



TECHNOLOGY ENHANCED LEARNING FOR KEY COMPETENCES

OVER A HUNDRED CROSS-CURRICULAR
IDEAS AND ACTIVITIES FOR DEVELOPING
KEY COMPETENCES IN EDUCATION



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TACCLE₂ *EU

TACCLE2

TECHNOLOGY ENHANCED LEARNING FOR KEY COMPETENCES

*Over a hundred cross-curricular ideas and activities
for developing key competences in education.*



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TACCLE2 - TECHNOLOGY ENHANCED LEARNING FOR KEY COMPETENCES

Over a hundred cross-curricular ideas and activities for developing key competences in education.



Brussels, GO! onderwijs van de Vlaamse Gemeenschap, 2014

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TACCLE2 by Fernando Albuquerque Costa, Pierre Bailly, Jan Bierweiler, Linda Castañeda, Elisabete Cruz, Nicholas Daniels, Elmo De Angelis, Kylene De Angelis, Koen De Pryck, Bruna Durazzi, Giulio Gabbianelli, Gabriela Grosseck, Isabel Gutiérrez, Jeroen Hendrickx, Jenny Hughes, Laura Malita, Angela Rees, Pedro Reis, Anne-Marie Tytgat, Katleen Vanden Driessche, Jens Vermeersch is licensed under a Creative Commons Attribution-Non-Commercial-Share Alike 3.0 Belgium License.

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INTRODUCTION

This handbook is the result of a trans-national project called TACCLE2, which is an abbreviation of the title Teachers' Aids on Creating Content for Learning Environments. The handbook aims to support teachers interested in using e-learning to teach Key Competences or, as they are sometimes called, Core Competences¹. This handbook is one of a series that includes e-Learning for Primary Teachers, e-Learning for Teachers of STEM, e-Learning for Teachers of Creative & Performing Arts and e-Learning for Teachers of the Humanities.

In this book we are focusing on web 2.0 - social software and applications that allow learners to **create, share** and **publish** content on line rather than simply being passive consumers of on line content. We are assuming that most teachers are already using the web as a resource - possibly employing web-based research activities as part of their normal lessons – which we call web 1.0.

Be warned, this is not a textbook, academic work or a book that addresses the ICT skills curriculum, nor is it a book for ICT teachers or experts (although it could provide some inspiration to even the most confident amongst us!). It is designed to help every teacher to use e-learning methods and techniques to make their lessons more fun, more creative, easier to prepare and to encourage improved learner engagement.

SO, WHAT IS IN THE HANDBOOK?

The main part of the book is devoted to practical ideas for using ICT in your classroom and has not been designed to be read from cover to cover – more as something to dip into for some instant ideas. The ideas used in this handbook are short and snappy and therefore easy to adapt, tweak, amend or expand in order to suit your students, curriculum and teaching context.

In this handbook you will find 8 grids, each dedicated to a separate core competence. These are:

1. communication in the mother tongue
2. communication in foreign languages
3. mathematical competence and basic competences in science and technology.
4. digital competence
5. learning to learn
6. social and civic competences
7. sense of initiative and entrepreneurship
8. cultural awareness and expression

The description you'll find under each of the core competences comes from the European Reference Framework on Key Competences for Life Long Learning published by the European Commission. For those of you who are interested in reading the complete document it can be found on The British Council website: <http://www.britishcouncil.org/sites/britishcouncil.uk2/files/youth-in-action-keycomp-en.pdf>

For each Competence we've selected 8 specific sub-competences composed of Knowledge (K), Micro Skills (MS) and Attitudes (A). These were selected by teachers from across Europe that are working on the Taccle2 project. Each row of the grid contains one of these specific sub-competences.

In the columns you'll find two levels based on the European Quality Framework for lifelong learning (EQF). This provides a common reference framework that assists in comparing the national qualifications systems, frameworks and their levels. It is a device created that aims to make qualifications more readable and understandable when applied to different countries. It could also be used to aid those moving to another European country in order to work or to study and to promote lifelong and life-wide learning in general. More advice can be found on the European Commission website <http://ec.europa.eu/eqf/>

¹ In this work we use both 'key competences' and 'core competences' – mainly to avoid sounding repetitious!

Our Level 1 encompasses EQF 3-4 which in most European countries corresponds with higher secondary education. Level 2 (EQF 5-6) corresponds in very broad terms with Bachelor degrees, Graduate diplomas and vocational higher education. This handbook doesn't include EQF 1-2 because primary education has its own handbook <http://taccle2.eu/news/taccle-primary-book-out-now>. We should also note that EQF 7-8, being equivalent to masters/doctorate level, falls outside the scope of the project and therefore isn't covered in this handbook either.

On the intersection of rows and columns we have suggested ideas aimed at helping you to target a particular competence on a particular level. If the idea is suitable for both levels this is clearly indicated on the grid. We've tried to give you an overview of the best web applications out there. All the tools are free of charge (at least in their basic version) and should work on different operating systems as most of them are browser-based. As ever, we **strongly** suggest that you visit and review the tools you plan to use and decide for yourself if they are suitable and/or appropriate for your learners and your particular teaching context – a subject, theme or article which may be perfect for one group of pupils or school may not be appropriate for another.

It goes without saying that these applications are only intended to support your teaching aims and should not be considered as end goal in themselves. In some countries core skills are taught implicitly and are therefore 'embedded' in broader, subject-specific activities; in which case distinguishing between the aim of the activity and the tool used to achieve it isn't usually a problem. The objectives of ANY idea you try out will be specific to you and the students you are teaching and will be related to your own scheme of work and, consequently, so will your assessment strategies. To clarify: although this book is not about on line tools per se it will definitely help you to expand your toolkit, thus giving you experience and mastery of even more on line resources that you can add to your existing teaching toolkit.

We've also added a short chapter on the accessibility of digital learning material and how you can improve the accessibility of your lessons in general. Of course it's impossible for every teacher to become a special needs specialist, but by taking into account a few principles and guidelines you can help make the activities you produce more accessible to more learners.

SO WHAT'S THE STORY BEHIND THIS HANDBOOK?

The launch pad for this new series was the popularity of the first TACCLE e-Learning Handbook for Teachers published in 2009. The original book covered the basics of e-learning practice, including how to use a basic toolkit of social software tools together with ideas for using them in the classroom, teacher-friendly explanations of some important issues underpinning e-learning (such as metadata, copyright, web 2.0 and web 3.0) and some basic skills teachers need to create learning resources. It also has a comprehensive glossary of terms and abbreviations related to e-learning. Print copies of the original handbook are still available in limited numbers in English, French, Dutch, Italian, Portuguese, and Spanish or they can be downloaded as pdf files at <http://www.taccle.eu/content/view/15/43/lang,en/>. If you live outside of these language communities there are also local translations in Arabic, Swazi and a few others.

