

TOTCOOP
+iTech

*“Technology for Training innovation in the
European Agri-food Cooperatives of the
digital era”*

KA2 Strategic Partnerships in the field of VET.

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Best Practices in Learning Innovation



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Foreword:

The ToTCOOP+i_Tech Project 2018-2020 is a continuation of the ToTCOOP+i Project (A Strategic Partnership for Innovating the Training of Trainers of European Agri-Food Co-operatives).

It is a collaboration of seven partners from six European countries which aim to strengthen and adapt to the digital era, the pedagogical, methodological and procedural capabilities of the trainers of associations or organisations that offer training and consulting services to agri-food co-operatives.

The partnership is made up of associations and organisations representing the agri-food co-operative sector. Partner organisations include:

1. **AGACA** – the Galician Association of Rural Cooperatives in Spain.
2. **Changemaker AB** – a consultancy organisation in Sweden.
3. **Grifo-multimedia**, S.r.l. – a technology organisation in Italy.
4. **ICOS** – the Irish Co-operative Organisation Society in Ireland.
5. **LLKC** – the Latvian Rural Advisory and Training Centre in Latvia.
6. **MedAtlantia** – a consultancy organisation in Spain.
7. **SNRSS** – the Association of Social Cooperatives in Poland.

The ToTCOOP+i_Tech Project aims to continue fulfilling the needs of the sector by improving the current training offer delivered by partners to the directors of the Agri-Food Co-operatives.

General Objectives of the Project

1. To transform the current offer of Continuing Vocational Training in the co-operative sector at EU level into exceptional training based on the use of technology and in the new models of the digital era.
2. To strengthen the capabilities of Business Administration of the Board of Directors, Members from agri-food co-operatives, through their direct involvement in the training process.

The Project Beneficiaries

The project is aimed at managers and trainers of the participating organisations, associations of rural co-operatives, public entities at local/regional/national level, young people working in the co-operative sector, members of small and medium of agri-food cooperatives, managers of social co-operatives and their associated directors.

The ToTCOOP+i_Tech Project 2018-2020 is funded by Erasmus +, the main EU programme in the field of Education and Vocational Training.

The Expected Results

The project aims to deliver several resources to support the transfer of knowledge amongst the beneficiaries of the project. These include:

- ✓ 1 x Infographic Handbook of innovative technological resources for training (with, at least, 10 digital learning tools included)

- ✓ 1 x Handbook of Best Practices in Learning Innovation

- ✓ 10 x Video materials, as interactive training materials in digital environment to be used to support the trainer in their face-to-face classes

- ✓ 1 x digital serious game, with 50 boxes of knowledge activities (5 boxes for each one of the 10 Didactic Unit developed by ToTCOOP+i Project)

- ✓ 1 x Didactic App for smartphone, based on gamification

- ✓ 10 x Gamification tools for training assessment (1 for each Didactic Unit)

- ✓ Technological tools contents translated to Spanish, Polish and Latvian

This handbook is a collaboration of best practices in learning innovation identified across all six partner countries.

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Introduction

In a world where technology is rapidly advancing and where learners are overloaded with information from a variety of sources, both internal and external to agricultural co-operative organisations, it is imperative that learning initiatives are also adapted to meet the ever-changing demands and expectations of learners.

The workforce landscape is evolving faster than ever and learners' expectations, training needs, and learning preferences are diverging from the traditional training initiatives previously offered. Time in particular, has become a significant obstacle in the world of learning and development. People are busy, they multi-task, and work from anywhere, including mobile devices.

Additionally, we see the emergence and continued rise of the gig economy as one of the most progressive industries, in the world of work. Agricultural co-operatives are no different when it comes to their people development considerations.

As learning & development professionals, we must always be looking out for ways to help our employees to continue learning in this fast-paced work environment. We need to focus on converting successful instructor-led learning experiences into innovative solutions that can reach more people simultaneously and that creates better accessibility to learning initiatives for learners.

In essence, this means trying to re-design learning experiences, into smaller byte size chunks, that includes as much as possible all the benefits of the classroom, the interaction with tutors and peers including the use of more collaborative tools, and adaptation of content to the needs of the learners as they arise.

This handbook of best practices aims to outline what tools and strategies are available to support learning innovation, with a view of meeting the needs and expectations of learners.



Designing the Learning Environment

A pivotal element in the process of learning transfer is the consideration of the learning environment. In traditional environments, we are used to classroom style rows and although we may set the room up in a U-shape, it still hinders true collaborations amongst learners.



As such to foster an environment that promotes innovative learning, it is essential we do things differently. The classroom design needs to stimulate creativity and thinking and allow for collaborative learning. The use of round tables instead of rows, enables natural discussion and group interaction.

Similarly, the construction of the environment could add positively to the learning experience, by allowing for additional collaborations and creative thinking, through having things like walls that allow for writing on for creating mind maps, brainstorming and group reflections.



Learning Design

*“Education is the foundation of our economy. What (and how) we learn determines who we become as individuals and our success throughout our lives. It informs how we solve problems, how we work with others, and how we look at the world around us. In today’s innovation economy, education becomes even more important for developing the next generation of innovators and creative thinkers.” –taken from **“Innovation in the Classroom: Why Education Needs to Be More Innovative by Phil McKinney.”***

Learning design plays a crucial part in ensuring the transfer of knowledge and addressing the needs of the learner. When designing learning initiatives, careful consideration should be given to the learning process and ensure that experience is very learner-centred.

