

# PART 03



## HUMAN CENTERED DESIGN AND ADULT EDUCATION

**A GUIDE ON HOW TO ADD  
VALUE TO YOUR PROJECTS**

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**IN PARTS 1 & 2, WE LOOKED AT HUMAN CENTRED DESIGN AND ITS ROLE IN PROJECT DEVELOPMENT AND IMPLEMENTATION. IN PART 3 WE CONSIDER THE ROLE OF HUMAN CENTRED DESIGN IN ADULT EDUCATION.**

We look firstly at the good practice principles in Adult Education then outline a selection on human centred teaching approaches and finally introduce how to apply the HCD approach when working online. We provide examples, tips and techniques to empower adult educators with design tools and pedagogic methods that will not only increase the impact of the teaching they currently do, but will also amplify the learning potential of their students.

We hope to encourage educators to design new teaching solutions to improve better learning outcomes. In order to support that process, the Creative Change project is developing additional resources including a Creative Design Space and a Hackathon Guide which can be accessed [here](#). Our hope is that educators can use this toolkit and resources to create human-centred projects that will improve the learning outcomes of their students.

Human centred design methodologies have gained increasing attention in education in recent years. From educators using the process as a pedagogical framework for real world, project-based learning to stakeholders leveraging the process as a driver of innovation and a mechanism for positive change. Every day, educators create experiences for their learners through developing student goals, considering different learner needs, iterating between lessons, and impacting student learning outcomes. These are essentially design processes and they can be improved still further through the introduction of some HCD approaches!

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# 03

## HUMAN CENTRED DESIGN AND ADULT EDUCATION



## 3.1 PRINCIPLES FOR TEACHING ADULT LEARNERS

As we become older our motivations to learn evolve, and for an adult educator a better understanding of adult learning theory or Andragogy can help developing better courses, with more involved learners and better learning outcomes. Educator and researcher Malcolm Shepherd Knowles developed many of the ideas that have become the most popular best practices for teaching adults, his principles state that adults learn best when:



They understand why something is important to know or do.



They have the freedom to learn in their own way.



Learning is based on, or relatable to, their own experiences.



The time is right for them to learn.



The education process is positive and encouraging.

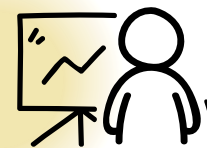


We have summarised these principles below:

01

Make **EDUCATION** Relevant

Adults are more interested in acquiring knowledge that will help them deal with real-world challenges they face at work or in their personal lives. They want more problem-centered than content-centered education.



02

Keep Them **INVOLVED**

Adult learners have little patience for sitting and listening for longer periods of time. They want input and conversation around what is being taught. They may have fixed viewpoints that make them agree or disagree with what is being said. Whatever the case, it's wise to involve adult learners in conversation at regular intervals during each class.



03

Integrate Their **EXPERIENCE**

Adult education attracts students with lots of life experience. Coursework must reflect this and offer information that builds on what they already know, what they do daily in their jobs and what they want out of a course.



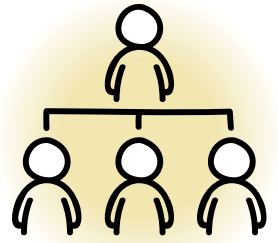
04

Let Them **EXPLORE** On Their Own

Adult learners tend to enjoy exploring topics on their own. They like to participate in deciding what is to be learned and remembered from a class, and may view much of what they learn through an established point of view. Adult learners typically make excellent collaborators and work well in teams.



