iN Inclusive Digital Education for Entrepreneurs

DEED

INDEED

The Inclusive Digital Pedagogy Toolbox

www.**indeedforyou**.eu

![IN DEED - Inclusive Digital Education for Entrepreneurs]

Welcome to our INDEED **toolbox**

Welcome to the INDEED toolbox! In our current lives, digital technologies have become an ingrained and important aspect in all aspects of our lives.

The INDEED toolbox makes it possible for entrepreneurship educators to access training on innovative digital pedagogic strategies which will help them create relevant, inclusive and creative learning spaces for their SME learners.

> *Never doubt that a small group of thoughtful, committed citizens can change the world; Indeed, it's the only thing that ever has.*
>
> **Margaret Mead**

Table of Contents

An Introduction To Our
Indeed **Toolbox**

At a time when digital technologies have revolutionized all aspects of our lives, particularly the way we live and work, we believe it is more crucial than ever to provide high quality, sector-specific training opportunities which allow educators, and staff working in the entrepreneurship sector to update their skills and embrace effective digital teaching and learning.

For this reason, we aim to increase the ability and motivation of adult entrepreneurship educators and VET leaders to incorporate digital pedagogies and activities into their curricula/teaching strategies, with a particular focus on increasing their confidence in using digital tools in adult entrepreneurship education.

The INDEED toolbox is designed to equip educators with the necessary knowledge and tools, with guidance on how to use them.
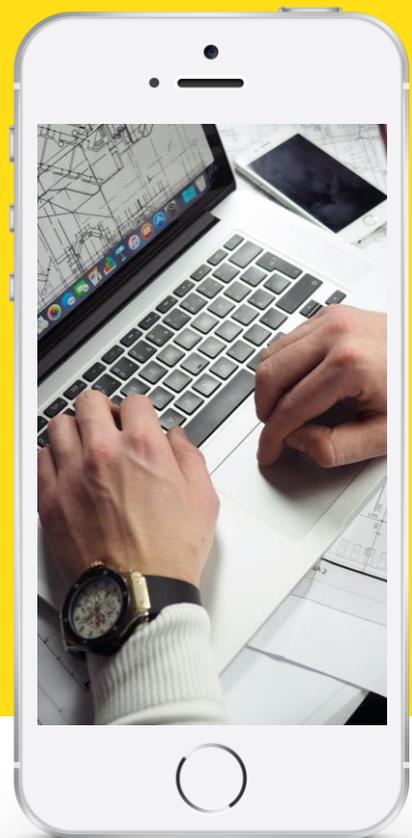
The INDEED project will do this by developing:

1.   The Inclusive Digital Pedagogy Toolbox

The Inclusive Digital Pedagogy toolbox. An interactive publication featuring the 6 of the best digital learning resources of particular relevance for Entrepreneurship, with 18 tools to match them, tested and tried by our team, with practical guidance on how to use them.

2.   Digital Pedagogy Online Learning Course

The Digital Pedagogy Online Learning Course. A course that Entrepreneurship Educators can use to strengthen their own digital skills. Uniquely, each module of the course will be taught using a different platform, thus integrating learning outcomes with the delivery mechanism.

3.   Inclusive Entrepreneurship Hackathon

Inclusive Entrepreneurship Hackathon. A Guide that introduces EEs to the concept of a Hackathon on creative digital pedagogic approaches & tools and guides them on how to use these tools and techniques to implement more inclusive, more innovative, more impactful teaching.

Pedagogies At A Glance

When the concept of pedagogy is discussed, it can be viewed as the way educators deliver the content of the curriculum to a class. When an educator plans a lesson, different ways to deliver the content will be considered. The target group of the toolbox is adult educators and people working in the VET Sector, specifically around entrepreneurship education, tutors and staff working with students in Higher Education Institutions. We aim to provide practical guidance and tools to these educators wishing to incorporate new Digital teaching strategies, with a particular focus on increasing their confidence in using digital tools and apps.

We will identify 6 inclusive pedagogies and 18 tools to accompany them to provide highly usable resources to offer concise, actionable information about their pedagogic contribution, allowing educators to quickly review each tool and choose those of most interest, then learn quickly and implement with students.

The six inclusive and innovative pedagogies we will focus on are:

01 Flipped Classroom Learning

The flipped classroom intentionally shifts instruction to a learner-centered model in which class time explores topics in greater depth and creates meaningful learning opportunities for diverse learners.

02 Problem Based Learning

Problem based Learning allows students to learn about a subject through the experience of solving an open-ended problem. It allows for the development of diverse and desirable skills and attributes

03 Product Development Hackathons

During hackathons, students get an opportunity to innovate various inspiring business ideas. Hackathons can act as gateways to entrepreneurship and churn out great candidates for exploring entrepreneurship.

04 Peer Learning (Also Networking)

Students learn a great deal by explaining their ideas to others and by participating in activities in which they can learn from their peers. Within this pedagogy, learners have access to experts they might not normally have access to.

05 Universal Design For Learning

Developing educational opportunities that are inclusive requires thinking not only about equality in opportunities to access education but also about equity- each student can achieve similar positive outcomes, regardless of their background.

06 Differentiated Instruction

Differentiated Instruction is a learner-centric model of education that aids educators struggling to respond adequately to varied student needs within one classroom or group. This approach is inclusive by matching student characteristics to student needs.

How to use our toolbox

Getting To Know The Pedagogies:

Our toolbox is split into two sections, pedagogies and tools.

The best way to use this toolbox is to take a look at the pedagogies you like first.

Within each pedagogy we have a detailed explanation about each pedagogy, with the advantages and disadvantages

We've also included some information to get you started with the pedagogy.

GETTING TO KNOW THE TOOLS:

STEP 01

Identify The Right Pedagogy For You

Take a deeper look into each pedagogy. Is this a teaching technique for you? The tools section within each pedagogy is designed to help you identify which three digital tools will allow you to achieve the best results with the pedagogy.

STEP 02

Advantages and Disadvantages

Outlining the pros and cons of each tool is important and we have collated feedback from business advisors who have helped give us insight into how effective they feel these tools are.

STEP 03

Learning From Others

Sometimes the best way to learn is to see a practical example. So that's what we have collated, some of the best online resources to help you get a good flavour of how other Advisors and Educators are using the tool.

STEP 04

Getting Started

Register online and get started with whichever tool you feel best suits your business needs!

> "
> *What are you waiting go ahead and pick your first tool to learn...*
> "

01

Inclusive Pedagogy-
Flipped Classroom
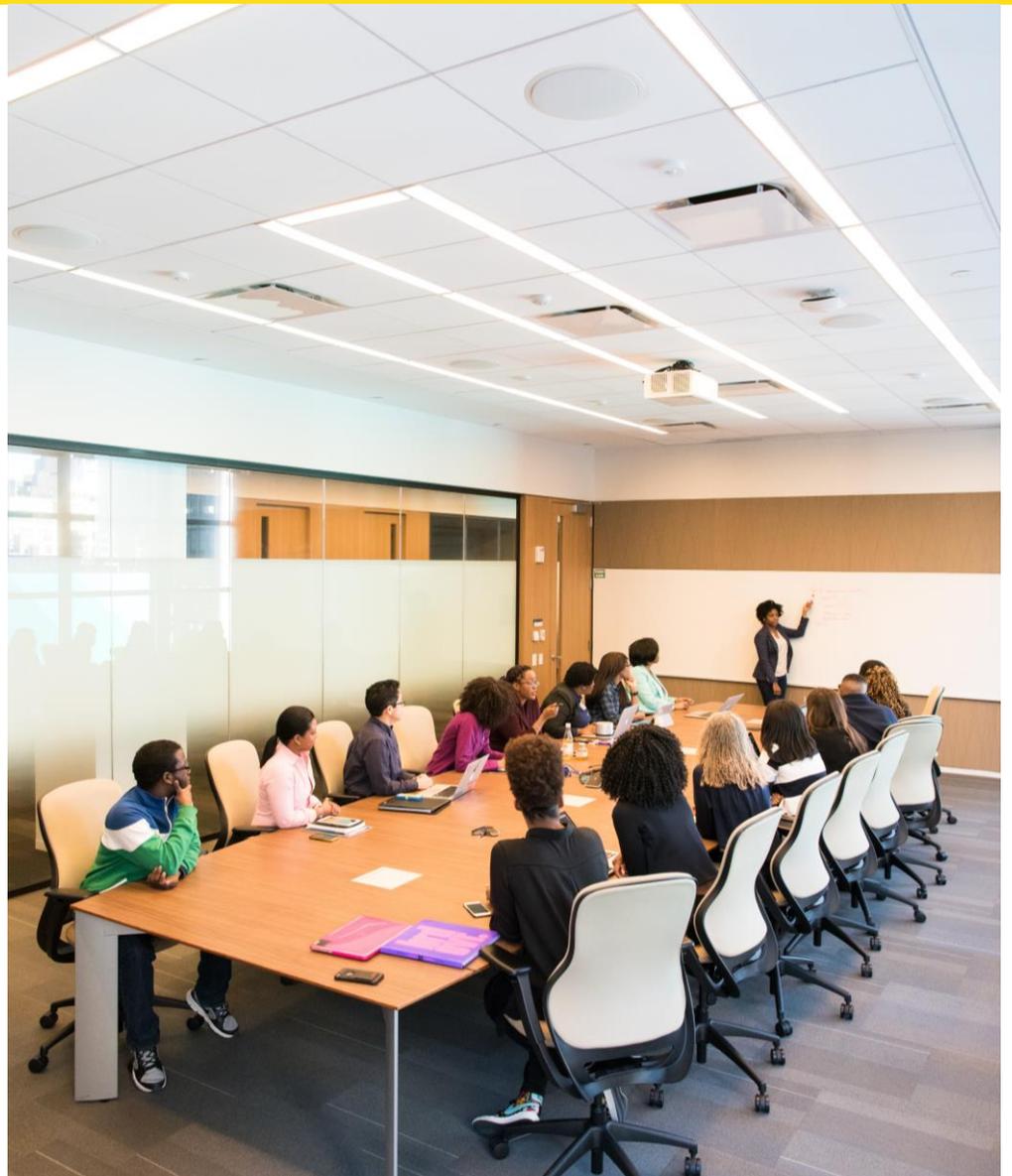
Introduction

Inclusive Pedagogy
Flipped Classroom

The **flipped classroom is an inclusive pedagogy** *which helps students to* **share, use, develop and process information using technology.**

Flipped classrooms can be generally thought of as a teaching approach where learners are first exposed to new content before class on their own and then process the information in a facilitated, group setting during class.

What is a Flipped Classroom?

A flipped classroom is an instructional strategy and a type of blended learning, which aims to increase student engagement and learning by having students complete deep content dives (readings/video lessons) at their home and work on live problem-solving or applied learning during class time. Traditionally, the opposite normally happens, i.e. a student is introduced to a concept during a lesson and they are asked to do homework to help solidify the information at home. A flipped classroom can be designed to introduce any concept or idea and is particularly useful when introducing topics or learning materials that may be hard to grasp.

Why is in an Inclusive Pedagogy?

Flipped classroom lessons and approaches are designed to be fluid/flexible. Introducing the concept outside of the classroom (typically as homework) allows learners to explore new content and learning material at their own pace. Video lessons are a mainstay of a flipped classroom given that they can be rewatched multiple times until the learner has a good grasp of the content.

The Flipped Classroom is:

- ✓ **Flexible** both in terms of teacher and student use/engagement
- ✓ **Equitable** – students can learn at their own past be it fast or slow
- ✓ conducive to **Collaboration**, discussion and opportunities for different forms of learning
- ✓ able to facilitate **Personalisation**. Class time becomes more group based with time for one on one. Students get more individualised attention from the teacher/educator
- ✓ inspired by and mindful of different learner preference, styles and **Diversity**

Watch this video more to find out even more about this pedagogy in practice:
https://www.youtube.com/watch?v=qdKzSq_t8k8

1. It allows all students to learn at their own

CLICK TO LEARN & WATCH

How to Design a Flipped Class Lesson:

outside of class

Identify student learning outcomes
(1) Use lower-order objectives such as remember, understand & apply.

Select Content
(2) Such as new concepts, review, fundamentals or demonstration.

Select Delivery Method
Such as videos, simulations, interactive modules or online research.

(3)

Coach Students
(8) Guide students and provide feedback as they work.

STUDENT LEARNING OUTCOMES

Create or Find Content
Create your own videos or leverage existing content.

(7)

(4)

Select Activity
(6) Such as problem solving, team based learning & hands-on activities.

Select Assessment
(5) Use low-stakes assessment so students come to class prepared.

Identify student learning outcomes
Use higher-order objectives such as analyze, evaluate & create.

in class

Benefits of the Flipped Classroom Pedagogy:

- More one-to-one time with teacher or lecturer
- More group work or student collaboration/interaction time
- Self-paced learning
- Deeper subject understanding

Negatives to the Flipped Classroom Pedagogy:

- Requires student preparation before class, if not prepared, the student may miss out on information and may not be able to be prepared to contribute in class
- Time and effort for teacher is increased (however, material can be reused)
- May create further digital divide issues in learners (digital skills/aptitudes/access should be assessed prior to lesson design)

Flipped Classroom Tools in focus

As you have learned, the flipped classroom typically revolves around a video lesson. The tools we have chosen will help you to create your own first flipped classroom lesson. You can use Canva to create a learning video, YouTube to publish the video for sharing and Ted Ed to take that published video and turn it into a structured video lesson.

Canva

Canva is a really simple-to-use tool for producing basic and animated graphics and videos. It is a powerful tool for visual storytelling and can be easily customized with a choice of fonts, backgrounds, frames and more. Canva is a really impressive suite of graphic design tools available on the web as well as Android and iOS. You can use it to create visual stories that can be delivered in a number of ways for example via social media posts, video, newsletters and more.