Learning should address the ever-changing needs of the learner and programmes should be designed based on user experience that recognizes that all employees learn different things in different ways at different times.

Learning initiatives should be delivered in bite size chunks that are accessible to learners at all times. Learners now want to access materials on the go, when they want, where they want and how they want.

This is evidenced by the fact that learners have become accustomed to accessing short tutorials to learn new skills and for “performance support” in their personal lives, and they want that same experience in the workplace.

Learning design should incorporate a multitude of learning activities that supports the type of learning desired in the current learning and development landscape. A blended approach should be taken when designing learning through the use of both classroom-based learning, digital learning and gamification.

However, core to the design, is clear and concise instructional objectives (what the learner should know or be able to do at the end) and careful consideration should also be given to the emotional objectives (for example how the learner should feel after watching a video or playing a game) when using digital or gamification as a learning tool.

VR and gaming are getting more and more common, and need to be integrated in the learning offer. We know that learning by doing with real-time feedback is more effective, with greater retention than traditional lectures. The way to integrate learning by doing in online learning is using VR tools and games which can offer simulation of processes.

Tools to Support Learning Innovation

- *Animation Design*



Adobe After Effects -

<https://www.adobe.com/products/aftereffects.html>

Adobe After Effects is a digital visual effects, motion graphics, and compositing application that can be used, among other things, for keying, tracking, compositing, and animation. It also functions as a very basic non-linear editor, audio editor, and media transcoder.



Adobe Animate - <https://www.adobe.com/uk/products/edge-animate.html>

Adobe Animate is a multimedia authoring and computer animation program and can be used to design vector graphics and animation, and publish the same for television programs, online video, websites, web applications, rich internet applications, and video games.



Animaker - <https://www.animaker.com>

Animaker is an online do-it-yourself (DIY) animation video maker with a variety of pre-built characters, video styles and templates.



Animatron - <https://www.animatron.com/>

Make engaging marketing videos online for your business. Create animated videos and presentations.



Moovly - <https://www.moovly.com>

Moovly is a company that provides a cloud-based platform (SaaS) that enables users to create and generate multimedia content: animated videos, video presentations, animated info graphics and any other video content that includes a mix of animation and motion graphics.



Powtoon - <https://www.powtoon.com/>

Powtoon is cloud-based software for creating animated presentations and animated explainer videos for business and education.

Video scribe - <https://www.videoscribe.co/en/>



VideoScribe is software for creating whiteboard animations automatically. VideoScribe is developed in Adobe Flash and produces QuickTime movies and Flash videos.



▪ **Augmented & Virtual Reality Tools**



Aurasma - <https://www.aurasma.com/>

An augmented reality app that changes the way people see and interact with the world.



ENTitTi - <https://www.wakingapp.com/>

Enables anyone to create interactive virtual and augmented reality content without any developer skills.



Experizer Studio - <https://experizer.com/>

Experizer helps create immersive VR Experiences with absolutely no programming. Create highly engaging eLearning Games, Virtual Tours and Walk-through experiences with xAPI tracking with Experizer.

Google ARCore SDK - <https://unity3d.com/es/partners/google/arcore>



The Google ARCore SDK preview for Unity enables you to develop or extend existing Android applications with captivating AR experiences. Create realistic looking virtual objects rendered over the real world that react as if physically there.

Vuforia - <https://developer.vuforia.com>



Vuforia is a cross-platform Augmented Reality (AR) and Mixed Reality (MR) application development platform. Unity's integration of Vuforia allows you to create vision apps and games for Android and iOS using a drag-and-drop authoring workflow.

- ***eBook Development***

Designrr - <https://designrr.io>



Create eBooks, Blog Posts & Flipbooks in 2 Minutes With Zero Design skills needed. Upload any web page, MS Word, Video, Podcast or YouTube and it will create a stunning ebook and convert it to pdf, epub, Kindle or Flipbook. Quick and Easy.

Atavist - <https://atavist.com>



Atavist is a multimedia publishing platform.

- ***Economical / Inexpensive Support – “THE GIG ECONOMY”***

Fiverr - <https://www.fiverr.com>



Fiverr is an online marketplace for freelance services and provides a platform for freelancers to offer services to customers worldwide. Examples would be for Voice-over, Graphic Design, Video Editing etc.

Up Work - <https://www.upwork.com>



Up Work is an online platform offering Freelance Service Support. Examples include, Web, Mobile and Software Development, Design and Creative Solutions, IT Support, Translations, Sales & Marketing etc.

- **Free Imagery**



Adobe Photoshop CC -

<https://www.adobe.com/products/photoshop.html>

Photoshop is a raster graphics editor and can edit and compose raster images in multiple layers and supports masks, alpha compositing, and several color models including RGB, CMYK, CIELAB, spot color, and duotone.



Gimp - <https://www.gimp.org>

GIMP is a free and open-source raster graphics editor used for image retouching and editing, free-form drawing, converting between different image formats, and more specialized tasks.



Pixabay - <https://pixabay.com/en/>

Pixabay.com is an international website for sharing photos, illustrations, vector graphics, and film footage under a proprietary license. As of November 2017, Pixabay offers over 1,188,454 free photos, illustrations, and vectors and videos.



Pexels - <https://www.pexels.com/royalty-free-images/>

Free stock photos and video footage you can use everywhere. Free for commercial use with. No attribution required.



