

Future-Proof Your Training Program with **Open Source**



eThink



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How do you make sure your eLearning program is future-proof?

The learning ecosystem is rapidly evolving, and the changing technologies and growing resources available to help individuals learn is likely a bit overwhelming for your Learning and Development team. One moment, they are convinced your organization has the perfect solution to meet your eLearning needs. In another, you come across a hot new tool with a flashy user interface and functionality that exceeds the solution you already have in place. Furthermore, organizational goals as they pertain to learning seem to constantly shift as your company scales and its needs change.

With the only guarantee being that change is inevitable, how do you build a learning solution that will meet your organization's needs 6, 12, or 24 months down the road?

The key is to develop a best-of-breed eLearning ecosystem that connects into a flexible learning hub - typically the **Learning Management System (or LMS)**.

The role of the Learning Management System varies depending on what goals an organization is looking to achieve; however, the main objective of

the LMS is typically to store, share, and track online training. By providing a virtual hub where learners can access training resources, an LMS aims to make training accessible for remote learners and provide a central location for training across departments and...



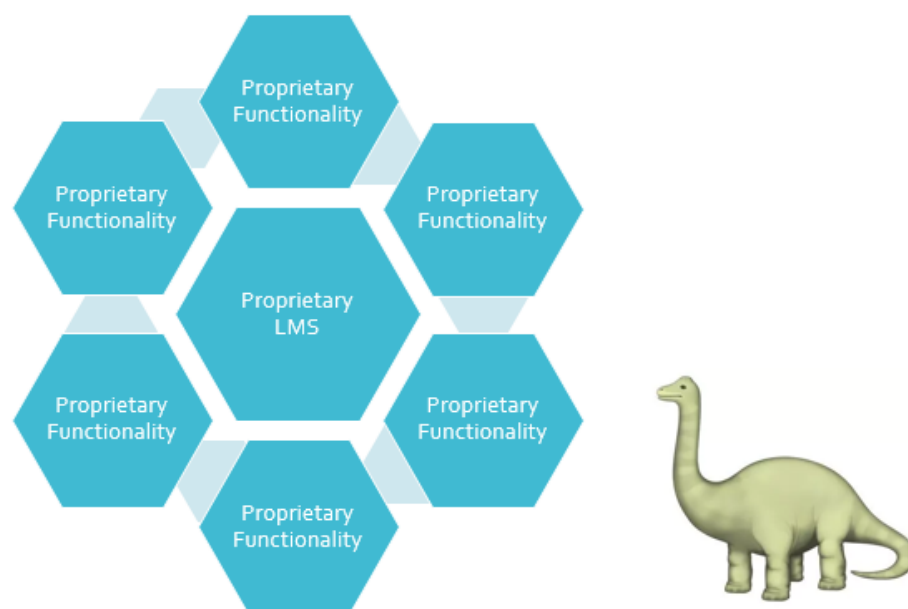
locations of an organization. Additionally, there are the periphery benefits of making training more streamlined, organized, and cost effective.

Traditionally, the LMS used to be the only place where learning occurred. Although the LMS is still the main hub of learning within many organizations, its role is changing. In this whitepaper, we'll discuss the advancements in today's learning ecosystem as well as how you can easily weather future changes in the eLearning space by creating an adaptable learning program around the LMS.

The Old vs. New Model

The Old Model

Creating a customized LMS solution has traditionally been no easy task. For years, proprietary (or closed-source) Learning Management Systems have put up walls to prevent easy connectivity to other systems and flexibility for their users. With a closed-source LMS as the hub of learning, the ecosystem often looks something like this:



Under this model, the LMS vendor attempts to prohibit third-party tools from integrating well or easily with the learning ecosystem's hub, the LMS. Instead, they force customers to use their own "preferred" tools, which often do not meet allow for customization to meet unique user needs and tend to be prohibitively expensive. In this scenario, your Learning and Development team is unable to explore and take advantage of the innovative technologies in the marketplace, while your budget is allocated to dated tools that don't meet the evolving needs of your learners. What a vicious cycle!

The New Model

Open-source Learning Management Systems, such as Moodle and Totara, take a different approach and present a new model that not only allows for but encourages a best-of-breed learning ecosystem. Open-source LMS solutions are designed to integrate well with third-party solutions, allowing L&D professionals to extend LMS functionality by integrating tools that best meet their needs and budget. Now the ecosystem can look something like this:



For anyone who has attended an education technology, learning & development or training conference lately, or is otherwise in tune with the evolution in the learning technology space, you know this honeycomb...

LMS model can be expanded exponentially. The idea is that by using this “plug-and-play” model, L&D professionals can select the best tools for their unique learning and development needs and “plug” them into the LMS hub for a dynamic, robust, and highly impactful experience for their learners.