The launch of the original TACCLE handbook was followed by a series of teacher training courses all over Europe. It was feedback from these courses that sowed the first seeds of the follow-up books. In particular, because the courses (and the original handbook) were targeted at secondary school teachers in general, the examples were generic and subject specialists found it difficult to apply them to their own discipline "Podcasting is great fun but you couldn't use it in Maths!"

THE TACCLE2 WEBSITE WWW.TACCLE2.EU

The Taccle2 website is an on line resource for teachers packed with instant ideas for using e-learning in the classroom. On the website, there is a designated area for activities dedicated to teaching key competences but you can also navigate by technology and by topic across the site. You can also search the tags – you never know what might turn up! The site contains complete lesson plans for teachers who are just starting to experiment with e-learning together with shorter posts on a much wider range of ideas for the more confident. Feel free to drop us a line and let us know what has worked, what hasn't and why! We look forward to reading your contributions! At the very least, please send us some examples of work that your class has produced so that we can use it to inspire others to have a go.

We would also encourage you to check out the other handbooks in this series - even the primary handbook could contain activities for younger secondary students or, with minor adjustments, activities from any of the handbooks could be appropriate.

Finally, we want to add a word of warning! E-learning is NOT the same as IT as a subject area and is not necessarily geared towards developing learners' ICT skills, although it will undoubtedly help. Nor does it automatically tick the box that says 'IT integrated across the curriculum' but is a big step towards it! This book is to help you, as a teacher, take the first steps in using technology as a routine part of your classroom practice. It is not another new initiative you have to take on board and it is not extra work or extra subject matter you have to squeeze in to your already over-crowded scheme of work. Most of the time, using e-technologies can actually save you time and energy and it can certainly go some way to saving your sanity with a class that just isn't responding to the old faithful methods and resources.

We are not pretending that e-learning is the answer to every teaching problem and it should not become the default for every occasion. It's fun, it's stimulating, it fires students' imagination and once you gain in confidence and fluency you'll wonder how you ever taught without it!

COMMUNICATION IN THE MOTHER LANGUAGE

COMMUNICATION IN THE MOTHER LANGUAGE	K= Knowledge S= Skill A= Attitude	LEVEL 1 EQF 3 – 4	
Communication in the mother tongue is the ability to express and interpret concepts, thoughts, feelings, facts and opinions in both oral and written form (listening, speaking, reading and writing), and to interact linguistically in an appropriate and creative way in a full range of societal and cultural contexts; in education and training, work, home and leisure.	1 Knowledge of functional grammar (K)	Check your grammar with GrammarBase.	
	2 Composing and structuring written texts (S)	Essay Map: an easy tool to structure your essay from ReadWriteThink.	
	3 Adapt communication according to the audience (S)	Write a story in pairs or groups and vote for the submissions you like best: Boomwriter.	
	4 Search for, collect and process information (S)	Discover, collect and share web content in a visually attractive manner Pearltrees.	
	5 Express oral and written arguments in a convincing way (S)	Instigate a discussion in response to a thought provoking video using Vialogues.	
	6 Critical reading (S)	Read a book or article using Curriculet. Answer questions and engage in discussions.	
	7 Distinguish and use different genres of text (S)	Use Scoop.it to collect web content on a certain topic and then zoom in on the different kinds of text.	
	8 Show an appreciation of aesthetic qualities and a willingness to strive for them (A)	Use purposeful tools to write a poem e.g. Tranquillity poet.	

LEVEL 2

EQF 5 – 6

Work on your Grammar (Basic, Intermediate or Advanced) with the Oxford English Grammar Course.

Use a mind mapping tool like MindMup to plan a writing task.

Create a radio show on Spreaker with a particular audience in mind.

Read, annotate, collect and tag useful info from the web with a social bookmarking tool like Diigo.

Respond politely to a previously recorded statement on audioBoom.

Create a class blog in WordPress or Blogger and encourage critical and constructive feedback.

Create a magazine with informative, descriptive, instructive and persuasive texts with Issuu.

Make sparkling writing even more beautiful with Notegraphy.

SOCIAL BOOKMARKING

Social bookmarking allows you to add, annotate, organize and share interesting resources on the web. You don't really collect the resources themselves but the URL that leads to them. This way you create a sort of mini-library in which you label every webpage with tags (key words). These tags make it easy to find the resources you need at a later stage.

It's possible to work together on these collections of resources. This makes the application powerful and social, but it also risks making the 'library' unclear. In this case it's a good idea to negotiate the tags you will be using. A communal list with tags is called a folksonomy*.

"Check out our example activity on page 24 to see how this works."

On the 'Make Use Of' website, Tim Brookes wrote an extensive comparison between Blogger and WordPress that is well worth a read:

<http://www.makeuseof.com/tag/blogger-vs-wordpress-comparision/>

* A folksonomy is a system of classification agreed collaboratively by a group of people working together. It is sometimes called collaborative tagging or social tagging.

COMMUNICATION IN FOREIGN LANGUAGES

COMMUNICATION IN FOREIGN LANGUAGES	K= Knowledge S= Skill A= Attitude	LEVEL 1 EQF 3 – 4	
<p>Communication in foreign languages broadly shares the main skill dimensions of communication in the mother tongue: it is based on the ability to understand, express and interpret concepts, thoughts, feelings, facts and opinions in both oral and written form (listening, speaking, reading and writing) in an appropriate range of societal and cultural contexts (in education and training, work, home and leisure) according to one's wants or needs. Communication in foreign languages also calls for skills such as mediation and intercultural understanding. An individual's level of proficiency will vary between the four dimensions (listening, speaking, reading and writing) and between the different languages, and according to that individual's social and cultural background, environment, needs and/or interests.</p>	1 Knowledge of vocabulary (K)	Find definitions and improve your English vocabulary with the Professor Word book-marklet.	
	2 Reading & understanding authentic texts (S)	Simplify what you're reading with Rewordify.	
	3 Self correction (S)	Develop your editing skills with the Hemingway app.	
	4 Initiate, sustain and conclude conversations (S)	Create cartoon dialogues using Wittycomics.	
	5 Interaction in the foreign language (S)	Practice with native speakers in the Livemocha community.	
	6 Understand authentic spoken messages (S)	Create transcripts of videos on videonot.es and share your notes through Google Drive.	
	7 Producing texts in the foreign language (S)	Choose a photoprompt that inspires you and start writing or create your own prompt with PicMonkey before sharing it with peers.	
	8 Show an interest and curiosity in intercultural communication (A)	Take a look at Fastenseatbelts and then create a short comic with Pixton to help people avoid cultural misunderstandings.	

LEVEL 2

EQF 5 – 6

Test your understanding of words using the adaptive application Vocabulary.com. Use the helpful functions (50/50, definition etc.) to support your understanding.