Unsplash - <https://unsplash.com/>

Beautiful, free images and photos that you can download and use for any project. Better than any royalty free or stock photos.

- **Graphic Design / Infographic Tools**



Adobe Illustrator - <https://www.adobe.com/products/illustrator.html>

Adobe Illustrator is a vector graphics editor.



Canva - <https://www.canva.com/>

An amazingly simple graphic design tool.



Chart Tool - <https://www.onlinecharttool.com/>

Design and share your own charts online and for free.



Co-Sketch - <http://cosketch.com/>

CoSketch is a multi-user online whiteboard designed to give you the ability to quickly visualize and share your ideas as images.



Comic Life - <http://plasq.com/>

The app with everything you need to make a stunning comic from your own images.



Doppel.me - <http://www.doppelme.com/>

Create an avatar of yourself for use in forums, instant messenger, blogs and almost anywhere else on the web.

- **Learning Games**



Kahoot - <https://kahoot.com/>

Kahoot! is a game-based learning platform, used as educational technology. Its learning games, "Kahoots", are multiple-choice quizzes that allow user generation and can be accessed via a web browser.



QuizLet - <https://quizlet.com/>

Search for and embed publicly available flashcards and question sets from Quizlet. Questions can be embedded directly into content as flash cards, review, or as a study game.



QuizLetLive - <https://quizlet.com/teachers>

Quizlet Live is an engaging in-class game where students work in teams to correctly match terms and definitions. The first team to match all terms and definitions correctly in a row wins the game.



Unity - <https://unity.com>

Unity is platform for creating 2D and 3D multiplatform games and interactive experiences.



Tell me and I'll forget. Teach me and I'll remember. Involve me and I'll learn.
Benjamin Franklin

- **Online Learning / Learning Management Systems / e-Authoring Tools**

Articulate360- <https://articulate.com/>



Articulate 360 includes both Storyline and Rise, plus a slew of other authoring apps. Use Storyline 360 to develop custom, interactive courses that work on every device—without any manual tweaking. It's powerful enough for experts, but easy for beginners to create virtually any interaction imaginable. Choose Rise when you want to build fully responsive courses in minutes. All you need is a web browser to quickly create beautiful courses optimized for every screen size.

Adobe Captivate - <https://www.adobe.com/products/captivate.html>



Adobe Captivate is an authoring tool that is used for creating eLearning content such as software demonstrations, software simulations, branched scenarios, and randomized quizzes in Small Web Formats and HTML5 formats.

Forma LMS - <https://www.formalms.org>



Forma LMS is an open-source, web-based eLearning platform (Learning Management System - LMS), used to manage and deliver online training courses.

Moodle - <https://moodle.org/>



Moodle is a free and open-source learning management system written in PHP and distributed under the GNU General Public License.

- **LMS for Word Press Plug-ins**



LearnDash - <https://www.learndash.com/>

LearnDash is a premium WordPress LMS plugin. It is also the most easy to use LMS plugin with tons of features.



LifterLMS - <https://lifterlms.com>

LifterLMS is another powerful WordPress LMS plugin with tons of awesome features. It is easy to setup, even on existing WordPress sites, LERNPRESS.



LearnPress - <https://wordpress.org/plugins/learnpress/>

LearnPress is a free WordPress LMS plugin with powerful features. Unlike other LMS plugins in this list, which come with a setup wizard, LearnPress lets you do the setup which is not that difficult.



WP Courseware - <https://flyplugins.com/wp-courseware/?fly=245>

WP Courseware is a popular WordPress LMS plugin. It is easy to use, and comes with tons of features to create large or small online course.

- **Podcasts**



Audacity - <https://sourceforge.net/projects/audacity/>

A free multi-track audio editor and recorder.



Chirbit - <https://www.chirbit.com/>

Chirbit is a useful and fun tool that enables you to record, upload and share your voice or audio files easily.



Podomatic - <https://www.podomatic.com>

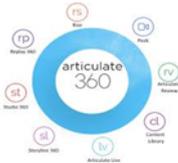
Create your own Podcast for music, fiction or nonfiction, or any type that you want to publish & share.



SoundCloud - <https://soundcloud.com>

SoundCloud is a music and podcast streaming platform that lets you listen to millions of songs from around the world, or upload your own.

- **Polling & Quizzes**



Articulate360- <https://articulate.com/>

Articulate 360 includes both Storyline and Rise, plus a slew of other authoring apps. Use Storyline 360 to develop custom, interactive courses that work on every device—without any manual tweaking. It's powerful enough for experts, but easy for beginners to create virtually any interaction imaginable. Choose Rise when you want to build fully responsive courses in minutes. All you need is a web browser to quickly create beautiful courses optimized for every screen size.



Mentimeter - <https://www.mentimeter.com/>

Mentimeter is a cloud-based tool that lets you engage and interact with your audience in real-time.



Slido - <https://www.sli.do/>

Slido is an audience interaction tool for meetings, events and conferences. It offers interactive Q&A, live polls and insights about your audience.



The capacity to learn is gift; the ability to learn is a skill; the willingness to learn is a choice.

Brian Herbert

- ***Presentations***



PowerPoint - <https://products.office.com/en-ie/powerpoint?rtc=1>

Microsoft's PowerPoint is a presentation tool and part of the Microsoft Office suite.



PresentationTube - <http://presentationtube.com/>

PresentationTube offers free presentation recording software & online platform to help presenters record, upload & share quality video presentations.