Furthermore, as new tools or even new product categories emerge in the learning marketplace - for example, the LXP wasn't on this diagram a short time ago! - they can easily be incorporated into the honeycomb or replace an existing piece of the eLearning ecosystem.

The Evolving Role of the LMS

As has been established above, the LMS serves as the hub of the learning ecosystem. The “Old Model” above shows how the eLearning ecosystem is incredibly limited in the world of proprietary, closed-source Learning Management Systems. In that ecosystem, the LMS is the end-all, be-all. The spokes are not replaceable even when an upgrade to one tool or another is necessary. This “out-of-the-box” LMS model is becoming increasingly outdated, as a one size LMS does not fit all.

For an LMS to provide an effective eLearning experience in today's learning environment, the LMS needs to sit at the center of the ecosystem and facilitate a best-of-breed learning environment through seamless integrations and single sign-on with additional tools.

The modern LMS is still where synchronous and asynchronous learning takes place, where managers and mentors can dictate learning paths for their teams, and where data can be garnered to make educated decisions. However, a successful LMS can no longer be a closed, walled-off product that demands learning be completed in a specific manner compatible with the system's limitations.

The Modern LMS:

Why Open Source is the Answer to Future-Proofing

The modern LMS must “play well with others” to create a dynamic learning experience with the ability to bring together multiple tools through best-of-breed selection by the consumer. It needs to emphasize flexibility, interoperability, and scalability. As the main functionality in almost all of the LMSs in the market have become more similar than different, these considerations can differentiate a solution, making it more attractive to both LMS administrators and end users.

Flexibility

Flexibility is critical in today’s learning and development environment. Within a single organization, there are often many departments or programs utilizing a single LMS, each in a different manner but within the same overall structure. With rigid, proprietary systems, the LMS often lacks the versatility and flexibility to meet the varying needs of the different subsets of the population being served. This causes frustration as the tool ends up dictating the approach necessary and not vice versa. This frustration hinders organization-wide adoption and prevents the learning atmosphere desired by leadership teams. On the other hand, open-source LMS solutions offer organizations maximum flexibility in how they configure their platform to meet specific needs.

Interoperability

The learning ecosystem also requires that the LMS be interoperable with other learning tools. Organizations looking to adopt new learning tools often have to spend valuable time and resources to ensure that these new components will communicate effectively with each other, and the...

integrations need to be both easy to implement and seamless to the end user. The best way to accomplish this is by taking advantage of open standards and frameworks, such as LTI and xAPI, and by opening the API structure to facilitate development by third parties. Learning Management Systems that embrace these open standards and frameworks and open their APIs for development facilitate the adoption of a best-of-breed learning ecosystem, while those that do not add cost and delay for their users.

Scability

Scalability is also key to a successful LMS implementation. For many organizations, there may be a huge uptick in use at specific times of the year, such as when new cohorts of employees are onboarded or in the beginning of the year when compliance courses become due. Whether it is a program that needs to be completed by thousands of employees during a two-week timeframe or all learners need to complete a testing process at a certain time, a solution that cannot scale can have a huge negative impact on the organization. A system that is not available or even unacceptably slow can be a huge concern for those responsible for delivering training or learning.



All of these considerations are addressed most effectively with an open-source Learning Management System.

Flexibility and interoperability are achieved by design, as open-source learning platforms are built as modular products that allow functionality to be extended by incorporating third-party plugins and modules. Furthermore, there is a global community of open-source LMS users that are able to contribute to the open code and write plugins, allowing for the rapid development and adoption of new functionality.

In addition to the wide range of plugin and design options with open-source learning platforms, there are numerous options for hosting and management, from self-hosting to a fully-managed approach. This also provides the flexibility to migrate between vendors and hosting environments without needing to change systems, affording users the ability to select a vendor who can provide great product expertise and support.

Choosing The Right Open-Source Learning Management System

Now that we've established the advantages of an open-source solution in supporting a future-proof training program, how do you choose the right LMS to effectively deliver your eLearning solution?

The open-source Learning Management Systems **Moodle** and **Totara** are built to be highly flexible, interoperable and scalable. Both Moodle and Totara embrace open standards such as SCORM, LTI and xAPI, which facilitate integration.

Let's explore each of these learning platforms further...

What is moodle ?

Moodle is the most widely used Learning Management System in the world, with nearly 100k registered implementations worldwide supporting over 150 million learners. Moodle was designed to provide educators, administrators and learners with an open, robust, secure and integrated system to create personalized learning environments. Moodle's modular nature and inherent flexibility make it an ideal platform for both academic and enterprise level applications of any size.

Moodle delivers a powerful set of learner-centric tools and collaborative learning environments that empower both teaching and learning. Designed with a simple and flexible interface and well documented resources, Moodle can be easy to learn and use. Freely available for all users, Moodle can be self-hosted (if you have the time and ambition) or you trust a Certified Moodle Partner to provide top-notch support for your Moodle environment.

