# Research on proposed on-line education platform (OLEP)

# Content

Project «Training material and programme for social and business entrepreneurial competence development by virtual learning methods for multinational and multiculturalgroups, and recognition and validation of the acquired competence» (No. 2017-1-LV01-KA204-035469)

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# Requirements for on-line education platform

On-line education platform (OLEP) will be used to host training for refugees and migrants on business and social entrepreneurship and project management. OLEP is planned as a cost-effective multifunctional product with the combination of various e-learning solutions - a learning management system, a live virtual classroom platform, a virtual reality environment and a software for tracking and evaluating progress.

Based on project requirements OLEP must support following business requirements:

- Number of users – trainees: 200
- Number of users – educators: 20

Based on VLM Training Guideline document and project requirements OLEP must support following functionality:

- Publication of static learning resources (documents, presentations, images, URL, audio, video)
- Publication of interactive learning resources with grading (SCORM, xAPI, etc.)
- Automated knowledge check - quiz
- Communication tools - forums, chats
- Individual activities – assignments, survey
- Group activities – assignments, discussions, wiki,
- Sharing knowledge – database, glossary
- Flexible training path – possibility to select free/ predefined learning module usage sequence
- Grading for completed activities
- Learning progress tracking
- Gamification elements
- Interface language – English, Italian
- Mobile device support
- Social media / social networks
- Web meetings / webinars (virtual classrooms)
- Virtual worlds

# LMS platforms

A learning management system (LMS) is software that lets host, deliver, and track training and certifications. An LMS enables trainees to complete training or e-learning courses and keeps track of where they are in the training process. The learning system can print or save certificates once employees complete training.

As there are strict limitations on available resources focus was made on Learning Management Systems that can be administered without a full-time trainer. We narrowed it down to five LMS vendors based on price, ease of setup and administration, ease of use for trainees, and the ability to host both instructor-led and self-paced e-learning courses:
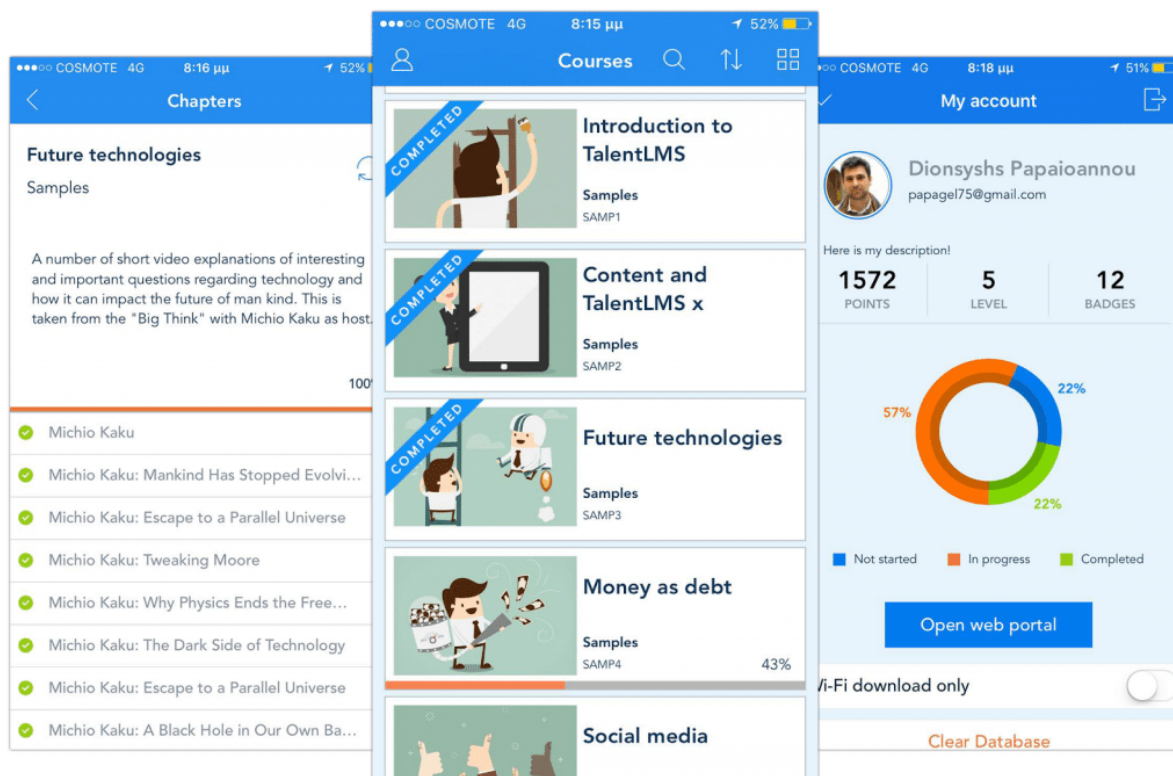
- TalentLMS
- Moodle
- SkyPrep
- Skillsoft
- LearnLinq

The five vendors reviewed here offer cloud-based services accessible from an employee's computer or mobile device. They are also SCORM compliant, which means they can host most standard e-learning content that includes text, video, tests, quizzes, and surveys.

Some of the reviewed systems let create your own training lessons. Others provide courses to choose from, either as part of the package or at an additional fee. There is also the option to purchase and upload additional content from any provider with SCORM-compliant e-learning lessons.

## Comparison of LMS platforms

**1. TalentLMS** (https://www.talentlms.com/)

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*TalentLMS, TalentLMS Training Options*

TalentLMS is great overall learning management system because of the low price, courses included, and robust features. There is a free version if you have fewer than 5 trainees/users, and even if you need a paid version, it's cheaper than most of the other LMS systems out there.

You can create your own learning content or select from TalentLMS' Course Marketplace of e-learning courses. Even the free version gives you 10 courses to start with. Access to built-in courses saves you time and money because you don't have to search for, purchase, and upload training content from course providers. Customization with your company logo, and single sign on (SSO) for user authentication is also included. You can even sell courses to customers or online through Paypal or Stripe with the ECommerce option.

In addition to the standard LMS features, TalentLMS also includes video conferencing, a training calendar, personal messages, and discussion forums for informal learning – allowing your trainees to reach out to and learn from peers and experts.

The price of TalentLMS ranges from $0 for the free version to about $200/month with no setup fees and is based upon the number of users. If you have fewer than 5 trainees and 10 courses, you can keep the free version – no time limit! The annual plans are cheaper, but you can also sign up for monthly billing if you need to spread your expenses over 12 months.

You have the option to try any plan before you buy without providing a credit card. TalentLMS doesn't charge for content storage, unlike many of the other LMS systems. The pricing below shows limits on the number of active users at each price point. If you go over these limits, you'd pay a $4 per user fee that month (for example, if you have 7 users, you would pay $8 per month).

| | Free | Small | Basic | Plus |
|---|---|---|---|---|
| Price | $0<br>No credit card needed | $29/month<br>billed annually | $99/month<br>billed annually | $199/month<br>billed annually |
| Number of Users | 5 | 25 | 100 | 500 |
| Number of Built-In Courses | 10 | Unlimited | Unlimited | Unlimited |

Core features of TalentLMS include:

- CSV Bulk User Upload
- Built-in Course Authoring
- Course Marketplace
- Automations
- Social Learning
- Videoconferencing
- Gamification
- Learner Portal and Learning Paths
- Custom Branding
- 300+ Integrations
- Blog and Knowledge Base

Everything you need to host and track training is already built into TalentLMS, and very few of these features require you to upgrade to a pricier plan.

Although TalentLMS is a great product, there's no telephone support. End users and administrators are required to submit a service request from the learning portal. If you want SSO, you have to upgrade to the Basic package. And if you want customized reports and automation, you'll need to upgrade to the Plus package. Otherwise, it's all there, even in the free version.

**2. Moodle** (https://moodle.org/)

We recommend Moodle as the best free learning management system. It is user supported and very popular (with over 70K customers and almost 90M users). It has a robust community forum, an easy to use interface, personalized dashboard, and includes some nice extra LMS features such as a calendar and user notifications. The site is customizable and secure, and it is a great option if you're a bit tech-savvy and don't want to have to pay for an LMS. Moodle refers to itself as a 'content management system' in addition to being an LMS.

Moodle is the best free LMS we found. No other free LMS comes close with respect to features and popularity.

Core features of Moodle include:

- Mass data upload
- Free course content available
- SQL database integration

- Automated email reminders
- Multiple languages
- Robust user community and resource center
- Custom branding

Because it's been built with input from the user community, Moodle has great features even if its interface looks less slick than the others. It is used by large industries and educators as well as small businesses. It has a wonderful resource center with answers on how to do just about anything in Moodle.



*Moodle, User Screenshot*

While Moodle is a powerful LMS, its course authoring options aren't the best. You either have to create your own courses using software like MS PowerPoint, Articulate, or Captivate, or you need to upload free courses created by other Moodle users. You could also do an internet search using keywords like 'SCORM courses for sale' or 'Free courses for Moodle' to find Moodle-compatible courses created by other vendors. The problem here is that there's no guarantee of the quality of user-generated courses.

In addition, Moodle doesn't have a back-end database for your employee list, so you can't just upload your list of trainees who need training with a CSV or Excel file. You have to upload your employee list to a SQL database such as MySQL, MariDB, and PostgreSQL. Moodle also has no direct integration with any HR software or Payroll system. And there is currently no social learning component allowing learners to reach out to experts on social media. And, finally, if you want to sell courses via PayPal, you'll need to do some research on how to set up the code in the program. In other words, it's possible to do lots of things on Moodle, but not necessarily easy unless you've got some programming skills.

**3. SkyPrep** (https://skyprep.com/)

We recommend SkyPrep for educators using Google apps because you can easily upload and import trainee data into the LMS from Google Sheets. It's also competitively priced and offers a good user

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experience. It is easy to install by allowing you to import users from Google Sheets and upload your own courses or courses found elsewhere. Although they don't have their own course catalogue, they integrate with OpenSesame where you can find and upload courses, many at no or low cost.