Prezi - <https://prezi.com/>

Prezi is seen as an alternative to PowerPoint in that it supports the creation of non-linear presentations. They are also easily shareable online.



SlideShare - <https://www.slideshare.net/>

Slideshare is a place to find, as well as host presentation slidesets as well as other documents and infographics.



SlideBazaar - <https://slidebazaar.com/>

More than 2500+ PowerPoint Templates and Keynote Slides.



Video scribe - <https://www.videoscribe.co/en/>

VideoScribe is software for creating whiteboard animations automatically. VideoScribe is developed in Adobe Flash and produces QuickTime movies and Flash videos.

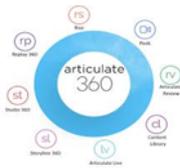
- ***Screen Casting***



Adobe Captivate - <https://www.adobe.com/products/captivate.html>

Adobe Captivate is an authoring tool that is used for creating elearning content such as software demonstrations, software simulations, branched scenarios, and randomized quizzes in Small Web Formats and HTML5 formats.

Articulate360- <https://articulate.com/>



Articulate 360 includes both Storyline and Rise, plus a slew of other authoring apps. Use Storyline 360 to develop custom, interactive courses that work on every device—without any manual tweaking. It's powerful enough for experts, but easy for beginners to create virtually any interaction imaginable. Choose Rise when you want to build fully responsive courses in minutes. All you need is a web browser to quickly create beautiful courses optimized for every screen size.



CamStudio - <https://camstudio.org/>

CamStudio is able to record all screen and audio activity on your computer and create industry-standard AVI video files.



Camtasia - <https://www.techsmith.com/video-editor.html>

Camtasia is a tool to record, edit and enhance on-screen activity in the form of screencasts.



Screen-Cast-O-Matic - <https://screencast-o-matic.com/>

Screencast-O-Matic is an easy-to-use, powerful flipped learning, lecture capture, and video publishing solution including Screen Recorder, Video Editor, Video CMS, and more.



Develop a passion for learning. If you do, you will never cease to grow.

Anthony J. D'Angelo

- **Sharing & Collaboration Tools**



Doodle - <https://doodle.com/>

Doodle is useful for easy event scheduling. You can propose several dates and times and the participants can indicate their availability online.



Dropbox - <https://www.dropbox.com>

Dropbox has become an important tool for sharing files both publicly and privately, both in companies and education. Dropbox lets you bring all your photos, docs, and videos anywhere and share them easily.



Google Docs - <https://www.google.com/docs/about>

The application allows users to create and edit files online while collaborating with other users in real-time. Edits are tracked by user with a revision history presenting changes. An editor's position is highlighted with an editor-specific color and cursor.



Google Drive - <https://www.google.com/drive/>

Create and share docs, spreadsheets and presentations – individually or collaboratively.



Google Drive Assignments - <https://support.schoolology.com/hc/en-us/articles/115008543287-Using-the-Google-Drive-Assignments-App>

The Google Drive Assignments App enables instructors to assign Google Docs, Spreadsheets, Slideshows and Drawings directly within the Schoolology platform. Once assigned, students can make their own copies of the content to work on and submit, and the instructor can then provide feedback and grade the assignment.



Slack - <https://slack.com/>

Slack is a team collaboration tool, for real time messaging and file sharing.



WeTransfer - <https://wetransfer.com>

WeTransfer is a cloud-based computer file transfer service. Share large files up to 2GB for free.



YouSendIt - <https://www.hightail.com>

YouSendIt is a simple web-based secure file sending service which allows you to securely send, receive and track files on demand.



Learning is an experience. Everything else is just information.

Albert Einstein

- **Social Learning Tools**



Buddypress - <https://buddypress.org>

BuddyPress is an open-source social networking software designed to allow schools, companies, sports teams, or any other niche community to start their own social network or communication tool.



Elgg - <https://elgg.org>

Elgg is open source social networking software that provides individuals and organizations with the components needed to create an online social environment. It offers blogging, microblogging, file sharing, networking, groups and a number of other features.



Facebook – www.facebook.com

Although primarily used by individuals for personal networking, it is also seen as a useful tool within education to support both study groups and course sites.



Instagram - <https://www.instagram.com/?hl=en>

Instagram lets you take a picture or video, choose a filter to transform its look and feel, and then post it. You can also share it on Facebook, Twitter and other places.



LinkedIn - <https://www.linkedin.com>

LinkedIn is seen as a prime professional networking service, for connecting with others professionally as well as for finding jobs. Its range of groups is also considered valuable.



Snapchat - <https://www.snapchat.com/>

Snapchat lets you easily talk with friends, view Live Stories from around the world, and explore news in Discover.



Twitter- <https://twitter.com>

Twitter is useful for professional networking, for news and updates as well as a backchannel in conferences and for real-time chats using hashtags.



WhatsApp - <https://www.whatsapp.com/>

WhatsApp Messenger is a freeware and cross-platform messaging and Voice over IP service owned by Facebook. The application allows the sending of text messages and voice calls, as well as video calls, images and other media, documents, and user location.

- **Video creator**



Adobe After Effects -

<https://www.adobe.com/products/aftereffects.html>

Adobe After Effects is a digital visual effects, motion graphics, and compositing application that can be used, among other things, for keying, tracking, compositing, and animation. It also functions as a very basic non-linear editor, audio editor, and media transcoder.



Adobe Premiere Pro -

<https://www.adobe.com/products/premiere.html>

Adobe Premiere Pro is the leading video editing software for film, TV, and the web.



