



Featuring **20 digital tools** to support differentiated inclusive and creative pedagogies

www.inclusiveeducators.eu

Welcome to our INACT toolbox

This Education 4.0 Digital Toolbox empowers educators to rethink your use of technology in the light of new pedagogical approaches, and to become more skilled in the selection and use of digital tools to favour learner inclusion and effective learning.

Designed for use in VET education, this toolkit is highly transferable to other fields of education.



UNESCO defines inclusive education as a process of strengthening the capacity of the education system to reach out to all learners.

As an overall principle, it should guide all education policies and practices, starting from the fact that education is a basic human right and the foundation for a more just and equal society.

Source: UNESCO 2009

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WHAT IS EDUCATION 4.0?

WHAT IS EDUCATION 4.0?

Why is it relevant to Vocational Education and Training?

Education 4.0 is an approach to reimagining education in a way that is inclusive. It focuses on the development and promotion of a broad range of skills to prepare learners for the Fourth Industrial Revolution. Most importantly, it leverages technological and pedagogical innovation to put learners at the centre of learning.

In the last ten years, digital technologies have revolutionised all aspects of our lives, particularly the way we live and work. And while great strides have been made to revolutionise how we teach and learn, there is still much to be done. The COVID-19 pandemic spurred rapid technological change.

Blended teaching and learning, involving the use of technology both within and outside of the classroom,

became a part of our lives. This change has brought many exciting opportunities and challenges for educators. At the same time it has compounded preexisting educational inequalities.

Our challenge as educators is to seize the opportunities that technology presents and deploy it to reduce learner inequalities and enhance opportunities.

WHY FOCUS ON EDUCATION 4.0 FOR VOCATIONAL EDUCATION?

The digital transformation is a key technological trend that will change the world of labour in the future. Those with a vocational education will need new skills for new jobs throughout their career. Teachers and trainers will need to integrate learners with diverse backgrounds and needs.

INACT Inclusive Educators understand that people with a vocational education will need their skills to stay relevant in the face of change. Teachers and trainers will need to ensure learners have the critical

thinking, communication, and learning-to-learn competencies to thrive in our changing society and unpredictable economy.

Much of this introduction to Education 4.0 is taken from the World Economic Forum, <u>Catalysing Education 4.0 Investing in the Future of Learning for a Human-Centric Recover Insight Report May 2022</u>.



The World
Economic Forum's
Education 4.0
Framework

Launched officially in January 2020, the World Economic Forum's Education 4.0 Framework proposes eight transformations within learning content and delivery mechanisms in education systems to better prepare the next generation of talent for the future of work and the future of societies. It is a useful and valuable framework to keep in mind as we explore Education 4.0 in the context of vocational education

THE **EIGHT** TRANSFORMATION AREAS ARE:

01 GLOBAL CITIZENSHIP SKILLS:

Include content that focuses on building awareness about the wider world, sustainability and playing an active role in the global community.

02 INNOVATION & CREATIVITY SKILLS:

Include content that fosters skills required for innovation, including complex problem-solving, analytical thinking, creativity and systems analysis.

03 TECHNOLOGY SKILLS:

Include content that is based on developing digital skills, including programming, digital responsibility and the use of technology.

04 INTERPERSONAL SKILLS:

Include content that focuses on interpersonal emotional intelligence, including empathy, cooperation, negotiation, leadership and social awareness.

05 PERSONALIZED & SELF-PACED LEARNING:

Move from a system where learning is standardized, to one based on the diverse individual needs of each learner, and flexible enough to enable each learner to progress at their own pace.

O6 ACCESSIBLE & INCLUSIVE LEARNING:

Move from a system where learning is confined to those with access to school buildings to one in which everyone has access to learning and is therefore inclusive.

O7 PROBLEM-BASED & COLLABORATIVE LEARNING:

Move from process-based to project- and problem-based content delivery, requiring peer collaboration and more closely mirroring the future of work.