Like the other LMS systems we reviewed it contains encryption of sensitive data, and has security (https) on all pages. In addition, SkyPrep supports 8 languages and like TalentLMS, gives your business the option to sell courses using Paypal or Stripe.
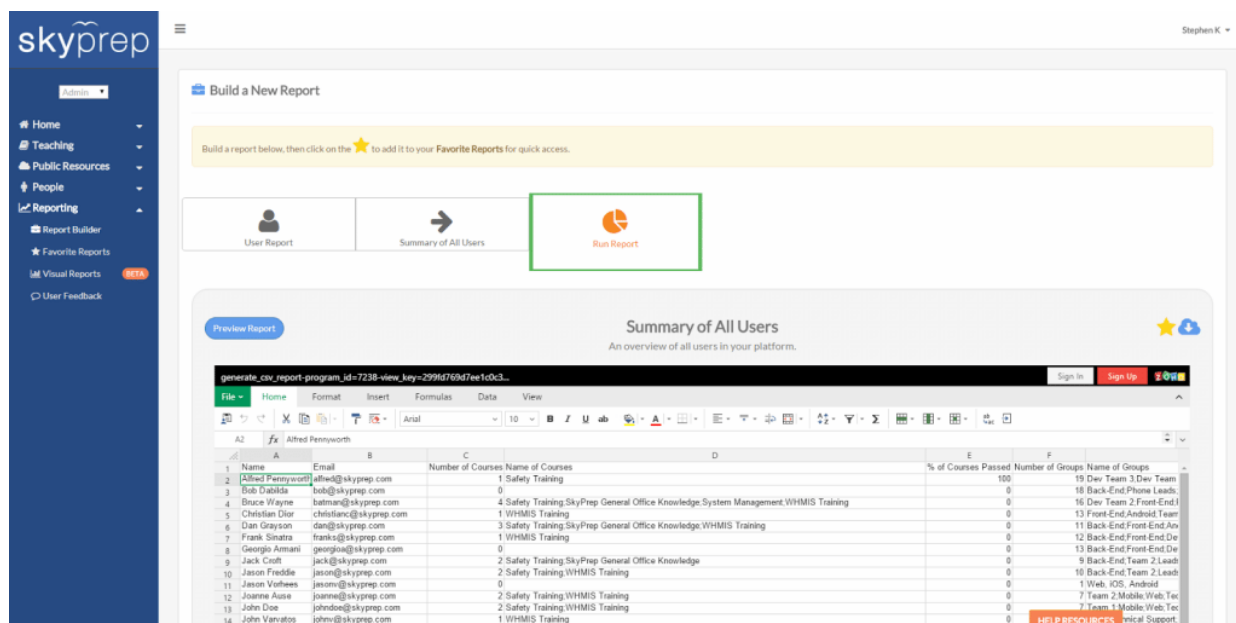


*Skyprep, LMS Administrative Screen*

The range of pricing for SkyPrep was between $79 and $649 based on the number of trainees you need to train (when we contacted them, SkyPrep gave us a small business price of $79 for 25 users, although that price wasn't posted on their website). They offer a free 30-day trial that doesn't require you to use a credit card.

Their pricing includes user access for a limited number of administrators – individuals who can assign courses, print reports, etc. If you want phone support, you'll need to choose a package that includes it. Social learning is not included in SkyPrep, but is available as an additional service called BoostHQ Social Learning Platform that costs between 0-$49 month, plus $1 per user per month.

|  | **FSB Small Business Quote** | **Starter** | **Advanced** | **Premium** |
|---|---|---|---|---|
| Price | $79/month | $249/month billed annually | $449/month billed annually | $649/month per billed annually |
| Users | 25 Active users | 100 Active users + 2 Admin Roles | 250 Active users + 5 Admin and Manager Roles | 500 Active users + 20 Admin and Manager Roles |

SkyPrep's core features include:

- CSV Bulk User Upload
- Built-in Course Authoring
- Course Content through OpenSesame
- Social Learning through BoostHQ
- Automated email reminders
- Learning Path and Learning Tracks
- Employee Self Service
- User Blog

SkyPrep offers the kind of features that most LMS offer, although some of the features like SSO require you to upgrade to the Premium package. It integrates with Google, Facebook, and many other social media systems.

SkyPrep has plenty of nice features and was a close runner up to TalentLMS. However, there is a limit on data storage based on the package purchased, so if you have a lot of courses or your courses have lots of video/media, you might have to upgrade. And although SkyPrep integrates with OpenSesame's free courses, they don't have their own course catalogue, and you may have to pay for content if the free courses don't meet your needs. In order to get SSO, you'll need to upgrade to the Premium package.

**4. Skillsoft** (https://www.skillsoft.com/)

Skillsoft provides thousands of high-quality e-learning courses with video and animations to choose from, including certification courses and e-learning lessons in IT, HR and project management. There's a reason 7K customers have chosen Skillsoft. I chose Skillsoft for one small employer that I worked with based on the top-notch catalogue of courses which could be very expensive to purchase separately. So, if you want to offer regular ongoing training in a number of areas to your trainees, Skillsoft is a good value.

*Skillsoft, User Interface*

Skillsoft provides administrative and user support 24/7 by phone, email, or live chat — which I have used and found to be very responsive. All packages provide custom branding.

Skillsoft pricing starts at $500/month for 25 users and increases based on the number of users and the number and kind of courses you choose. The Select package lets you choose from 300 self-paced e-learning courses from Skillsoft's business, IT, and project management catalogs. The Select Plus package adds leadership videos and ebooks.

Certification courses, like workplace safety or sexual harassment training, are also available from a different catalog at a different price. Skillsoft doesn't offer a free package, but they do have a 14-day free trial if you want to check it out. Skillsoft's primary features include:

- Bulk user upload
- Course content included
- Automated email notifications
- Learning Plans
- Social and Collaborative Learning
- Integrates with multiple applications
- Product Knowledge Base and Blog

We recommend SkyPrep for educators using Google apps because you can easily upload and import trainee data into the LMS from Google Sheets. It's also competitively priced and offers a good user experience. It is easy to install by allowing you to import users from Google Sheets and upload your own courses or courses found elsewhere. Although they don't have their own course catalog, they integrate with OpenSesame where you can find and upload courses, many at no or low cost.

Like the other LMS systems we reviewed it contains encryption of sensitive data, and has security (https) on all pages. In addition, SkyPrep supports 8 languages and like TalentLMS, gives your business the option to sell courses using Paypal or Stripe.

Skillsoft is unique in that, if you purchase a package of 300 Skillsoft courses, you get the LMS and all the course tracking features that it comes with.

| | Select | Select Plus | Unique |
|---|---|---|---|
| Price | $500/month | $651/month | Call for pricing. Requires a Setup Session. |
| Users | 25 | 25 | Varies |
| Built-In Course Content | 300 Courses Included | 300 Courses + 100 Leadership Videos and Books | Depends on how many and what kinds of courses chosen; lets you add your own course content. |

For no additional cost, you could also add eCommerce with an additional Channel Agreement or Social Learning with their InGenius add on.

Skillsoft contains just about every course that a small business would ever need included with its LMS. But what's missing is the ability to upload your own proprietary learning/e-learning courses such as a product video or your new hire orientation program, without having to pay an additional hosting fee based on the amount of storage you use. Also, the Select package does not include SSO or any HR Software integration. Like content hosting, those features require an upgrade to the more expensive Unique package.

**5. LearnLinq** (https://www.learnlinq.com)

We included LearnLinq in our comparison as a rising star among LMS systems. While not as well known or tried and tested as the others, it was designed specifically for small and mid-sized businesses. Users give it great reviews for being quick to implement, easy to administer, and user friendly for trainees, with intuitive visual menu icons. It includes all the basic LMS features, and almost all users in companies with fewer than 50 trainees said they would recommend it. Their user support is via the web and phone.

LearnLinq is based in Europe, so pricing is in Euros. The prices range from approximately $240-$1200 USD/month depending on the number of users (we didn't change the price chart below to US Dollars because international currency exchange rates fluctuate). LearnLinq has a free 30-day trial, with no credit card required.

|  | **River** | **Lake** | **Sea** |
|---|---|---|---|
| Price | 200 €/month | 750 €/month | 1000 €/month |
| Users | 100 | 500 | 1000 |

Core features of LearnLinq include:

- Data can be imported from Excel
- Course creation with EasyGenerator
- Self Service Learning Portal
- Learning path with progress tracking
- Email invitations and reminders
- Integrates with HR Systems
- Knowledge Base and FAQs
- User Community on Facebook
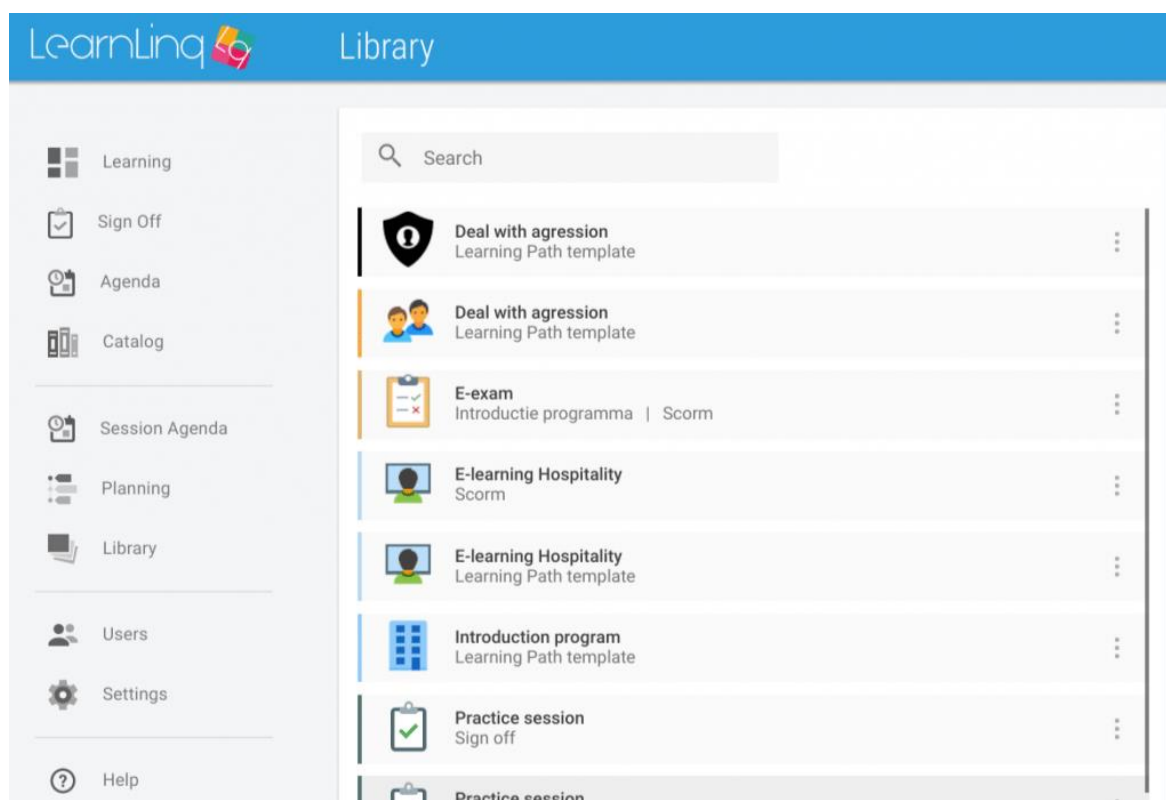
*LearnLinq, Example of Course Library*

LearnLinq has a modern look and feel and many users stated that LearnLinq is easy to use and fast to implement. It integrates with SAP, and has helpful online resources including text chat and video tutorials to help you get started.