We particularly like Canva because it easy for beginners to grasp and the Canva Design School has lots of learning resources to help you make the most of this tool.

Check out the Canva website by clicking on this link.

Advantages Of Canva

- Great font/template options
- More organization and storage
- Lots of features - Photo editor, Transparent backgrounds, Automatic resize, Save your brand/favourite font and color scheme
- Affordable

Disadvantages Of Canva

- Limited free icons (€1 per icon/picture)
- May need tutorials to get started

Canva In Action

Canva for Education

How to use Canva as a teacher and educator with students

www.youtube.com/watch?v=rmV6EfDvSdk

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Canva for Education

Tutorial for Teachers

https://www.youtube.com/watch?v=9iuWcf67pgM

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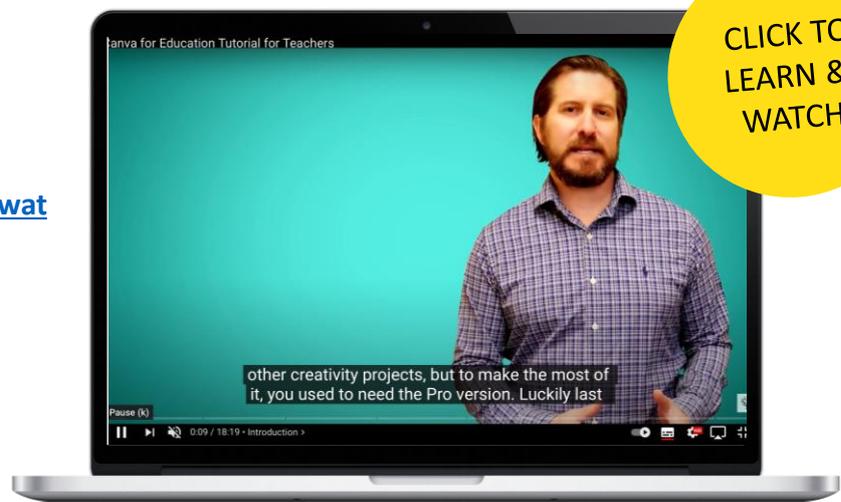
YouTube

YouTube is a video streaming and social media platform where users can publish their videos for free. Users can add videos in a wide array of definition, and can even upload 4k videos for free. Create a video of your class or topic, and publish it on YouTube so it can be accessed freely. Educators can use YouTube in many different ways, and educators may find it easier to relay complicated concepts through video format. YouTube is available on any device, and is most commonly used on mobile platforms such Android and iPhone devices.

We love YouTube as a flipped classroom tool because it is straightforward to use, and is completely free to publish unlimited videos. It is a valuable tool for the flipped classroom pedagogy.

Check out YouTube by clicking on this link.

Advantages Of YouTube

- Free to use
- Users can rewatch videos at their own pace
- Videos can bring life into your classroom
- Improved learning for students as they can find multiple videos of similar material
- Remote access- students do not have to be present in the classroom to watch the videos

Disadvantages Of YouTube

- May take the user some time to get a good grasp of the platform
- Users may get distracted as there will be recommendations which suggest other videos
- Access requires a stable internet connection, generally the videos cannot be watched offline
- Unwanted adverts- students may find that they are exposed to advertisements on the platform

"In my opinion, each student learns at their own pace to use class videos as a teacher or as a student who makes their videos of their hobbies upload combine images or some, to be able to share online. YouTube is great for all types of learners. **Adult Educator**.

YouTube In Action

YouTube for Education

**How To Create A YouTube Channel! (2020 Beginner's Guide)**
https://www.youtube.com/watch?v=6o7qODwjEz8
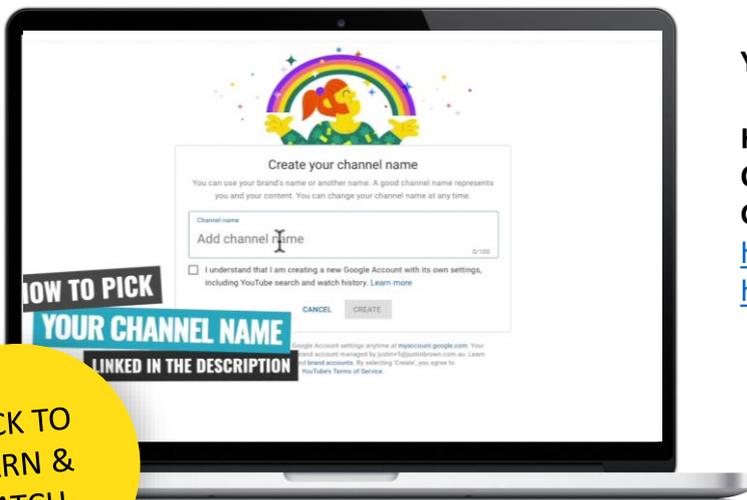
CLICK TO LEARN & WATCH

YouTube for Education Tutorial for Teachers

How to Make a YouTube Video (Beginners Tutorial)
https://www.youtube.com/watch?v=aB0TlsnkY6E
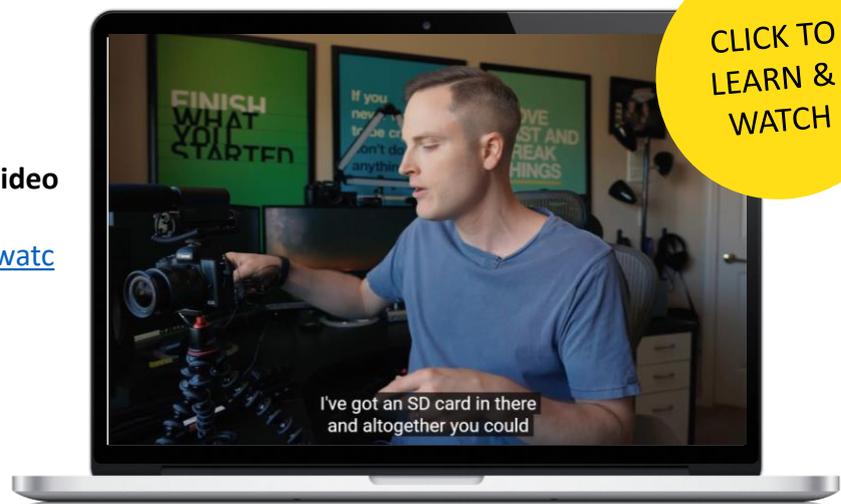
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The TED-Ed platform provides a framework to quickly and easily create an educational lesson around a TED Talk, TED-Ed Lesson or YouTube video.

Educators can then distribute these lessons, publicly or privately, and track their impact on a group/class or an individual learner. Educators can create discussions for their classes, or customized questions to reinforce learning.

We love Ted-Ed because the platform hosts a large amount of existing educational material, where users can search for the desired topics with the search function.

Check out the Ted-Ed website by clicking on this link.

Advantages OF TED-Ed

- Ted-Ed is completely free
- Ted-Ed includes a large library of existing educational material, prepared by other trainers, advisors and educators. Users can also create lessons around their own YouTube videos
- Videos can be short and to the point, ideal for 'bite-sized learning'

Disadvantages OF TED-Ed

- Some people may find it difficult to generate their own visually attractive presentation content.
- In order to create a lesson around a video, it need to be previously updated to YouTube as well as listed as public.

> Quality learning is baked into these intriguing videos -- although they're short, they cover a lot of content. Many videos prominently feature women and minorities in positions of expertise, exploration, and discovery. **A Ted-Ed Educator.**

TED-ED In Action

TED-ED for Education

**3 Minute Teaching With Tech Tutorial - Create a Flipped Video Lesson with TedEd:**
https://www.youtube.com/watch?v=TPPbAcY9s-M

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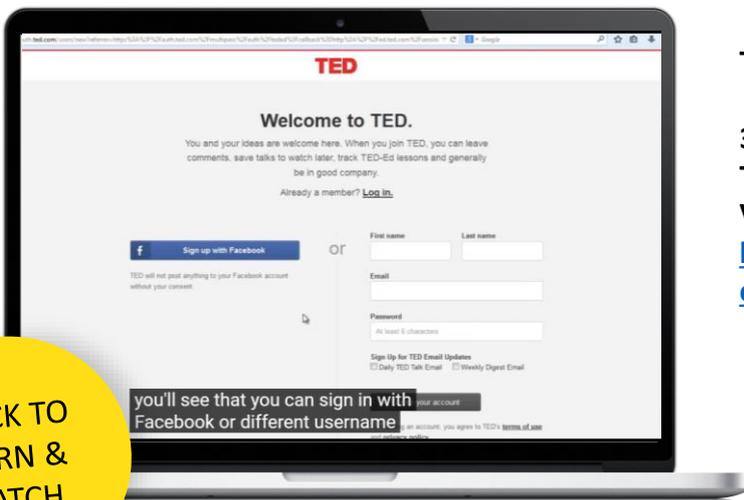
CLICK TO LEARN & WATCH

TED-ED for education
**Creating a TED-Ed Lesson**
https://www.youtube.com/watch?v=gelTdSJAT0k
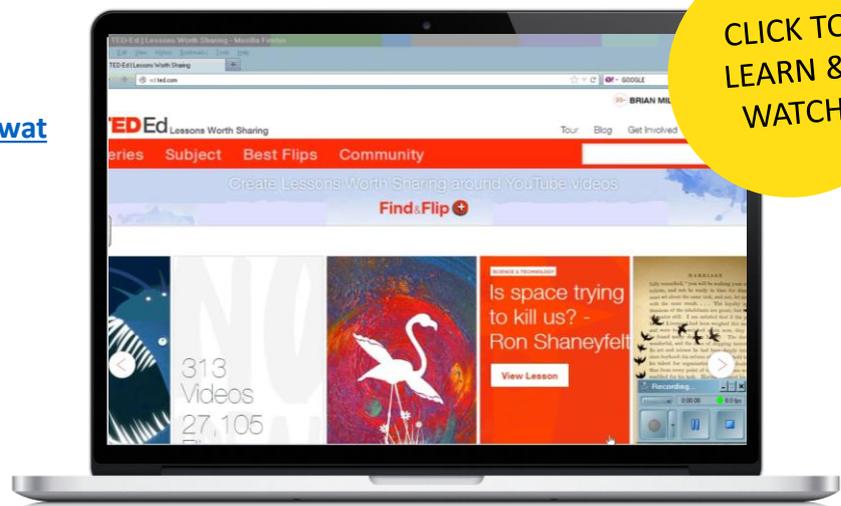
02

Inclusive Pedagogy- Problem Based Learning
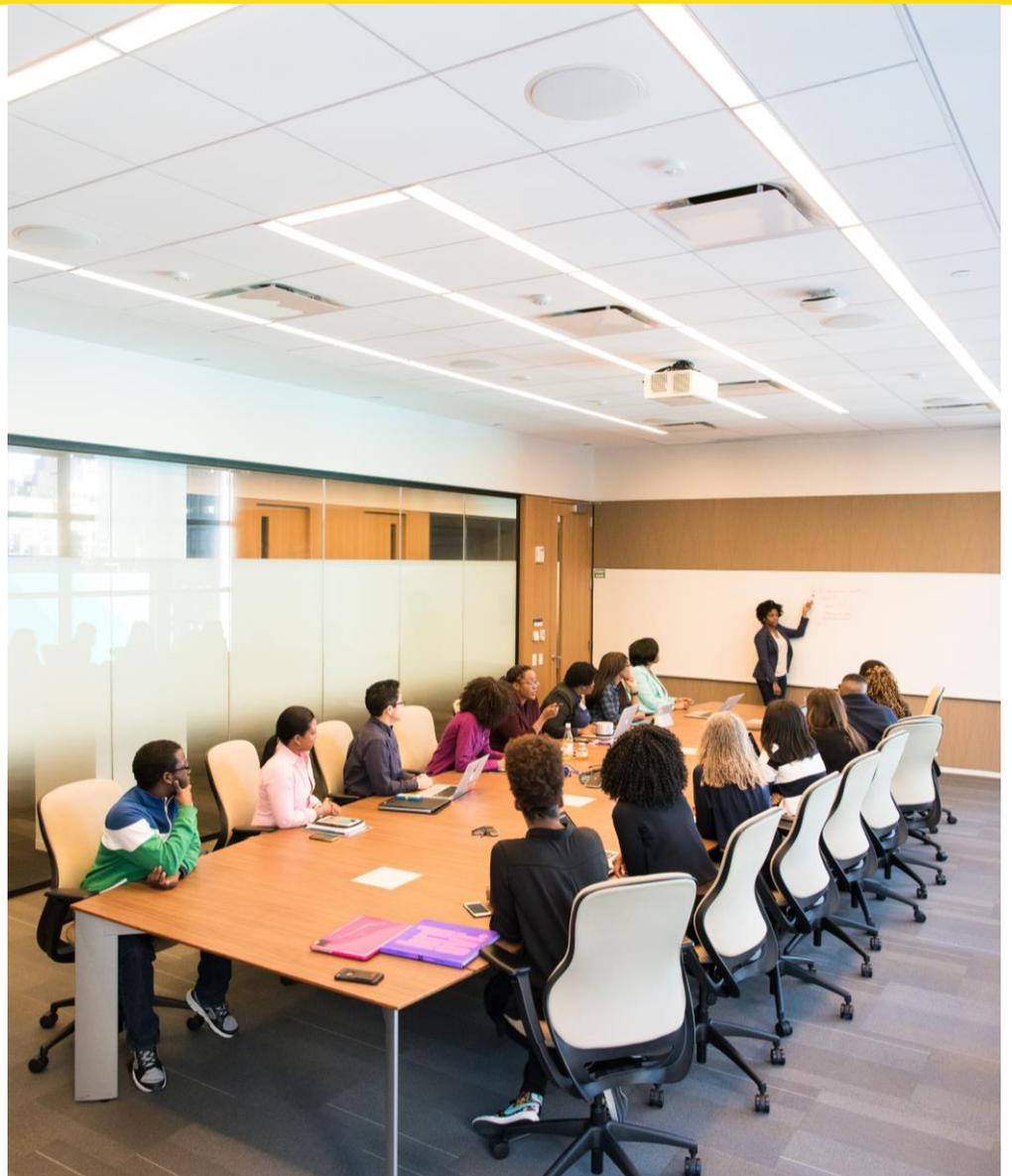
Introduction

Inclusive pedagogy
Problem based learning

Problem-based learning is a student-centered pedagogy in which students learn about a subject through the experience of solving an open-ended problem found in trigger material. The PBL process does not focus on problem solving with a defined solution, but it allows for the development of other desirable skills and attributes. This includes knowledge acquisition, enhanced group collaboration and communication.