Collect and share articles related to a specific subject in your personal Flipboard magazine.

Use Storytoolz to analyze and improve your authoring skills.

Hold a Google Hangout with native speakers of the language you are learning.

Look for a perfect language match on Easy Language Exchange.

Add captions to YouTube videos to prove your understanding and make them more accessible.

Write stories in Medium.com and immediately connect with an audience.

Listen to people from all over the world telling stories on Cowbird. Respond with your own story.

“Adaptive means that the technology will provide different learning opportunities for different students based on their responses to questions and tasks.”

CONTENT CURATION

With the vast quantities of information available on line the process of selecting, organizing and displaying information relevant to a particular topic is becoming more and more important. As a teacher you are also a content curator and it's quite important for your students to discover the value of this concept.

On line newspapers and magazines curated by teachers and/or students are well suited to reduce the time sifting through on line information. Applications like Storify make it possible to create timelines using social media sources like Facebook and Twitter. Content curation and social bookmarking (CS1) often go hand in hand.

“Read our chapter dedicated to accessibility to make sure every learner can enjoy these learning activities.”

MATHEMATICAL COMPETENCE + BASIC COMPETENCES IN SCIENCE AND TECHNOLOGY	K= Knowledge S= Skill A= Attitude	LEVEL 1 EQF 3 – 4	
<p>Mathematical competence is the ability to develop and apply mathematical thinking in order to solve a range of problems in everyday situations. Building on a sound mastery of numeracy, the emphasis is on process and activity, as well as knowledge. Mathematical competence involves, to different degrees, the ability and willingness to use mathematical modes of thought (logical and spatial thinking) and presentation (formulas, models, constructs, graphs, charts). Competence in science refers to the ability and willingness to use the body of knowledge and methodology employed to explain the natural world, in order to identify questions and to draw evidence-based conclusions. Competence in technology is viewed as the application of that knowledge and methodology in response to perceived human wants or needs. Competence in science and technology involves an understanding of the changes caused by human activity and responsibility as an individual citizen.</p>	<p>1 Expand knowledge of technology and technological products and processes. (K)</p>	<p>Collect groundbreaking scientific or technological discoveries on List.ly and let the class (or the world) discuss what impact each might have on the natural environment.</p>	
	<p>2 Understand the impact of science and technology on the natural world. (K)</p>	<p>Get ideas from the Instructables website or app (android and iOS) and create your own product. Document your creation process with I Create to Educate or make your own Instructable.</p>	
	<p>3 Measurements: measure distance, weight, time, angles, temperature... (S)</p>	<p>Get information about all kinds of units with the UnitsMeasures from Wolfram Alpha and then practice conversions with the conversions module. The mobile choice: Amount for iOS and Unit Converter for Android.</p>	
	<p>4 Computational skills: basic operations, order of operations, use of percentages. (S)</p>	<p>Play Math Workout for Android and iOS and train your calculation skills every day.</p>	
	<p>5 Read, interpret and construct tables, charts and graphs. (S)</p>	<p>Come up with some good questions for your research topic, put a survey on line with Kwiksurveys and then create on line charts with Chartgo or Juice Labs.</p>	
	<p>6 Understand geometry: concepts of point, line, plane, parallel; basic properties of geometric figures, calculate simple perimeters, areas, volumes. (S)</p>	<p>Use Shmoop to learn all about geometry, make flashcards and complete exercises.</p>	
	<p>7 Develop the ability to use scientific data to achieve a goal or to reach an evidence-based decision or conclusion. (S)</p>	<p>Participate in real scientific projects on Scistarter or Zooniverse.</p>	
	<p>8 Develop an attitude of critical appreciation and curiosity. (A)</p>	<p>Get apps like SciFri and Mobento to fire your interest in science and technology! Create a magazine with your topics of interest using Joomag.</p>	

LEVEL 2

EQF 5 – 6

Read Gizmag for a few weeks, choose one of the newest discoveries/developments in technology and then write an article to explain what impact it could have on everyday life. Bring all articles together on a Weebly website.

Get going with the technology of 3D printing with the free 123D software web based tool or apps.

Practice estimating (and then check) with free map tools.

Come up with your own calculus questions and check your answers with wolfram widgets. Need tutorials first? Go to Khan academy.

Use Gapminder to comment on graphs, make your own graphs, find links, correlations etc.

Work together on an interactive map with Google Maps, examples here.

Use Google Public Data Explorer to answer your research questions.

Listen to the podcasts on Skepticity and discuss them on an embedded Disqus community.

MATHEMATICAL COMPETENCE + BASIC COMPETENCES IN SCIENCE AND TECHNOLOGY

“With a 3D printer you make a three-dimensional object from a 3D model by laying down successive layers of material.”

MOBILE LEARNING

Coffee on the go, a sandwich on the go... why not try learning on the go too? Mobile learning allows students to break out from their desks or from buildings altogether. Portable devices like smartphones and tablets make it possible for learning to occur anywhere - wherever there are problems to be solved there is knowledge to be shared!

The number of educational apps is growing rapidly so websites like the Educational App Store (<http://www.educationalappstore.com>) that offer an overview and evaluation of educational apps are a welcome aid for teachers that want to tap into the possibilities of mobile technology.

“If you already use another type of forum in your school, discuss the podcasts there. If you already have a discussion forum there’s no need to embed a Disqus forum on your classblog, website or LMS.”

DIGITAL COMPETENCE

DIGITAL COMPETENCE	K= Knowledge S= Skill A= Attitude	LEVEL 1 EQF 3 - 4	
<p>Digital competence involves the confident and critical use of Information Society Technology (IST) for work, leisure and communication. It is underpinned by basic skills in ICT: the use of computers to retrieve, assess, store, produce, present and exchange information, and to communicate and participate in collaborative networks via the Internet.</p>	1 Develop an understanding of the opportunities and potential risks of the Internet (K)	Use Telepathwords to check the safety of your passwords.	
	2 Summarize, synthesise ideas and make propositions (S)	On line collaborative mind-mapping with Coggle.	
	3 Produce & present complex information (S)	Edit & illustrate your data with infographics from Infogr.am or Visual.ly.	
	4 Support creativity (S)	Remix the web with Mozilla's Popcorn Maker.	
	5 Communicate (S)	Videochat directly from your browser with vLine or appear.in.	
	6 Collaborate (S)	Use Dropbox to share group and collaborative work effectively and easily.	
	7 Search, select and process information (S)	Play A Google a Day to brush up and expand your search skills.	
	8 A critical and reflective attitude towards information (A)	Evaluate a website with the Radcab framework.	

"These are new applications with webRTC technology which means you can videochat straight from your browser without installing software or plugins. Registration is optional. It is worth noting that this only works with Google Chrome, Mozilla FireFox and Opera."

LEVEL 2

EQF 5 – 6

Use the interactive case studies on the Digital Bytes website and become a critical digital citizen.