08 LIFELONG AND LEARNER -DRIVEN LEARNING:

Move from a system where learning and skilling decrease over one's lifespan to one where everyone continuously improves on existing skills and acquires new ones based on their individual needs.



CORE CONCEPTS & TOOLBOX CATEGORIES

The main goal of the INACT Inclusive Educators project is to provide educators with the knowledge, skills and confidence to engage in pedagogic innovation. Our aim is to help them create inclusive, innovative and genuinely engaging learning experiences for all learners. We have compiled twenty digital tools to support trainers and educators in these tasks.

TOOLS TO SUPPORT DIFFERENTIATED INSTRUCTION

As teachers and trainers we use differentiation every day. We are called on as educators to actively plan for learners' differences so that all learners can learn to the best of their abilities. We must divide our time, resources, and efforts to effectively teach learners who have various backgrounds, capabilities, skill levels and interests. Digital tools can aid differentiation for inclusion.

A digital tool can enable a learner to:

- Work at their own pace.
- Set their own goals.
- · Get individualized feedback.
- Engage with a learning style that suits them:
 Visual, Audial, or Kinaesthetic (note kinaesthetic relates to hands on learning)
- · Work independently.

TOOLS TO SUPPORT DIGITAL INCLUSION

Meeting increasingly diverse learning needs demands means we need to provide inclusive, accessible learning environments. As the digital dimension of vocational education grows, we must ensure that this education empowers learners to feel safe, confident, and respected so they can reach

their full potential. The digital tools we have included can help build a sense of community and offer opportunities for active participation. Digital tools can allow learners to work collaboratively in a way that is guided by the educator and enables each learner to work to the best of their ability.

TOOLS TO SUPPORT CREATIVITY

Creativity is the ability to see new opportunities, to produce original ideas, to flexibly adapt to changing situations and to apply one's imagination to solve complex problems. Creativity is rising in value and is recognized as a key 21st Century workplace skill. Digital tools can encourage creativity and innovation.

A digital tool can enable a learner to:

- Create their own diagrams and visualisation for learning.
- Create audio and visual content.
- Be inspired by ideas to go in new directions with their learning.

Guided by an educator, a learner can encounter new learning opportunities through digital tools which encourage innovation.



Our toolbox has 20 digital tools to support differentiated inclusive and creative pedagogies.

The tools are presented in alphabetical order. As with all tools, they can be used in different ways and support differentiation, inclusion and creativity to varying degrees.

STEP

OVERVIEW TO THE TOOL

01

Get to know the tool quickly, learn what it can be used for and get a sense if it's the right tool for you

STEP

DIFFERENTIATION, INCLUSION AND CREATIVITY OPPORTUNITIES

02

Outlining the differentiation, inclusion and creative possibilities of each tool is important and we have gathered feedback and insights from educators who share into how effective and useful they feel these tools are. These serve as a guide: you will form your own judgements as you use the tools

WHAT YOU MIGHT CONSIDER AND LEARNING FROM OTHERS

03

STEP

We have included some points you might want to consider before committing to a digital tool. 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 educators are using the tool.

STEP

GETTING STARTED

04

Register online and get started with whichever tool you feel best suits your needs! We suggest you take the time to explore each of the tools and their merits over the course or one or two sittings. Return to this toolkit as often as you need to. Share your progress with colleagues to support and enrich each other professionally.

INACT DIGITAL TOOLS

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- 02 Actively Learn
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Simple to use online quizzes.



SUPPORTING DIFFERENTIATION & INCLUSION



- Simple to create quizzes for the classroom which can easily be adapted for different abilities.
- It can also be used for collaborative creative brainstorming
- No account is required for use.
- Very simple user interface.



SUPPORTING CREATIVITY

Student can respond to discussion items freely and give responses in their own way. These can be anonymised by the teacher.

Answer Garden In-depth

It can also be used for collaborative creative brainstorming

TO CONSIDER



Other tools might more suitable for in-depth answers and assessment.