What is Problem Based Learning?

Problem Based Learning is a pedagogical approach that enables students to learn while engaging actively with meaningful problems. Students are given the opportunities to problem-solve in a collaborative setting, create mental models for learning and form self-directed learning habits through practice and reflection.

Why is in an Inclusive Pedagogy

• Encourages knowledge acquisition
• Enhanced group collaboration and communication
• Aids problem-solving skills

Problem based learning is:

- ✓ **Is a learner-centered approach**
- ✓ Conducive to **Collaboration**, discussion and opportunities for different forms of learning
- ✓ Able to facilitate **Personalisation**. Class time becomes more group based with time for one on one.
- ✓ Students get more individualised attention from the teacher/educator
- ✓ Inspired by and mindful of different learner preference, styles and **Diversity**

Watch this video more to find out even more about this pedagogy in practice:
https://youtu.be/RGoJIQYGpYk

What is Problem-Based Learning?

PROBLEM-BASED LEARNING
IN LESS THAN FIVE MINUTES

CLICK TO LEARN & WATCH

How create a Problem based learning Class Lesson:

PBL Process

- Present Problem
- Students define the problem and brainstorm ideas based on prior knowledge.
- Students engage in independent study.
- Students share information, engage in peer teaching, and work toward a solution.
- Students present their solution and review what they have learned.
- Students engage in self, peer, and coach review of the process.
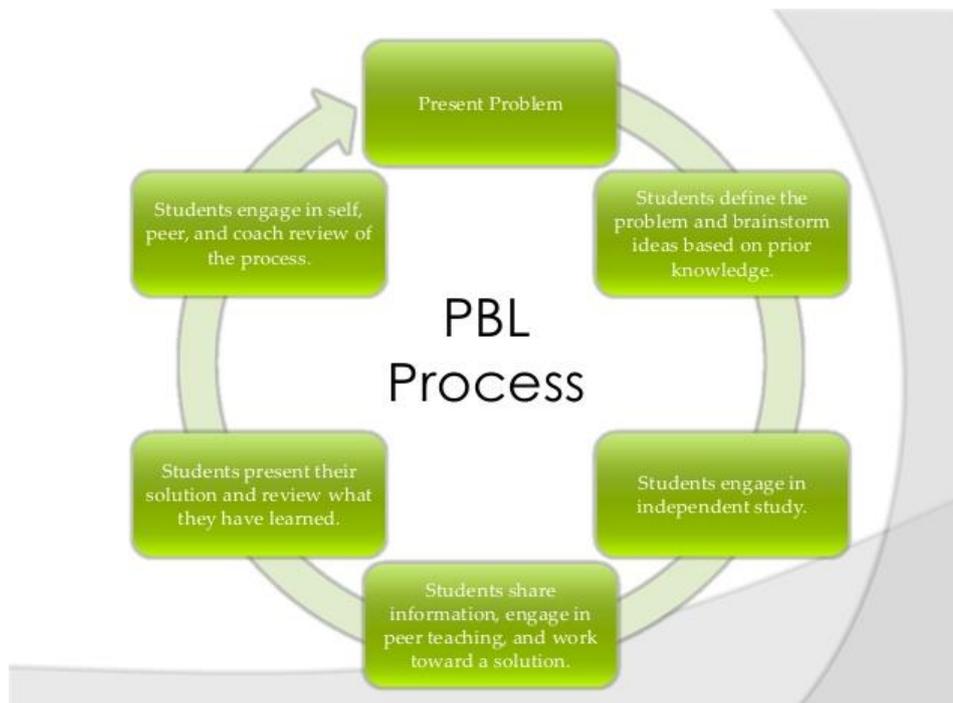
Benefits of the Problem Based Learning Pedagogy:

- Students gain practical problem-solving experience
- Collaborative working
- Brainstorming ideation
- Creates high order thinking skills

Negatives to the Problem Based Learning Pedagogy:

- Student Unpreparedness
- Group dynamics issues can compromise PBL effectiveness

Problem Based Learning Tools in focus

As you have learned, the problem-based learning pedagogy revolves around exposing learners to a problem, and then identifying ways that this open-ended problem can be solved. The tools we have chosen will help you to create your own problem-based learning lesson. Use Prezi to create a presentation outlining the problem and how students might want to approach a solution. With Diigo, you can use the tool to get students to enrich their learning by bookmark ideas or solutions to tackle the problem. Finally, use Jamboard to have an open discussion on the ideas from your class- creating an inclusive discussion on what the best solution was and why.

Prezi

Prezi is a web-based tool for creating presentations (called prezis for short). Prezi is the evolution of a dull and monotonous PowerPoint in which the audience can interact with the content. Leaving aside the old slides that move forward and backward like pages in a book, in Prezi, you show the big picture and then zoom in to reveal the relationships between your ideas. Prezi offers a wide variety of reusable templates that will blow your imagination and help you start your project. So even if you are not a designer, this web-based tool is made for you. In the last few years, it has become popular in schools, universities, and businesses. So, if you are trying to engage your students in interactive lessons, Prezi is the way to success. It has 3 core interfaces which users can utilise to meet their needs: Prezi presentation tool, Prezi Video and Prezi Design.

Find out more about Prezi by clicking on this link

Advantages Of Prezi

- Supports flipped classroom-Preview the day's lesson content with a short video your students can watch beforehand
- Integration Support- Prezi can be connected to other apps like Slack, Zoom, and Google Meet. These integrations make it easier to share and present Prezi projects with teams and collaborators.
- Non-linear navigation-the signature navigation in Prezi offers a unique perspective for creating and viewing a presentation.

Disadvantages Of Prezi

- No free version- ranges from €3- €8 per user per month
- A link to pricing can be found by clicking here
- Can be difficult to navigate when starting out with the tool.

Prezi In Action

Prezi in education
Teachers discuss how they use Prezi in the classroom:

https://www.youtube.com/watch?v=-abH3mHsnuM

CLICK TO LEARN & WATCH

Prezi in education
Tutorial for teachers

How to Create a Presentation on Prezi:

https://www.youtube.com/watch?v=cNjnyeeNOmU&t=6sa
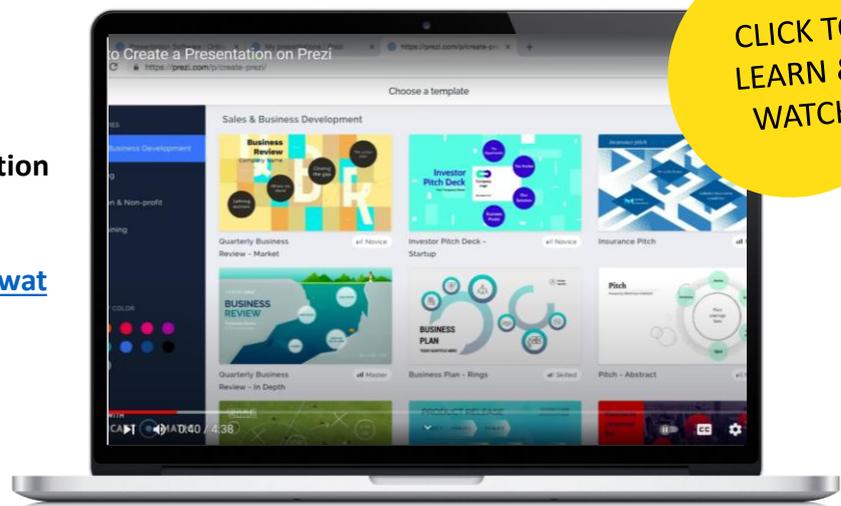
CLICK TO LEARN & WATCH

Diigo

Diigo is a **social bookmarking tool** that enables you to search, bookmark, organize, archive, share, discuss, and annotate materials on the web. It's a useful tool for professional collaboration, student project collaboration, and for feedback and conversation between teachers and students.

Diigo can also provide new ways to enrich or extend learning about specific topics. Through formal or informal activities, learners can research websites about a class topic and post their findings to Diigo lists or groups.

https://www.diigo.com/

Advantages Of Diigo

- Collects and organizes online research results
- Suitable for report writing based on discovered online content
- This includes data, reports and video content

Disadvantages Of Diigo

- Designed for researchers and academics not specifically for business advisors
- May have limited SME appeal
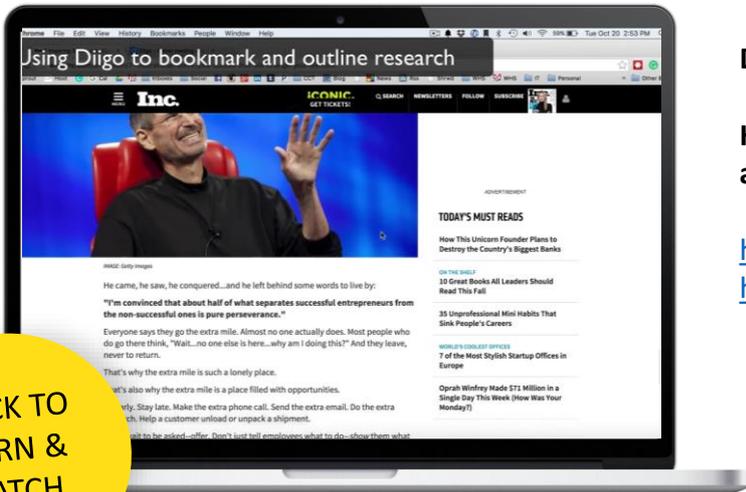
Diigo In Action

Diigo in education

How to Use Diigo to Research and Organize for a lesson

https://www.youtube.com/watch?v=Y3iDeWEl9Ok

CLICK TO LEARN & WATCH

CLICK TO LEARN & WATCH

Diigo in education
Tutorial for teachers

How to get started on Diigo

https://www.youtube.com/watch?v=rstsjVGwDaM

Jamboard

Jamboard is a digital interactive whiteboard app developed by Google.

The cloud-based environment is good for collaboration and sharing your work with others is especially easy. Learners can use Jamboard in several different ways, such as for brainstorming activities, which can be created in small groups, face to face on one device.

Learners can also share an "everyone can edit" link with other learners in Google Classroom for whole-class collaboration. Jamboard is also great to help students collaborate in remote or online settings, as students can work together or in groups on the same jam.

https://edu.google.com/intl/ALL_uk/products/jamboard/

Advantages Of Jamboard

- The app is free, that can be used through tablets, smartphones and web browsers
- Great collaborative tool for groups
- Great way of brainstorming and developing new ideas in a team
- Can be used for many different purposes – business, education or personal use
- Can easily & quickly add ideas via sticky notes, text boxes, and images

Disadvantages Of Jamboard

- Lacks ability to add media content such as music and videos
- Need a Google account to use it
- A maximum of 25 collaborators can edit simultaneously
- The tools for editing and sketching are quite simple and basic

Jamboard In Action

Jamboard in Education
How To Use Google Jamboard Tutorial For Teachers & Students

https://www.youtube.com/watch?v=8ikEojc9_wI

CLICK TO LEARN & WATCH

Jamboard in Education

How To Use Google Jamboard
https://www.youtube.com/watch?v=K1qS6avlnaE
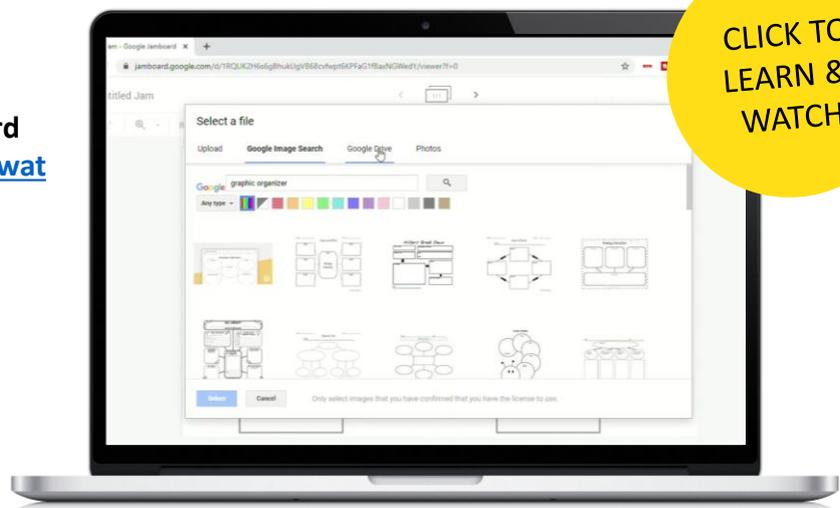
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03