Doodly - <https://www.doodly.com/>

Doodly is Video Creation Software to allow anyone, regardless of technical or design skills to create professional, realistic doodle videos in minutes. The simplest drag and drop doodle video creator available! Available for both white board and blackboard.



TedEd - <https://www.ted.com/#/>

TED Ed is a collection of quality videos that can be used for instructional purposes. This app lets you search for and embed TED Ed videos in your course material.

- **Video Conferencing / Meetings**



Adobe Connect -

<https://www.adobe.com/products/adobeconnect.html>

Adobe Connect is software used to create information and general presentations, online training materials, web conferencing, learning modules, and user desktop sharing.



Doodle - <https://doodle.com/>

Doodle is useful for easy event scheduling. You can propose several dates and times and the participants can indicate their availability online.



Google Meet - <https://gsuite.google.com/products/meet/>

Use Hangouts Meet to hold video meetings with people inside or outside your organization.



Skype - <https://www.skype.com>

Skype is a telecommunications application software product that specializes in providing video chat and voice calls between computers, tablets, mobile devices, the Xbox One console, and smartwatches via the Internet and to regular telephones. Skype additionally provides instant messaging services



Zoom - <https://zoom.us/>

Zoom provides remote conferencing services using cloud computing. Zoom offers communications software that combines video conferencing, online meetings, chat, and mobile collaboration.

- *Video Sharing*



Adobe Connect -

<https://www.adobe.com/products/adobeconnect.html>

Adobe Connect is software used to create information and general presentations, online training materials, web conferencing, learning modules, and user desktop sharing.



Youtube - <https://www.youtube.com/>

YouTube, is a video-sharing website.



Vimeo - <https://vimeo.com>

Vimeo is an online video-sharing platform that makes it easy to upload, distribute, and view your videos.

- **Virtual Classroom**



Adobe Connect -

<https://www.adobe.com/products/adobeconnect.html>

Adobe Connect is software used to create information and general presentations, online training materials, web conferencing, learning modules, and user desktop sharing.

Litmos - <https://www.litmos.com/>



Litmos is the world's easiest to use Learning Management System (LMS). Litmos LMS unifies virtual, classroom, mobile, and social learning in a secure, intuitive platform.

Skype - <https://www.skype.com/en/>



Skype is a telecommunications application software product that specializes in providing video chat and voice calls between computers, tablets, mobile devices, the Xbox One console, and smartwatches via the Internet and to regular telephones. Skype additionally provides instant messaging services.

- **MOOCS (Continuous Professional Development – Free Courses)**

Alison.com - <https://alison.com/>



Alison is one of the world's largest free learning platforms for education and skills training that mostly focuses on workplace-based skills.

It is a for-profit social enterprise dedicated to making it possible for anyone, to study anything, anywhere, at any time, for free online, at any subject level.

They are a catalyst for positive social change, creating opportunity, prosperity, and equality for everyone.

Coursera - <https://www.coursera.org/>



Coursera is an online learning platform that offers massive open online courses, specialisations, and degrees.

Every course on Coursera is taught by top instructors from the world's best universities and educational institutions.

Courses include recorded video lectures, auto-graded and peer-reviewed assignments, and community discussion forums. When you complete a course, you'll receive a sharable electronic Course Certificate.

edX - <https://www.edx.org/>



edX is a massive open online course provider. edX is the trusted platform for education and learning, founded by Harvard and MIT. It hosts online university-level courses in a wide range of disciplines to a worldwide student body, including some courses at no charge. It also conducts research into learning based on how people use its platform.

FutureLearn - <https://www.futurelearn.com/>



FutureLearn is a digital education platform that offers a diverse selection of courses from leading universities and cultural institutions from around the world.

These are delivered one step at a time, and are accessible on mobile, tablet and desktop, so you can fit learning around your life.

They believe learning should be an enjoyable, social experience, so their courses offer the opportunity to discuss what you're learning with others as you go, helping you make fresh discoveries and form new ideas.

Udemy - <https://www.udemy.com/>



Udemy helps organizations of all kinds prepare for the ever-evolving future of work. Their collection of top-rated business and technical courses gives companies the power to develop in-house expertise and satisfy employees' hunger for learning and development.

Future Trends in Learning and Development



Education is the most powerful weapon which you can use to change to world.

Nelson Mandela

Although traditional classroom learning will still have a place, particularly for regulatory and core skills, learning will continue the shift from being just thought of as formal, away from the office, programmes to an on-going process where learning is continuous, social, informal and embedded in the workplace.

A stronger emphasis will be placed on the use of technology as a key element of learning in the future. Technology will also provide increased opportunities to deliver content on a just-in-time basis, combining recognition of a development need with timely delivery of just the right content.

The growth of design thinking will be needed to enhance the user experience in learning. This means we need to take a new approach to the way we structure our learning based on the changing landscape.

The use of technology requires a different way of thinking about learning which isn't about content delivery necessarily, but more about providing the means for people to find and share information for themselves. Understanding the psychology of relationships and networks will be fundamental to creating effective learning environments.

The future isn't just about delivering the same content in a new way but providing ways for people to seek out and find learning for themselves.