Deliberate and decide upon complex issues with cloud based DebateGraph.

Use Haiku Deck to help you present your information in a visually attractive way.

Create animated videos with Moovly.

Start a private or public community on Google+.

Work together on Google Drive to manage all documents and communication.

Face the difficult search challenges of Daniel M Russell in the Search Research blogspot.

Talk back to commercials with Mediabreaker.

DIGITAL CITIZENSHIP

Schools should help student to become digital citizens, in other words teachers have to make clear what is considered appropriate and responsible behaviour on line. This means they have to know about plagiarism and illegal downloads, but they also have to be able to take precautions to guarantee their personal safety.

Digital literacy is also a big component of digital citizenship. Students need to be able to effectively and critically navigate, evaluate and create information using a range of digital tools. They must also be aware that digital rights come hand-in-hand with digital responsibilities.

“Animation used to be very time consuming but new technologies are making it a relatively easy and quick process. A good alternative for Moovly is PowToon.”

LEARNING TO LEARN

LEARNING TO LEARN	K= Knowledge S= Skill A= Attitude	Level 1 EQF 3 – 4	
<p>Learning to learn is the ability to pursue and persist in learning, to organize one's own learning, including through effective management of time and information, both individually and in groups. This competence includes awareness of one's learning process and needs, identifying available opportunities and the ability to overcome obstacles in order to learn successfully. This competence means gaining, processing and assimilating new knowledge and skills as well as seeking and making use of guidance. Learning to learn engages learners to build on prior learning and life experiences in order to use and apply knowledge and skills in a variety of contexts: at home, at work, in education and training. Motivation and confidence are crucial to an individual's competence.</p>	1 Understand your own preferred learning strategies (K)	Create a Padlet wall to bring together as many learning strategies as you can think of.	
	2 Learning autonomously and with self-discipline (S)	Choose a programming language and learn how to code on Codecademy.	
	3 Planning (S)	Schedule all your meetings with Calendly.	
	4 Reflect critically on the purposes and aims of learning (S)	Use an ePortfolio like	
	5 Self-assessment (S)	Practice with existing flashcards or create your own with Quizlet.	
	6 Seek advice, information & support when necessary (S)	Ask your questions on Open Study, a free on line community of students.	
	7 Work collaboratively and share what you have learnt (S)	Learn from your peers or teach them something you know with Stoodle.	
	8 Actively employ a problem solving attitude (A)	Check out LessonPaths or Gooru in your search for answers to difficult questions.	

Level 2 EQF 5 – 6

Take a note in Evernote every time a certain learning strategy proves successful.

Start from simple math and become a rocket scientist through self-study on Khan Academy.

Use Remember the Milk to manage all your tasks from all your devices.

Dropr, FolioFor.me or Pathbrite.

Create, publish, share and take tests on the Gnowledge website.

Create a Facebook Group with your classmates to exchange info and support.

Write collaboratively and weave the best parts together in a final text with Mixedink.

Use your PLN on Twitter to find answers with the hashtag #daretoask

“The well-known tutorials that made Salman Khan famous are just a part of the Khan Academy’s adaptive assessment environment.”

“If Facebook is not allowed in your school, have a look at Edmodo which is very similar but is specifically designed with education in mind.”

PROFESSIONAL LEARNING NETWORK

Through a PLN you can connect with experts in your field and colleagues from all over the world. This allows you to build global relationships and work on your professional development.

If you want to join a weekly discussion on educational technology try #EdChat & #EdTech. To get a complete overview of twitter hashtags for education, check out <http://www.teachthought.com/twitter-hashtags-for-teacher>. To get started with Twitter, watch the video on <http://goo.gl/xbHFHq>

SENSE OF INITIATIVE AND ENTREPRENEURSHIP

SENSE OF INITIATIVE AND ENTREPRENEURSHIP	K= Knowledge S= Skill A= Attitude	Level 1 EQF 3 – 4	
<p>Sense of initiative and entrepreneurship refers to an individual's ability to turn ideas into action. It includes creativity, innovation and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives. This supports individuals, not only in their everyday lives at home and in society, but also in the workplace in being aware of the context of their work and being able to seize opportunities. This is also a foundation for more specific skills and knowledge needed by those establishing or contributing to social or commercial activity. This should include awareness of ethical values and promote good governance.</p>	1 Awareness of the ethical position of enterprises (K)	Get inspired by GoodGuide and create advertisements with Pixlr that are honest and impartial.	
	2 Project based approach (S)	Create an interactive story or game with Scratch from MIT.	
	3 Collaboration (S)	Organise tasks, files and projects with Azendoo.	
	4 Lead and delegate (S)	Use RealtimeBoard to manage your project on line.	
	5 Taking initiative and responsibility (S)	Gather a team around you and develop an app with TouchDevelop.	
	6 Competing (S)	Collect ideas on Tricider and let your peers vote for the ones they like best.	
	7 Risk taking (S)	Use Popplet to brainstorm and make sure that different approaches and ideas are valued.	
	8 Motivation and determination to meet objectives (A)	Create a to-do list with Wunderlist and sync it across all your devices.	

Level 2 EQF 5 – 6

Discuss the ethics of everyday products on Soundcloud. Label the products with QR codes that link to the recording.

"To read QR codes you need a QR reader on your smartphone or tablet."

Organise your project by creating your first on line Gantt chart with Tom's Planner.

Collaborate and communicate with your class/team with LiveMinutes.

Track what your 'team' is working on via Catchapp.

Start a campaign on Causes and try and change the world for the better!

Play Startup Spirits and become the new Steve Jobs while competing with your friends.

Start a (small) project with your class and try to get it funded on Kickstarter.

Chains.cc: set goals and show your determination not to break the chain.

PROJECT BASED LEARNING

Project-based learning lets students work on real-world problems and challenges. Usually the students work in small collaborative groups and they have to take a lot of decisions themselves. The result is often presented in front of an audience that also encompasses people from outside the class.

To complete their projects students need to organise their own work and communicate with the outside world. Project based learning usually offers many opportunities to integrate technology into schools. A relevant problem or challenge can encourage students to explore, investigate and better understand the world they live in.