Inclusive Pedagogy- Product Development Hackathons
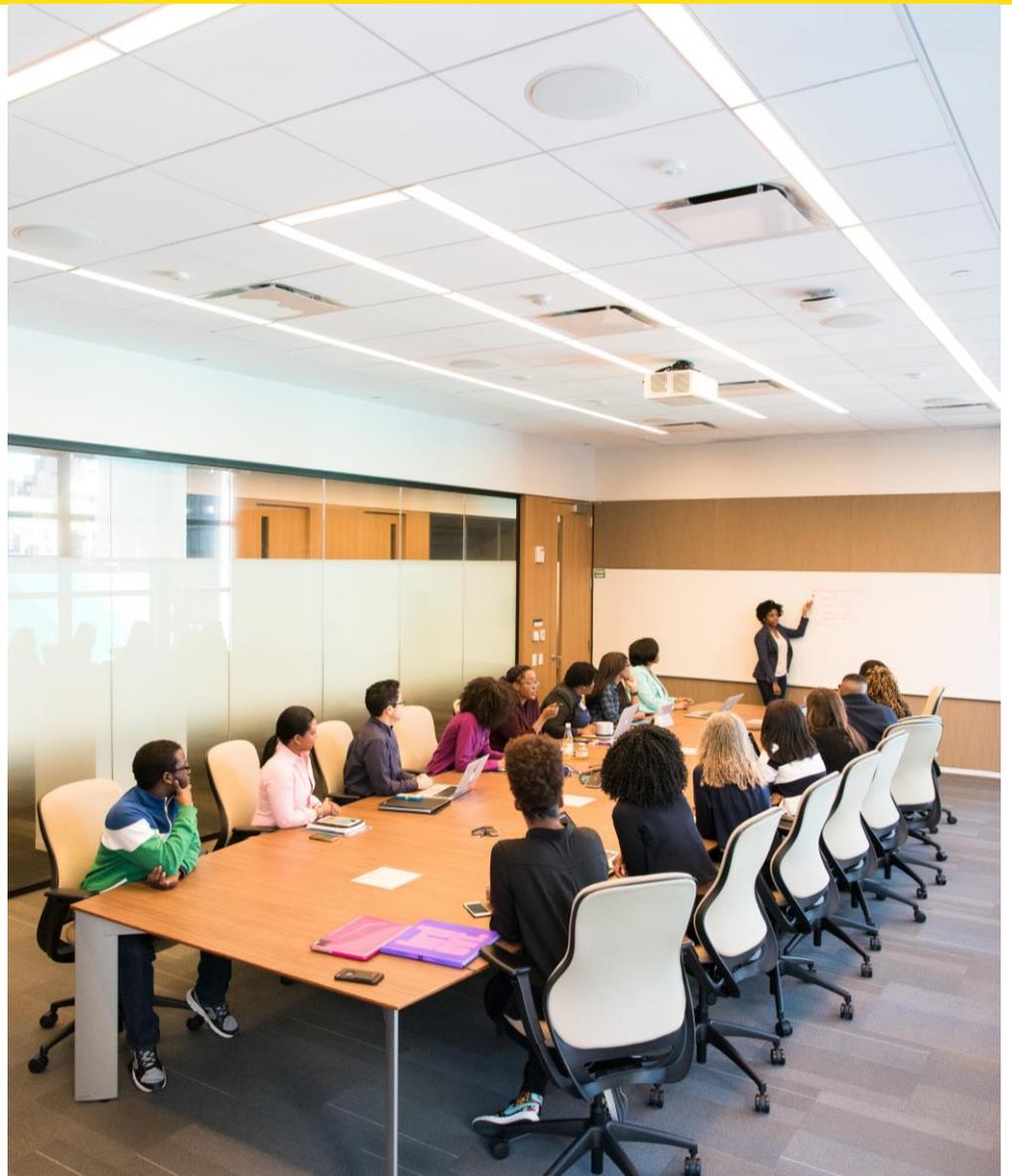
Introduction

Inclusive Pedagogy- Product Development Hackathons

Hackathons *usually take place over a set time frame such as a weekend, where different people with different skills and abilities work together to propose a solution to a problem. During hackathons, students get an opportunity to innovate various inspiring business ideas. Thus, hackathons could act as gateways to entrepreneurship and churn out great candidates for exploring entrepreneurship.*

On the one hand, best business ideas generated may be given the opportunity for further growth hacking. On the other hand, hackathons instill to pursue their own business ideas entrepreneurial mindset in students and propel them.

What is a Product Development hackathon?

Hackatons are events typically software and hardware focused, but have been expanding to broader disciplines. Hackatons tend to have a specific focus on a problem, subject and the demographic group of the students.

Structure
- Hackatons start with communication via a presentation that mentions the objectives, terms and details of the hackathon.
- The administrator of the hackaton is typically there to answer questions and offer help to the participants if needed.
- At the end of the hackathon there are usually a series of presentations by each of the participating groups of students.
- Sometimes, a contest element may be included as well in which a panel of judges select a winning team and prizes may be given.

Why is in an Inclusive Pedagogy?

Hackatons are desgined to support collaborative work by bringing together many people from different fields/discipline/areas of interest. Moreover, hackatons may also involve mentors who can support students and also answer any career-specific questions they might have.

## Product Development hackathons are:

- ✓ **Equitable** - students can combine their skills and knowledge for a common good, thus learning from each other and contributing to achieve the end goal of their project.
- ✓ **Collaborative** - students work with each other but also with mentors, thus increasing their knowledge and expertiese.
- ✓ **Diverse** - some hackatons can be attended only by certain students (e.g. females). Furthermore some hackatons are opened for everybody but they are aimed at coming up with solutions that address today's problems (e.g. bias, diversity, and inclusion).

Watch this video more to find out even more about how to organise an online hackathon:

https://www.youtube.com/watch?v=wTK2I7dy vLU&ab_channel=AI4EU

AI4EU

Welcome to the public AI4EU Café
on April 21st, 2020 at 3 pm

Title: How to organize an online hackathon?
The Speaker is:
Elena Poughia (Founder of Data Natives, Germany)

The Guest Speaker is: Sachin Gaur (Innovatiocuris, India)
Title: „Open Innovation experiences from India during COVID-19"

Please take notice that this session will be recorded.
The link for the recording you find on the AI4EU youtube channel and on the AI4EU platform
No confidential information shall be shared in this Café session.
All Speakers express their personal views and opinions, this is not the official AI4EU project opinion.

CLICK TO LEARN & WATCH

How create a Product development hackathon Class Lesson:

- **Type** Private, public etc.
- **Reward** Selection logic and awards
- **Timeline** Duration and critical dates
- **The Hackathon**
- **Evaluation** Project assessment
- **Context** The topics, themes, problems
- **Deliverable** Pitch video prototype etc.
- **Eligibility** criteria for participants
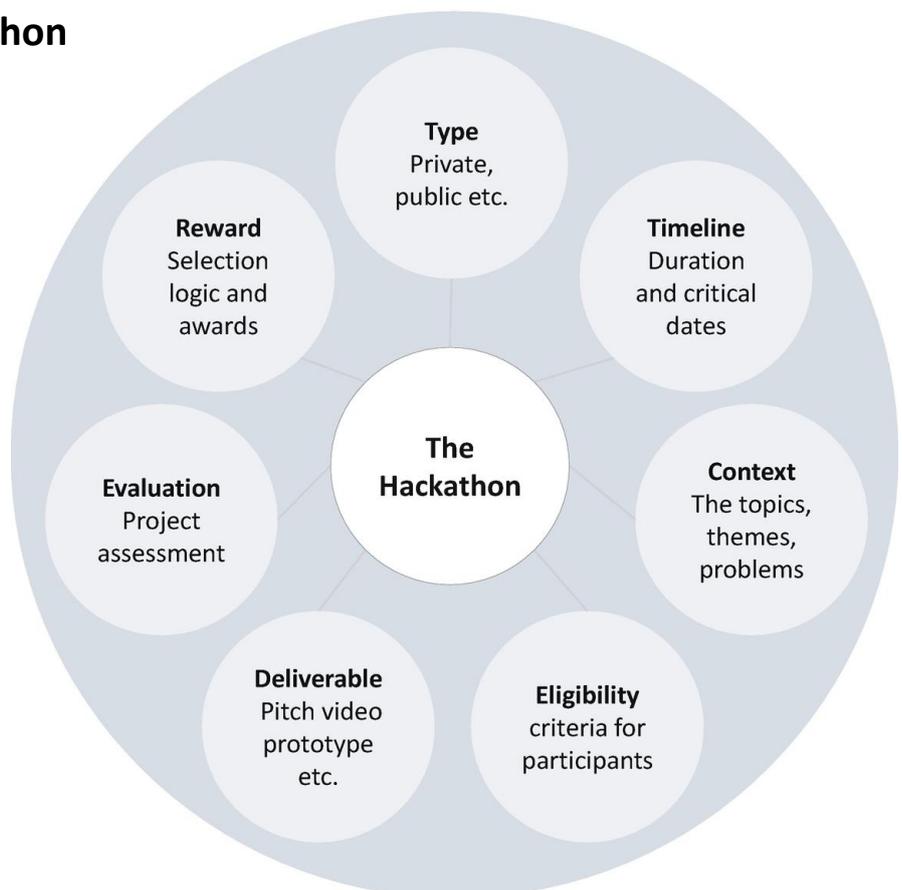
Benefits of the Product Development Hackathon Pedagogy:

- Students can practice their skills with real-life problems
- Students can network and exchange knowledge between themselves and with the mentors.
- Students can be awarded for their effort with actual prizes
- Hackatons can be used by students to boost their CVs

Negatives to the Product Development hackathon Pedagogy:

- Hackathons can be very lengthy, and participants need to invest a lot of time and work in them
- They may become hard to focus due to the group athmosphere around the participants
- Regarding social interaction: it's even harder to control or guide group dynamics in an online environment

Product Development Hackathon Tools in focus

Product Development Hackathons span over a long period of time (1-2 days) and they involve a lot of teamwork. The tools chosen will help you organise your first online hackthon. You can use Zoom as an online meeting room for all the stakeholders involved (e.g. students, mentors, etc.). Padlet will be then used to work collaboratively and ThingLink to present the final project.

Zoom

Zoom is a video communications app that allows you to set up virtual video and audio conferencing, webinars, live chats, screen-sharing, and other collaborative capabilities.

You don't need an account to attend a Zoom meeting, and the platform is compatible with Mac, Windows, Linux, iOS, and Android, meaning nearly anyone can access it.

For those who are not familiar with Zoom, the platform has a Help Center with various training webinars so they can easily learn how to use it.

Find out more about Zoom by clicking on this link: https://zoom.us/

Advantages Of Zoom

- No account needed in order to use it
- Allows screen-sharing and recording of the calls
- Can be used for free and has affordable pricing plans
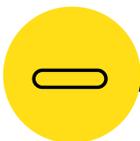
Disadvantages Of Zoom

- Group calls (3+) will stop automatically after 40 min if the Zoom free version is being used
- Lack of comment control
- Zoom does not work without downloading an app for your browser

Zoom In Action

Zoom in education
Creating Small group work and role plays on Zoom

https://www.youtube.com/watch?v=KP0FxB-5uV0&ab_channel=WrightInstituteOnline
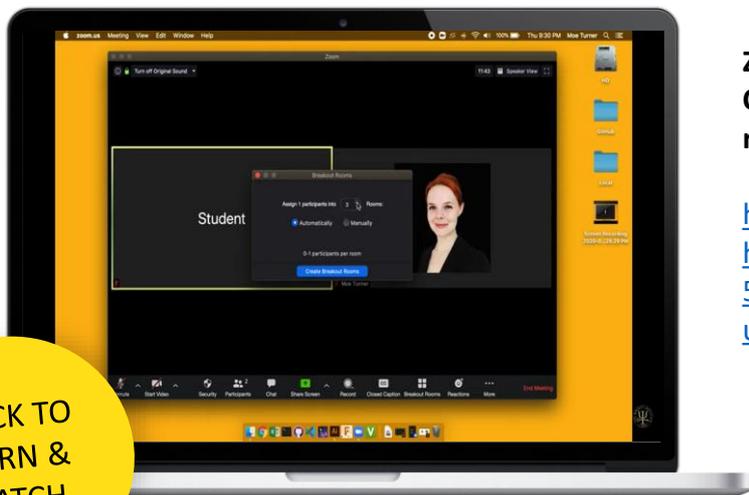
CLICK TO LEARN & WATCH

Zoom in education
How to use Zoom for Remote and Online learning

https://www.youtube.com/watch?v=9guqRELB4dg&ab_channel=FlippedClassroomTutorials

CLICK TO LEARN & WATCH

Padlet

Padlet can be used by students and by teachers. With padlet you can create an online post-it board that you can share with any student or teacher you want. Just give them the unique Padlet link. Padlet allows you to insert ideas anonymously or with your name.

Whoever has the Padlet board opened on their smartphone or computer, can see what's on it and what everyone is writing. Students just have to take a device and start adding little sticky notes online.