05



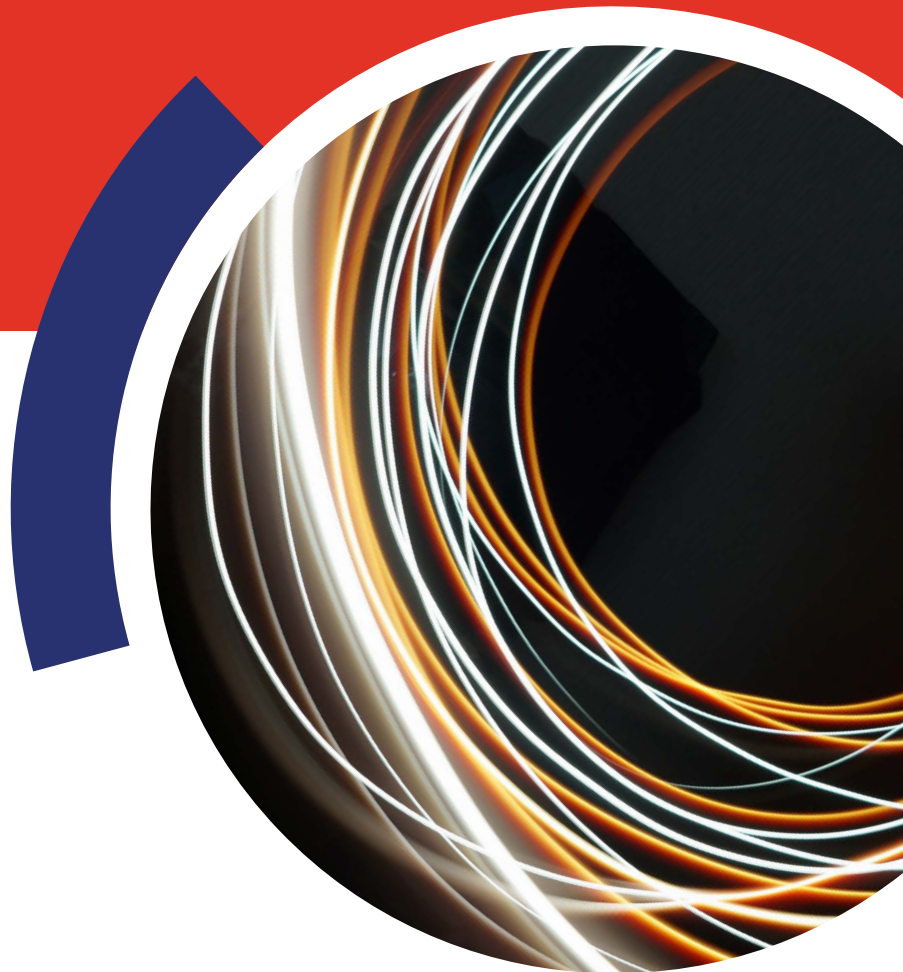
## Keep Avenues Open for **FEEDBACK**

Adult learners want the opportunity to speak with instructors about issues that come up with course materials. This works the other way as well – most adult students have experiences in getting feedback in their professional life and should be more open to constructive criticism and guidance from instructors.

## 3.2 HUMAN CENTRED TEACHING APPROACHES

Now that you understand a little more about Andragogy, we present you three new supporting teaching approaches that combine andragogic principles with innovative digital tools.

- Flipped Classroom
- Peer Learning
- Hackathons





# FLIPPED CLASSROOM

The flipped classroom is an inclusive teaching approach which helps students to share, use, develop and process information using technology. Up to now it has been used more in school classrooms, but is perfectly suited for working with adult learners.

Flipped classrooms can generally be 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.

## HOW IS IT HUMAN CENTRED?

Flipped classroom lessons and approaches are designed to be more collaborative and fluid/flexible, which suits Adult learners perfectly. Introducing the concept outside of the classroom allows learners to explore new content and learning material in their own way and at their own pace. Video lessons are often a mainstay of a flipped classroom. The Flipped Classroom is:

- Class time becomes more group based and conducive to collaboration, discussion and opportunities for different forms of learning
- Able to facilitate personalisation
- Inspired by and mindful of different learner preference, styles and diversity
- Flexible both in terms of educator and student use/engagement
- Equitable – students can learn at their own pace be it fast or slow



## LEARNING BOX

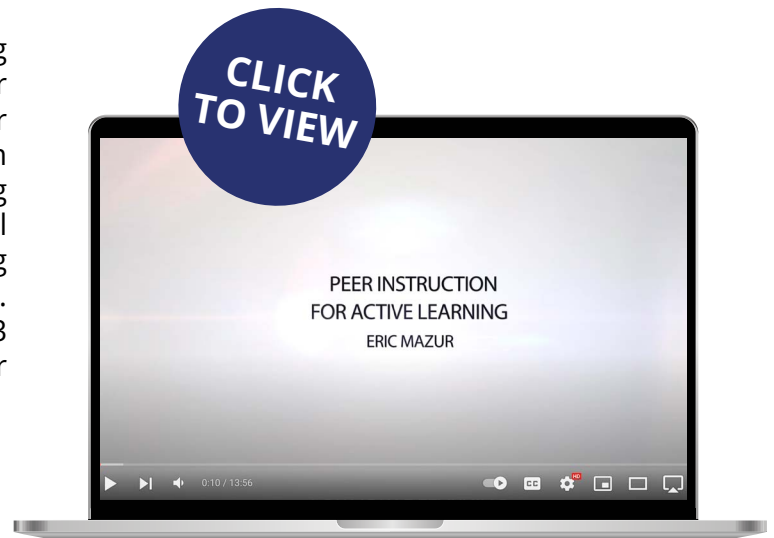
Here you can learn more about the concept of flipped classroom. Often, the flipped classroom revolves around a video lesson. Here are some tools to help you to create your own first flipped classroom lesson. You can use Canva to create a learning video, Youtube to publish the video for sharing and Ted Ed to take that published video and turn it into a structured video lesson.