There are four core areas for Integrative design that learning and development professionals need to consider in the future of learning. These include:

Contextualised Learning – it's all about access to learning and the experience for the learner. Learning needs to be personalised to fit each learner's specific requirements and learning

needs to be Applied. We know that people learn better by doing. Therefore, it needs to be practical and based on real world situations. Learning should be integrated by design, with more group work, project-based collaborations, social interactions (access & sharing), game inspired and be imbedded with digital media.

Learning needs to micro and mobile friendly– learning needs to be learner driven, meaning the learner must be able to access the types of content they want and how and when they want to access it. Learning needs to be readily accessible and needs to be based on micro learning concepts. Smaller is better. Moving away from traditional full classroom activities into shorter, sharper initiatives, such as bootcamp or master class sessions. Byte size learning initiatives such as video, podcasts, short online courses are good examples of this.

Learning needs to Data Driven– L&D professionals needs to be tuned in to technology themselves and should consider the use of analytics driven platforms to predict learning based on use of technology, such social media etc., similar to how advertising agencies predict the types of adverts to send based on usage of technology and search engine analytics.

Technology, Virtual (VR) and Augmented Reality (AR)– learning HAS TO BE Technology enabled – L&D Professionals need to leverage technologies that work and we need to build in innovative learning tools that enhance the overall learning experience. AR and VR tools gives way to immersive learning. It allows you to enter a 360° video shot or created 3D immersive environment.

Case Studies

Case Study # 1 - “The Art of Story Telling and Theatre to Enhance Real Life Learning”

Brief description of the innovative learning approach:

Glanbia Co-operative Society in Ireland, in conjunction with ICOS Skillnet has embraced the concept of using theatre and storytelling as a catalyst for self-awareness and learning in business.

The use of Theatre to Change Organisational Culture focuses in two main area, namely business culture and behavioural safety.

- Business Culture:

Bringing business to life, theatre is at work to develop and enhance culture and skills. Scripted scenarios, forum theatre plays and skills practice techniques are used with leaders and managers through to frontline sales and service teams. Theatre also supports cultural change in areas like brand engagement and workforce diversity.

- Behavioural Safety:

Theatre is at work to explore the human factors involved in workplace safety. Using safety plays as live, interactive case-studies illustrates how even the smallest action, or inaction, can have the greatest impact when it comes to safety at work. Themes like responsibility, risk perception and safety interventions are highlighted and discussed in the workshops.

Examples of Workshops:

- Business Culture Workshop:

“The Bridge” - Based on case-studies in occupational psychology and research into organisational culture and bullying

This is a theatre production based on workplace bullying that gives you greater understanding of this issue and advice on how to manage it effectively, through facilitated discussion and live interaction. The session will challenge your thinking; exploring the human factors and biases often at play.

Event Outcomes

- Develop greater understanding of the human and organisational factors that can be involved in workplace bullying
- Gain insights into effective engagement with the issue and the supports available to manage it
- Examine your own role in influencing, creating or maintaining a culture where workers are protected from psychosocial, health and safety risks

The session overcomes a key challenge in changing behaviour and culture; it enables awareness, engagement and ultimately ownership.

Themes:

Workplace Bullying, Assumptions & Bias, Culture, Psychosocial Risks & Responsibility

Suitable For:

Managers, Supervisors and Operatives in any Industry.

Inspired by case-studies from Irish workplaces this piece explores workplace bullying. The interactive style of the workshop is designed to stimulate awareness, enable understanding and challenge assumptions in order to support organisations in proactively engaging with a key cultural challenge.

- Behavioural Safety Workshop:

“The Mousehole” - Based on a true story set off-shore in oil and gas

Themes:

Responsibility, Rule-Breaking, Intervention, Culture.

Suitable For:

Operatives, Supervisors and Managers in any industry.

This is the tragic and true story of a horrific death onboard an oil rig. A man is being hoisted in a harness towards the 'Mousehole', a trapdoor in the deck of the rig. His harness slips and instead of hanging vertically, he is dangling horizontally. A radio fails, a crane operator operates blindly, and a man dies. We start after the incident has happened and go back in time to uncover the attitudes and behaviours which contributed to a fatality.

High on impact and engagement, the Mousehole is one of the UK and Ireland's most frequently performed safety plays for workplace learning.

Additional Information:

The Theatre based programmes are provided and delivered by an external training organisation “Theatre at Work” in Ireland. They offer other dramatised solutions to include, Leadership & Management, Broad Cultural Applications, Health & Wellness, Commercial Skills, Behavioural Safety, Office based and Operational and Construction Safety suites.



We now accept the fact that learning is a lifelong process of keeping abreast of change. And the most pressing task is to teach people how to learn.

Peter Drucker

Case Study # 2 - “Strategic Leadership Development through Gamified Learning”

Brief description of the innovative learning approach:

North Cork Co-operative Creameries in Ireland, in conjunction with ICOS Skillnet has embraced the concept of using game-based learning to improve performance and to foster sustainable behavioural change.

Game-based learning is based on the concept of experiential learning, which is the process of learning through experience and is more specifically defined as “learning through reflection on doing”. It combines immersive activities that mimic real-world challenges with a targeted debrief that connects the lessons learned with the reality of the workplace.

Example of Workshop:

The Game: “Gold of the Desert Kings”

In Gold of the Desert Kings, teams start off with the same amount of time, the same access to information and the exact same budget. Even though this is the case, teams deliver very different results. How is this so? Well the only thing that differed between the teams was the strategy that they took to the situation! It’s an incredible way of focusing participants on their real-life work strategies!