Answer Garden in 5 Minutes



GETTING STARTED

Follow these links to see examples of best practice from other educators. Remember to share your progress with colleagues to support and enrich each other professionally.

Webpages into interactive exercises



SUPPORTING DIFFERENTIATION & INCLUSION



- Webpages can be made into interactive exercises. This means that difficult content can be made much easier to understand.
- Far beyond the average e-reader, this tool helps students connect with texts and each other while giving teachers useful insight into student thinking.



SUPPORTING CREATIVITY

• Content is completely opened up for students to engage with. Every word can be commented upon or defined.

Actively Learn In-depth

TO CONSIDER



- Many of the best features require a paid subscription.
- · Writing is limited to commenting.

Actively Learn in 5 Minutes





GETTING STARTED

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SUPPORTING DIFFERENTIATION & INCLUSION



- Instruction can be personalised. As well as instruction, it encourages student voice and school community building.
- With the right guidance, the abundance of design features make creating dynamic presentations simple for all students.
- From video to hand-drawn images it's possible to add content in almost any format imaginable



SUPPORTING CREATIVITY

Gives students the power to represent their learning. Students can create templates and slides with images, video, audio and links.

Buncee In-depth

TO CONSIDER



The boards can get cluttered quickly, and top-notch features come with a cost.

Buncee in 5 Minutes



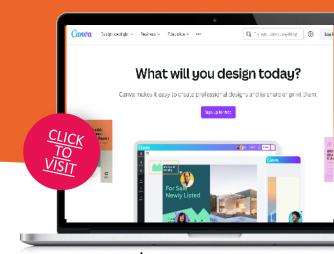


GETTING STARTED

Follow these links to see examples of best practice from other educators. Remember to share your progress with colleagues to support and enrich each

other professionally.

Makes it possible to edit photos and videos easily.





- Brings ideas to life for all students. Students can collaborate to create a large range of content.
- Many free templates plus great guidance can help anyone design beautiful images and infographics.
- This is a flexible, accessible way to create beautiful designs in your classroom.



SUPPORTING CREATIVITY

The great variety of resources and templates will allow every student to express their ideas fully

TO CONSIDER



It can be easy to confuse "layouts" and "designs" and lose work in the process, and more skilled designers might feel limited by this scaffolded approach.

Canva In-depth

Canva in 5 Minutes





GETTING STARTED

Follow these links to see examples of best practice from other educators. Remember to share your progress with colleagues to support and enrich each

other professionally.

Allows questions and answers through video or voice recording





SUPPORTING DIFFERENTIATION & INCLUSION

- Participation for students at all levels through video clips which the teacher can share with the class.
- · Customizable video responses push students to plan their responses and speak thoughtfully.



SUPPORTING CREATIVITY

- Students creatively control the video content themselves and this is shared with class.
- This accessible, approachable tool offers connection, multiple means of expression, and creativity to apply to almost any topic.

TO CONSIDER



 The social media-style features that make Flip fun can also distract students from the purpose of the assignment.

Flip(grid) In-depth





GETTING STARTED

Follow these links to see examples of best practice from other educators. Remember to share your progress with colleagues to support and enrich each other professionally.

Creation of quizzes, flash cards, presentations and more.





SUPPORTING DIFFERENTIATION & INCLUSION

- Flippity easily turns any Google spreadsheet into flash cards, a badge creator, a spelling quiz, a memory game, a word search, and more.
- Very accessible and quick to set up resources which can be targeted at all abilities specifically. No account is required and everything is in one place.



SUPPORTING CREATIVITY

• The range of resources here mean that a student can engage with a lot of learning quickly and be inspired by it.

TO CONSIDER



 Teachers might want to that creations or published spreadsheets are not restricted for wider sharing, or the generated content would not be visible to students outside that domain. This might require a workaround on the teacher's part



Flippity in 5 Minutes



GETTING STARTED

Follow these links to see examples of best practice from other educators. Remember to share your progress with colleagues to support and enrich each other professionally.