"In 2013 3 million people pledged 480 million dollar to Kickstarter projects. Almost 20 000 of these projects reached their target. "

CULTURAL AWARENESS AND EXPRESSION	K= Knowledge S= Skill A= Attitude	LEVEL 1 EQF 3 – 4	
Appreciation of the importance of the creative expression of ideas, experiences and emotions in a range of media, including music, performing arts, literature, and the visual arts.	1 Awareness and understanding of your own cultural heritage (K)	Explore where you live and contribute a photo to the Historypin community.	
	2 Understanding the cultural and linguistic diversity in Europe and the world (K)	Create a tag cloud with Wordle with the same word in at least 20 different languages.	
	3 Understanding the importance of aesthetic factors in daily life (K)	Create a Pinterest board with images of beautiful/ surprising landmarks, events etc. in your neighbourhood.	
	4 Basic knowledge of major cultural works, including popular contemporary culture (K)	Explore Van Gogh's masterpieces on Android tablet or iPad with Touch Van Gogh.	
	5 Consuming and appreciating cultural products (S)	Create your own gallery in the Google Arts project.	
	6 Sharing and discussing opinions on cultural expression with others (S)	Find an outspoken art review on the internet and put it on the Branch website to instigate a discussion.	
	7 Being able to express oneself through a variety of creative media (S)	Create beautiful picture books with Storybird.	
	8 Appreciating and respecting cultural, linguistic, ethnic and religious diversity (A)	Use What We Watch to see which videos are trending in different countries and try to find out why.	

DIGITAL STORYTELLING

In a digital story you combine narrative with digital components like images, audio and video. These stories are often shared on line in order to attract a larger audience. The stories range from simple slides with narration to highly interactive videos. Because the resources available to the storyteller are almost limitless, the creative possibilities are equally impressive. There are many free tools available on the Internet to unleash that productive potential. Aside from Storybird you can try Narrable, Inklewriter, Map Tales, Make Belief Comix, Powtoon or Wideo.

LEVEL 2
EQF 5 – 6

CULTURAL AWARENESS AND EXPRESSION

Create a Story map of an interesting place in your country. Add text, photos and video.

Upload a video from the Unesco World Heritage YouTube channel to Voicethread and use it to discuss cultural diversity.

Upload an image (picture, map, work of art) of your city in Thinglink and add aesthetic ideas for improving the local environment.

Take an image of a cultural work you admire and bring it to life with the augmented reality platform Aurasma.

Create a Prezi presentation for your favourite cultural work.

Write your own review on a Tackk webpage, share it and invite feedback from others.

Design flyers, posters, presentations, invitations and lots more with Canva.

Use Movenote to explain how a religious work of art illustrates theological concepts of that religion.

“Check out the Heilbrunn timeline of Art History of the Metropolitan Museum in New York (<http://www.metmuseum.org/toah>) for a complete overview of art history.”

“Look for inspiration on the world religions in Art website (<http://www.artsmia.org/world-religions>) of the Minneapolis Institute of Art.”

SOCIAL AND CIVIC COMPETENCE

SOCIAL AND CIVIC COMPETENCE	K= Knowledge S= Skill A= Attitude	Level 1 EQF 3 - 4	
<p>These include personal, interpersonal and intercultural competence and cover all forms of behaviour that equip individuals to participate in an effective and constructive way in social and working life, and particularly in increasingly diverse societies, and to resolve conflict where necessary. Civic competence equips individuals to fully participate in civic life, based on knowledge of social and political concepts and structures and a commitment to active and democratic participation.</p>	1 Understanding of how individuals can ensure optimum physical and mental health (K)	Play the Health Month game to improve your health and have some fun at the same time.	
	2 Knowledge of contemporary events, as well as the main events and trends in national, European and world history (K)	Create a timeline with Dipity to gain insight in the events that shaped national, European and world history.	
	3 Knowledge of social and political concepts (K)	Play NationStates and see what kind of country your decisions would create.	
	4 Co-operating as a team (S)	Work & write together with your fellow students in a simple cloud based word processor like Scrawlar.	
	5 Conflict treatment and resolution (S)	Use Narrable to describe a potentially inflammatory situation and your steps to defuse the conflict.	
	6 Participate in social and working life in an effective and constructive way (S)	Play Poverty is not a Game, a simulation of what happens when you have to fend for yourself.	
	7 Awareness of ethical values (A)	Think of the environment and use Print Friendly whenever you want to print from the web.	
	8 Show a willingness to participate in democratic decision-making at all levels (A)	Use Student Response System Socrative to give students a taste of democratic decision-making.	

"Another example of a Student Response System is Kahoot."

Level 2 EQF 5 – 6

Watch the Explania Health Channel for tips on healthy living and create a similar video using Wideo.

Use the Newsy approach (one topic, different sources) to create an on line newspaper about current events with Paper.li.

Use Glogster to create digital posters about political and social concepts.

Start a group in Wiggio to communicate, share files and manage to-do lists.

Play the PeaceMaker Game and attempt to solve the conflict in the Middle East.

Play Spent, an interactive game that shows you what it means to live on a very tight budget.

Play Quandary and help the planet Braxos when the inhabitants face difficult ethical decisions.

Make a change in your community: play the Activate Game from the iCivics website.

GAME BASED LEARNING

Game based learning (GBL) describes an approach to teaching where students explore relevant aspects of games in a learning context designed by teachers. To make game-based learning effective, you work toward a goal, choosing actions and experiencing the consequences of those actions along the way.

A big advantage is that you can make mistakes without taking risks. Although similar, gamification is a different kind of learning experience. Gamification takes game elements (such as points, badges, leaderboards, competition, achievements) and applies them to a non-game setting.

“Be aware that this game can provoke heated discussions, take your time to explain the goals behind the game.”

EXAMPLE ACTIVITY

CREATING A RADIO SHOW ON SPREAKER WITH A PARTICULAR AUDIENCE IN MIND (CS1)

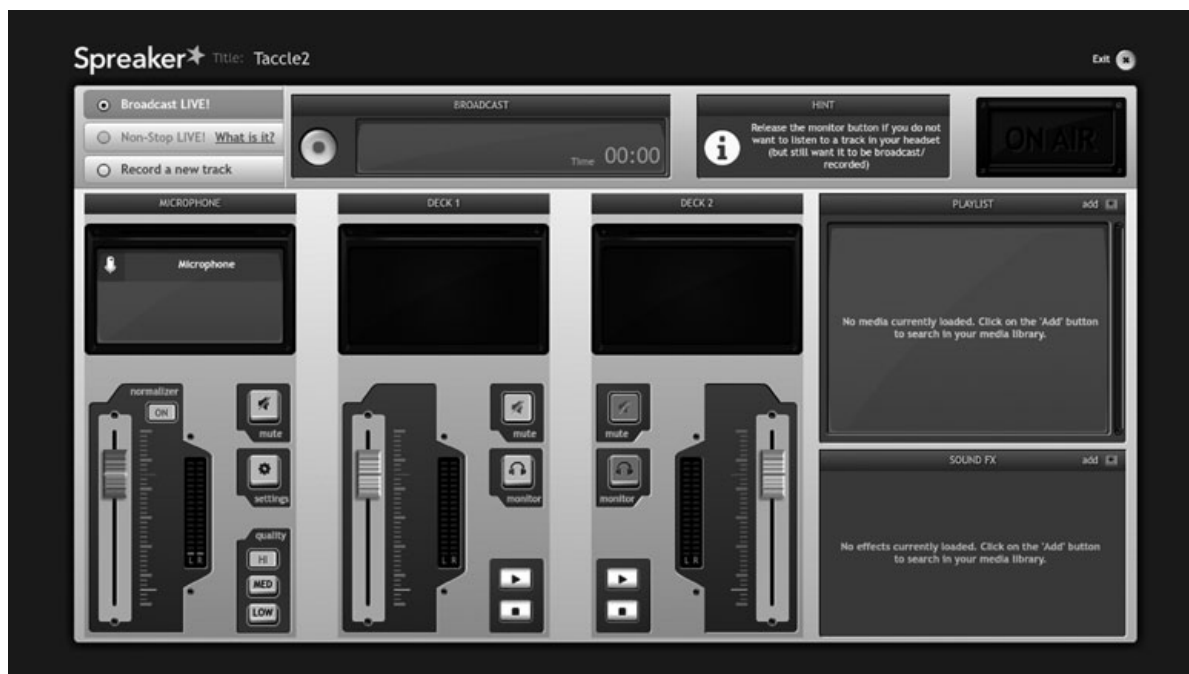
The subject of your radio show could be anything from science to Spanish but it's also an excellent opportunity for students to adapt that which they wish to communicate so that it reflects the needs and expectations of their chosen audience. Are they talking to parents, fellow students, the school, the neighbourhood or whole the world?! Whilst the aim is to tailor-make a radio show for a specific target group, students should not be afraid to challenge the audience whilst, at the same time, being respectful and considerate.

