	Flipgrid
CottenTechCoach Twitter:	Answer Garden	Google Slides	VennGage	Deck Toys	Screencast-o-matic	Google Keep	Anchor	Fotoflexer	Make Beliefs Comix	3D Bear	Microsoft Whiteboard App	Word Clouds	Kahoot
@jcotten32 YouTube Channel:	Poll Everywhere	PowerPoint	Infogram	Timelinely	iMovie	Padlet	Twisted Wave	Big Huge Labs	PowToon	Civilisations AR	Miro	Word Art	Socrative
bit.ly/TechCoachYT	Slido	PowToon	Slides.go	Nearpod	Nimbus	Edji	Soundation Studio	Adobe Photoshop Express	Pixton	Quiver AR	Chrome Canvas	Free Word Cloud Generator	Quizizz
Instagram: @cottentechcoach TikTok:	<u>Chatzy</u>	Activinspire (licensed to install)	PixTeller	Pear Deck	Flipsnack	MoocNote	Clyp It	Photo Scissors	Gickr	Fetch! Lunch Rush	Mural	Tag Crowd	GimKit
@cottentechcoach	Twitter	Flipsnack	Genial.ly	Blendspace	MovieMaker (windows 10)	Actively Learn	Chirbit	AddText	EzGif	PopAR World Map	Math Whiteboard	Word Cloud Maker	Quizalize
	Socrative	Adobe Spark	Poster My Wall	Actively Learn	Adope Spark	Miro	VoicePods	Image Resize	Canva	Reality Composer	Explain Everything	Infogram	Formative
	Flinga	SlideDog	Circly	Symbaloo Learning Paths	Biteable	GooseChase	Audacity (install software)	PhotoPea		Geogebra AR	Flinga	Word Sift	Teacher Made
	Google Jamboard	Classroomscreen	Online Chart Tool	Classkick	KeepVid	Trello	Text2VoiceOver	Phrase it		AR Makr	Scrumblr	Monkey Learn	Plickers
	Tricider	Slides.go	Easel.ly	Whiteboard.chat	Zamzar	Whiteboard.chat	Synth	PixTeller				Word It Out	Google Form:
	Mentimeter	Slides Mania	Visme	Google Jamboard	Recordcast	Kanbanchi	Flipgrid	Photo Collage				ABCya!	Nearpod
	Google Forms	Slides Carnival		EverFi	Flipgrid	Google Jamboard	Cue Prompter	Fotor					Quiz Whizzer
	Wooclap	Pear Deck		Classcraft	Cue Prompter	Wakelet		Summo Paint					Actively Learn
		Buncee		Perusall	iorad	Creately		Storyset					Triventy
		Circly		Lumio		Flipgrid		Cut My Pic					Classkick
		Flipgrid				Flinga							GooseChase
		Book Creator				Scrumbir							Knoword
		<u>Genial.ly</u>				Circly							Vimboard
		Beautiful											Wizer





08 **Impact**

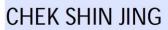


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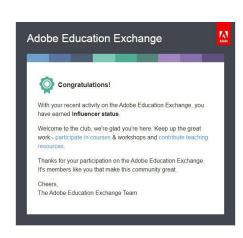


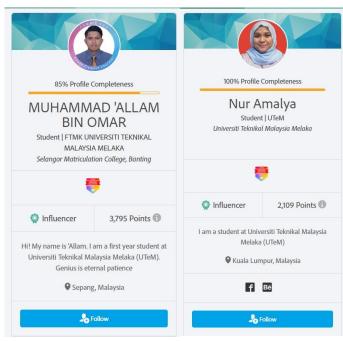
This certificate is presented in recognition of participation in and completion of:

Basic Principles of Design

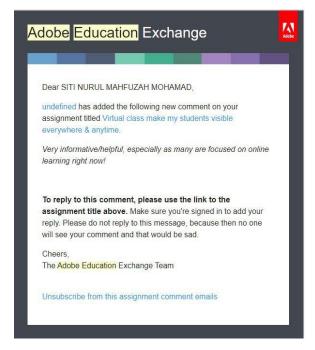
A **5 hour** course on the Adobe Education Exchange.

Greg Hodgson Greg Hodgson, Course Leader
Basic Principles of Design - Adobe Education Exchange





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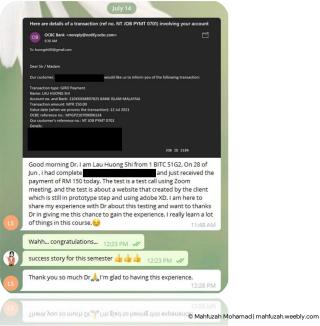
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SOCIAL MEDIA DESIGN

Instagram









SOCIAL MEDIA DESIGN

Twitter











09Conclusion

Cooperative learning is an **active learning strategy** that involves students working together to complete a task or project. It helps students develop **communication** and **teamwork skills** as they discuss options and negotiate agreements on the best course of action.

There are many forms of cooperative learning that exist across the entire educational continuum. In addition to traditional cooperative learning approaches, there are also opportunities for educators to **integrate technology** into classroom..