Uses slides to create interactive, multimedia digital shows



SUPPORTING DIFFERENTIATION & INCLUSION



- Student can collaborate on feature rich presentations which can be tailored to ability.
- The site supports nearly any type of media creation, and templates are varied and dynamic.



SUPPORTING CREATIVITY

The features allow students to enliven and organise their thinking freely.

TO CONSIDER



 There is a lot going on in this website and it could be more intuitive. It might challenge school internet speeds

Genially In-depth

Genially in 5 Minutes



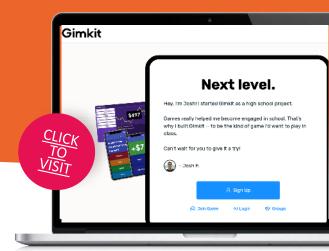


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inclusive educators.eu

Uses slides to create interactive, multimedia digital shows





SUPPORTING DIFFERENTIATION & INCLUSION

- Learning is gamified in a variety of ways with visual competitions which are accessible to all.
- Minimal setup. Offers students more agency than competitors.
- This tool's unique spin on game shows could increase engagement, or offer classrooms burned out on other tools something new.



SUPPORTING CREATIVITY

• Students are inspired by the sheer varieties of ways in which they can actively learn.

TO CONSIDER



• Image library has suggestive content. Students could focus on gameplay at the cost of content.

Gimkit In-depth

Gimkit in 5 Minutes





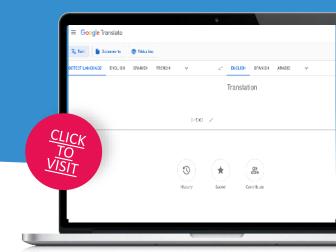
FISHTOPIA

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Instantly translates phrases in 100 languages.





SUPPORTING DIFFERENTIATION & INCLUSION

- A very handy tool for basic translation and improved communication
- Accessible through a variety of devices, this app ensures that students can engage with learning through instant written and audio translations.



SUPPORTING CREATIVITY

Language is opened up as a means of expression rather than being a barrier.

TO CONSIDER



• Despite attempts at accuracy, translations are sometimes only workable, if not sometimes inaccurate.

Google Translate In-depth







GETTING STARTED

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inclusive educators.eu

Enables visual collaboration between users in real-time





SUPPORTING DIFFERENTIATION & INCLUSION

- A straightforward whiteboard can be used easily by all students collaboratively.
- Students can pull files from Google Drive and collaborate with each other while using Google Meet.



SUPPORTING CREATIVITY

Doodling ideas is an intuitive and creative process in itself.

TO CONSIDER



Lacks ability to add media content such as music and videos.

Jamboard in 5 Minutes





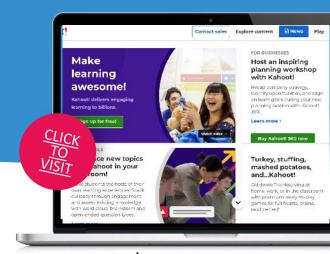
Jamboard In-depth

GETTING STARTED

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User-generated multiple-choice quizzes via browser or app







- Can be used in person or remotely for easy access quiz based learning which is presented excitingly in a simple way.
- A quick pace, suspenseful music, and instant scoreboards keep competition lively and learners engaged.



SUPPORTING CREATIVITY

- The ease of use makes it easier for students to express themselves, building up a creative instinct.
- Many students will love the challenge of creating their own Kahoots.

TO CONSIDER



• It may not be best for all students. Some students would do better if they work through at their own pace without a time restriction and the added stress of competing against their classmates.

Kahoot In-depth

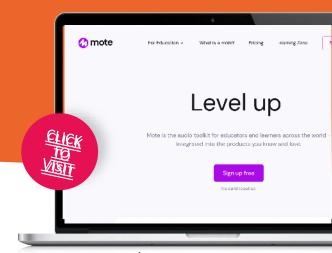




GETTING STARTED

Follow these links to see examples of best practice from other educators. Remember to share your progress with colleagues to support and enrich each other professionally.