LearnLinq is based in the Netherlands and new in 2017. While it supports US clients, most of the reviews were from European users using LearnLinq for less than 6 months. They noted, that some features are still in development. It doesn't yet have robust reporting, videoconference integration, or social learning, but these items are on their roadmap. The drawback I found for US business owners is LearnLinq's sales and support is not currently 24/7, so I had to wait until the next business day for text chat and email responses.

## Selected LMS

Comparison results of 5 selected LMS are provided in table below.

**LMS comparison summary**

| Company | Best For |
|---------|----------|
| TalentLMS | Best overall LMS due to low cost, a free version, and great customer reviews |
| Moodle | Best free SCORM-compliant open source LMS for do-it-yourselfers |
| SkyPrep | Best LMS for businesses that use Google apps |
| Skillsoft | Best LMS for number and quality of included e-learning courses |

| LearnLinq | Best LMS for ease of setup and ease of use |
|-----------|--------------------------------------------|

Moodle was selected as base LMS platform of OLEP because it was free of charge and provided all necessary functionality in excellent way. More detailed Moodle description is provided in following chapter.

# Moodle LMS features

Moodle general features:

- Modern, easy to use interface - Designed to be responsive and accessible, the Moodle interface is easy to navigate on both desktop and mobile devices.
- Personalised Dashboard - Display current, past and future courses, along with tasks due.
- Collaborative tools and activities - Work and learn together in forums, wikis, glossaries, database activities, and much more.
- All-in-one calendar - Moodle's calendar tool helps you keep track of your academic or company calendar, course deadlines, group meetings, and other personal events.
- Convenient file management - Drag and drop files from cloud storage services including MS OneDrive, Dropbox and Google Drive.
- Simple and intuitive text editor - Format text and conveniently add media and images with an editor that works across all web browsers and devices.
- Notifications - When enabled, users can receive automatic alerts on new assignments and deadlines, forum posts and also send private messages to one another.
- Track progress - Educators and learners can track progress and completion with an array of options for tracking individual activities or resources and at course level.

Moodle administrative features:

- Customisable site design and layout - Easily customise a Moodle theme with your logo, colour schemes and much more - or simply design your own theme.
- Themes - Secure authentication and mass enrolment
- Over 50 authentication and enrolment options to add and enrol users to your Moodle site and courses.
- Multilingual capability - Allow users to view course content and learn in their own language, or set it up for multilingual users and organisations.
- Bulk course creation and easy backup - Add courses in bulk, back up and restore large courses with ease.
- Manage user roles and permissions - Address security concerns by defining roles to specify and manage user access.
- Supports open standards - Readily import and export IMS-LTI, SCORM courses and more into Moodle.
- High interoperability - Freely integrate external applications and content or create your own plugin for custom integrations.
- Simple plugin management - Install and disable plugins within a single admin interface.
- Regular security updates - Moodle is regularly updated with the latest security patches to help ensure your Moodle site is secure.

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- Detailed reporting and logs - View and generate reports on activity and participation at course and site level.

Course development and management features:

- Direct learning paths - Design and manage courses to meet various requirements. Classes can be instructor-led, self-paced, blended or entirely online.
- Encourage collaboration - Built-in collaborative publishing features foster engagement and encourage content-driven collaboration.
- Embed external resources - Teach materials and include assignments from other sites and connect to the gradebook in Moodle.
- Multimedia Integration - Moodle's built-in media support enables you to easily search for and insert video and audio files in your courses.
- Group management - Group learners to share courses, differentiate activities and facilitate teamwork.
- Marking workflow - Conveniently assign different markers to assignments, manage grade moderation and control when marks are released to individual learners.
- In-line marking - Easily review and provide in-line feedback by annotating files directly within browser.
- Peer and self-assessment - Built-in activities such as workshops and surveys encourage learners to view, grade and assess their own and other course members' work as a group.
- Integrated Badges - Fully compatible with Mozilla Open Badges, motivate learners and reward participation and achievement with customized Badges.
- Outcomes and rubrics - Select from advanced grading methods to tailor the gradebook to your course and examination criteria.
- Competency based marking - Set up competencies with personal learning plans across courses and activities.
- Security and privacy - Teach and share in a private space only you and your class can access.

## Moodle activities

An activity is a general name for a group of features in a Moodle course. Usually an activity is something that a student will do that interacts with other students and or the teacher.

In Moodle terminology, an Activity, such as Forums or Quizzes, properly means something students can contribute to directly, and is often contrasted to a Resource such as a File or Page, which is presented by the teacher to them. However, the term activity is sometimes for convenience also used to refer to both Activities and Resources as a group.

There are 14 different types of activities in the standard Moodle that can be found when the editing is turned on and the link 'Add an activity or resource' is clicked.

- Assignments - Enable teachers to grade and give comments on uploaded files and assignments created on and offline.
- Chat - Allows participants to have a real-time synchronous discussion.
- Choice - A teacher asks a question and specifies a choice of multiple responses.
- Database - Enables participants to create, maintain and search a bank of record entries.
- Feedback - For creating and conducting surveys to collect feedback.

- Forum - Allows participants to have asynchronous discussions.
- Glossary - Enables participants to create and maintain a list of definitions, like a dictionary.
- Lesson - For delivering content in flexible ways.
- (LTI) External tool - Allows participants to interact with LTI compliant learning resources and activities on other web sites. (These must first be set up by an administrator on the site before being available in individual courses.)
- Quiz - Allows the teacher to design and set quiz tests, which may be automatically marked and feedback and/or to correct answers shown.
- SCORM - Enables SCORM packages to be included as course content.
- Survey - For gathering data from students to help teachers learn about their class and reflect on their own teaching.
- Wiki - A collection of web pages that anyone can add to or edit.
- Workshop - Enables peer assessment.

Additional plugins from the Moodle plugins directory may also be installed on your site. VLM project potentially may benefit from following Moodle plugins:

**1. Interactive Content – H5P.** One of the great benefits with using H5P is that it gives you access to lots of different interactive content types. Another great benefit with H5P is that it allows you to easily share and reuse content. To reuse content, you just download the H5P you would like to edit and make your changes – e.g. translate to a new language or adjust it to a new situation. H5P is:

- Open Source
- Free to Use
- HTML5
- Responsive
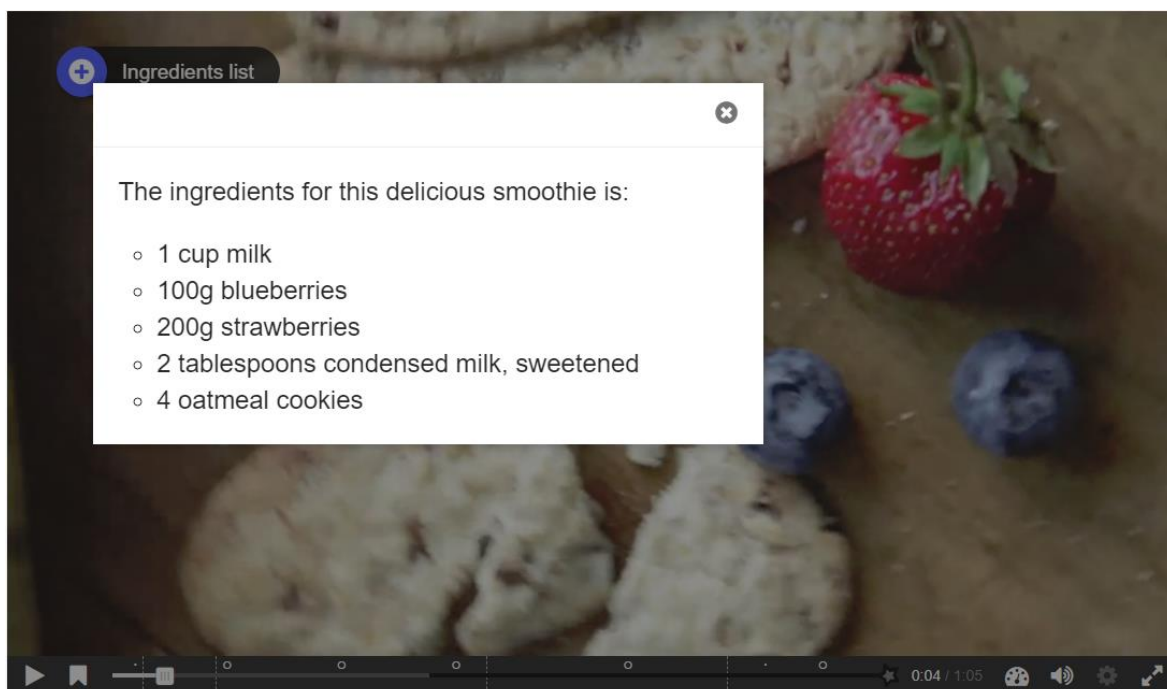


*H5P content example – interactive video*

Note that it is currently possible for people with programming skills to cheat in H5P interactions and obtain the full score without knowing the correct answers. H5Ps must not be used for exams or similar.

