



LEARNER INFORMATION SYSTEM

Best Practice Implementation Toolkit

City College Plymouth

Weston College

National College for Advanced Transport Infrastructure

A College Collaboration Fund Project

Learner Information System

A learner information system (LIS) is critical in supporting a number of functions for a college or training provider to secure funding and manage data. Learner Information Systems can be represented by a number of different platforms, depending on the overarching requirements of the end user. A LIS can be purchased to provide a solution for:

1. ILR Reporting
2. Tracking learner progress
3. Data reporting
4. Compliance monitoring
5. Resources management
6. Actioning change requests
7. Quality improvement activities
8. Financial reporting
9. Curriculum management
10. CRM systems

Apart from submitting funding claims, there are many reasons to upgrade or to purchase a Learner Information System. The main reason is to increase efficiency by harnessing technological improvements in capturing learner and employer data and then analysing this data to support organisational development. An LIS will provide the opportunity to improve the following:

1. The time and resource required to capture mandatory data, freeing up staff time
2. Learner outcomes through the analysis of collected data
3. Transparency and audit compliance
4. Real time information
5. Communication and employer engagement activities
6. Monitoring of learner data resulting in improved teaching and learning

However, the purchase of a LIS will potentially run into tens, if not hundreds of thousands of pounds over the lifetime of the product. This toolkit will support you in the procurement process and help identify what should be considered, what stakeholders should be engaged to ensure feedback is taken on board and how systems should be developed to have maximum impact. The use of feedback methods to identify MoSCoW requirements, must have, should have, could have and wont have will be explored and concepts such as Design Thinking will be offered to enable an informed decision on how you will decide on which management systems is best for your organisation.

This document will therefore provide:

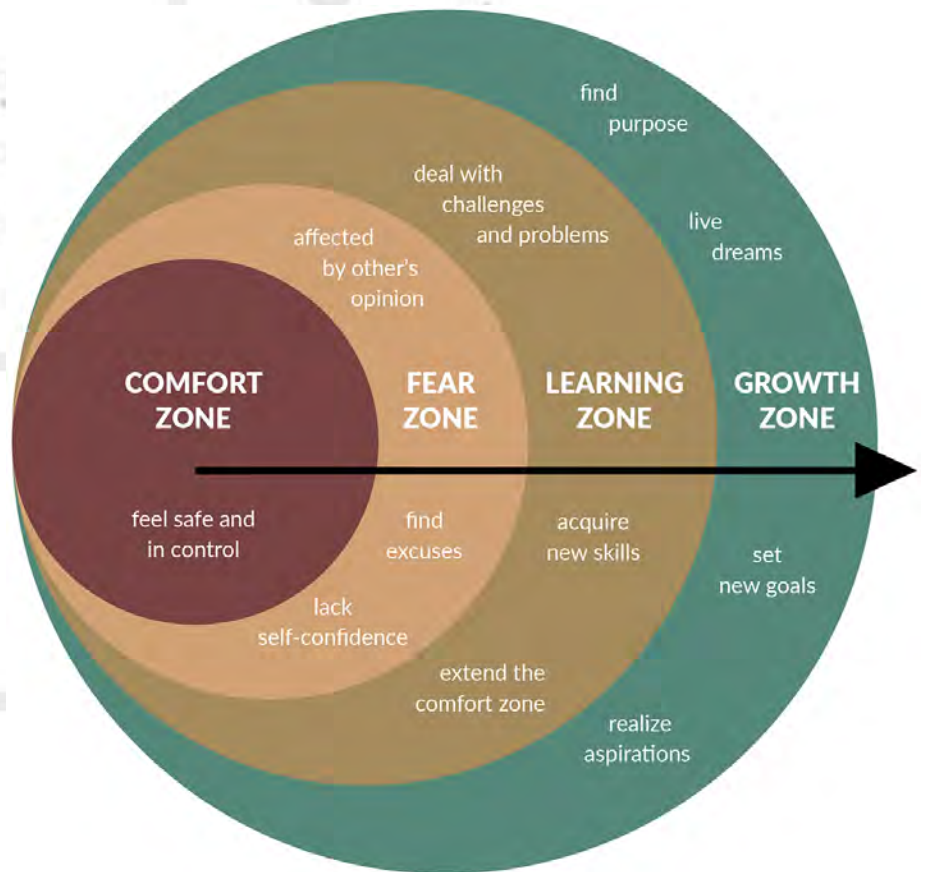
1. Example of a digital strategy to inform your choice of LIS and to set up your digital infrastructure ready to accept your choice of LIS
2. Design Thinking feedback and stakeholder feedback
3. Example of a Student Record Specification
4. Example of a Tender Document

Digital Strategy

The first consideration of a Learner Information System is to is how it integrates into your digital strategy. If you do not already have a digital strategy, you'll need to review the digital culture within your organisation and plan a change control process. This process will challenge your workforce through different phases, but you'll be able to tailor your strategy to find your required solution. A digital solution should include the the 6 Ws:

1. What
2. Why
3. How
4. Who
5. Where
6. When

Your organisation will start in the comfort zone and through the implementation of the digital strategy, aim to move to the growth zone. An reason why a digital strategy is important can be found below and an example is included in the resources linked to this toolkit.



To make people's lives better



To keep us safe and better connected



To be efficient and more productive



Engaging the Stakeholders

A Learner Information System will need to result in outputs that meet a number of different factors. This may be financial to ensure ILR submissions are completed or it could be to meet audit and compliance regulations, which should support continuous improvement activities. However, a significant requirement of implementing a new LIS is that it meets the needs of the users. The success of any LIS is how well users maximise the functions of the system at the front end, and how to minimise the issues at the back end.