Click [here](#) to learn more about the Moodle Partner Network and the advantages of working with a Certified Moodle Partner.

The Moodle project's open-source approach means that Moodle is continually being developed and improved on to suit the current and ever-changing needs of its users. Moodle's modular and interoperable design allows developers to build plugins that can integrate with external applications to enhance system capabilities and extend what is possible with Moodle. Additionally, Moodle can be scaled to support the needs of both small and large organizations.



Because of its flexibility and scalability, Moodle has been adapted for use across education, business, non-profit, government, and many other community systems. Moodle has been translated into more than 120 languages and is designed to comply with open and accessibility standards.

Moodle is web-based and features a mobile-compatible interface, making it accessible from anywhere in the world across different web browsers or devices.

Download the **Comprehensive Moodle Guide** below to learn more.

[Download](#)



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What is totara ?

Originally built off of the open-source Moodle platform, **Totara** takes learning and performance management to the next level for companies, associations, non-profits, government agencies, and healthcare organizations.

Totara is created with organizational learning needs in mind, offering hierarchies, personalized learning paths, compliance, certification, and much more to better educate, train, and manage employees. Totara's flexible design allows organizations to configure and customize the look and feel of their training portal, creating a truly unique place for professional learning to happen. A fully responsive design that leverages HTML5 to adapt to different browsers and devices gives learning programs the flexibility to deliver the training modern learners want.

Totara also makes it easy to capture observational data for on-the-job training. You can develop employees using personalized or role-based Learning Plans. Dashboards make relevant data around learning, competencies, and learning objectives easily visible and can provide important data around deadlines and what is mandatory or voluntary easily accessible at a glance.

Additionally, tools like the Seminar manager makes it simple to organize training, schedules, rosters, notifications, and attendance for both synchronous and face-to-face training. Published training calendars and management approval workflows further help to track and report on learner interest, registrations, and attendance for training events.



That said, the Management tools in Totara are powerful and help manage employee learning performance, appraisals, and feedback and analysis to better align employee training with both individual and organizational goals.

Furthermore, Totara connects the LMS with other key business systems to maximize the return on your investment by automating data entry, synchronizing virtual face-to-face training, assigning and distributing badges based on course completions and skill achievements, and offering specific management tools and much more to continuously develop employees at any staff level.

Download the **Comprehensive Totara Guide** below to learn more.

[Download](#)



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Maximizing the Interoperability of Open-Source to Extend and Future-Proof Your Learning Program

With open-source technology, you're able to create a future-proof eLearning solution that can be scaled, upgraded, and enhanced based on organizational or industry changes. With the ability to incorporate third-party solutions that can extend LMS functionality and provide a tailored solution specific to your industry or company needs, you'll find yourself with a flexible, best-of-breed training solution that can stand the test of time.

At eThink Education, our support and services for open-source Moodle and Totara support the "best-of-breed" approach described above. This means that rather than locking customers into our own proprietary products, we leverage Moodle and Totara as a vehicle to meet our client's needs and objectives. We also work with our clients to identify other tools or solutions that can work with the LMS to enhance the learning experience and achieve the types of outcomes they're looking for.

Through this eLearning consultation, we have observed a number of trends in regard to the most common eLearning goals and the tools and solutions that organizations are pairing with the LMS to create a complete, best-of-breed eLearning ecosystem. These goals and tools include:

- Reporting on activities across the learning ecosystem (xAPI/LRS)
- A Netflix-like experience when it comes to learning content (LXP)
- Premade compliance content for heavily regulated industries and soft skills, along with custom content for organizations that don't have the bandwidth to create their own (Canned or Custom Content)
- The ability to sell courses to partners and customers (eCommerce)

eThink has a robust partner program by which we have developed partnerships with like-minded eLearning companies who provide services and solutions that bring value to our clients. Many of these partnerships are with companies providing the types of tools and services listed above.

Now, let's break down these tools below to illustrate how they can be integrated with the LMS to enhance the eLearning experience.

Experience API (xAPI) & Learning Record Stores (LRS)

Many organizations want to track and report on the learning that happens outside of the LMS, as well as inside it. By incorporating an xAPI-enabled Learning Record Store (LRS) into your learning environment, you collect both formal and informal learning for a 360-degree view of the learning experience. Working together, the LMS and LRS can improve the ability to connect, utilize, and apply data from multiple types of formal and informal learning experiences. From there, organizations can leverage data across platforms to improve training programs and performance outcomes and positively impact the experience of team members and business processes. The result is a more extensible, flexible, and future-proofed eLearning ecosystem.