Find out more about Padlet by clicking on this link:

Advantages Of Padlet

- Users can collaborate in a variety of ways; including image, audio, and video, these help to foster an environment that is rich with shared resources
- Linked documents can be uploaded and viewed within Padlet, so users don't have to download them, making Padlet an ideal platform for students to share their work
- Different Padlet types: Wall, Canvas, Stream, Grid, Shelf, Backchannel are suited to a variety of uses - for example 'Canvas' posts can be arranged and linked making this template ideal for 'mind mapping'

Disadvantages Of Padlet

- In order to create a wall without an account, Padlet installs a cookie on your computer to help you gain access back to your wall. It can be deleted or blocked by your computers virus protection software, leaving users unable to access their wall
- Privacy varies due to everyone's posts being visible

> It has been a great tool for students to collaborate, and share thinking/ideas/learning/wonderings. **Michelle Z. - Educator**

Padlet In Action

YouTube in Education
Padlet Tutorial for Teachers- 8 Ways to Use With Students

https://www.youtube.com/watch?v=x9IQVofS43I&ab_channel=PocketfulofPrimary

CLICK TO LEARN & WATCH

YouTube in Education
Padlet Tutorial - How to Get Started Guide

https://www.youtube.com/watch?v=OPkq5q8nRbM&ab_channel=EvgeniiPermiakov
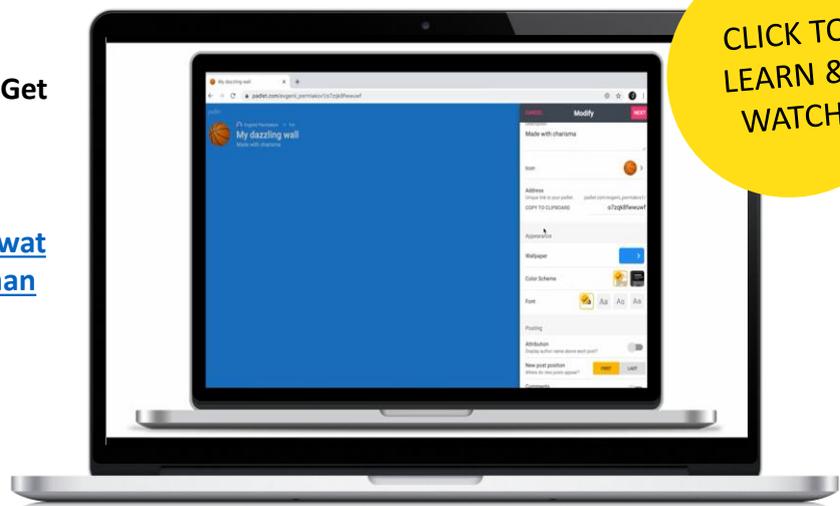
CLICK TO LEARN & WATCH

ThingLink

ThingLink is a digital tool that provides users with the ability to turn any image into an interactive graphic. Create multiple "hot spots" on specific parts of an image and turn that image into a multimedia launcher. Include video, record audio or provide a link to any website with the click of a button.

For those who are not familiar with ThingLink, the platform has a Support Center with various articles on how to use the tool.

Find out more about ThingLink

Advantages Of Thinglink

- ThingLink's growing collection of 360º VR experiences allows learners to experience places and phenomena otherwise inaccessible in the real world supported by a virtual learning assistant, as well as create and personalize their own 360º environments (e.g. by adding audio narrations, images, videos, and quizzes to it)
- ThingLink can empower students to become content creators and develop digital literacy and storytelling skills in a number of different and collaborative ways (e.g. create interactive infographics, maps, drawings, and engaging 360º real-world learning experiences)

Disadvantages Of Thinglink

- ThingLink does does not allow you to create presentations if you are not registered on it
- You must keep in mind your keyword to login
- The comments you want to add must be on facebook, or the social network you decide to display your ThingLink

Thinglink In Action
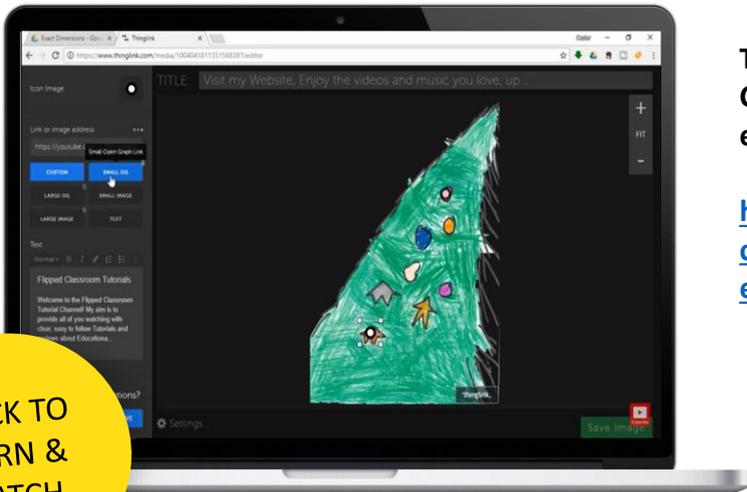
ThingLink in Education
Create Interactive and more engaging lessons with Thinglink

https://www.youtube.com/watch?v=ZfN_A1lOxMU&ab_channel=FlippedClassroomTutorials

CLICK TO LEARN & WATCH

ThingLink in Education
How to Use ThingLink

https://www.youtube.com/watch?v=aRkdIdbqHig&ab_channel=JenJonson

CLICK TO LEARN & WATCH

04

Inclusive Pedagogy- Peer Learning (Also Networking)
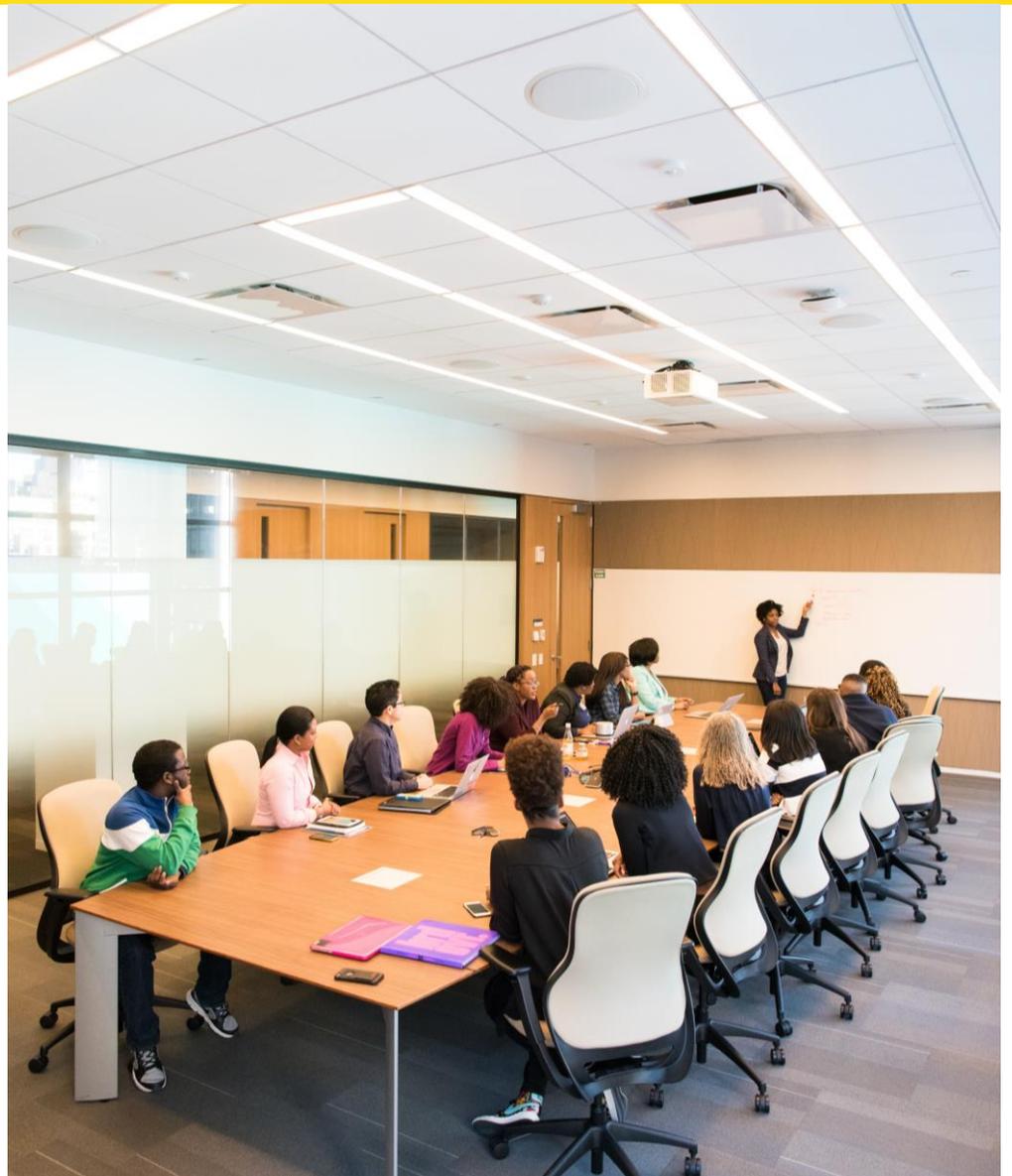
Introduction

Inclusive Pedagogy-
Peer Learning (Also Networking)

Peer learning (also networking) is an inclusive pedagogy which helps students to share, use, develop and process information using technology.

Peer learning should be mutually beneficial and involve the sharing of knowledge, ideas and experience between the participants. It can be described as a way of moving beyond independent to interdependent or mutual learning.

What is Peer Learning (Also Networking)?

Students learn a great deal by explaining their ideas to others and by participating in activities in which they can learn from their peers. They develop skills in organizing and planning learning activities, working collaboratively with others, giving and receiving feedback and evaluating their own learning. Peer learning is becoming an increasingly important part of many courses, and it is being used in a variety of contexts and disciplines in many countries. Some examples of Peer Learning are: action learning groups, committees, debates, discussion groups, peer mentoring, study groups, etc.

Why is in an Inclusive Pedagogy?

Peer Learning (also Networking) lessons and approaches are designed to be fluid. Making students to debate and exchange visions and perspectives, they are able to understand themselves and study some concepts or topics in a deeper context.

Students will be involved in giving their own opinion, and they will express themselves and work collaboratively finding a joint vision.

Peer Learning (Also Networking) is:

- ✓ **Flexible** both in terms of teacher and student use/engagement
- ✓ conducive to **Collaboration**, discussion and opportunities for different forms of learning
- ✓ inspired by and mindful of different learner preference, styles and **Diversity**
- ✓ able to facilitate **Personalisation**. Class time becomes more based on a certain of topics. Teacher can opt for introduce a debate to focus on a part of the subject.
- ✓ Free in terms of material. Students do not need to prepare anything, and it is not necessary to work at home.

Watch this video more to find out even more about this pedagogy in practice:

BENEFITS OF PEER TEACHING

Learners receive a more personalised learning experi

CLICK TO LEARN & WATCH

How to create a Peer Learning (Also Networking) Class Lesson:

Student Learning Outcomes

How to create a Peer Learning Class Lesson

01	IDENTIFY STUDENT LEARNING OUTCOMES	What is necessary for the class to be taught
02	SELECT CONTENT	What is the topic that is going to be studied/debated
03	SELECT ACTIVITY	Choose the type of Peer Learning
04	IDENTIFY TUTOR	Who is going to be the instructed person that must know better the topic than the rest of the class
05	COACH STUDENTS	Guide students and provide them feedback as they work

Benefits of the Peer Learning (Also Networking) Pedagogy:

- Deeper subject understanding
- In peer learning, the peers often do most of the work, so expensive consultants and materials often aren't needed thus, the learning can be quite cost-effective.
- Peers often can manage much of their own learning, including deciding their own learning goals, methods to achieve the goals and also the means to evaluating their learning.
- Peers often can schedule and locate their learning, making it very accommodating to busy schedules.

Negatives to the Peer Learning (Also Networking) Pedagogy:

- Introducing debate as a form of learning could lead to conflict between learners from different cultural backgrounds if their views cannot be shared.
- There is nothing to ensure that students will learn more if there is no material to prepare. In the end, the time spent could be wasted.

Peer Learning (Also Networking) Tools in focus

As you have learned, the peer learning (also networking) typically revolves around a debate lesson. The tools we have chosen will help you to create your own first peer learning class lesson. You can use Webex to create a call where students can debate about a topic, Adobe Spark to add to the debate some graphics or short videos to follow ideas and LinkedIn to share the class online with people interested in this topic.

Webex

Webex is a solution that offers a set of powerful software tools that deliver a secure, reliable and on-demand collaboration experience over the web.

It enables meetings anywhere in real time on the network, elaborate work with presentations, review documents, share any object or desktop, including applications, windows and directories of currently open files. At any time, you can grant privileges to attendees that allow them to annotate, save, print and display different views of shared documents or presentations.

It is used for virtual meetings, remote or interactive sales, help desk and technical support, marketing and live events, virtual training and remote access.

Check out the Webex website by clicking on this link.

Advantages Of Webex

- Webex supports E-Meeting and E-Learning technologies.
- It has unlimited connection time.
- Any kind of software can be presented or shared.
- You can remove or block access to unwanted users.
- Corrections can be made to documents and presentations within the meeting.

Disadvantages Of Webex

- Can be expensive if there are many users, can be up over €1000 for monthly rent.
- 10 users on the same site at the same time. More users incur an additional cost.
- File transfer is slow.
- Can be heavy on PC resources

Webex In Action

Webex for Education:
Webex Teacher Training

https://www.youtube.com/watch?v=c_nWDZUb_bA&ab_channel=ClaytonDonnan

CLICK TO LEARN & WATCH

Webex for education:
Webex Meetings for Teaching

https://www.youtube.com/watch?v=y_ljlURDlW8&ab_channel=eSkills

CLICK TO LEARN & WATCH

Adobe Spark

Adobe Spark enables you to tell stories and share ideas quickly and beautifully. Spark lets you create three types of content:

- Use Page to create a story using text, images, and video. When you're done it will present your story as a responsive web page that can be viewed in any web browser.
- Use Post to create images optimized for social media.
- Use Video to create a video. Add videos from your computer or iOS camera roll, overlay text, add your voice and background music.

You can create individual Pages, Posts, and Videos, or you can use the formats together (including a Post image in a Video, or a Video in a Page).

Check out the Adobe Spark website by clicking on this link.

