

UC5

ID

Implementation



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Learning Outcomes

- 1 Prepare the learning environment and engagement approach for the instructional process;
- 2 Organise the instruction materials and set up the necessary conditions for both the teacher and the learners;
- 3 Review the quality of the instructional materials and the learning setup internally and involving the client.

The background is a warm, orange-toned image of a workspace. It features a desk with a lightbulb, a pen, and several sticky notes. One sticky note has the text 'Web site' and 'dev' written on it. Another sticky note has 'Product 2' and 'Product 3' written on it. The overall aesthetic is creative and professional.

Learning Management Systems

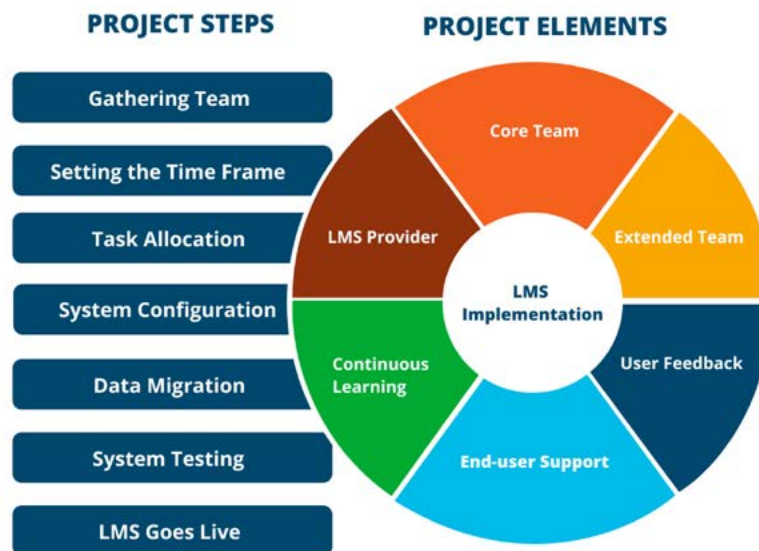


➤ Learning Management Systems

- Delivering, monitoring, and reporting on eLearning courses through different LMS systems.

LMS Implementation

- Selection of the LMS Implementation Team.
- Development of a timeline and implementation plan for the LMS.
- Definition of a data migration strategy (Chetia 2021).



Main Steps in LMS implementation by DDI Development (2020) .

More information at

<https://ddi-dev.com/blog/programming/main-steps-in-lms-implementation/>

Team

Selection of the LMS Implementation Team.

Since the LMS probably impacts various organisational functions, connecting team members should be considered. Departments, such as HR, IT, and Learning and Development, should be connected in order to manage the LMS deployment process. In order to maintain an accurate concentration on the LMS implementation process, it is essential keeping the team as small as possible (Westmoreland 2018).

Important elements:

- Team leader;
- Project manager;
- eLearning specialist;
- L&D administrator;
- IT expert.

Timeline and Plan

Development of a timeline and implementation plan for the LMS.

Depending on the type of the selected LMS, the length of the implementation process for that LMS will vary. Installing an on-premises LMS on a personal server could take longer than installing a hosted or cloud-based LMS, where the vendor's server hosts the software. A more accurate timeline can be provided by the LMS vendor or the IT department.

The time it takes to implement the LMS depends on how many user accounts and software applications are planned. A realistic timeline will allow ample time to achieve each benchmark before the launch (Westmoreland 2018).

Data

Definition of a data migration strategy.

Which courses, data, and instructional assets should be transferred to the new system is a crucial decision whether one is switching from a traditional LMS or installing an LMS for the first time.

Archiving the remaining courses and data and only transferring what is necessary for the updated LMS is mandatory.

The organisation's IT specialist should examine the instructional assets when transitioning from a legacy LMS to a new one to ensure they can be incorporated into the new LMS. Even if SCORM compliant, the courses might need to be modified to function in the new setup (Westmoreland 2018).

LMS

- Select the learning management systems to upload the products.
- Assess the sequence for uploading the products in the LMS.
- Upload communication protocols for tracking learning-related activity into LMS.
- Report (to IT team) if malfunctions are identified.