To more easily offer our clients solutions that can achieve this, eThink currently partners with organizations like [HT2 Labs](#) (who offers the open-source [LRS LearningLocker](#)) and [Yet Analytics](#).



Learning Experience Platform (LXP)

The market has called for a shift from centralized learning located completely within one proprietary system to a mix of proprietary eLearning and outside content to suit a customizable experience.

Furthermore, learning administrators are looking for more than just a system that simply stores and delivers eLearning content. The modern learner wants personalized eLearning content that can be recommended to them when they might need or want it.

To create this type of learning experience, organizations are incorporating Learning Experience Platforms (LXP) to provide employees with more engaging and relevant training materials based on learning paths or interests. An LXP can be added on top of an organization's existing LMS to provide a Netflix-like experience within the LMS by suggesting content based on employee role, activities, or more.

An LXP can aggregate learning content from multiple sources like Lynda.com, Skillsoft, or even Youtube and make recommendations based off of data associated with the learner (using machine learning). Whereas learning in an LMS is often driven by instructors, department managers or administrators, learning in an LXP is largely driven by the learners themselves. Learners can add content to their training plan and decide which content they want to consume, as well as how and when they want to consume it.

By allowing a broader range of content to be part of employee training, it becomes easier for managers to encourage employee engagement and collaboration in online learning.

When it comes to LXP options, eThink recommends [EdCast](#).

Content

The LMS is essential, but content will always reign king! Whether it's premade content used for basic skills training and compliance or custom content built specifically for the needs of your organization, the market has called for a vast array of content options. Creating quality online training material requires both time and resources, which are two things most medium to small sized companies in particular may not have much of. Onboarding new employees and creating the content to support their continued training is a sizable project, which makes being able to outsource your custom content creation or grab off-the-shelf content when needed incredibly valuable.

The advantage of using a third-party content provider is that content can generally be obtained at a lower cost and from a number of different sources. Organizations can pick and choose the pre-made content that works best. When an organization's learning needs extend beyond pre-made content, organizations may need to seek out custom content development services. Custom content developers work with an organization's subject matter experts (SME's) to understand their training needs and develop content based on their specific company or industry requirements. A variety of authoring tools are often used, along with gamification, leaderboards, and social components to create a more dynamic learning experience in the LMS.

With an open-source LMS, you're able to easily import pre-made or custom content solutions into your learning platform using open standards such as SCORM, LTI and xAPI.

For pre-made, off-the-shelf content, check out [Go1](#) and [Vado](#). When it comes to custom content, eThink has a network of partners that we can connect you with through our [Custom Content Program](#).

eCommerce

More and more organizations are using their LMS platform for extended enterprise. Companies that manufacture products that require training to use them or companies that teach a skill set will often sell courses to those end users, on either an individual or company-wide basis.

Companies often require more functionality than just the ability to sell one course at a time, such as the ability to offer subscriptions, vouchers, and profile-based membership discounts. Additionally, learners must be allowed to self-register into courses and critical profile data about the learner needs to be captured. In this type of scenario, an LMS Shopping Cart or eCommerce platform is required and can be easily layered on top of the LMS.

Most eCommerce solutions can work with multiple payment gateways and even use offline payment methods like “pay by invoice.” With a seamless single sign on integration into your LMS, individuals or groups of learners will get easy access to courses as each transaction is documented in the eCommerce platform.

For eCommerce, eThink recommends our partners [Course Merchant](#) and [Intellicart](#).



Conclusion

Using an open-source LMS as your learning hub is the best way to future-proof your learning programs. Open-source learning platforms provide the ability to customize and extend your LMS to include the tools, or pieces of the eLearning ecosystem, above.

Open-source learning platforms like Moodle and Totara allow your organization to create a flexible solution that can grow and scale with your company and learner needs, effectively future-proofing your L&D and technology investments for years to come.

Is Your LMS Future-Proof?

Is your Learning Management System...

- ☒ xAPI compliant?
- ☒ Content agnostic?
- ☒ Scalable?
- ☒ Able to integrate well with other tools?
- ☒ Reasonably priced?
- ☒ Open source?
- ☒ Supported by your vendor?

If not, it might be time to look towards the future. eThink can help!

Speak to one of our experts...

[Request a Demo](#)

About eThink Education

eThink Education provides a fully-managed eLearning solution including implementation, cloud hosting, integration, consultation, and management services for open-source Moodle and Totara. Managed by experts, eThink's total solution provides a dynamic and customizable platform to meet specific institutional and organizational needs. With clients in various industries including Healthcare, Education, Government and Corporate, eThink can help all types of organizations to maximize the effectiveness of their eLearning programs for improved business outcomes. eThink also offers LMS and eLearning trainings through eThink Academy, as well as custom content solutions.

Learn more about our fully-managed solutions for open-source Moodle and Totara.

[Request a Demo](#)



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