# PEER LEARNING

Peer learning is a two-way, reciprocal learning process. Students learn from and with each other in a formal or informal way. They interact with other students, share their knowledge and learn from explaining their own experience while receiving ideas and comments from other peers. Reciprocal peer learning emphasises simultaneous learning and contributes to the learning of other students. Not convinced of the benefits? Watch this 13 minute video from Harvard Educator Eric Mazur and you will be!



## BENEFITS OF PEER LEARNING

- Helps students learn effectively from one another
- Students learn how to collaborate with others
- Develop organizational and planning skills
- Allows students to evaluate their own learning
- Enables students to give and receive constructive feedback
- Helps find solutions to problems and provides emotional support
- Students may become more receptive to learning
- Fosters a culture of community while developing soft skills
- Encourages participation and sharing – increases comfort and openness
- Highlights the existing experience and knowledge of students

## HOW IS IT HUMAN CENTRED?

Peer Learning encourages the sharing of human experience and knowledge between students, so adult learners who generally have more experience (at professional and personal levels) are able to share their knowledge and use their experience to contribute and value other contributions. Learners might be more receptive to new information when they are learning from their fellow students rather than from an outsider, even if it is an expert.

## LEARNING BOX

In a face-to-face situation, small working groups in the classroom would allow the peer-learning process as a first loop and the small groups can join in plenary and share their discussion with the full group.

In online situations, the peer-learning process changes. Students need to be organised in pairs and set up vis-à-vis video conferences, share documents and work in small groups. A number of tools can facilitate this type of activity. It is recommended to use a video conference tool such as Zoom or Teams, a sharing document writing tool such as Google Drive and a space to store resources online such as One Drive or Dropbox.



## HACKATHON

Hackathons are intense events where teams try to creatively tackle problems. Hackathons typically last between a day and a week. Some hackathons are intended simply for educational or social purposes, although in many cases the goal is to better understand and collaboratively develop

practical solutions to an identified problem or obstacle. Hackathon is a great tool to drive sustained innovation and crowdsource solutions to address problems and issues.

### BENEFITS OF HACKATHON

- Inspire participation, expression and problem solving
- Complete the move from theory to practice
- Strengthen soft skills such as communication, leadership, and teamwork
- Allow to approach a problem from a different angle and perspective

### HOW IS IT HUMAN CENTERED?

- Hackathons are typically used to solve technical problems, but the format can be adapted to Adult Learners to generate solutions that are based on inclusion and creativity
- Engage Adult Learners in participatory activities
- Enable Adult Learners to use inclusion to create workable solutions for the obstacles they face
- Expand the range of educational programs that Adult Learners currently have

## LEARNING BOX

In a face-to-face situation, participants of the Hackathons are organized in small teams. Tools to support Hackathons are sticky notes, papers, stationary equipment.

In online situations, it is recommended to use an online video conference software such as Zoom, a whiteboard collaboration platform such as Jamboard or Miro, and other interactive tools such as Menti or Slido



### 3.3 HOW TO APPLY A HCD APPROACH WHEN WORKING ONLINE

In recent years learning institutions have been on the path of using digital technology to create more student-centred experiences. However, since early 2020 technology has undoubtedly played a major role in redefining education. Remote learning has been a critical and necessary step as institutions make a huge effort to adapt to the pandemic. These online learning practices of the COVID-era and the usage of new technologies, in harmony with pedagogy, will be essential to personalised and engaging learning experiences in the future.

In the COVID-affected new world, adult learning has a more prominent role than ever: this is key in ensuring people can learn the new skills required in the transforming labour market and society.