For delivering, monitoring, and reporting on eLearning courses, a course-building software called Learning Management Systems (LMS) is mainly used. The foundation and structure of the course will be provided by the LMS. It is essential to consider the team's technical expertise, the training requirements, and whether the LMS has all the features required to deliver high-quality and engaging training, such as gamification elements, calendars, and learning paths.

Consider choosing an LMS compatible with mobile devices if the course needs to be accessible by teachers and learners who are constantly on mobile devices.

Additionally, it's essential to think about an LMS with white-labelling options if the course needs to reflect the firm's branding.

If monitoring learning performance is crucial, an LMS with robust reporting is a requirement (Andriotis 2021).

LMS Software

Common LMS software for ID are Blackboard, Canvas LMS, LearnWorlds, Talent LMS, to name just a few.

E-learning courses can be uploaded, users can be enrolled in them, they must check in to access them, and their progress can be monitored.

It is possible to enrol students in new learning programs and branches as they become available and to view which courses or other learning experiences they have already completed. It allows for managing learning resources, access to these, and monitoring overall student engagement.

Adding users, uploading a SCORM or xAPI package, and enrolling participants in the course are standard LMS procedures and tasks.

The effectiveness of an eLearning environment can be evaluated using a number of criteria.

The main three are **SCORM**, **AICC**, and **Experience API (xAPI)**. The most recent of these specifications, known as xAPI, is regarded as the norm (Peck n.d.).

Success Stories

Virgin Australia

Virgin Australia decided to centralize its training in 2008 and implemented a Learning Management System (LMS). The technology, internally referred to as V-Learn, allows employees to complete their training quickly and provides the company with an easy way to handle re-enrollment and report on certification completion.

What originally began as an LMS implementation to satisfy strict regulatory criteria has grown to be far more extensive. The V-Learn has evolved over the past 12 years to become more than just a provider of learning software, becoming a key component of Virgin Australia's learning technology strategy.

«[The LMS] was able to give us the solutions for our immediate needs, but also give us solutions that would help us grow. We started this relationship with a specific need, but we've actually been able to provide better outcomes as an airline because of the capabilities the solution provides us.»

Follow the link for more information about this story:

https://www.seertechsolutions.com/wp-content/uploads/2020/08/virgin_australia_seertech_case_study.pdf

Crown

In order to complement and improve their current classroom-based welding instruction, Crown Technology built a customized e-learning program and assessment. In the packaging industry, accurately seaming and welding metal cans is a crucial step because errors are costly and perhaps harmful. This significant project's secondary goal is to demonstrate how e-learning may be used to conduct and track web-based evaluations as well as send consistent learning messages to the entire organization.

Follow the link for more information about this story:

<https://www.walkgrove.co.uk/case-studies/crown-packaging-technical-training/>

Toyota

An interactive video tour of the Toyota Customer Journey was suggested as a solution to Toyota so that new hires could see the entire customer value chain. The new employee can click on hotspots to view video segments with experts as they navigate the interactive video. The movie includes quizzes at certain points so prospective hires can evaluate their understanding as they watch.

Toyota's LMS system implementation produced a more consistent and engaging orientation while also saving time and money. The interactive video solution has shown to be such an excellent resource for describing the customer journey that it is now being used to train up current staff.

Follow the link for more information about this story:

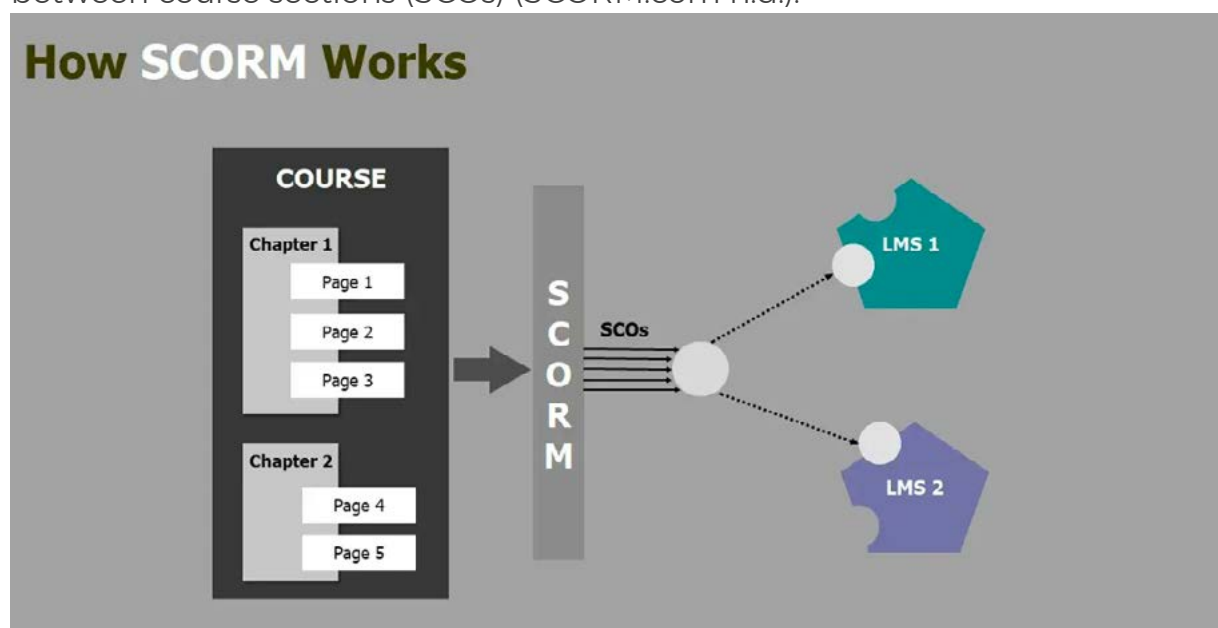
<https://www.spongelearning.com/blog/case-studies/onboarding/toyota/>

SCORM

A set of technological requirements for eLearning products is called SCORM. It offers the channels of communication and data structures required for LMSs and eLearning content to interact. It guides programmers in developing code so that everything they create will suit other eLearning applications. The most popular eLearning standard is SCORM.

Interoperability is SCORM's main advantage. Any produced content must be uploaded into the LMS by the client. Clients who use LMS as a learning platform will import content from other sources. A LMS can import, launch, and track material if it is compatible with SCORM.

There are three sub-specifications that make up SCORM. Content packaging outlines the proper way to package and describe content. The Run-Time specification outlines how content should be launched, how data should be communicated with the LMS, and it also includes the data model specification. Finally, sequencing outlines how a student might move between course sections (SCOs) (SCORM.com n.d.).



SCORM – Sharable Content Object Reference Model

More information at <https://medium.com/@ImAshutoshPS/do-you-want-your-lms-to-be-scorm-compliant-f5701fdf10de>

xAPI

A new protocol for learning technology called as Experience API (or xAPI) makes it possible to gather information about the many different experiences a person has (online and offline). This API collects information on a person or group's activities across numerous technologies in a uniform format. Using the straightforward vocabulary of xAPI, very diverse systems can securely communicate with one another by collecting and sharing this stream of activities.

Many of the previous limitations are solved by the xAPI system. A few of the things that can now be recognised and effectively communicated with by the Experience API are experiential learning, social learning, offline learning, serious games, real-world activities, and collaborative learning (xAPI.com n.d.).