Easily add audio comments and content to projects and forms







- Allows voice comments to made to added to digital documents and webpages, helping students to engage with content in a variety of languages.
- The tool is flexible, easy to use, and seamlessly integrated into the Google suite.



SUPPORTING CREATIVITY

Text heavy documents can be opened up for creative engagement with students.

TO CONSIDER



The extension works only within the Google ecosystem.

Mote in 5 Minutes





Mote In-depth

GETTING STARTED

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w.inclusiveeducators.eu

Interactive slides-based lessons and student learning data.





SUPPORTING DIFFERENTIATION & INCLUSION

- Slide based teaching which can be used by the teacher face to face and/or remotely. This allows for a range of engagement options.
- Students can actively participate during lessons. Teachers get valuable feedback.
- Use Nearpod's VR lessons to take students on a virtual field trip to a national park or a different country



SUPPORTING CREATIVITY

Student can engage interactively, providing and gaining feedback.

TO CONSIDER



- Note that while many lessons are free, others require a purchase.
- Content filters could be better.

Nearpod in 5 Minutes





Nearpod In-depth

WHAT DID WE LEARN?

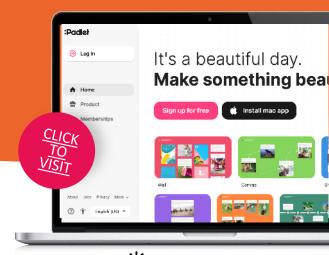
owers have many differer
structures (parts). Each
structure has a different
function (purpose)

GETTING STARTED

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Noticeboard that digitizes content and facilitates collaborations







- Students can engage in visually rich collaboration. It empowers everyone to make the content they want, whether it is a quick bulletin board, a blog, or a portfolio.
- It is very easy to use, the customizable interface is intuitive, and help is available around every corner.
- Students have opportunities to share content and knowledge in ways most comfortable for them.



SUPPORTING CREATIVITY

• Students can hit the design sweet spot with just enough options that they can add your personal touch, but you will not be overwhelmed by customization menus

TO CONSIDER



 Accessibility features are somewhat lacking, and although it is possible to include almost any media, options to add nuance to a Padlet's appearance are limited.

Padlet In-depth

Padlet in 5 Minutes



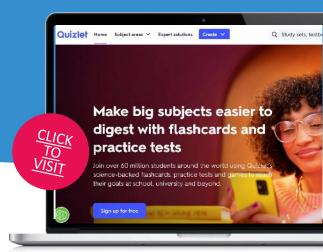


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Flashcard app handling images, diagrams, languages and audio





SUPPORTING DIFFERENTIATION & INCLUSION

- Used by many teachers and students to create flashcards for study. Teachers can monitor performance with the list. Different groups can learn with different lists.
- Works well for personal study sessions or game show-style competition.
- This is a quality study tool that helps students learn and memorize facts.



SUPPORTING CREATIVITY

• A number of options for engagement, including gamified learning, mean that students are constantly stimulated.

TO CONSIDER



- User-generated content is not always reliable or appropriate.
- Not as fun or flashy as competitors.

Quizlet in 5 Minutes

GLICK TO LEARN & WATCH



Quizlet In-depth

Terms

GETTING STARTED

Follow these links to see examples of best practice from other educators. Remember to share your progress with colleagues to support and enrich each other professionally.

Substitutes a difficult passage with easily understood language



SUPPORTING DIFFERENTIATION & INCLUSION



- Intelligently simplifies difficult English, for faster comprehension. Effectively teaches words, for building a better vocabular, producing engaging lessons.
- Quick and easy to adapt text to various levels of complexity with high levels of customization.
- This utilitarian differentiation tool is useful enough to be in every teacher's toolbox.