Adult learners tend to have different goals, motivations, and challenges than traditional students when choosing the online space, and the most important one is not that they are experienced computer users (they're usually not), but that they're short of time and constantly balancing between work and private life. The human-centered approach can offer a solution to this problem.

Adult learners need tools that don't require much time and effort: easy to use, accessible on any platform, and available on demand. They need courses that are flexible and practical. During the lessons, they need clear instructions, repetition, practice, and support. And on top of all that, they even need the online space to give them an atmosphere of trust and a sense of belonging to a community. With regard to learning online they need teachers who are equipped with the skills and know-how of making relevant information available by using technology. They need teachers and trainers who are qualified in the management of learning groups and the facilitation of learning. Teachers and trainers have a difficult task because in the online environment especially the communication and interaction differs from the interpersonal encounter in face-to-face teaching. So instructors across all courses

have to make time to understand their students' communication style and they have to check in with students in a way they may not typically do for in-person instruction. Educators with a human-centred approach can be a good solution to adult learners who would like to further develop their skills.



# PRINCIPLES FOR TEACHING ADULT LEARNERS FROM A DIGITAL PERSPECTIVE:

## 3.3.1 MAKE EDUCATION RELEVANT

Knowing why they should learn something, is the most important of the adult learners' characteristics.

They want to see the immediate tangible benefits from their training. To properly motivate adult learners, it is necessary to make the learning outcomes clear. Educators should let them know that their training success will be a factor in the advancement of their careers. Adult learners mostly prefer highly personalized courses that adapt to the learner's wants and needs and are most satisfied when they can directly apply what they are learning. With technology, it is possible to create something almost "tailor-made" for each student.

## 3.3.2 KEEP THEM INVOLVED

Focusing on student engagement is more challenging in the virtual education environment. While there are challenges related to student engagement in other learning environments, online education includes additional obstacles. Problems often revolve around the lack of personal interaction between the teacher and student, as well as student-to-student contact. Important considerations to keep students engaged:



**SEGMENT LESSONS INTO SHORTER SEQUENCES AND MAKE SHORT BREAKS REGULARLY**



**KEEP LESSONS INTERACTIVE**





**GIVE THEM FEEDBACKS CONSTANTLY, REFLECT ON THEIR WORK**



**USE (LIVE) MEDIA AS MUCH AS POSSIBLE, PRESENTATIONS THAT CONTAIN JUST TEXT ARE BORING.**



**ENCOURAGE STUDENTS TO USE THE CHAT FUNCTION OF THE ONLINE PLATFORM WHERE THEY CAN ASK THE TEACHER OR EACH OTHER**



**CREATE SMALLER GROUPS FOR TEAMWORK**

Teamwork is challenging but especially important in the online space. Listening to each other's ideas, working on those ideas, collaboration and common creation can reinforce a sense of belonging to a community.

When students work alone on a task in the online space, teachers and trainers should also make them feel that they are not alone with their problems. Students have to have the opportunity to ask teachers. Trainers have to pay attention to possible disruptions, if a situation or task is especially difficult, if the student is unable to cope with the problem on his/her own.

Some engaging techniques that work for children can also work for adults. For example, gamification or turning learning outcomes into games can enhance student participation. Game elements included in the online lessons will make the training experience more challenging and definitely more compelling for adult learners.



### 3.3.3 INTEGRATE THEIR EXPERIENCE

The growing accessibility of online learning has long been preferred by part-time students engaged in lifelong learning. However, it would be a mistake to assume that adult learners are familiar with newer technologies. As such, adult learners need tools that don't require much time and effort and want to learn on platforms that they are already familiar with. Complicated or unfamiliar technological tools can frustrate them - as it takes a lot of time to learn the new technology.

### 3.3.4 LET THEM EXPLORE ON THEIR OWN

Adult learners are independent, self-directed, and self-motivated. So a teacher who works with them should act more as a facilitator rather than the owner of all knowledge.

#### THE EDUCATOR SHOULD

- 01 actively involve learners in the learning process and allow them to discover new digital tools on their own
- 02 engage them in live discussions during the lessons,
- 03 use group-oriented online activities.

### 3.3.5 KEEP AVENUES OPEN FOR FEEDBACK

Adult learners like to participate in learning experiences that are meaningful to them. The online space gives them the opportunity for either continuous or direct feedback. It is therefore worthwhile to include questions, discussions, case studies, or interviews, either in certain parts of each lesson or in the closing section of them, on which the adult learners can give immediate feedback.





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