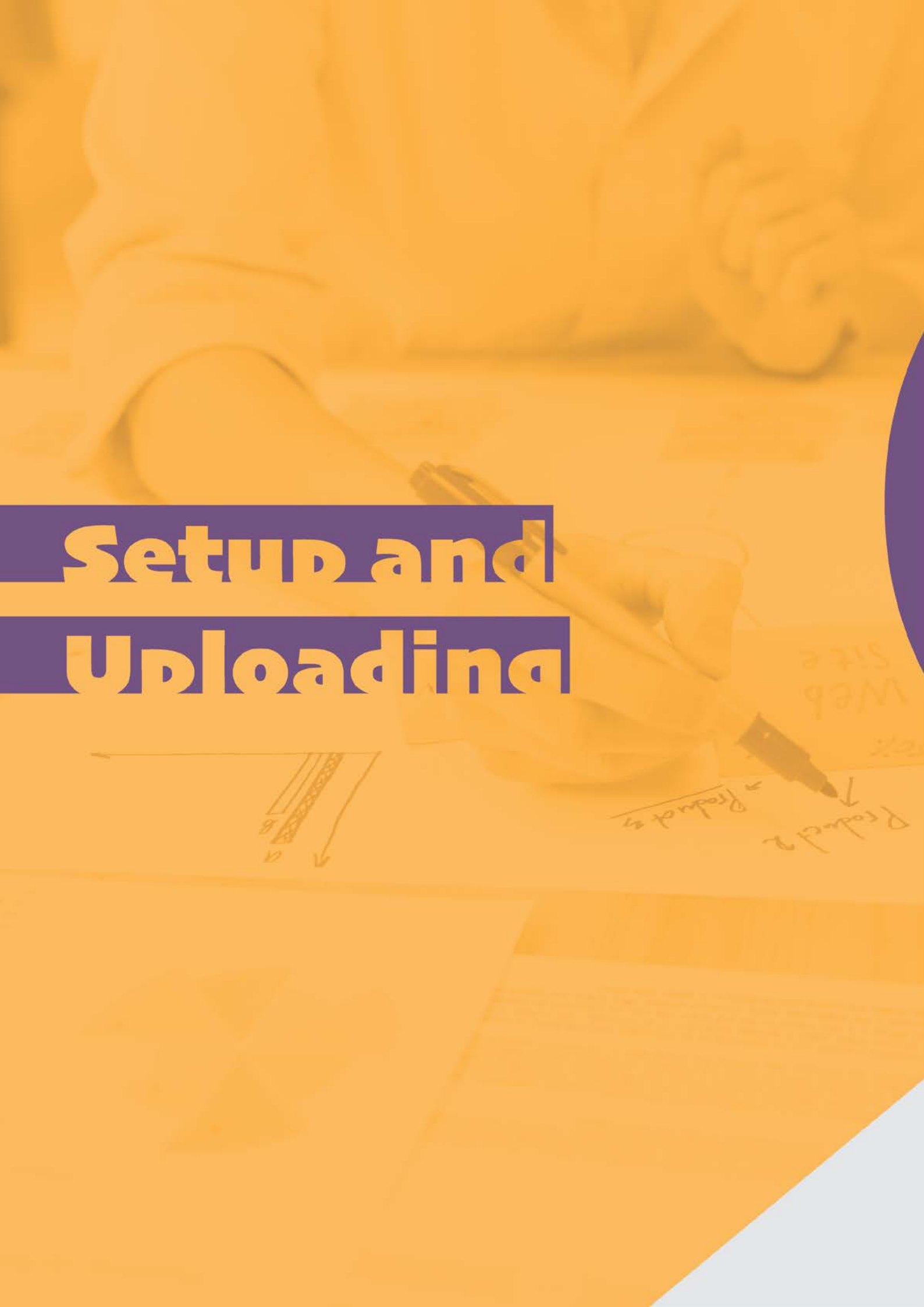
The graphic is a purple rectangle divided vertically by a white line. The left side features a yellow bar chart icon in a circle above the text 'xAPI' in large yellow letters. Below it is a list of five yellow bullet points. The right side features a teal icon of three horizontal lines in a circle above the text 'SCORM' in large teal letters. Below it is a list of four teal bullet points. The background of the purple area has faint binary code (0s and 1s) scattered across it.

xAPI	SCORM
• Newer content standard	• Still most popular content standard
• Tracks online and offline learning	• Tracks only online learning
• Comprehensive tracking	• Older and outdated standard
• Deeper learning insights	• Many organizations transitioning to xAPI
• Future potential to use long-term	

xAPI – Experience API

More information at

<https://waterbearlearning.com/what-is-xapi-tincan/>



Setup and Uploading



➤ Setup and Uploading

- Preparing the environment of the eLearning experience and how the learners will be engaged in the instruction.