www.spreaker.com provides a platform on which it is possible to produce an Internet radio show. In other words, you can use it to record, publish and share audio clips with listeners and/or followers. Of course you can upload an audio file recorded in advance, but the real fun starts when you decide to make a podcast in the console and, if you're feeling bold, you can also decide to go live with your own radio show.

Spreaker requires a registration and a few moments to fill in your profile settings. Your 'free Speech' account is worth 10 hours and each episode is limited to 30 minutes (which is more than enough!). When you're ready, click Create to start working on your radio show.

If you choose 'Broadcast', Spreaker will ask you to give a title to your show. Click next and allow the system to access your microphone. This will bring you to Spreaker's recording console where anyone can talk and mix like a real deejay.

It's a bit strange, but the buttons to add audio clips to the console are rather small. Because we're beginners let's opt for 'Record a new podcast' instead of 'Broadcast LIVE!' in the top left hand corner. Here we can upload a few audio clips that we want to use in our podcast/show. These clips can be music files, recorded interviews, sound effects etc. Click 'add' on the 'Playlist' window on the right.



Spreaker will immediately give you some examples of music fragments that are free from copyright. You can upload your own clips, but always keep copyright² in mind. The Spreaker library is rather limited, so have a look at sites like Jamendo where you can listen to and download 370 000 songs that are both free of charge and legal to use. We especially like Free Music Archive, a site from an American radio station (WFMU) that was inspired by the open source movement and Creative Commons. It's still in beta, but works fine.

² You can find further guidance on copyright by visiting www.taccl2.eu

In Spreaker, all the clips you upload will be visible in the list. If you click on an artist and then select one of his/her albums all the songs in that album appear. You can listen to the songs and if you like them add them to your playlist. It makes it easier to have the songs and audio clips ready in your playlist before you start recording but it is possible to add new ones along the way. In the Sound FX window under the playlist you can add various effects in exactly the same way. These effects can give your recording a real professional touch.

When everything is ready, close the window used to add the music and/or effects. Just click the small icon on the top right and your back in the console. Drag the audio clips from your playlist to the decks in the console. Click the record button (start with a jingle or an effect) and bid your listeners welcome! Switch between the decks and the microphone to make an engaging recording. If you're making a longer episode (+15 min) it's quite possible that you'll have to allow a commercial break (nothing is ever really free). In the 'Commercial Break' window you'll see a timer that warns you how much time you have left before the break.

If your podcast/radio show is ready, it's time to share. Of course people can find it on the Spreaker website, but you can also add a player to Facebook or copy the embed code and paste it in a class blog or website. You can also send e-mail with a link and invite people to listen to the show.

Making a radio show is great fun and it motivates students to have this connection with the outside world. By targeting a specific audience the teacher encourages students to concentrate on adapting communication in certain settings and in doing so gives them a genuine context in which to master an important micro skill.

ACCESSIBILITY

Reserved parking spaces, ramps for wheelchair users, guide dogs, sign language interpreters and television subtitles are all familiar examples of ways in which life is made more accessible to those with disabilities. As well as making everyday life more accessible, these examples (and others like them) are important both morally and socially because they promote inclusion and equality in a world where the demands of the majority often take precedence. But did you ever think of checking your (e-)courses on "accessibility"? More and more learners are becoming engaged in e-learning and among them there is a significant number with additional educational needs (AEN). Digital learning resources and web-based learning environments should support the learning process and not create additional barriers for users with AEN. There are many specific AEN, each with their own set of specific teaching and learning requirements. We won't try to address the full range of access issues and the whole gamut of possible differentiation solutions, but maybe the following suggestions can help us tackle some of the most common accessibility issues. These suggestions have been made by experienced teachers with experience of teaching students with a range of AEN in a range of contexts. However, we must recommend that you seek advice regarding any new strategy that you wish to use in class with the relevant department or people e.g. your AEN Co-ordinator, AEN Advisory Team BEFORE using it with students. Remember, using the wrong strategy can cause more problems than using none at all – ALWAYS get advice.

HEARING IMPAIRMENT

Without too much sweat, you can subtitle YouTube videos within YouTube itself or for example with CaptionTube. Something a little more far-reaching is "captioning". Captions aim to describe all significant audio content, spoken dialogue and non-speech information, such as the identity of the speakers, their manner of speaking, intonation etc. along with any significant music or sound effects using words or symbols. A free program designed to add captions to videos with accessibility in mind is MAGpie. This program can export captions to different formats like Microsoft SAMI, SMIL (Quicktext of RealText) en W3C DXFP. Help on how to use this program is available on the NCAM website http://ncam.wgbh.org/invent_build/web_multimedia/tools-guidelines/magpie2helpcontents. A visit to www.dcmp.org - a lending library with access to over 4000 captioned educational media - can be worthwhile too. Students who aren't suited to auditory learning will benefit as well as those with a hearing impairment.

Vision impairments

(The following may also be beneficial to learners with dyslexia)

For visually impaired students it's important that you keep the display of information uncluttered and/or the layout consistent from one page to the next. This will increase the effectiveness of screen readers like JAWS, Natural Reader, Voice Over or Dspeech.