The H5P community is actively contributing to improve H5P. Updates and new features are continuously made available on the community portal H5P.org.

**2. Custom certificate.** The custom certificate module allows the generation of dynamic PDF certificates with complete customization via the web browser. It is different from the certificate module which requires PHP and FTP access in order to customize its appearance.

## Moodle resources

A resource is an item that a teacher can use to support learning, such as a file or link. Moodle supports a range of resource types which teachers can add to their courses. In edit mode, a teacher can add resources via the 'Add an activity or resource' link. Resources appear as a single link with an icon in front of it that represents the type of resource.

Administrators can decide whether or not to force teachers to add descriptions for each resource by enabling or disabling a site-wide setting in Administration > Plugins > Activity modules > Common settings.

- Book - Multi-page resources with a book-like format. Teachers can export their Books as IMS CP (admin must allow teacher role to export IMS).
- File - A picture, a pdf document, a spreadsheet, a sound file, a video file.
- Folder - For helping organize files and one folder may contain other folders.
- IMS content package - Add static material from other sources in the standard IMS content package format.
- Label - Can be a few displayed words or an image used to separate resources and activities in a topic section, or can be a lengthy description or instructions.
- Page - The student sees a single, scrollable screen that a teacher creates with the robust HTML editor.
- URL - You can send the student to any place they can reach on their web browser, for example Wikipedia.

There are several solutions for user grouping in Moodle:

- Groups: On the course level you can assign a user to one (or more) groups. In a course you can assign a context(activity) to a group. When members of the group leave the course, they lose their identity with the group.
- Groupings are a collection of groups. If you had 10 groups, you could combine or mix and match the smaller groups into 2 or more groupings. You can assign a grouping to a context like an assignment.
- Cohorts: On the site or category level you assign a user to a cohort. Cohorts are used to bulk enrol users into one or more courses. If you wish the cohort to be members of a group within the course, you will then have to add them to a group in a further step.

## Best practices for course design

Careful planning of your Moodle course is essential for creating a positive and effective learning experience for your students. Before you begin to design your course online, review your current teaching strategies, the course learning outcomes and the learning activities used to assess the outcomes.

Articulating the learning outcomes and aligning them with teaching and assessment strategies—"constructive alignment" —will help you select your course content and plan the learning activities for your students.

Effective course design minimises course navigation time, leaving more time for students to spend collaborating, communicating and engaging with the course. Moodle is flexible enough to allow you to create learning paths specific to the needs of your students, through the sequencing of resources and activities.

Without planning, the flat structure of Moodle can result in a long list of links on a course home page. This can require a lot of scrolling and discourage student engagement.

Giving your content and activities a clear structure is essential if students are to participate actively. If they can't find an activity, or a particular resource, they'll get confused and frustrated.

**1. Planning**

With your course outline and program of lectures, use coloured sticky notes to physically identify and order your class activities from week to week.

- Use one colour (say yellow) to represent the points at which you provide input to students (content).
- Use another (say pink) to identify the activities that students do during the course.
- Use yet another (say green) to identify the points of assessment—both formative and summative—throughout your course.
- Lay these notes out on the table to see how the course (or learning process) looks to your students as an overall experience.

You can do this overall for the duration of the course, or break the course down into weekly maps of your students' learning experience.
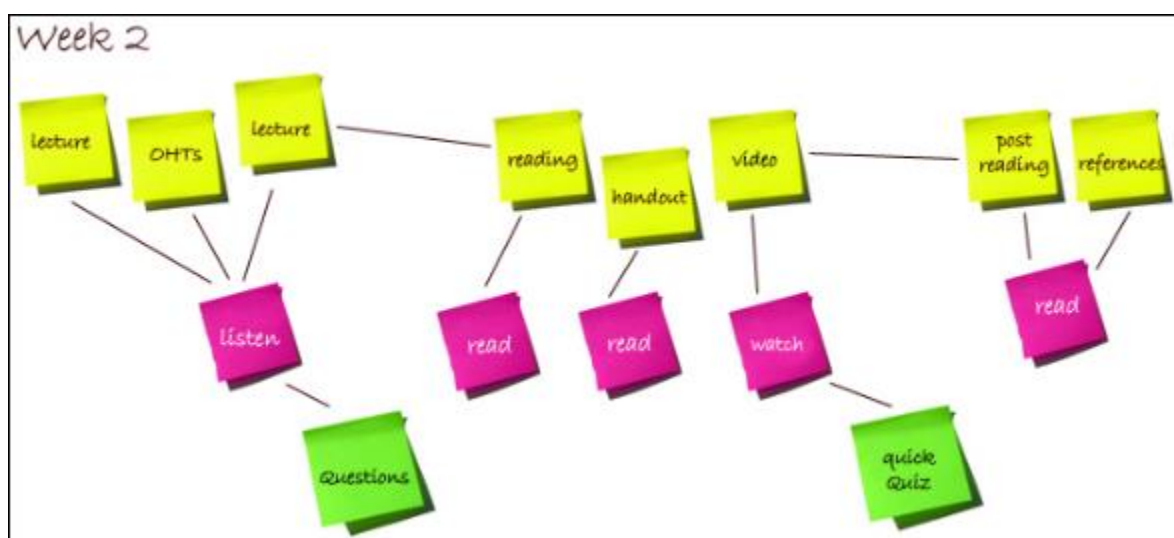


*Planning course outline*

You may see a number of weeks where the learners are only passively receiving content in the form of lectures, videos, handouts and readings. These present opportunities to use Moodle to add student activity or engagement with your content.

If you are satisfied with the course, its structure and experiences, you might consider where you can augment the student experience with asynchronous discussions, access to external resources or a formative assessment to help students judge their progress independently. Use some other sign (e.g. red dots) to mark these opportunities.

## 2. Building

Once you have planned your course, choose the Moodle course format that is appropriate for your needs and start building. When you select content for your course in Moodle, choose content that can be used to construct learning activities that encourage student engagement. Choose learning activities that enhance what your students learn in the classroom, not replicate what they are already doing.

Consider your current course topics or units and try to match these to the skills and understandings to be addressed in your course. Consider the relative size of these topics and the order in which you cover them.

In selecting and sequencing your content the main objective is to support the course learning objectives. Decide how to sequence your content by choosing one of the options below based on your purpose for using Moodle:

- chronologically
- topics
- problem-based
- case studies.

When choosing learning activities, reflect on the learning process, what do we actually do when we learn something? One model by Hughes et al. suggests that in order to learn something you need to do the following:
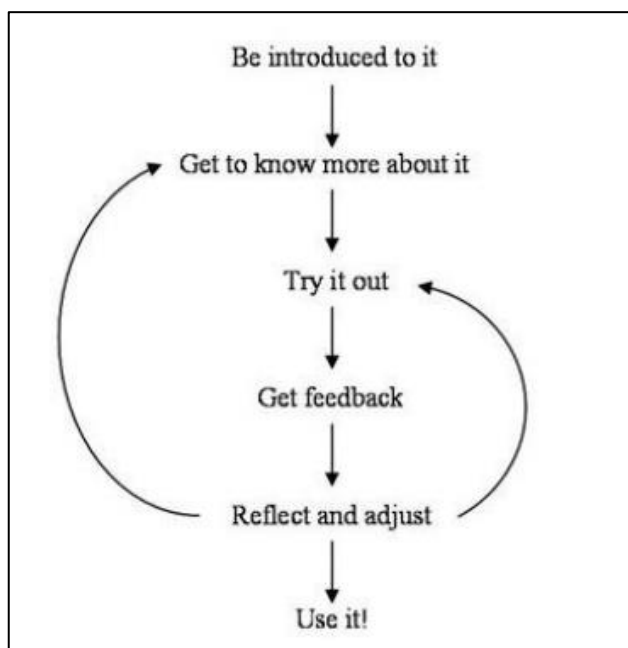


*Learning process*

1. When you design learning activities consider the following:

- All learning requires some type of activity.
- Engage your learners to encourage active learners.
- Consider different learning styles.
- Design authentic learning activities that make learning outcomes achievable.
- Allow learners to use different approaches to achieve the same outcome.

*Activity* is the key word here. Think about what students can do other than passively receive your content.

- Can they discuss an issue or concept? Example using the Forum activity
- Can they construct something like a written paper or piece of media that they publish to the class?
- Can they read and record their reaction to a reading?

2. Consider what you want to achieve with each learning activity. Is the activity for:

- information transfer
- communication and interaction
- collaboration
- formative assessment, or
- summative assessment?

Some final considerations for course design in Moodle.

Accessibility for all:

- Provide alternative text (alt text) for images.
- Use high contrast.
- Information conveyed using colour should also be conveyed in other ways.

Design course for diverse learning styles:

- Include activities and resources that visually engage, e.g. video and images.
- Use charts, tables and graphs to aid processing of text-based information.
- Break up recorded lectures into manageable chunks and supplement with video, maps and diagrams.
- Use voice-over with PowerPoints.
- Provide opportunities for students to discuss and collaborate.

General tips and best practices:

- Use simple, consistent layouts.
- Remove unused blocks.
- Use Moodle styles (e.g. heading, paragraph) for course titles, topic titles and subtitles.
- Avoid abbreviations.
- Avoid redundancies e.g. "Forum Week 1"; instead use "Weekly Forum".
- Hide embedded activities in an additional week/topic.
- Provide only useful links that you expect the students to use.
- Edit your course for spelling, grammatical and punctuation errors.

# Webinar platforms

A webinar is a live, web-based video conference that uses the internet to connect the individual (or multiple individuals) hosting the webinar to an audience of viewers and listeners from all over the world. Hosts can show themselves speaking, switch to their computer screens for slideshows or demonstrations and even invite guests from other locations to co-host the webinar with them.