The first stage is to survey your staff to understand how the inputting of Learner Information can be improved. This can be achieved through a simple feedback form. Questions should be kept to a minimum (up to 10), and open questions should be used to illicit a rich response. The responses can then be used later in Design Thinking to identify session themes and the issues that currently need to be resolved in the present LIS, if one is already in place.

An example of a feedback form is included in the resources.

Design Thinking

Design Thinking is a methodology which provides a solution based approach to solving problems. It's extremely useful when used to tackle complex problems that are ill-defined or unknown—because it serves to understand the human needs involved,. (Rikke Friis Dam, 2021).

Design Thinking essentially helps to identify a problem and brainstorm to find a solution. Each of the 5 steps are shown below, with a brief explanation underneath:

Design Thinking



Empathize



Define



Ideate



Prototype



Test

1. Empathize—research your users' needs.
2. Define—state your users' needs and problems.
3. Ideate—challenge assumptions and create ideas.
4. Prototype—start to create solutions.
5. Test—try your solutions out.

Design thinking sessions should be completed by grouping stakeholders who have an interest in the outcome. For example, User, Managers, Finance, MIS teams who may all want different outcomes.

Similar to the questions posed in the formulation of a digital strategy, Design Thinking critically analyses What, Why and How to identify and bring about a solution.

Design thinking is a non linear cycle in that it has feedback loops at every stage of the process. The stages do not need to be sequential and can be undertaken in any order or in parallel with each other. The use of Design Thinking will bring innovative ideas to life and support a solution based approach to understanding what your organisation needs to capture learner information, but at the same time focusing on staff and data efficiencies. In addition to the five steps, another can be added to the process, which is Review and Reflect. This enables the feedback loop to those involved in the proposed outputs and outcomes that will benefit the project.

A simple feedback grid can be used to support the identification of ideas and solutions.

+ What worked

△ What could be improved

? Questions

! Ideas



Further information on Design Thinking can be found on YouTube. Below is a Ted Talk video that breaks down the Design Thinking process and analyses how and when this should be applied for best results:

A Design Thinking Pre-Reading document can be accessed through [CourseHero](#), which is also detailed in the **Sources and Information** section at the end of the toolkit, along with other links.

MoSCoW

To support the identification of the requirements of a Learner Information Systems, a well known project management technique can be used. MoSCoW supports decision making by enabling you to understand what is critically important to success. The acronym MoSCoW and its meaning is below:

MoSCoW Prioritisation

MUST HAVE

All of the requirements that are necessary for the successful completion of the project

SHOULD HAVE

All of the requirements that are important for project completion but not necessary

COULD HAVE

All of the requirements that are nice to have but has a much smaller effect when left out of the project

WON'T HAVE

All of the requirements that have been recognised as not a priority for the project's framework

Once you have undertaken Design Thinking and have the outputs from the sessions, the requests can then be grouped into the four categories above to identify the priorities. to aid decision making.

Records System Requirements

Following the Design Thinking process and the outputs generated and agreed upon, a Learner Information System will require a detailed specification of the inputs and outputs required for the system to meet the users needs. By identifying what is needed through Design Thinking a document can be produced that serves to accompany the tender request to any software solution providers that could provide tailored systems that meet the needs of your learners, staff and organisations.

The key elements to understand and capture are:

1. Core system structure and student / course management
2. Portal systems for students, staff, parents and employers
3. Student journey and business systems - applications, enrolments and timetabling, for example
4. Reporting and performance management
5. System functionality and workflows
6. Implementation training and support requirements
7. Platform maintenance and upgrades - both security and performance
8. Value added and integration with current systems
9. Price, fees and ongoing support costs

By using these headings it will allow you to understand and review which software solution meets your requirements and provides the opportunity to compare competing bids for the new Learner Information System. An example of a Student Records System Specification is included in the resources linked with this toolkit.

Learner Information Systems Tendering

The final stage, after understanding your requirement, engaging with your stakeholders, reviewing feedback and identifying the final requirements for the system, is to publish and publicise the opportunity for developers to bid and meet the outlined specification. Alternatively, the specification can be used to identify already established developers and compare and contract the different off the shelf products that are on offer.

A tender document will provide confidential information about your organisation that could be commercially sensitive. For this reason, any sharing of information with 3rd parties should be bound by a confidentiality agreement, which can be built into the Tender Document. The Tender Document will provide the following information:

1. Introduction and Executive Statement - a brief overview of the output required and legalities
2. Business overview and background - includes core values, belief, culture and other organisation details
3. Detailed requirements - what do you need the system to do. What can developers offer
4. Pricing
5. Terms & Conditions
6. Selection criteria
7. Legislation related to the tender
8. Supporting documentation

An example of a tendering document can be found in the resources section linked to this toolkit. The documents that support this toolkit are:

1. Example of a First Stage Systems Review Questionnaire
2. Example of Students Records System Specification
3. Example Tender Document- Student Records System CCF
4. Design Thinking Pre-reading (must be downloaded via CourseHero)

Using all the attached documents, resources, recommended activities and the resulting stakeholder feedback, it should allow an informed decision to be made on the purchase of a Learner Information System. These activities will be time consuming and software developers will require at least one academic year's notice to support the full implementation of a system. This does not include the processing detailed above, which will also require circa six months to be completed effectively and information and data analysed to make an informed choice. Therefore a minimum of 18 months should be allowed in total when purchasing and implementing a new Learner Information System.

Sources and References

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