MS Word

- use “styles” for titles and other headers
- for text in columns, don't use a table, but use “columns” under “page layout” and provide sufficient white space
- use relative font sizing and sans-serif typefaces, using upper and lower cases is more readable than italic, oblique or condensed formats
- add “alt text” to your graphics: “format” à “size” à “alternative text”
- use proper punctuation
- KISS: keep it short and simple, sentences of 15 words and paragraphs of 4 sentences are ideal
- hypertext links: highlight the link, right click, a dialogue box will open that allows you to substitute the web address with text
- Word can check your documents on accessibility. Go to File<Info and choose under the ‘Check for issues’ button ‘check accessibility’. Word will point out accessibility issues and give you tips and warnings. This only works in the 2010 and 2013 versions of Microsoft Office.

PDF

- if you prefer PDF formats, save your accessible Word document as .pdf, click “options” and tick the box for “document structure tags for accessibility”
- when using existing PDF documents in your course, check their accessibility with the PDF accessibility checker from the Swiss organization Zugang für alle

Presentations

- don't overload the slides with text
- minimum 24pt font size at 100% zoom
- use the provided designs
- when you use colour, check how it will look to a person with colour blindness through the Visccheck website www.vischeck.com
- don't use light colours for the background, they can have a flickering effect
- Eric Meyers S5 and HTMLSlidy (web-based) are very good programs to create accessible presentations

Consider converting all your text materials or documents to HTML. It allows screen readers to read out underlying formatting, which may be an aid to navigation.

Provide auditory comments at crucial points in the course e.g. instructions for assignments and tests, a short synopsis or podcast at the end or the beginning of a new chapter.

Video

Providing audio description with a video can be very helpful in some contexts. Audio description is a description of all relevant image of a video speech. Audio description can include information about actions, characters, body language, backgrounds, sets and on-screen text and graphics at points where the original sound of the video is not descriptive enough for students to follow. Doing this yourself is not easy but you can give the following method a try. When using the JW FLV Player audio description exists simply from an MP3 file. This can be made with any program that can record audio and save as MP3, such as Audacity (for Windows, Macintosh and Linux). Especially for longer videos, it is best if the sound can be directly recorded in sync with the picture and sound of the video. A simple program like Windows Movie Maker (bundled with Windows XP or newer) or iMovie (bundled with Mac OS X) will do. After the audio description is recorded as an MP3 file, it can be added to the JW FLV Player with a single line.

EPILEPSY AND RELATED CONDITIONS

Flickering and flashing images should be avoided. They can result in seizures. This is the case with flashes and flickering in the 2-55 Hz range.

The Trace Center's **Photosensitive Epilepsy Analysis Tool (PEAT)** is a free, downloadable resource to identify seizure risks in web content and software. The evaluation used by PEAT is based on an analysis engine developed specifically for web and computer applications. PEAT can help determine whether animations or video are likely to cause seizures. Not all content needs to be evaluated by PEAT, but content that contains video or animation should be evaluated, especially if that content contains flashing or rapid transitions between light and dark background colours.

Learners who are easily distracted (students with ADD or ADHD for example), often find it hard to concentrate on the content if there are distracting blinking screens and moving graphics.

Here are some rules of thumb for accessibility when creating an on line course

- avoid graphics as buttons, but if must use them, include an ALT tag that describes the function of the button
- provide auditory comments at crucial points in the course: instructions for assignments and tests, a short synopsis or podcast at the end or the beginning of a new chapter
- provide information about the general layout of the course and use navigation mechanisms consistently
- include a bibliography or 'link list' to sites and on line tools used to create the course. For example, if they are learning about Pythagoras' Theorem you may want to include a link to his biography or other sites of interest. Include a 'blurb' with the link so that students know they will be directed to a different site and what they can find once they get there.
- test your website, course or linked web pages by using a "text only" browser (like Webbie) or a standard browser with graphics and sound-loading features turned off
- include an alt tag with all graphics
- encourage users to adjust font size to suit them
- when using chat or discussion features, post a text log file

Assistive Technology

If you want to try out some of the available (free) assistive technology or want to help your students to find technology adjusted to their needs, try these links:

<http://access.uoa.gr/ATHENA/eng/pages/home>
http://wac.osu.edu/conferences/emrc08/free_at.html
<http://www.jisctechdis.ac.uk/techdis/technologymatters/FOSS>
<http://udltechtoolkit.wikispaces.com/Home>

SOURCES:

<http://www.jisctechdis.ac.uk/techdis/home>
<http://www.kuleuven.be/diversiteit/digitaletogankelijkheid>
http://www.vita.virginia.gov/uploadedfiles/vita_main_public/unmanaged/library/accessibility/developingaccessibility-learning.pdf
<https://www.norquest.ca/NorquestCollege/media/pdf/centres/learning/Accessibility-to-E-Learning-for-Persons-With-Disabilities-Strategies,-Guidelines-and-Standards.pdf>
<http://webaim.org/>
<https://www.accessibility.nl/>

123D	http://www.123dapp.com/design
Activate Game	https://www.icivics.org/games/activate
A Google a day	http://www.agoogleaday.com
appear.in	https://appear.in
audioBoom	https://audioboom.com
Aurasma	http://www.aurasma.com
Azendoo	https://www.azendoo.com
Blogger	https://www.blogger.com
Boomwriter	http://boomwriter.com
Branch	http://branch.com
Calendly	https://calendly.com
Canva	https://www.canva.com
Catchapp	https://getcatchapp.com
Causes	https://www.causes.com
Chains.cc	https://chains.cc
Chartgo	http://www.chartgo.com
Codecademy	http://www.codecademy.com
Coggle	https://coggle.it
Cowbird	http://cowbird.com
Curriculet	https://www.curriculet.com
DebateGraph	http://debategraph.org
Diigo	https://www.diigo.com
Digital Bytes	http://digitalbytes.commonsensemedia.org
Dipity	http://www.dipity.com
Disqus	https://disqus.com
Dropbox	https://www.dropbox.com
Dropr	http://dropr.com
Easy Language Exchange	http://www.easylanguageexchange.com
Essay Map	http://www.readwritethink.org/files/resources/interactives/essaymap
Evernote	https://evernote.com
Facebook	https://www.facebook.com
Flipboard	https://flipboard.com
FolioFor.me	http://foliofor.me
free map tools	http://www.freemaptools.com
Gapminder	http://www.gapminder.org
Glogster	http://edu.glogster.com
Gnowledge	http://www.gnowledge.com
Google Arts project	http://www.google.com/culturalinstitute/project/art-project
Google Drive	https://drive.google.com
Google Hangout	http://www.google.com/hangouts
Google Maps	https://www.google.com/maps
Google Public Data Explorer	http://www.google.com/publicdata/directory
Google+	https://plus.google.com
Gooru	http://www.goorulearning.org
GrammarBase	http://www.grammarbase.com
Haiku Deck	https://www.haikudeck.com
Health Month	http://www.healthmonth.com
Hemingway app	http://www.hemingwayapp.com
Historypin	http://www.historypin.com
I Create to Educate	http://icreatetoeducate.com
Infogr.am	http://infogr.am
Issuu	http://issuu.com
Joomag	http://www.joomag.com
Juice Labs	http://labs.juiceanalytics.com/chartchooser
Khan Academy	https://www.khanacademy.org
Kickstarter	https://www.kickstarter.com
Kwiksurveys	http://kwiksurveys.com
LessonPaths	http://www.lessonpaths.com