Webinar platforms also offer interactive features that the audience can use to ask questions and chat with host. Many people who host webinars include Q&A sessions at the end to answer viewers' questions about the content from the presentation. Webinar platform will be used as the virtual classroom solution for OLEP.
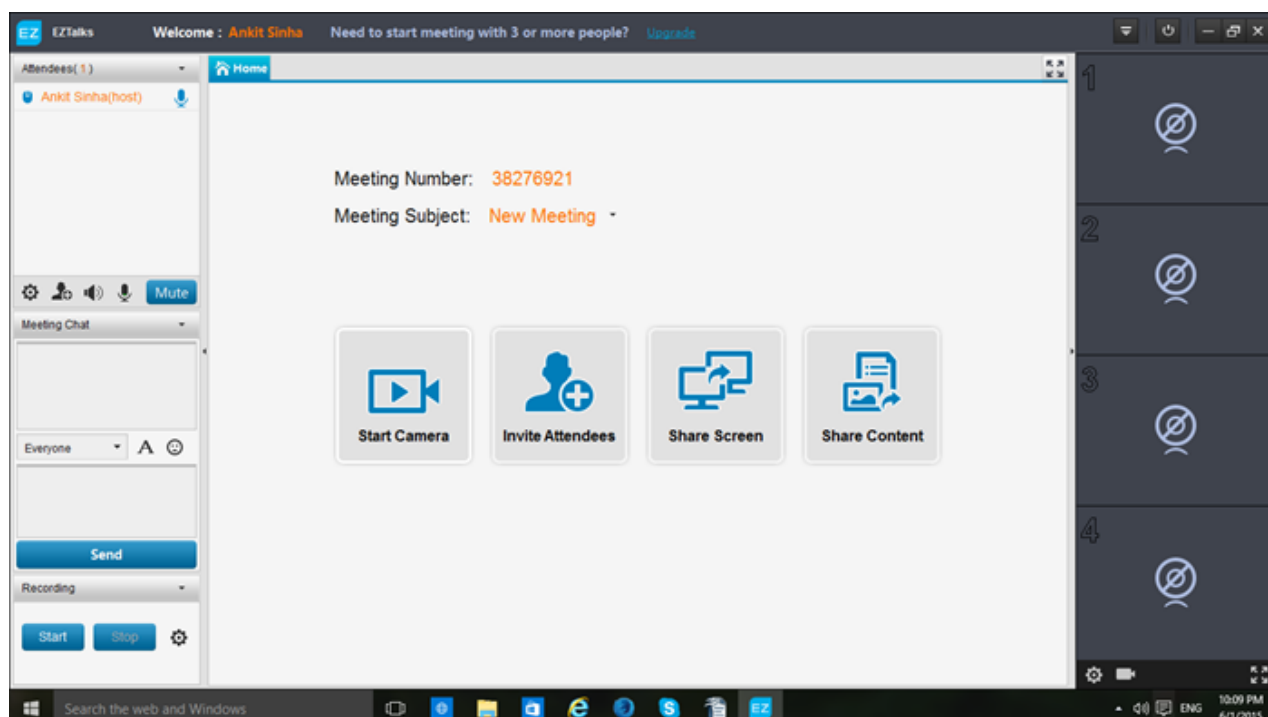


*ezTalks Meeting screen shot*

## Comparison of webinar platforms

There are the top six high-quality free webinar software used by a large number of people.

**1. ezTalks Meetings** (https://www.eztalks.com/meetings). As a useful video conferencing tool, ezTalks Meetings can be used to hold webinars online. It is one of the best free webinar software, which helps you reach more people no matter where they are. The innovative platform supports up to 100 participants simultaneously attending the webinar for free. The powerful features such as screen sharing, interactive whiteboard, recording and polling make users experience a meaningful and collaborative online seminar. What's more, the host can easily sign up or sign in with Facebook or Google account while the attendees can join the webinar via browser without downloading the app.

**2. Zoom**. (https://www.zoom.us) It's one of the most popular free online webinar software. Simply create a free account and you can get started instantly to launch your first webinar. Integrated analytics data lets you optimize your webinar session in real-time.

**3. Google+ Hangouts.** (https://hangouts.google.com/)) Since the launch of Google+, Hangouts have become one of the most popular webinar software free of charge, which has been used by large number of users to connect with friends, peers and customers. It's easy to use, runs within a browser and supports high-quality yet reliable group video chat sessions. Participants can join and leave Google+ Hangout session in real-time.

**4. Yondo Webinar.** (https://www.yondo.com/)You can use this excellent web-conferencing and online collaboration service as a Google Chrome plugin. It has tons of features and supports crystal clear web conferencing stream. Attendees can join the session in real-time and can use the shared resources (screen, applications) with ease. It has one of the easiest and user-friendly web conferencing interfaces which even a layman can use without any issues.

**5. OpenMeetings.** (https://openmeetings.apache.org/) As the name suggests, it's free and open source web-conferencing software. OpenMeetings is browser-based webinar system that you can host on your own server. You can share your screen, mic, webcam and can also use interactive whiteboard during webinar. Since it can be hosted on your own web server, there's no limit on the number of users who can join a single web-conferencing session. Apache Foundation now actively develops this open source webinar software.

**6. TokBox.** (https://tokbox.com/) This awesome tool lets you add group video chat support on your web site or blog. The free API gets you started within minutes and you don't need to be a programmer to implement this solution. You can also use the plug-n-play application for embedding the same functionality on your blog. Plugins for WordPress and Drupal are also available to easily integrate group video chat on your web site.

## Selected webinar platform

Internet marketers, bloggers, developers and small businesses often use custom webinar applications in various forms to connect with their loyal customers and teams working in remote areas. This is such a powerful medium to reach out to the consumers, peers and business partners without any hassle. Comparison results of 6 selected webinar platforms are provided in table below.

**Webinar platform comparison summary**

| Features | ezTalk Meetings | Zoom | Google+ Hangouts | Yondo Webinar | OpenMeetings | TokBox |
|---|---|---|---|---|---|---|
| Free | Yes | Yes | Yes | Free trial | Yes | Free trial |
| Online/ Hosted locally | Online | Online | Online | Online | Hosted | Online |
| Participants | 100 | 100 | 15 | 25 | 100+ | 100+ |
| Group video | Yes | Yes | Yes | Yes | Yes | Yes |

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| | | | | | | |
|---|---|---|---|---|---|---|
| Group audio | Yes | Yes | Yes | Yes | Yes | Yes |
| IM chat | Yes | Yes | Yes | Yes | Yes | Yes |
| Screen sharing | Yes | Yes | Yes | Yes | Yes | Yes |
| Whiteboard | Yes | Yes | Yes | Yes | Yes | Yes |
| Webinar recording | Yes | Yes | No | Yes | Yes | Yes |
| Access with Web Browser | Yes | Yes | Yes | Yes | Yes | Yes |
| Max lenght | 45 min | 40 min | Unlimited | Unlimited | Unlimited | Unlimited |

ezTalk Meeting was selected as webinar (virtual classroom) platform of OLEP because it was free of charge and provided best functionality and user experience in comparison with other free webinar platforms.

## Best Practices for Conducting Engaging Webinars

In order for webinars to be successful, they need to be engaging, provide value to the audience and offer actionable- takeaways. Top three best practices for conducting a webinar:

1. Keep the event exciting and relevant—and deliver what you promised.

- Engage your audience the moment they join the event with an opening slide containing a relevant and interesting fact or anecdote.
- After welcoming people to the webinar, explain how the technology works—including how (and when) to ask a question or participate in a poll.
- Outline what you will be discussing during the event, and in what order. Make it clear that people will leave with actionable advice and recommendations.

2. Make sure the event is interactive.

- Uploading a PowerPoint or PDF is a great way to share information, but sharing applications or your desktop is a good way to engage attendees. Rather than show a screen shot of a website, go to the website and navigate through the content you are discussing.
- A single speaker is great but live, ad-hoc discussions and moderated panels are more interactive, and will often enliven and engage your audience more than a stagnant presentation.
- Use slides to illustrate your points, not as a visual crutch—and don't simply read content from the deck.
- Consider allowing participants to ask questions during the event itself, rather than during a specific time period at the end. This will likely lead to off-the-cuff discussion that will feel real and relevant.

- Use mark-up capabilities as they make sense. Drawing a circle around a key point or a line to connect related issues.

3. Leave your audience wanting more (contact)—and knowing what to do.

- Wrap up your presentation with best practices or actionable advice. Leave your audience knowing what to do next.
- Provide contact information for all the speakers, as well as key contacts within your organization.
- Conduct a post-event meeting for all the presenters, to get feedback on their experience of the technology, the content and the audience reaction. Keep track of what worked—and what didn't.
- Within 24 hours, provide attendees with any materials you offered, such as whitepapers, the event recording or a copy of the presentation.

## Additional resources

| Tips for webinars or virtual training | http://blog.cathy-moore.com/2014/01/tips-for-webinars-or-virtual-training/ |
|---|---|
| 5 Tips for Interactive Webinars | https://yourwebinarguru.com/2015/04/15/5-tips-for-interactive-webinars/ |

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# Virtual worlds

A virtual world is a computer-based simulated environment which may be populated by many users who can create a personal avatar, and simultaneously and independently explore the virtual world, participate in its activities and communicate with others. These avatars can be textual, two or three-dimensional graphical representations, or live video avatars with auditory and touch sensations. In general, virtual worlds allow for multiple users but single player computer games, such as Skyrim, can also be considered a type of virtual world.

The user accesses a computer-simulated world which presents perceptual stimuli to the user, who in turn can manipulate elements of the modelled world and thus experience a degree of presence. Such modelled worlds and their rules may draw from reality or fantasy worlds. Example rules are gravity, topography, locomotion, real-time actions, and communication. Communication between users can range from text, graphical icons, visual gesture, sound, and rarely, forms using touch, voice command, and balance senses.

Massively multiplayer online games depict a wide range of worlds, including those based on science fiction, the real world, superheroes, sports, horror, and historical milieus. The most common form of such games are fantasy worlds, whereas those based on the real world are relatively rare. Most MMORPGs have real-time actions and communication. Players create a character who travels between buildings, towns, and worlds to carry out business or leisure activities. Communication is usually textual, but real-time voice communication is also possible. The form of communication used can substantially affect the experience of players in the game.