Gold of the Desert Kings creates an experience in which the difference between activity and productivity can mean life or death, not success or failure. But the vibrant world within this learning experience is simply a parallel for the world we face at work every day – a world where planning, gathering resources and goal-directed action, executed within a changing environment, are the keys to maximised results.

The Learner Experience:

There’s gold in the mountains, and it can be yours – if you can negotiate the hazardous desert that lies in its way. This interactive learning adventure will challenge you to work together as a prepared, organised and focused team, because competition is fierce and the clock is ticking. With pressure and limitations bearing down, you and your fellow adventurers must cross the vast and perilous desert, collect as much gold as possible and return home safely, and you’ll need to get the most from every moment and decision in order to survive and succeed. Be transformed from an armchair tourist into a motivated explorer; discover the direct impact of planning, preparation and execution; eliminate the frustration of wasted activity and convert into results-generating productivity-this is the real Gold of the Desert Kings.

Learning Outcomes:

You will learn to:

- Differentiate between activity that moves you away from your goal and productivity that moves you closer
- Ask “What’s Possible?” instead of “What’s Required?” to break through your perceived limitations
- Plan, prepare and execute – never losing sight of the objective – to deliver maximized productivity and results
- Obtain, evaluate and apply information, adjusting your plan to contend with pressure and surprises
- Permanently adopt a strategic mindset for any challenge; develop lasting habits of focused productivity

Practical Details:

- 3-4 Hour Programme
- Minimum Group Size of 10
- Teams of 2-6 Participants
- Suitable for cross-functional and intact teams at all levels

Additional Information:

This programme was provided and delivered by an external training organisation “Eagle’s Flight” in Ireland. They offer other game-based solutions to include, workplace culture, building relationships, teamwork and team development.

Case Study # 3 – “Serious games in learning about social economy”

Brief description of the innovative learning approach:

Computer games can be used in learning young people some values that are important for members of cooperatives (for instance: the need of social inclusion, cooperation and entrepreneurship abilities).

There are a lot of advantages that made games interesting and innovative tools for education and trainings. On one hand, they have defined learning objectives and defined rules and on the other there is a space for a gamer to experience a new situation and new environment under controlled conditions. Additionally, in the game – unlike in life – the participant can lose and try again to face the challenge.

In addition, it is necessary to take into consideration the popularity of digital games among young (and not only) people. Some research says that even 85% teenagers are involved in playing computer games.¹ That is why the games can be so useful in learning.

A new, extremely interesting trend in digital games are serious games called games for change. It is a movement and community of practice dedicated to using digital games for social change. Main aims of these movements are:

1. Use digital and video games in education for social change.
2. Change the stereotypical view of digital games as superficial, full of violent and vulgar language.

Games for change give the gamer a closer look into some of the world's challenges: climate change, intolerance, social inequalities, difficult situations of minorities and addictions.

Examples of Workshops:

Key words:

serious games, games for social change, games for social impact.

Competences that are developed:

entrepreneurship, social competences, digital competences, lifelong learning, solidarity, empathy, cooperation.

“Sweatshop” - through a series of thirty challenging levels players must balance the unreasonable demands of Boss, the temperamental cloth factory owner and Boy, a gentle, hard-working child labourer. Together, the team must work to make the factory a roaring success supplying clothes to their ever-demanding retail clients. (Source: <http://www.gamesforchange.org>).

The game gives the player an opportunity to discover the inequalities in the labour market. The player has to make independent decisions – support the employees or increase company gain. The game could be taken into account as a good start for discussion about cooperatives and social enterprises.²

“Cart Life” - *Cart Life*, players control one of three characters, each of whom has a different street vending job; Vinny sells bagels, Andrus runs a newspaper stand, and Melanie sells coffee from a cart. Each character has unique situations to address; each of them has to

¹ <http://www.pewresearch.org/fact-tank/2018/09/17/5-facts-about-americans-and-video-games/>

² The game is free of charge and can be downloaded from here: <http://www.gamesforchange.org/games/>.

struggle between work and personal life, for instance Melanie is a single mother and has to share her time between work and her daughter.

The game gives the player the opportunity to explore a daily-routine life of people who has to struggle with life hardships. It could be a good start for discussion about how can we improve their quantity of life? What has to change in the society to help them? (source: https://en.wikipedia.org/wiki/Cart_Life)

Additional Information:

These kind of games are usually free of charge and easy to download and install. Some of examples can be found here: <http://www.gamesforchange.org/games/>.

Games for social impact in SNRSS activity:

Games (also video games) are part of SNRSS educational social entrepreneurship programme dedicated to students from primary schools in Poland. We believe that games will help to involve and attract young people to the ideas connected with social entrepreneurship and make this subject more attractive to them.

The programme has been tested in June 2019. The conclusion is as follow: the students were more interested in subject of workshop if games were a part of it. The serious game was a good starting point for a discussion about serious issues such as inequality, homelessness, poverty and exclusion. The only disadvantage pointed out by students and (mainly) by teachers is that all the games are available only in English. Preparing serious games available in Polish language would be highly recommended.

Case Study # 4 - “The application of gamification techniques in a multinational corporation: the case of NESPRESSO”

Brief description of the innovative learning approach:

The need of the client



The world-renowned leader in home coffee machines, coffee capsules and coffee accessories Nespresso expressed the need to reach, train, inform, update and in some way build loyalty the Sales staff who, within Specialized Retailers, are to offer their products to the public along with those of competing brands.