Setup

- Make a checklist to ensure that all the needs and requirements defined for the project are implemented.
- Prepare the environment where the educational experience will take place and how the learners will be engaged in the instruction (Chetia 2021).

Implementation

The implementation phase involves preparing the environment where the educational experience will take place and how the learners will be engaged in the instruction.

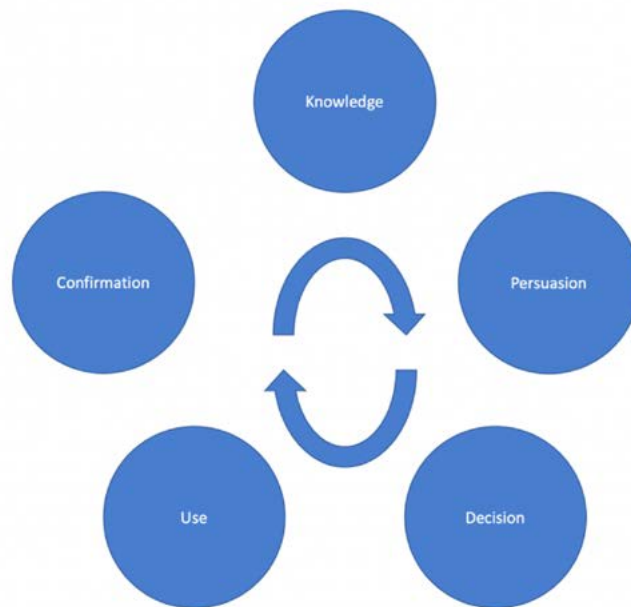
It is important to consider a thorough organisation of all information and the setup of the necessary conditions for both the teacher and the learner(s) to develop their activity. In this context It is necessary to focus on the guidance of the teacher; and the guidance of the student (Moloney 2018).

- The rhythm of ID activities should be efficient.
- Information should be contextualised.
- It should promote a community of learners within the course.
- Students should have the opportunity to create original content.
- It should be based on fair, pertinent and efficient assessment tools.

The role of an instructional designer shouldn't be finished with the creation of the final product; they also need to think about how, when, and where real learners will apply the instruction in real-world contexts. It is known as implementation work (Eichler, 2021).

However, implementation is a stage of the instructional design process that is usually ignored. The customer or other stakeholders frequently wish to be the main actors during implementation, while designers are frequently prepared for their next assignment. It's also possible that the company the designer works for does not see assigning instructional designers to assist with implementation as falling within their competence (Eichler, 2021).

Specialists use Everett M. Rogers' five stages of presenting a new design to structure the discussion (2003). As products or services are adopted, it is also crucial that instructional designers be aware of how people normally utilize the products or services. As a result, it is also important the typical progression through Rogers' stages that new product or service adopters make (Eichler, 2021).



The Stages of Roger's Implementation Model (2003).

More information at

https://edtechbooks.org/id/implementation_and_i

ID Rhythm

The rhythm of ID activities should be efficient.

An educational program should efficiently convey information while motivating students to practice whenever they have the chance, as proficiency in a skill requires many hours of practice. Effective instructional design must swiftly get students to a point where they can start applying what they have learned (Moloney 2018).

- When designing materials, keep in mind the backgrounds of the students.
- Add Supplemental Information.
- Include additional material for struggling students.
- Use a structured and clear format.
- Set up a framework.
- Increase learning speed by using small units.

It is crucial for the instructional designer to take into account design elements that affect adoption and usage. These characteristics were named by Rogers (2003) as relative advantage, compatibility, complexity, trialability, and observability.



Rogers' five attributes: relative advantage, compatibility, complexity, trialability and observability (2003) .

More information at

https://edtechbooks.org/id/implementation_and_i

Information Contextualisation

Information should be contextualised.

Students accelerate their learning when they can connect new knowledge and theories to what they already understand. In addition, individuals can use information more effectively in real scenarios by completing more activities (Moloney 2018).