Virtual worlds are not limited to games but, depending on the degree of immediacy presented, can encompass computer conferencing and text-based chatrooms. Sometimes, emoticons or 'smilies' are available to show feeling or facial expression. Emoticons often have a keyboard shortcut.

There are several benefits of using virtual reality elements in e-learning:

- It offers a visual approach – According to numerous studies, people retain what they have read better when they are able to see it or experience it somehow. VR in e-learning makes this possible and creates a completely new visual experience to improve learners' retention capacity and their understanding of the material.

- It lowers the risk factor – VR in e-learning can simulate dangerous and risky situations in an environment that is controllable, so that it removes the risk factor usually associated with such situations. This lets learners alleviate their fear of making a mistake.

- It facilitates complex data – Like the visual approach, when learners can really experience complex situations, they are more likely to handle them with ease. VR simplifies the complexity of those situations, allowing learners to actually experience everything themselves, rather than just reading about it.

- It offers remote access – VR in e-learning doesn't require an actual classroom so that learning can be conducted remotely, which can help you save a lot of time and money that would normally have to be spent on planning a complete learning program.

- It provides real-life scenarios – As mentioned, one of the greatest things about VR in the context of e-learning is that it allows learners to really immerse themselves in various virtual scenarios. For instance, if the learning program involves some real situation that a certain business has faced

before, an employee will be able to handle such a situation more efficiently after experiencing it virtually.

- It is fun and innovative – People love to try out new things. VR offers a completely innovative and interactive approach to learning and makes learning become an entertaining, rather than an everyday dull process.

Best practices for implement virtual reality implementation in the classroom:

**1. Collaborate with others** - First, imperative to the success of any project is including as many stakeholders as possible into the initial plans for using the equipment. Furthermore, virtual reality is for everyone, not to be locked and guarded like 'the precious few.'

**2. Use centers and grouping** - Practically–when scaffolding students into virtual reality–classroom teachers can adapt a 'Centers Model.' In this model, virtual reality is a "center" that students rotate through, typically in a small group.  They may also use a 'Team Model.' This model falls into more of a game-design, collaborative design-team type.

**3. Make it meaningful** - The final tenet is teachers having a specific reason for engaging with virtual reality in the classroom, with clear objectives being a key element into making virtual reality meaningful.

## Comparison of virtual worlds platforms

**1. Second life** (https://secondlife.com/) is a free 3D virtual world where users can socialize, connect and create using free voice and text chat. Joining Second Life is free. Once your students are registered as Second Life users, then you can send them directly to your region with a SLurl — or a Second Life URL — a link that teleports avatars directly to a specific place

The land and group tools in Second Life enable you and colleagues to collaborate on content creation and editing in a shared space.

An avatar is a digital, animated representation of yourself in Second Life. When you join Second Life, you have a standard set of avatars to choose from. Once you receive your avatar, then you can go into "appearance mode" and change your hair, skin, shape, and clothing

Each region can run optimally with roughly 60 avatars before performance suffers and 100 is the recommended limit.

Second Life is a rich-immersive environment that enables a wide variety of communication channels, including both text chat, and 3D spatial voice. There are other more interesting and dynamic ways that teams can communicate such as virtual brainstorming tools, document sharing, whiteboarding, 3D mind mapping, and many other educational tools that take full advantage of virtual spaces.

Project «Training material and programme for social and business entrepreneurial competence development by virtual learning methods for multinational and multiculturalgroups, and recognition and validation of the acquired competence» (No. 2017-1-LV01-KA204-035469)

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*Second Life*

Today, there is a wide assortment of business productivity and creativity applications within Second Life. These include widgets for: running PowerPoint presentations, white boarding, brainstorming, dynamic audience polling, and many others.

Residents can acquire land in several ways (Educators and Non-Profits may be eligible for a discount from the standard rates):

- Buy Land from Residents

- Auctions.

- Private Regions (Islands) – allows to control who is permitted to enter my region, campus, classroom, or events

    o Full Regions are the premier island product. These regions can handle the most avatars and scripts and offer the highest performance. Max. avatars 100 (Price $349 plus Maintenance Fee $249 (monthly))

    o Skill Gaming Regions are Full Regions that permit the placement, operation and use of approved Skill Games in accordance with the Skill Gaming Policy (Price $600 plus Maintenance Fee $345 (monthly)

- Linden Lab offers temporary Full Region rentals (Private Regions are US$50 per region per day)

Once your organization owns virtual land, you can then create buildings, meeting spaces, and social spaces yourself (if your organization has Second Life building skills in-house). Important:

- There is requirement for graphics card (may be restrictive): minimum NVIDIA GeForce 6600 or better, OR ATI Radeon 9500 or better OR Intel 945 chipset

- SL requires a number of ports to be open that your network admin people may respond to by simply shaking their collective heads in disbelief

**2. jokaydiaGRID** (http://jokaydiagrid.com/) is OpenSimulator based Virtual World focused on Education and the Arts. The jokaydiaGrid Project has a number of aims including:

- Providing an engaging educational virtual worlds grid, with a focus on supporting teachers to implement real virtual worlds learning in their classroom

- Developing a rental service for educators and artists who are interested in working in a PG virtual worlds environment

- Exploring ways to 'multi-grid' – eg. creating strategies, techniques and best practices for creating presence across a range of virtual worlds, and learning how to best use each environment for and to its best advantage

- Engaging kids in our virtual worlds adventures – the jokaydiaGrid gives us the freedom to create a PG environment which is much more viable for k-12 educational use

- Learning about OpenSimulator – we are excited to be joining the opensource virtual worlds community and look forward to both learning about and contributing to the development of opensource virtual worlds options for education

- Developing new 3D educational resources – Leveraging off the flexibility available to us on the OpenSim platform for public and private delivery (without the scary price tag)



*jokaydiaGRID*

jokaydiaGRID sim rentals entitle owners to:

- Full region connected to the jokaydiaGRID

- Light scripting – limited timed/physics scripts

- 15-20 Avatars concurrently depending on build/activity

- Full terraforming rights

- Up to 15,000 prims

- Parcel media movie & MP3 streaming

- Estate Managers

- Parcel divisions allowed

Costs for jokaydiaGRID Rentals: Rentals are charged at a standard fee of $25au per month (including GST). They also charge a one-time setup fee of $50au (including GST) to setup you estate. Important notice: system requires a number of ports to be open from your network.

**3. Unity**

As xr.community are group of researchers, clinicians, engineers, artists and gamers who are passionate about virtual, augmented and mixed reality (summarized as extended reality - XR). They provide tools and resources for XR development, as well as Unity tutorials. There is possibility to use Unity resources:

**Personal** is free:

- Do not make more than $100k in annual gross revenues, regardless of whether Unity Personal is being used for commercial purposes, or for an internal project or prototyping.

- Have not raised funds in excess of $100K.

- Not currently using Unity Plus or Pro.

**Plus:** ~$25 per month with 1 year, prepaid  Or $35 (Plan eligibility: annual revenue or funds raised of $200k or less)

**Pro:** $125 per month

**4. OpenSimulator** (http://opensimulator.org) is open source software program (OpenSim). OpenSim does not have a single persistent virtual space that is – and has to be – shared by all users, with all of the consequences that entails.
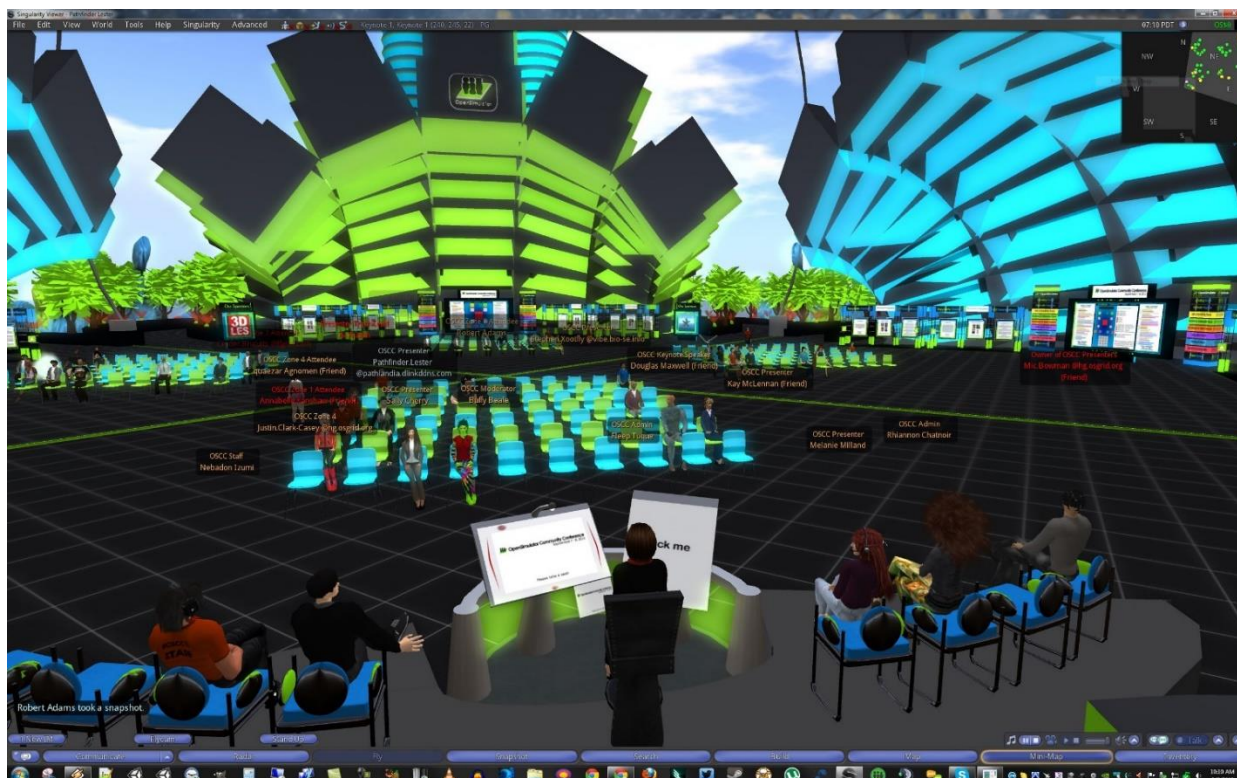
*OpenSim*

Instead, there are many OpenSim entities, each with their "own" virtual space. A shared standard at least enables space to be entered by avatars from other entities – it is up to the operator to decide whether to allow this option and, if so, in what way. But this method does not create a binding connection between the "residents" of a virtual world and certain spaces and places within this world, where all residents are connected.