List.ly	http://list.ly
LiveMinutes	http://liveminutes.com
Livemocha	http://livemocha.com
Math Workout	Android + iOS
Mediabreaker	http://thelampnyc.org/lamplatoon/oven
Medium	https://medium.com
MindMup	http://www.mindmup.com
Mixedink	http://www.mixedink.com
Moovly	http://www.moovly.com
Movenote	https://www.movenote.com
Narrable	https://narrable.com
NationStates	http://www.nationstates.net
Notegraphy	https://notegraphy.com/
Open Study	http://openstudy.com
Oxford English Grammar Course	https://elt.oup.com/student/oxfordenglishgrammar
Padlet	http://padlet.com
Paper.li.	http://paper.li
Pathbrite	http://pathbrite.com
PeaceMaker Game	http://www.peacemakergame.com
Pearltrees	http://www.pearltrees.com
photoprompt	http://photoprompts.tumblr.com
PicMonkey	http://www.picmonkey.com
Pinterest	https://www.pinterest.com
Pixlr	http://pixlr.com
Pixton	http://www.pixton.com
PopcornMaker	https://popcorn.webmaker.org
Popplet	http://popplet.com
Poverty is not a Game	http://www.povertyisnotagame.com
Prezi	http://prezi.com
Print Friendly	http://www.printfriendly.com
Professor Word	http://www.professorword.com
QR codes	http://www.fancyqrcode.com
Quandary	http://www.quandarygame.org
Quizlet	http://quizlet.com
Radcab	http://www.radcab.com
RealtimeBoard	https://realtimeboard.com
Remember the Milk	http://www.rememberthemilk.com
Rewordify	http://rewordify.com
Scistarter	http://scistarter.com
Scoop.it	http://www.scoop.it
Scratch	http://scratch.mit.edu
Scrawlar	http://www.scrawlar.com
Search Research blogspot.	http://searchresearch1.blogspot.be
Shmoop	http://www.shmoop.com/basic-geometry/topics.html
Socrative	http://www.socrative.com
Soundcloud	https://soundcloud.com
Spent	http://playspent.org/playspent.html
Spreaker	http://www.spreaker.com
Startup Spirits	http://startupspirits.dk
Stoodle	http://stoodle.ck12.org
Story maps	http://storymaps.arcgis.com
Storybird	https://storybird.com
Storytoolz	http://storytoolz.com
Tackk	https://tackk.com
Telepathwords	https://telepathwords.research.microsoft.com
Thinglink	https://www.thinglink.com
Tom's Planner	http://www.tomsplanner.com
Touch Develop	https://www.touchdevelop.com

Touch Van Gogh	Android + iOS
Tranquillity poet	http://tranquillpoet.com
Tricider	https://tricider.com
Twitter	https://twitter.com
Vialogues	https://vialogues.com
videonot.es	http://www.videonot.es
Visual.ly	http://visual.ly
vLine	https://vline.com
Vocabulary.com	http://www.vocabulary.com
Voicethread	http://voicethread.com
Weebly	http://www.weebly.com
What We Watch	http://whatwewatch.mediameter.org
Wideo	http://wideo.co
Wiggio	http://wiggio.com
Wittycomics	http://www.wittycomics.com
Wolfram Alpha examples	https://www.wolframalpha.com/examples
Wolfram widgets	http://www.mrbartonmaths.com/wolfram.htm
Wordle	http://www.wordle.net
WordPress	https://wordpress.com
Wunderlist	https://www.wunderlist.com
YouTube	https://www.youtube.com
Zooniverse	https://www.zooniverse.org

CONCLUSION

The concept of a core or key competence has been introduced in management theory as an approach to identity. A business must be able to rely on core competences to define its existence in a larger environment. Extreme decentralisation makes it difficult to do so as the organisation becomes increasingly dependent on external resources and services. Core competences, in that sense, are the collective learning in the organization - co-ordinating different skills and integrating multiple streams of information and decisions.

From this perspective, core competences at the different stages of lifelong learning are the collective learning of humans: the skills, competences and abilities that define who we are and how we create our future. Their importance, therefore, cannot be overstated. Acquiring them is essential in order for us to successfully participate in society.

The human race is diverse, as is the learning processes of each individual human. Being able to foster and nourish core competences in the context of different study subjects is therefore essential - even more so than the matter and learning outcomes at hand. But if the core competences are more important than subject matter, how do we go about nurturing and developing them without disrupting the normal learning and teaching processes which predominantly focus on subject matter and knowledge as an end goal? That is the question this book has tried to answer, pointing at the increasing range of great on line tools available that can develop students' key competences as they learn in every area of the curriculum.

These new tools will change the role of the teacher and require him or her to invest in diagnostic teaching and to learn which core competences are required for their courses, which tools are available, how they work, and how learners can use them most effectively. Teachers of all disciplines want to help students develop skills, attitudes and knowledge that will give them a flying-start in life and we hope that this handbook can help them do this in a way that is fun, innovative and interesting for everyone involved!

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Teaching has always been a challenging (albeit gratifying) profession and the demands on teachers are ever-increasing. In the last decade you have probably been asked (amongst many other things) to personalise learning, to integrate technology in and outside the classroom and to focus on core competences while working with your students. This all sounds great and will undoubtedly benefit students... but where do you start?

The Taccle2 handbook on Core competences might be the right place to do just that. In it you'll find in excess of 100 short activities and ideas to implement the 8 Key Competences in your teaching practice. The vast majority of the suggested activities are student-centered so learners will have to roll up their sleeves and truly engage! This, we hope, enables them to move from being consumers of information technologies to being active on line prosumers.

Teachers from 7 European countries identified what they considered to be the most important knowledge, skills and attitudes within the Key Competences. They then looked for ways to help students develop their own personal skills, attitudes and knowledge in these areas. Every activity contains at least one (but often two or even more!) recommended digital applications or resources. Therefore, the really curious amongst you could, technically, explore over 150 different on line applications and resources thus giving you a great overview of the educational opportunities that information and communication technologies now have to offer.

Tacple2 is a project funded by the EU under its Lifelong Learning Programme. The key competences handbook is one in a series of five. Although this book is not a step-by-step guide, we feel confident that any teacher with a passion for teaching will discover many activities and applications that will enhance and enrich their current practice.

So give it a GO! and remember to let us know what you think at www.tacple2.eu