- Use a variety of examples.
- Use different formats.
- Make use of a range of meaning contexts.
- Offer a variety of real-world applications.
- Connect theoretical ideas to real-world experiences.
- Create new knowledge based on existing knowledge.

Community-based

It should promote a community of learners within the course.

Learning is a collaborative process. Thus, the learning community plays an important role in the learning process, especially in an eLearning context (Moloney 2018).

- A significant aspect of learning is peer feedback.
- Most positions in real life require teamwork.
- Create the conditions for interactions between students.

ID Content

Students should have the opportunity to create original content.

Students are affected by a course that solely asks them to retain knowledge in order to reproduce it in a constrained setting, like a multiple-choice exam or fill-in-the-blank. Instead, it's important to incorporate opportunities for students to create original content within the class plan (Moloney 2018).

- Oral presentations or critical reviews engage students in organising and comprehending issues.
- Students should be encouraged to use their newly acquired knowledge and skills outside of the classroom.
- Include exercises in critical thinking in the course materials.
- Teach students how to approach a problem from various angles.
- Create courses that prepare students to learn throughout their lives.

Assessment Tools

It should be based on fair, pertinent and efficient assessment tools.

Students who practice for exams are the outcome of the outdated teaching method of packing a lot of information into each lesson. The knowledge and abilities are then consigned to short-term memory, where they are quickly forgotten after the exam is done. Companies today want employees who have internalised the skills, values, and knowledge they have studied in school.

Accordingly, students should have material that is presented and assessed at a rate that will allow them to retain the information for a lifetime (Moloney 2018).

- Distinguish new information and assessments.
- Test the tests.
- Don't hesitate to offer advice.
- Give straight feedback.

Quality Check





➤ **Quality Check**

- Supervising and testing the LMS involving stakeholders and users.

Follow-Up

- Supervise the implementation of ID solutions related to specific training by the ID team.

Testing

- Test products individually to ensure they function correctly.
- Perform validation tests to ensure the LMS is reading the products correctly.
- Implement a prior trial and instructional session.
- Implement process revision and enclose.
- Debug potential mal-functions.

Trial and Training

Implementation of a prior trial and instructional session.

It is relevant to test the new LMS with a selected set of users before completing the LMS deployment process and releasing the new system.

Also important is to prepare a test case that the administrators and users can go through for the initial LMS trial. Log any issues and let the team members and the LMS supplier know about them.

Then, provide a training program to your LMS's internal users and external partners (Westmoreland 2018).

Final Steps

Implementation process revision and enclose.

An important step is a review of how the LMS implementation procedure went for everyone involved after it is finished and after the new system has been in use for a while. At this stage, it is essential to identify and fix any technical issues that may have prevented the launch.

As it is finished up the LMS implementation, the following evaluation should also be performed: Analyse the number of users logged in and how they used the system. If they finished the courses, What was their score. Scores and user satisfaction alone may not fully convey how successfully the LMS met organisational objectives. But initially, these statistics offer the perception of the LMS's technical performance, including page uploads, upload times, and overall user experience (Westmoreland 2018).

Conclusion

The background of the slide is a warm, orange-toned photograph of a workspace. It features a desk with a pen, several sticky notes, and a notebook. One sticky note has the text 'Web site' and '200%'. Another sticky note has 'Product 2' and 'Product 3' written on it. The overall aesthetic is professional and creative.



➤ **Conclusion**

The Implementation phase is where ID activities are prepared to be efficient. This is based on LMS setup and methodology for uploading content and quality check.

LMS

The team's technical expertise and training requirements on LMS is one of the most critical issues required to deliver high-quality and engaging eLearning.

Setup and Uploading

Preparing the eLearning environment and engagement of both the teacher and the learner(s) is a key feature, only possible through a well-planned LMS implementation.

Quality Check

Supervising the implementation of ID solutions and performing validation tests is essential to ensure the LMS reads the products correctly.

References

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Co-funded by
the European Union

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Project number 2021-1-PT01-KA220-VET-000034676