Advantages Of Adobe Spark

- Free and impressive results
- Simple and easy to use
- Can build unique web projects quickly

Disadvantages Of Adobe Spark

- There is no true embed (the embed functionality of Spark Page is quite limited)
- Can't build an entire Website
- Their branding is present on free versions (if you use the free version of Adobe Spark you cannot remove the Adobe branding that's added to all Spark created content)

> A beautiful interface and plenty of creative inspiration reel students in, and the personalization options foster a sense of ownership. Students make compelling design choices and craft polished products. Students experiment, iterate, and think critically about the content they're presenting and learn visual communication skills that will help with other projects and classes. **Adult Educator**

Adobe Spark In Action
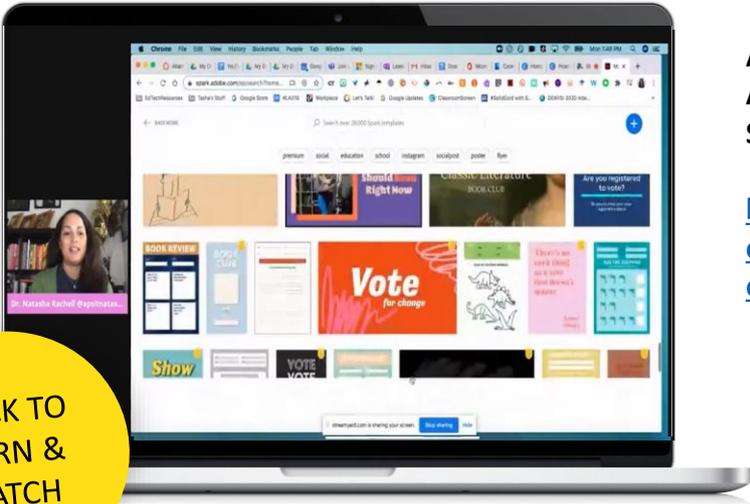
Adobe Spark for education: Adobe Spark for Teachers and Students

https://www.youtube.com/watch?v=ryAQIVSrPWE&ab_channel=NatashaRachell

CLICK TO LEARN & WATCH

Adobe Spark for education: How to Use Adobe Spark - Beginner's Tutorial

https://www.youtube.com/watch?v=3zH5LNt8dH8&ab_channel=Teacher%27sTech
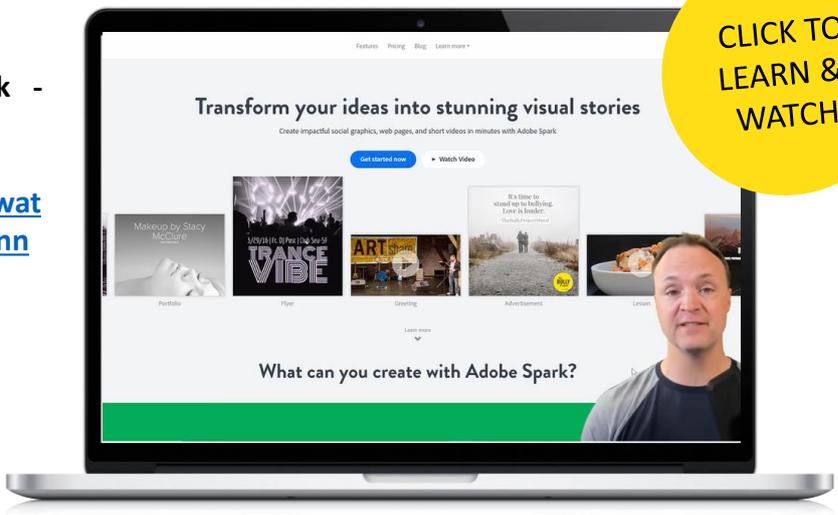
CLICK TO LEARN & WATCH

LinkedIn

LinkedIn is the world's largest professional network on the internet. You can use LinkedIn to find the right job or internship, connect and strengthen professional relationships, and learn the skills you need to succeed in your career. You can access LinkedIn from a desktop, LinkedIn mobile app, mobile web experience, or the LinkedIn Lite Android mobile app.

A complete LinkedIn profile can help you connect with opportunities by showcasing your unique professional story through experience, skills, and education.

You can also use LinkedIn to organize offline events, join groups, write articles, post photos and videos, and more.

Check out the LinkedIn website by clicking on this link.

Advantages Of LinkedIn

- Enhances visibility
- Professional environment
- Integrated learning platform – LinkedIn Learning

Disadvantages Of LinkedIn

- Potentially, a lot of spam messages
- Interactivity level limited in comparison to other networks
- Premium account prices, get high if you choose to pay monthly

> LinkedIn is an amazing website to connect with like-minded people and professionals. You can do a search for a business or a person. I really like the fact that I can read articles and magazines for free and they're so educational and informative. I've made some amazing connections with organizations and was able to network with people. **Adult educator**

LinkedIn In Action
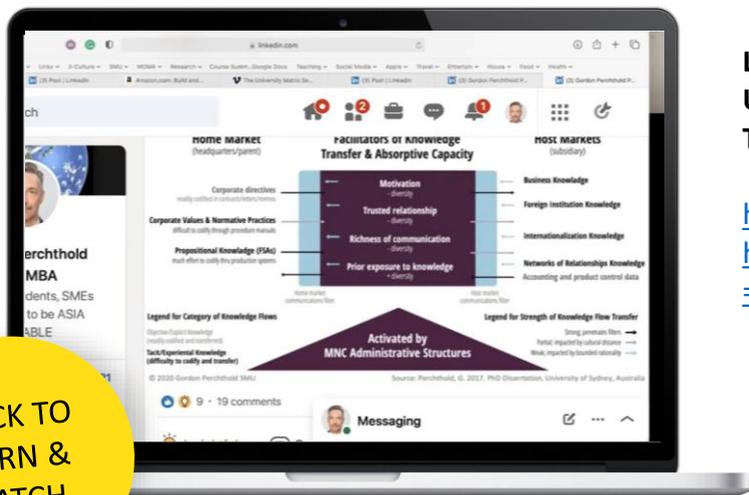
LinkedIn for education:
Using LinkedIn as a Teaching Tool

https://www.youtube.com/watch?v=oojLkmcJ04M&ab_channel=X-CultureEducation

CLICK TO LEARN & WATCH

LinkedIn for education:
Using LinkedIn as a Networking Tool

https://www.youtube.com/watch?v=oW7Ybqo5n3Y&ab_channel=AcademiaIndustryOpportunitiesGroup
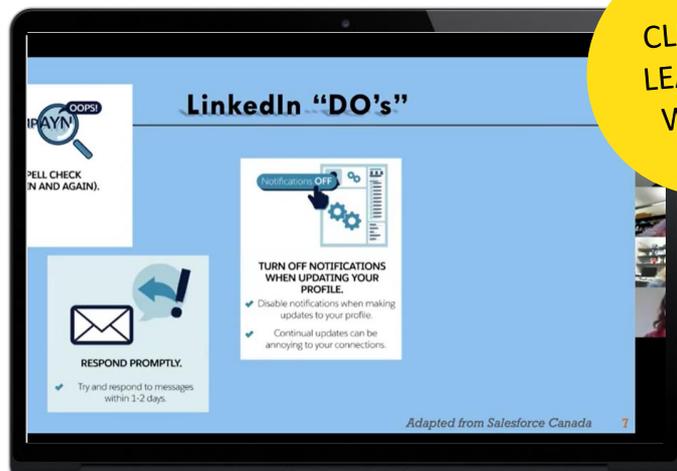
CLICK TO LEARN & WATCH

05

Inclusive Pedagogy-Universal Design For Learning

Introduction

Inclusive pedagogy
Universal Design For Learning

Universal Design for Learning (UDL) is an approach to teaching and learning that gives all students equal opportunity to succeed.

To understand what UDL is, it helps to understand what it's not. The word universal may throw you off. It may sound like UDL is about finding one way to teach all students. But UDL takes the opposite approach.

UDL developing educational opportunities that are inclusive, which require thinking not only about equality in opportunities to access education but also about equity, whereby each student can achieve similar positive outcomes, regardless of their background and characteristics such as gender, disability or ethnicity.

What is Universal Design for Learning?

The goal of UDL is to use a variety of teaching methods to remove any barriers to learning and give all students equal opportunities to succeed. It's about building in flexibility that can be adjusted for every student's strengths and needs. Examples of UDL include, access to assignment options, flexible workspaces, regular feedback and digital and audio text.

Why is in an Inclusive Pedagogy?

UDL is the design and composition of an environment so that it can be accessed, understood and used as far as possible by all people regardless of their age, size, ability or disability. An environment (or building, product, or service in that environment) should be designed to meet the needs of all people who wish to use it. If an environment is accessible, usable, convenient and a pleasure to use, everyone benefits which means, in short, that UDL is inclusive.

Universal Design For Learning is:

- ✓ **Flexible** in student and teacher use and engagement, which is designed to meet the needs of those wishing to use it.
- ✓ Conducive to **Collaboration** and opportunities for different forms of learning and improvement
- ✓ Facilitates **Personalisation,** as it can be adjusted for every student's strengths and needs
- ✓ **Diverse,** in that it is mindful of each learners' different preferences and promotes equality, regardless of the student's background.

Watch this video more to find out even more about this Universal Design For Learning in practice

CLICK TO LEARN & WATCH

How create a Universal Design For Learning Class Lesson

http://blog.core-ed.org/blog/2019/03/why-udl-is-valuable.html
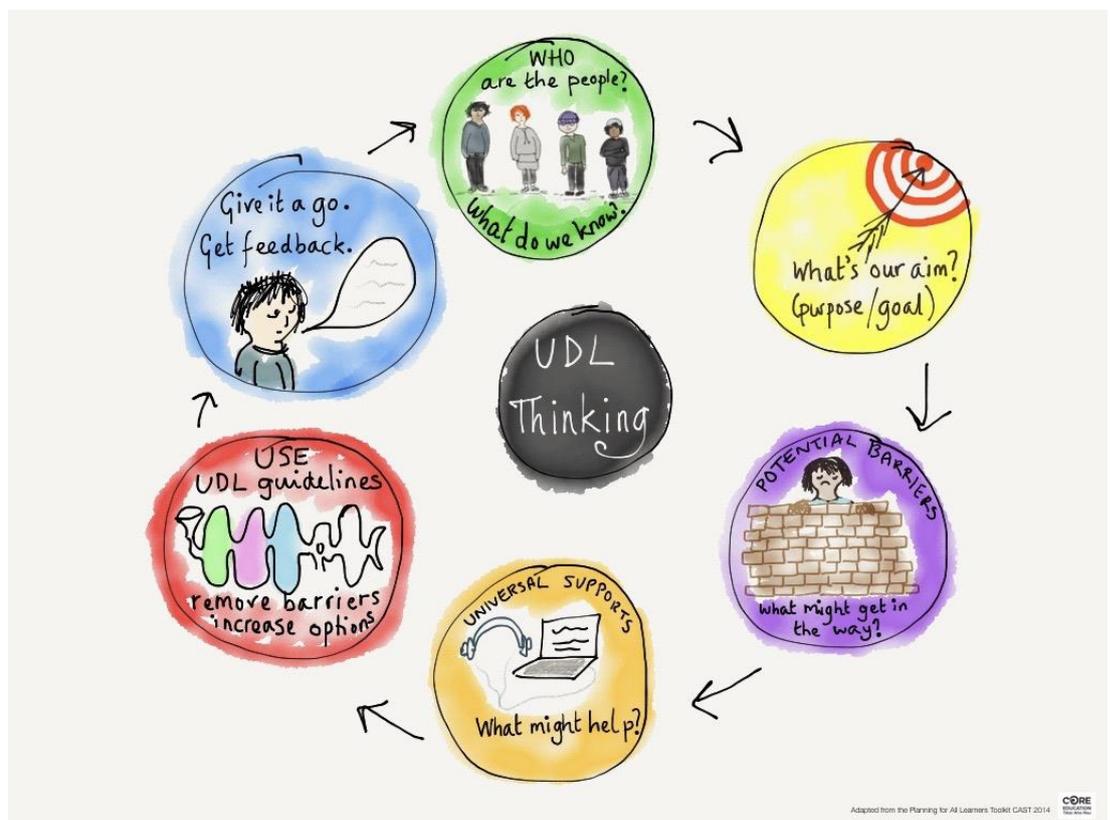
Benefits of the Universal Design For Learning Pedagogy:

- Helps all students be successful learners and plays to students' strengths.
- Supports greater accountability by guiding development of assessments that provide accurate, timely, and frequent means to measure progress and inform instruction for all students.
- Support greater use of evidence-based practices by guiding the design of high-quality curriculum that include research-based techniques for all students, including those with disabilities.

Negatives to the Universal Design For Learning Pedagogy:

- The content itself is often not engaging, the format is even less engaging, and the stakes are high, which create stress for all.
- Standardized tests are not differentiated.

Universal Design For Learning Tools in focus

As you have learned, the UDL typically revolves around the design and flexibility of a classroom. The tools we have chosen will help you to create your own first UDL lesson. You can use Google Forms to create a survey, quiz or research form, Pearltrees to organise, explore and digitalise all their project research and Thinkific to create online courses and then deliver or sell those courses to an audience from your website.

.

Google Forms

Google Forms is a free online tool from Google which allows users to create forms, research surveys, and quizzes as well as to collaboratively edit and share the forms with other people. Educators can use Google forms to assess their students at the beginning of the class and gauge pre-existing knowledge. Additionally, Google forms can be used to give feedback to and receive feedback from students. Equally, students can use Google forms to assess their own learning and set the learning goals as well as to collect data for their research projects.