The response to the need

To respond to the needs of this customer, Grifo developed a gamification portal (delivered also on mobile devices) to engage and motivate Sales Representatives in order to improve their work experience.

The gamification strategy was designed to work in successive steps. It starts from information on the Nespresso world and values of the brand; in the following step, users are introduced to the activities that Nespresso carries out every day (promotions, training, etc.) so that they can understand how the Nespresso world evolves. Finally, the platform provides real training on Nespresso products, offers and sales techniques, in order for sales persons to do their job better.

Alongside traditional training, more oriented to the acquisition of knowledge about the offer, and delivered through mini courses and videos, the gamification portal provides more experiential activities carried out through mini-games and simulations that aim to teach specific skills needed to operate. All the activities carried out by the sales person on the platform, together with their sales performance, are recorded, reported and used for the continuous improvement of the sales person. The gamification platform is in fact also an operational support for sales people, through which they can order new demonstration kits or interact with the Nespresso structure.

In a nutshell, the Nespresso gamification platform developed by GRIFO provides the following:

- information on the Nespresso world: classification and characteristics of the coffee, descriptions and technical specifications of the machines, description and methods of delivery of the Nespresso services to the consumer, information on the certified programs for sustainable development and the eco-compatibility of industrial processes;
- real-time updates on offers, promotions, new products;

- educational content, usable on mobile devices, which cover all the topics concerning the Nespresso supply chain delving deeper and deeper for a total of 18 interactive and multimedia teaching units with final assessment of learning;
- a series of mini-games, contests, quizzes, galleries for sharing images and sales experiences.

When users access information and participate in activities and competitions, they are rewarded with "golden capsules" which, in addition to leading them to higher ranking in the leaderboards (using the effective leverage of competition among players), can be used by players at any time to request prizes from a very rich catalogue of products made available by Nespresso.

Examples of Workshops:

Not applicable

Additional Information:

Advantages for learners

The use of gamification techniques brought some clear advantages to the audience identified by Nespresso in their sales representatives distributed across their retailer network:

- it stimulated competition
- training was continuously updated and renewed, with real-time updates on offerings, promotions, release of new products, thus keeping high level of learner engagement
- new mini-games were launched on a monthly basis

The Nespresso gamification portal has been used by more than 2,500 users located in 1,000 stores around Europe.



Figure 1: The Nespresso gamification portal



Figure 2: an example of a mini-game in the Nespresso gamification portal

Case Study # 5 – “Case study in learning innovation: using a tablet in learning process in high school”

Brief description of the innovative learning approach:

The use of the latest technologies opens up new opportunities in organizing various learning and teaching processes. With the ever-expanding range of educational tools, using tablets is a long-term solution. Using tablet, you can include both sound and visual image and typed text in the learning process at the same time. Students can learn by using multiple senses simultaneously. Interactivity is important because students can perform tasks by touching the screen, moving pictures, changing the order of words, selecting tasks according to their abilities, checking the tasks they perform, and repeating tasks several times if necessary. It is important that training is organized according to the individual needs of students. They can perform tasks independently in pairs while working on a team. This improve both individual work skills and team skills.

Tablets are a way of life for the 21st century. It is easier to use than a classic computer. This technical innovation has now become a self-evident tool for obtaining information. Undoubtedly, a tablet cannot completely replace a book or a practical experiment, but it is a new format with new features and capabilities.

In order to make a meaningful use of tablet, the teacher must use it for some time in advance to learn the different options to focus on apps, menus and to explain and give directions on tasks. Of course, at that time, the trainer could also use a tablet at school by connecting it to a projector and showing a variety of apps, presentations and video on the screen.

When completing an exercise or a small test, the student immediately receives scoring points, percentage or verbal praises. This motivates students to engage in the learning process, improving confidence in their abilities and changing attitudes to learning.

By studying and testing new applications, one can find appropriate tasks for each topic he or she is learning to diversify work into lesson. Many apps have been developed for mobile phones.

Examples of Workshops:

Classroom

Keep your class fun, engaged and focused. The Classroom app turns your iPad into a powerful teaching assistant. It puts you in the driver’s seat of every iPad and Mac in class, so you can guide students through lessons and keep them focused on the task at hand. Classroom also makes it easy to share information — send and receive files with the entire class and individual students using AirDrop, or show student work on the big screen.

Labyrinth 3D

The program develops visual perception, thinking and motor skills. The game has different levels and difficulty tasks. It’s a 3D game. The ball can be moved and direct to the target by moving the tablet. An interesting and exciting game also for adults.

MosaicHD

Mosaic is an evolutionary and creative game for everyone. Creating different mosaics by example, memory, perception, thinking, and accuracy are developed. Develop creative thinking and imagination, as you need to create your own mosaic. The program offers two variants with larger and smaller mosaics buttons.

Additional Information:

The use of technology in education is a very important factor for Apple Company, so a special site has been created to gather information. More technical descriptions and solutions can be found in Apple Education: <http://www.apple.com/education>.

This site is a compilation of documents and recommendations and there are also available videos with technology support solutions. The information is updated according to the systems currently in use. The support site is for the US market, so some solutions may vary.

Conclusions

The future is likely to lead to a change in the balance of learning & development activity rather than a completely new way of working – evolution rather than revolution.

The challenge for organisations is how to help people learn most effectively in these connected and independent ways, which will allow the rapid spread of knowledge as and when required, perhaps recognising that they can't control this process but can create the right conditions for it to occur.