SUPPORTING CREATIVITY

Students have access to content and can quickly engage with learning material.

TO CONSIDER



The old-school interface could organize info better.







Rewordify In-depth

GETTING STARTED

Follow these links to see examples of best practice Remember to share your progress with colleagues to support and enrich each

from other educators. other professionally.

Interactive teaching tool that lets users create visual story timelines.



SUPPORTING DIFFERENTIATION & INCLUSION



- Students can easily add text, media and all kinds of interactivity to a story on any topic.
- Sets up a template so that students have a framework from which to create their projects and collaborative presentations.
- The simple visual design helps make complex ideas more approachable.



SUPPORTING CREATIVITY

• Gets students engaged in the content through the commenting system. Create a story, invite groups of students or the whole class to get everyone involved. Students can also set their own collaborative stories for easy group work.

Sutori In-depth

TO CONSIDER



- There may be a need to upgrade to a premium account.
- Some design tweaks are not available.
- Pre-built timelines can vary drastically in depth and quality.

Sutori in 5 Minutes





GETTING STARTED

Follow these links to see examples of best practice from other educators. Remember to share your progress with colleagues to support and enrich each other professionally.

n c l u s i v e e d u c a t o r s . e u

Tool for real-life learning situations using interactive media



SUPPORTING DIFFERENTIATION & INCLUSION



- A free online platform that seamlessly creates interactive images and videos with labels, hotspots, tours and much more.
- Allows students to explore the Internet for supporting information and media pertinent to a topic.



SUPPORTING CREATIVITY

- Students can create a 360 degree virtual tour of your school, local area on an educational video.
- This tool gives students the creative ability to construct their own knowledge about a topic through the use of a base image.

TO CONSIDER



- Not necessarily a start up and go teaching tool: it is a creative annotation tool that requires work to get a finished product.
- The search feature for tags requires spelling accuracy for the best search choices, so this could be a roadblock for students with spelling difficulties.

Thinglink In-depth

Thinglink in 5 Minutes





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GETTING STARTED

Digital curation tool where users organize and share resources



SUPPORTING DIFFERENTIATION & INCLUSION



- Easily curate and share media and content. Variety of layouts allows for creative displays.
- It is integrated with an Immersive Reader so every student can access text and other learning
 materials at their own pace to help them reach the desired outcomes. Students can share these
 with class.



SUPPORTING CREATIVITY

• This inclusive platform empowers students to showcase their knowledge and creativity through projects and presentation in a safe learning environment.

Wakelet In-depth

TO CONSIDER



- Lacks two-way communication, tagging, and feedback features.
- Students may share inappropriate content so guidance is needed.

Wakelet in 5 Minutes





GETTING STARTED

Follow these links to see examples of best practice from other educators. Remember to share your progress with colleagues to support and enrich each other professionally.

Virtual whiteboard for collaborative learning





SUPPORTING DIFFERENTIATION & INCLUSION

- A truly impressive feature set. Allows real-time assistance and feedback. Impressive, unparalleled versatility makes this more of an instructional platform than a whiteboard
- It is integrated with an Immersive Reader so every student can access text and other learning materials at their own pace to help them reach the desired outcomes.



SUPPORTING CREATIVITY

• Build games using active widgets for collaborative, effective learning. Although a blank slate to start, it's incredibly customizable thanks to media uploads, widgets, prompts, objects, and gizmos.

TO CONSIDER



- No lesson library.
- A lot of features and seemingly simple tasks can be tricky. It requires a lot of up-front work to get comfortable.

Whiteboard Chat In-depth

Whiteboard Chat in 5 Minutes





GETTING STARTED

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- No one tool or methodology is perfect for all students, so adapt them as you see fit.
- Make a small beginning, with perhaps two or three tools at first.
- Share your experiences with colleagues and get feedback from your students: your knowledge and skills will grow over time.

NEXT STEPS ON YOUR DIGITAL JOURNEY



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