Administrator of the OpenSim entity can possess each individual world (it is up to him to decide whether and how another user lives in his world).

Important: OpenSim current version is considered in alpha state – not reasonable to use in real student activities however there are projects utilizing OpenSim.

**5. High Fidelity** (https://highfidelity.com) is an open-source software where you can create and share virtual reality (VR) experiences. You can create and host your own VR world, explore other worlds, meet and connect with other users, attend or host live VR events and much more.

*High Fidelity*

High Fidelity has been designed to be an immersive and interactive experience. Learn if your system meets all the requirements to run Interface and Sandbox.

The system requirements are quite high:  NVIDIA GTX 970 / AMD R9 290 equiv. or greater Graphics Card, Intel i5-4590 equivalent or greater CPU, 8GB+ RAM, Windows 7 SP1 64 bit or newer or Mountain Lion (10.8) or newer or Linux.

Additional Hardware Requirements: recommended VR hardware such as head mounted displays (HMD), hand controllers and audio headsets

**6. ActiveWorlds** (https://www.activeworlds.com/) offers a comprehensive platform for efficiently delivering real-time interactive 3D content over the web. ActiveWorlds' 3D content is dynamic, visually compelling and most importantly provides users a richer, more exciting online experience. Applications for ActiveWorlds' 3D technology are as diverse, creative and exciting as the product itself.

For consumers, ActiveWorlds hosts a free Universe of over 600 3D virtual reality worlds. In these worlds you can choose from a vast array of avatars that fit your personality (or your perceived personality - that's half the fun!). You can then move about, play online games, shop and make friends with people from all over the planet. You can even stake claim to a piece of land and build your own virtual home, mansion, estate or castle! If you like to travel, there is plenty to explore. With Active Worlds' most popular world, AlphaWorld, boasting virtual land space larger than California, there is plenty of opportunity to be awed by the creations of others!
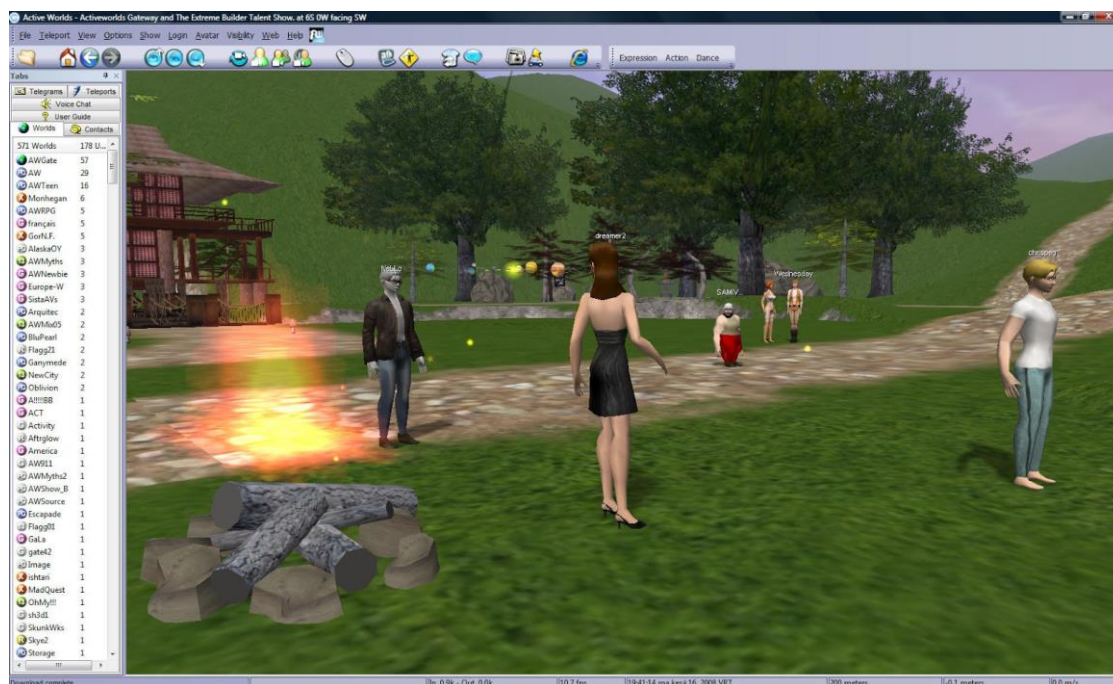
*ActiveWorlds*

ActiveWorlds offers Galaxy and Universe server configurations as Cloud Services

- One-time Server License starts with $1,999
- Annual Cloud Services start with $699/yr
- Annual World Server Hosting starts with $299/yr

# Conclusion

It is expensive if you would like to use special VR equipment: Oculus rift from VR for just $399 USD*, VIVE VR SYSTEM from $ 499, Vive Pro starter kit from $1098. Both include some game stuff too. With your smartphone – cardboard starts from $5.71

Not all hardware is available in all regions and hardware has quite special requirements. Virtual world platform solutions which can be used in this project are not free of charge.

For those reasons virtual world platform wouldn't be used in proposed online learning platform.

# Social media and social networks

Social media are web-based communication tools that enable people to interact with each other by both sharing and consuming information.

The following list of common features are dead giveaways of a social media site. If you're questioning whether a particular site could be classified as social or not, try looking for at least one of these features.

- **User accounts:** If a site allows visitors to create their own accounts that they can log into, then that's a good sign there's going to be social interaction. You can't really share information or interact with others online without doing it through a user account.
- **Profile pages:** Since social media is all about communication, a profile page is often necessary to represent an individual. It often includes information about the individual user, like a profile photo, bio, website, feed of recent posts, recommendations, recent activity and more.
- **Friends, followers, groups, hashtags and so on:** Individuals use their accounts to connect with other users. They can also use them to subscribe to certain forms of information.
- **News feeds:** When users connect with other users on social media, they're basically saying, "I want to get information from these people." That information is updated for them in real-time via their news feed.
- **Personalization:** Social media sites usually give users the flexibility to configure their user settings, customize their profiles to look a specific way, organize their friends or followers, manage the information they see in their news feeds and even give feedback on what they do or don't want to see.
- **Notifications:** Any site or app that notifies users about specific information is definitely playing the social media game. Users have total control over these notifications and can choose to receive the types of notifications that they want.
- **Information updating, saving or posting:** If a site or an app allows you to post absolutely anything, with or without a user account, then it's social! It could be a simple text-based message, a photo upload, a YouTube video, a link to an article or anything else.
- **Like buttons and comment sections:** Two of the most common ways we interact on social media are via buttons that represent a "like" plus comment sections where we can share our thoughts.
- **Review, rating or voting systems:** Besides liking and commenting, lots of social media sites and apps rely on the collective effort of the community to review, rate and vote on information that they know about or have used. Think of your favorite shopping sites or movie review sites that use this social media feature.

A lot of people user the terms social media and social networking interchangeably as if they mean the exact same thing. Although the difference is subtle, they're not the same. Social networking is really a subcategory of social media.

The easiest way to understand the difference between social media and social networking is by thinking about the terms "media" and "networking" separately. Media refers to the information you're actually sharing–whether it's a link to an article, a video, an animated GIF, a PDF document, a simple status update or anything else.

Networking, on the other hand, has to do with who your audience is and the relationships you have with them. Your network can include people like friends, relatives, colleagues, anyone from your past, current customers, mentors and even complete strangers.

They certainly overlap, which is why it gets confusing. For example, you can share media with your social network to gather likes and comments–a form of social networking. But you can also just upvote a link on Reddit, which is a social media platform, to help out the community and give your say in the matter without any intention of building relationships with other users.

## Comparison of social media platforms

There are the top five ways to start using social media for training:

**1. Twitter** (https://twitter.com/) allows educators to find out what's happening now with the people and organizations they are interested in. Identify their colleagues, competitors, and leaders in your sector, and follow them on twitter. This allows to stay up-to-date on current news, trends, and other pertinent information that is relevant in specific field. Educators can tweet links to articles and blog posts that keep their trainees up to date with the latest rules and regulations.

**2. Google Hangouts** (https://hangouts.google.com/) connect educators and their trainees via video chat. The Google application makes group meetings simple and easy, especially for those team members who work remote. The program allows up to nine persons to join the hangout in which everyone can be seen and heard. It is possible to demonstrate a task, share computer screen with a others, or discuss a performance evaluation etc.

**3. Facebook** (https://www.facebook.com/) can be integrated into your training and development program by creating specific groups for trainees teams. If your team is working on a task or project together, educator can set deadlines and delegate tasks through updates and events. Educators can post links to articles and websites that may be of interest to them or to trainees. Sending messages and sharing files will help training participants communicate regularly, manage time, and be productive.

**4. Quora** (https://www.quora.com/) is a discussion board for training participants to ask and reply to questions on any topic of professional or personal interest. Trainers can suggest Quora to their trainees to continue learning about topics discussed in training sessions. Next time trainees have a question, they can look it up and/or ask it on Quora. They might discover something they never knew before or spark up an interesting conversation.

**5. Hipchat** (https://www.hipchat.com/) allows to create and select exclusive chat rooms. Start a conversation with your trainer or share links and files with several of training participants.

## Selected social media platforms

Comparison results of selected social media platforms are provided in table below.