Along with the many pre-designed templates for users, if you want to design your own Google form, you can select the blank template. There are many types of questions you can include such as; short answer, paragraph response, multiple choice, checkboxes, dropdown, linear scale, and multiple-choice grid.

https://docs.google.com/forms/u/0/

Advantages Of Google Forms

- Google Forms let you run as many free polls as you'd like, with as many questions as you like
- You can share a form, along with the results of that form in a spreadsheet, with as many people as you'd like
- The interface is very easy to use.
- Its mobile friendly and customisable
- Its free version has full functionality

Disadvantages Of Google Forms

- The design customisation is somewhat limited
- Google form has limitations regarding its uploading system
- Must have a Google Account to use
- Requires internet connection

Google Forms In Action

Using Google Forms as a Teaching Tool

CLICK TO LEARN & WATCH

Using Google Forms as a Networking Tool
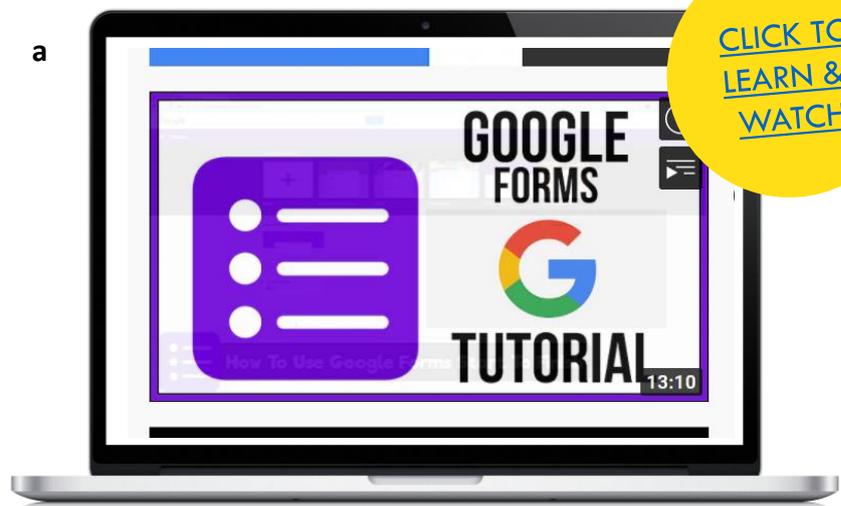
CLICK TO LEARN & WATCH

Pearltrees

Pearltrees is a visual and collaborative curation tool that allows users to organize, explore and share any URL they find online as well as to upload personal photos, files and notes…it is also referred to as social bookmarking. It has two valuable and unique features, firstly research and information can be structured in a tree like hierarchy so that it flows enabling users to progress and dig deeper to another level, secondly it is a very visual tools which aids comprehension. From organizing research topics, to presenting research findings, Pearltrees cooperative organizational system enables the user to digitalise all their project research with supreme ease and consistency.

Pearltrees allows project managers and educators to instruct their audience more efficiently through a topic or research by guiding them through different sites laid out on each pearl of the tree. Create private collections to prepare before meetings or in order to enhance a lesson.

Find out more by clicking on this link

Advantages Of Pearltrees

- Pearltrees is a great free tool
- Drag and Drop facility is very useful for collecting online data & links from various quarters
- Great resource for project managers
- Allows users to "Team Up" and curate collaboratively
- Great support for French Speakers
- Enables users to find rare content in their areas of interest
- Pearltrees Education is available with comprehensive technical and scholastic support

Disadvantages Of Pearltrees

- Support mainly provided in French
- Cannot save drafts, meaning incomplete projects appear online
- File size limit when using the free version

54

Pearltrees In Action

Using Pearltrees as a Teaching Tool

CLICK TO LEARN & WATCH

Using Pearltrees as a Networking Tool

CLICK TO LEARN & WATCH

Thinkific

Thinkific is a technology company with a platform that allows people and businesses to create online courses from their existing knowledge and then deliver or sell those courses to their audience from their website, and under their own brand. Thinkific offers the tools you need for every step of your online course journey, from initial course creation to well past your launch.

Thinkific is for experts who want to share their knowledge online or add education as a component of their existing business. The platform can be used for online courses of all kinds of business goals. Online courses are great for training customers on a product or service and helping them see the most value possible. Thinkific helps many business owners and one on one consultants free up more of their time by transferring their training online.

Thinkific currently helps more than 25,000 course creators deliver education in 164 countries.

https://www.thinkific.com/

THINKIFIC

Advantages Of Thinkific

- It's easy to set up without the help of an expert. You can customize it according to your preferences and needs.
- It integrates well with other major platforms and databases. Some of these include integrations with WordPress, TypeForm, and PayPal.
- It offers excellent customer support and a knowledge base with online webinars to help you navigate their platform expertly and support you when you get stuck.
- It is a cloud-based Learning Management System (LMS) that lets you manage all your online course needs in one place.

Disadvantages Of Thinkific

- The initial start-up can be costly. If you start with Thinkific's free plan, you may not get all the features you need, and it does not give you a custom domain.
- Thinkific gives you all the tools necessary to market your courses, but you won't start with a ready-made audience.

Thinkific In Action

Using Thinkific as a Teaching Tool

CLICK TO LEARN & WATCH

Using Thinkific as a Networking Tool

CLICK TO LEARN & WATCH

06

Inclusive Pedagogy- Differentiated Instruction
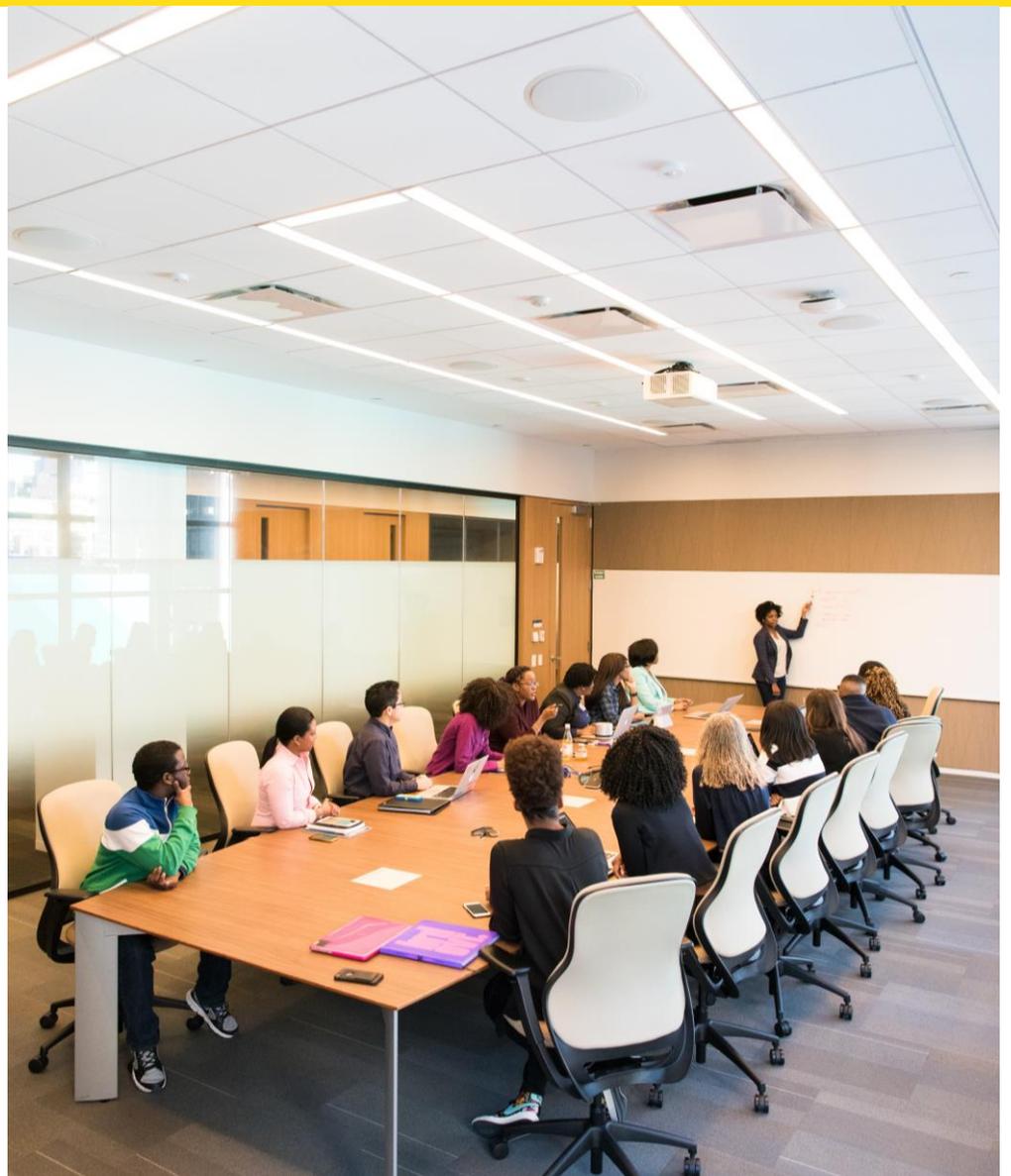
Introduction

Inclusive pedagogy
Differentiated Instruction

Differentiated Instruction is a learner-centric model of education that aids educators struggling to respond adequately to varied student needs within one classroom or group. This pedagogy takes and inclusive approach by matching student characteristics to student needs.

Diversification of materials, activities, methods, structures, commands and interactions, gives every pupil the opportunity to freely and safely develop their competences. Individual learners are activiated and motivated to learn, the content is easier to remember, they engage naturally and feel the sense of success. Diversified education is a very organized activity and is characterized by great flexibility. By adapting teaching to the current level of development of students, we help them achieve maximum progress, but there is no need to prepare individual assignments.

What is Differentiated Instruction?
Differentiation will make sense and have a real impact on the work of the group only if it is based on its observation and analysis - what is the individual student's interest, what gives the greatest joy and what is difficult? It must also take into account the learning profile, i.e. the preferred way of acquiring information, which depends on the learning style, type of intelligence, as well as neurobiological predispositions to learning.

Why is in an Inclusive Pedagogy?
individualization in teaching is the organization of teaching which already takes into account the diversity of the school class. Education occurs when teachers make attempts to adapt the education process to the individual characteristics of learners.
Differentiated instruction is proactive, qualitative, is rooted in assessment, blends individual, small group and whole-group strategies.

Differentiated Instruction is:

- ✓ **Flexible** both in terms of teacher and student use/engagement
- ✓ **Equitable** – students can learn at their own past be it fast or slow
- ✓ Conducive to **Collaboration**, discussion and opportunities for different forms of learning
- ✓ Able to facilitate **Personalisation**. Class time becomes more group based with time for one on one. Students get more **individualised attention** from the teacher/educator
- ✓ Inspired by and mindful of different learner preference, styles and **Diversity**

Watch this video more to find out even more about this pedagogy in practice:
https://www.youtube.com/watch?v=h7-D3gi2lL8

CLICK TO LEARN & WATCH
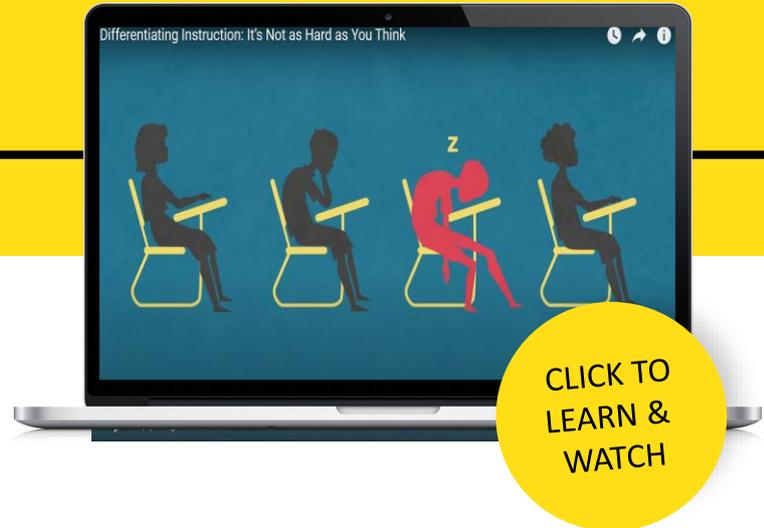
How create a Differentiated Instruction Class Lesson:
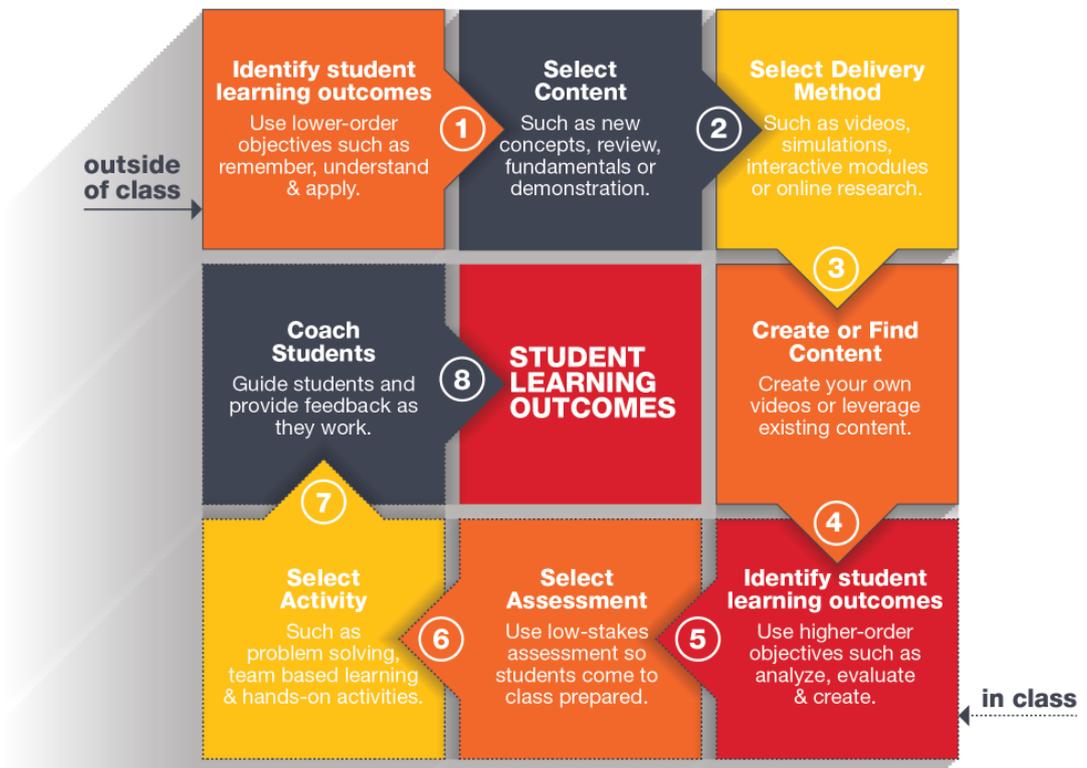
Benefits of the Differentiated Instruction Pedagogy:

- Education methodology better suited to gender
- Higher academic performance
- Less competitive behaviors
- Effective for both high-ability students and those with a disability
- Improves engagement and learning

Negatives to the Differentiated Instruction Pedagogy:

- Requires much more lesson-planning time for teachers
- Requires more resources for a school to implement
- It is not suitable for every student
- lack of funding for creating the best learning environment

Differentiated Instruction Tools in focus

Differentiated instruction simply concerns the use of individual approach to pupils and students. To conduct this in the most effective way, the right tools must be usued.
One of those tools that we recommend is **kahoot** - a free online tool designed to create and run interactive quizzes. **Pictochart** is a friendly, intuitive and easy-to-use tool for quickly creating graphics in the form of infographics. **Ideaboardz** is a community-based tool that allows users to add sticky notes, known as ideaz, to an IdeaBoard.