**Summary of social media analysis**

| Social media | Analysis and decision about usage |
| --- | --- |
| Twitter | Can be recommended as additional source of information for trainees. |
| Google Hangouts | This functionality will be supported with online webinar platform. |

| | In addition, webinar platform will support additional tools like white board, polls, session recording. |
|---|---|
| Facebook | Must be included in OLEP platform. Main usage: Closed/ secure Facebook groups in Social learning mode. Publish resources and posts using Units as some kind of categories Video publishing and sharing Picture galleries Group discussions and chat using FB messenger Track resource usage and member activity |
| Quora | This functionality will be supported with LMS platform and Facebook. |
| Hipchat | This functionality will be supported with LMS platform and Facebook. |

## Best practices for Facebook groups usage for training needs

**1. Opt For Smaller Groups.** One of the perks of incorporating Facebook Groups into your e-learning strategy is providing a personal e-learning experience. Online learners don't have to be concerned about sharing their thoughts with everyone, just they select a few like-minded peers. Facebook offers three different levels of privacy: open, closed, and secret. Public group posts are viewable to the masses. Closed group posts are only accessible to the members, but others can search for the group. Secret Facebook groups are more exclusive. Only members are able to locate the group and view the posts. Ideally, you should aim on smaller, closed Facebook groups if online learners are reluctant to participate. If you're dealing with sensitive subject matter, then secret Facebook groups may be your best bet.

**2. Choose Your Name Carefully.** You must choose a name for your Facebook group and write a brief description. Keep in mind that potential members are going to read this when you send the invite. Thus, it has to clearly state your message, group goals, and what online learners can expect. For example, what information they'll receive and how much they will have to participate. If you're opting for an open Facebook group, include keywords to make it easy for online learners to find you. The "about" section has a 3000 character limit. So, you may have to write a few drafts to get it just right or enlist the help of your Subject Matter Expert.

**3. Set Some Ground Rules.** Things can quickly spiral out of control if there aren't rules in place. Therefore, you should create a list of guidelines, recommendations, and netiquette tips to keep the group on-topic. Above all else, online learners must understand that the group dynamics hinge on respect and collaboration. If there is ever a dispute, online learners can refer to the guidelines and figure out how to resolve the issue. They also make members feel more at ease, which increases participation. After setting the ground rules, pin them at the top of the Facebook group page so that everyone can see them. In fact, you should pin all important reminders so that they don't get lost in the shuffle.

**4. Appoint A Group Admin.** Facebook groups must have an administrator who monitors group activity and has the power invite new members. Smaller groups usually only require one admin, while larger groups may require a team of administrators. If you have more than one group, it's usually best to appoint a new admin for each one. The administrator is typically in charge of sparking online discussions, posting resource links, and managing the member count. You might consider creating a secret admin group or page where they can discuss key issues. For example, enacting changes to the group guidelines or dealing with a problematic member.

**5. Make It A Daily Commitment.** Successful Facebook groups rely on commitment and consistency. Your membership may rise slowly at first, but you must give it time to grow. You also need to post on a regular basis and manage the group dynamics daily. If the group is open, promoting it to grow your membership is part of the e-learning process, as well. Your group members are more likely to engage and offer their input if they see that the leader is active. Absent admins can also lead to chaos and confusion, as there is no one present to moderate the online discussion. Set aside time every day to do some Facebook group maintenance, which includes posting and replying to comments.

**6. Give Online Learners A Reason To Participate.** In some cases, your online learners may need a nudge to join the Facebook group or participate in the online discussion. Invite them to share their ideas by posting compelling questions or images. Post links to e-learning articles that serve as discussion-starters. Make them feel like they are part of an online learning community by featuring "member spotlights". This involves sharing interesting tidbits about themselves, such as their hobbies and interests. The goal is to connect with them on a personal level so that they feel comfortable. You can also host special contests and giveaways for those who need some extra motivation.

**7. Nip Controversial Comments In The Bud.** It's inevitable. Every now and then you'll notice a controversial comment pop up on the Facebook group page. This is particularly true for open groups that don't enforce membership guidelines. Try not to ignore the comment, because this can lead to a "snowball effect". Another member will comment on the post in question, and that can trigger a verbal sparring match within the group. If you see an offensive or disrespectful comment, acknowledge it and then encourage others to move on to another post. If the commenter is repeatedly posting inflammatory comments, you may want to remove them from the group altogether.

Facebook Groups require an investment of both time and energy, but they offer a wealth of benefits to your online learners. The key is to stay consistent. Post on a regular basis and get your online learners involved. Pose questions, solicit their feedback, and make them feel like a valued member of the team.

## Additional resources

| Use Your Facebook Group as a Learning Platform (for Training or an Online Course) | https://www.youtube.com/watch?v=KKpvzSKHGOM |
|---|---|
| Using Facebook For eLearning: The Ultimate Guide For eLearning Professionals | https://elearningindustry.com/using-facebook-for-elearning-ultimate-guide-for-elearning-professionals |
| Using Facebook as a learning platform | https://www.efrontlearning.com/blog/2013/04/using-facebook-as-a-learning-platform.html |

Project «Training material and programme for social and business entrepreneurial competence development by virtual learning methods for multinational and multiculturalgroups, and recognition and validation of the acquired competence» (No. 2017-1-LV01-KA204-035469)

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# Proposed solution for on-line education platform

Brief description of on-line education platform:

- Moodle 3.5.1 (https://moodle.org/) will be used as a base on-line education platform. Moodle demo site https://school.demo.moodle.net/
- Additional H5P (https://h5p.org/) module will be used to provide interactive learning resources with grading. Full content library https://h5p.org/content-types-and-applications
- ezTalks Meetings (https://www.eztalks.com) will be used as web conferencing platform. It is free of cost webinar platform with up to 100 participants and 40 minutes webinar sessions
- As virtual world platforms require financial investments they are not implemented in proposed platform.

**Detailed description of on-line education platform**

| Technical requirement | Proposed solution |
|---|---|
| Publication of static learning resources (documents, presentations, images, URL, audio, video) | Standard Moodle resource modules – File, Folder, URL, Label, Book. |
| Publication of interactive learning resources with grading (SCORM, xAPI, etc.) | Additional H5P module which allows to create interactive content including interactive video, scenarios, images with hotspots, etc. Full content library https://h5p.org/content-types-and-applications |
| Automated knowledge check - quiz | Standard Moodle module – Quiz |
| Communication tools - forums, chats | Standard Moodle modules – Forum, Chat |
| Individual activities – assignments, survey | Standard Moodle modules – Assignment, Feedback |
| Group activities – assignments, discussions, wiki, | Group mode for Moodle modules like Assignment, Forum, Chat, Wiki, Quiz etc. |
| Sharing knowledge – database, glossary | Standard Moodle modules – Database, Glossary. Allow students create specific records to share knowledge, as well as comment and grade them. |
| Flexible training path – possibility to select free/ predefined learning module usage sequence | Moodle Activity completion and Access restriction features for Moodle modules. |
| Grading for completed activities | Grading and Activity completion for Moodle activities. All grades are collected in course Grade book. |

| | |
|---|---|
| Learning progress tracking | Moodle Activity completion and Grading features together with Gradebooks, Activity completion and other reports. |
| Gamification elements | Moodle standard Badges feature complemented with interactive content (H5P additional module) |
| Interface language – English, Italian | Moodle supports English, Italian, Latvian, Lithuanian, Russian and other interface languages. |
| Mobile device support | Moodle support mobile devices by specific interface theme and mobile app. |
| Social media / social networks | Twitter can be included in OLEP as additional source of information for trainees.<br><br>Facebook must be included in OLEP platform. Main usage:<br><br>• Closed/ secure Facebook groups in Social learning mode.<br>• Publish resources and posts using Units as some kind of categories<br>• Video publishing and sharing<br>• Picture galleries<br>• Group discussions and chat using FB messenger<br>• Track resource usage and member activity |
| Web meetings / webinars (virtual classrooms) | ezTalks Meetings (https://www.eztalks.com) will be used as web conferencing platform. |
| Virtual worlds | Not implemented as all virtual world platforms require financial investments not supported by project's budget. |

Project «Training material and programme for social and business entrepreneurial competence development by virtual learning methods for multinational and multiculturalgroups, and recognition and validation of the acquired competence» (No. 2017-1-LV01-KA204-035469)

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# Best practices for effective soft skills training

Boring soft skills training doesn't just put trainees to sleep. It lowers trainee perception of your organization – your internal brand. That's why the most effective soft skills training typically doesn't just fly off someone else's shelf.

Savvy organizations take time to customize soft skills training so that it not only addresses their desired learning objectives, but does it with highly targeted, interactive courses that look and feel professional, and make good use of employee time.

Here are a best practices for effective soft skills training:

- **Make it personal** - Update the course graphics and voice of the copy to feature your internal culture and brand. For very best results, be authentic but don't be afraid to be aspirational. That is, show your people what's possible.
- **Make it relevant** - Every industry has its own unique terms and acronyms. Use your soft skills courses as an opportunity to introduce them. Customize course scenarios with realistic workplace situations and characters that look like your workforce.
- **Make it Blended** - Offer a mix of self-paced e-learning and facilitated Instructor-Led Training (ILT), on-site or delivered via virtual classroom. Offer the type of training best suited to the logistics and cultural norms of your business and region.
- **Each one teach one** - For greatest impact, coach your internal leaders on how to develop soft skills in others. Hold internal Train-The-Trainer (TTT) sessions with seasoned managers and ask them to participate in delivering soft skills sessions to their direct reports.
- **Keep it timely** - In times of great change, when stress levels are high, internal problems tend to bubble up to the surface. By the time a class or workshop is available, the damage may already be done. Be proactive; have targeted training ready to deploy at the moment of need.
- **Integrate with work** - As part of ongoing training, encourage stretch assignments with on-the-job practice and feedback from managers and peers.
- **Keep it current** - It's hard to get the attention of employees outside of the classroom. Keep your training updated with your most current policies, procedures, links, contacts so they have everything in one place during and after the training session.

# Used resources

- https://fitsmallbusiness.com/best-lms-learning-management-system/
- https://docs.moodle.org/35/en/Features
- https://docs.moodle.org/35/en/Activities
- https://docs.moodle.org/35/en/Resources
- https://teaching.unsw.edu.au/moodle-course-design
- https://www.lifewire.com/what-is-a-webinar-3486257
- https://www.eztalks.com/webinars/best-free-webinar-software-for-startups.html
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- https://www.opensesame.com/blog/5-ways-start-using-social-media-training
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