Kahoot

Kahoot is a platform for creating quizzes, polls or jumbles (matching answers to issues). It is an educational tool that allows you to create your own quizzes and use existing resources.

Kahoot is a free tool available in 180 countries. The navigation of Kahoot is very intuitive, there is no need to be afraid of the lack of knowledge of the English language and you can easily create your own resource.

Find out more about Kahoot by clicking on this link:

Advantages Of Kahoot

- Improved classroom dynamics
- Free and easy to use
- It can be used as a tool of assessment for the teachers
- Creates motivation
- No need to create websites or accounts - just go to the appropriate website and enter the code provided by the teacher
- The number of players is unlimited
- Mobile devices can be used

Disadvantages Of Kahoot

- Tracking the student's progress level is a complex process
- The need for a permanent Internet connection
- The need for an adequate number of devices
- Limited number of characters in the question

Kahoot In Action
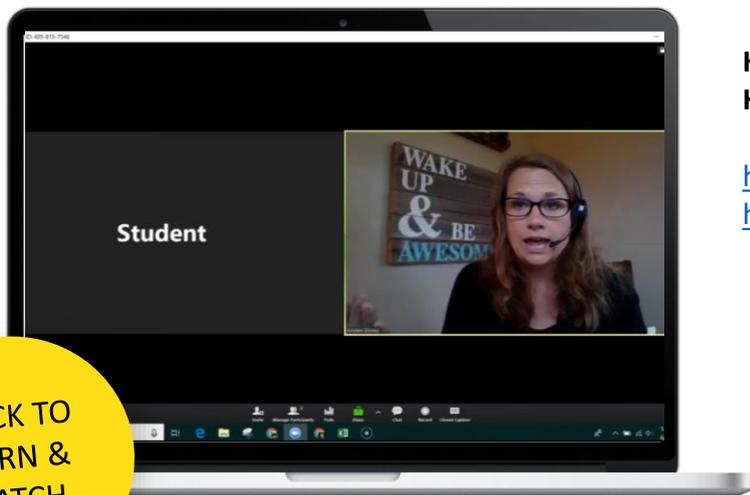
Kahoot in Education:
How to play Kahoot! on Zoom

https://www.youtube.com/watch?v=ejqi2wKWW_w

CLICK TO LEARN & WATCH

Kahoot! In Education:
5 Minute Guide to Kahoot

https://www.youtube.com/watch?v=pAfnia7-rMk
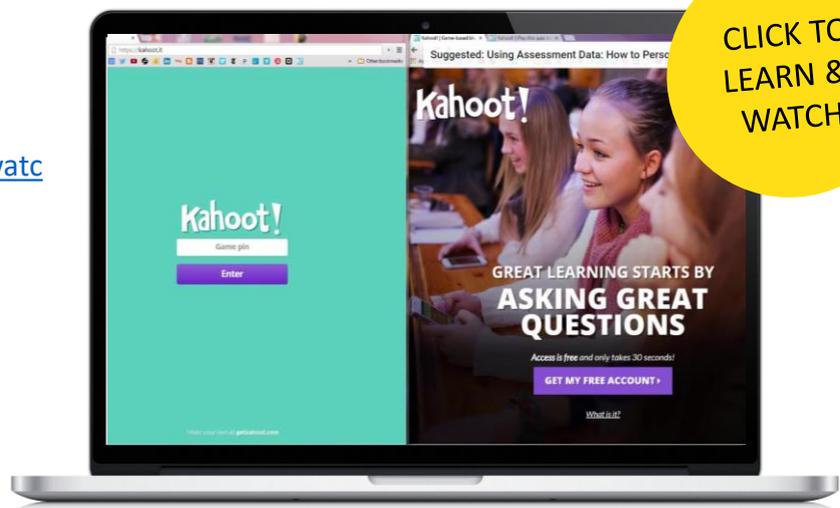
CLICK TO LEARN & WATCH

Pictochart

Pictochart is a web-based [infographic](#) application which allows users without intensive experience as graphic designers to easily create infographics and visuals using themed templates.

One of the simplest and most intuitive tools. Provides 5 free themes. Creating infographics with Piktochart is easy and fun. The tool allows you to change colour schemes and fonts, load graphics, and change basic shapes and images.

[Find out more about Pictochart by clicking on this link:](#)

Advantages Of Pictochart

- Free of charge
- Available online
- Possibility of creating a report, banner or presentation
- One of the simplest and most intuitive tools for creating infographics
- Imports Excel sheets and CSV files
- Ready to share on the most popular social media platforms

Disadvantages Of Pictochart

- In the free version, the graphics will be watermarked
- The quality of the added images is in some cases rather poor
- The number of images in one infographic is limited

Pictochart In Action
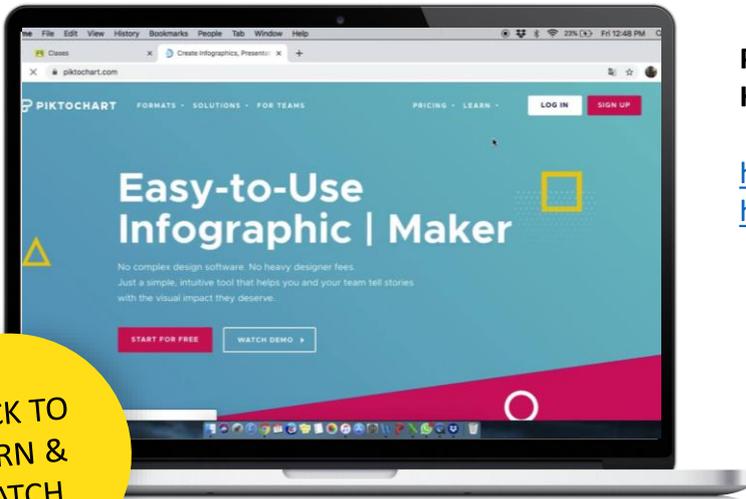
Pictochart in Education:
How to use Piktochart Tutorial

https://www.youtube.com/watch?v=VbIBNBWYqTA

CLICK TO LEARN & WATCH

Pictochart in Education:
A Simple Guide to Piktochart for Beginners

https://www.youtube.com/watch?v=Eq-85gzw3GI
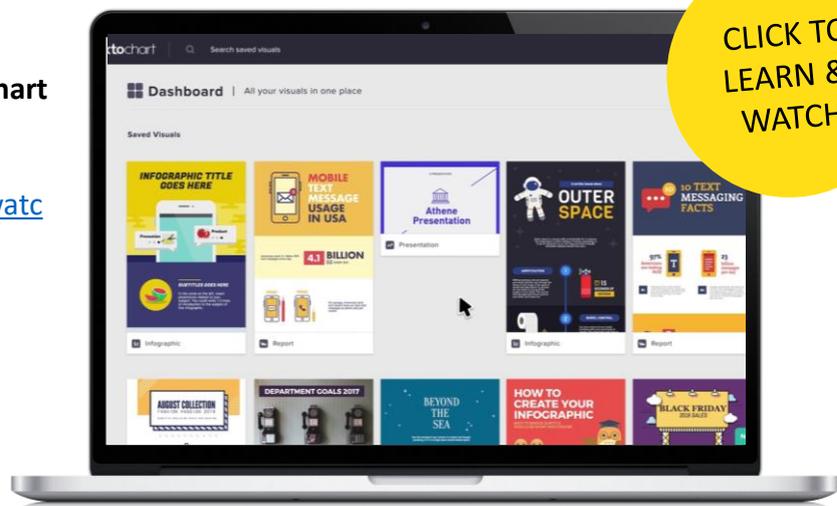
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Ideaboardz

Ideaboardz is a collaboration tool. It allows teams to collectively brainstorm, gather inputs, reflect and retrospect ideas. It's a nice idea board. We wanted to take this to the next level with a modern interface and more features.

IdeaBoardz can also be used as a team collaboration tool. It will allow teams to collectively brainstorm, gather inputs, reflect and retrospect. It is especially useful for teams that are distributed geographically, and it is also handy for teams to collect inputs over several days and then meet to talk through them.

For more information about Ideaboardz click on this link:

Advantages Of Ideaboardz

- Completely FREE to use online Retrospective Tool
- Can be used for brainstorming exercises
- No need to login and the board can be created directly
- Easy to share with others
- Easy to create, delete and maintain boards
- All well known formats are provided as pre-defined formats
- There is a search option to find sticky notes with any keyword
- Export the information of your board to a pdf document or to Excel

Disadvantages Of Ideaboardz

- Having many different cards can make it quite unorganised
- Not so convenient for action points
- Cards must be concise

Ideaboardz In Action

IdeaBoardz in Education:
IdeaBoardz Tutorial

https://www.youtube.com/watch?v=u4-XthctNLo

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IdeaBoardz in Education:
How to create and use IdeaBoardz:

https://www.youtube.com/watch?v=4zYlzjpEfzM
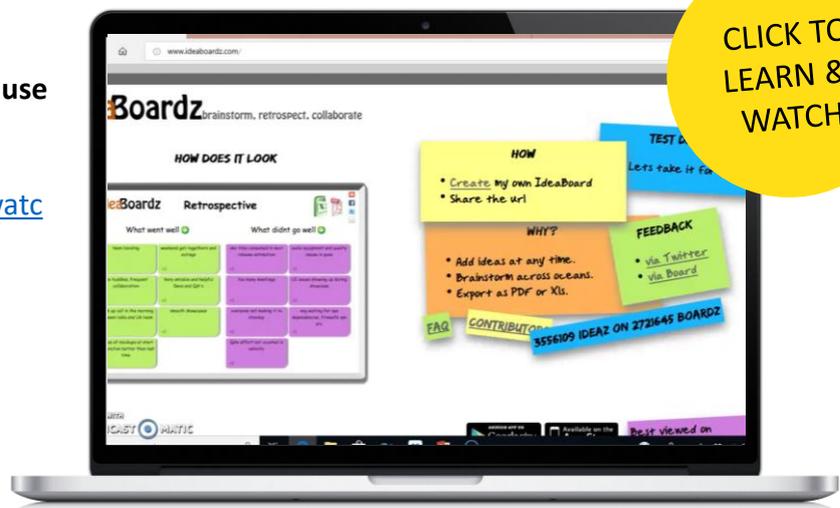
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iN DEED
Inclusive Digital Education for Entrepreneurs

Thank you for reading our INDEED Toolbox, and we hoped you enjoyed it!

You can find more information about the project by clicking on the Laptop Screen or the link below.

INDEED Website:
https://indeedforyou.eu/

Alternatively, you can also find us at the following social media links which we invite you to join!

INDEED Project Facebook:
https://www.facebook.com/INDEEDerasmusProject/

INDEED Project Twitter:
https://twitter.com/INDEED_project

INDEED Project LinkedIn:
https://www.linkedin.com/company/indeedproject/

GUIDE TO DIGITAL EDUCATION

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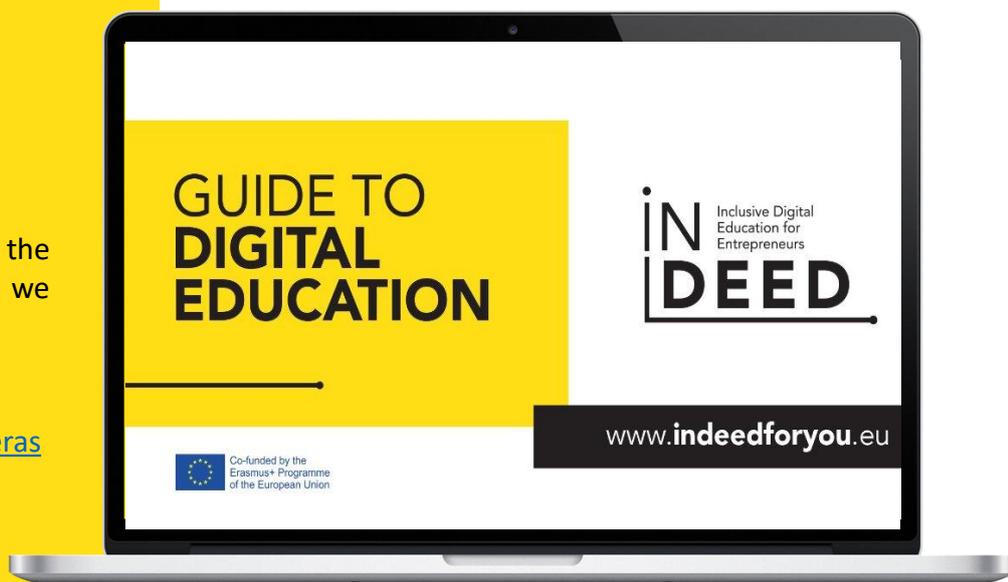
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