Co-funded by the European Union

LSP-TEOC.PRO

LSP TEACHER EDUCATION ONLINE COURSE FOR PROFESSIONAL DEVELOPMENT – LSP-TEOC. Pro

Project 2020-1-DE01-KA203-005687
Grant no. KA203-ABE6A51B

INTELLECTUAL OUTPUT 8:

Methodologies / guidelines – Evaluation method and tool

INTERNAL REPORT:
Joseph Cullen
Arcola Research (United Kingdom)

TEAM MEMBERS:
Joseph Cullen, Greg Holloway

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Document Summary

This Document builds on the initial version of LSP-TEOC.Pro Intellectual Output 8 – Methodologies, Guidelines, Evaluation Method and Tool. This initial version of IO8 presented the overall evaluation approach for the project - based on 'theory-driven realist evaluation. It then presented the methodology for implementing this approach, together with an implementation plan and an Evaluation Toolkit for data collection and analysis. It also set out the proposed Quality System for the project. This revised and updated version of Intellectual Output 8 reports on the results of the evaluation, derived from the application of the approach, methodology and tools.

The key messages from the evaluation show that LSP-TEOC.Pro successfuly delivered on many of its key objectives and outputs, and is seen by partners as a success. It carried out an extensive review of state of the art in LSP training programmes, with 532 institutions consulted and 12 programmes extensively reviewed. This research and its results fed into the development of a comprehensive on-line training programme for LSP teachers and students. The programme is comprised of eight modules that reflect the competences needed to deliver high quality LSP training across a range of institutional settings.

300 teachers and students enrolled on the course and 183 - 61% - actively participated in it. These results reinforce the conclusion that there is a clear need for such an innovative programme. However, the retention and completion rates for the course are relatively low, at 23% for the whole course for active participants, with over half active participants completing only 4 modules. This evidence suggests a requirement for additional work to increase retention and progression, including more detailed analysis of the reasons behind drop-out and incomplete progression.

Course participants increased their LSP knowledge and understanding by 40% on average for the course as a whole, with significant increases in LSP knowledge and understanding across all modules of the course. Course participants increased their capacity to apply LSP knowledge in their practice by 20% on average for the course as a whole, and across all modules of the course.

On balance there is very strong evidence that LSP-TEOC.Pro successfully developed the resources necessary to promote change and applied these resources to support change. There is rather strong evidence that utilisation of these resources contributed to positive immediate changes, i.e. in attitudes, awareness, knowledge and the capacity to apply this knowledge in practice. However, the evidence is weaker with regard to the contribution LSP-TEOC.Pro made to intermediate outcomes, i.e. changes in actual behaviours of participants and in the systems and structures of their organisations. Although there is evidence from the evaluation that LSP-TEOC.Pro created favourable conditions for behavioural and systems change, and the vast majority of course participants aim to apply what they had learned in their practice going forward, there is little hard evidence that this was achieved in practice – not least because assessing such change would require longitudinal data to be collected on things like teacher and student classroom practices and their career progression over a period following the end of the project.

For similar reasons, the evidence to support longer-term impacts at the systemic level is also weak. Although the dissemination activities carried out by the project reached a reasonable number of stakeholders, there is no hard evidence that these activities have led to significant changes in the infrastructure needed for extensive knowledge transfer, and the formation of networks and partnerships that could lead to changes in the quality of LSP teaching provided at the European level; in new research networks and in policy formulation and delivery. However, the training course will run until 2028 and a steady throughput of trainees will provide a foundation for potential longer-term impacts. It would appear therefore that, although LSP-TEOC.PRO has progressed significantly along its 'change journey', further effort is required going forward to improve the training offer to increase retention and progression, capitalise on new trainees joining the course and support scaling up and out, so that the project has an impact at the macro level.

Glossary

Term	Definition and source
Action research	Practice based research, which seeks to end the dislocation of research from practice and enhance the position of research as a direct mechanism for change and improvement. http://ec.europa.eu/regional_policy/sources/docgener/evaluation/guide/guide_evalsed.pdf
Attribution	The ascription of a causal link between observed (or expected to be observed) changes and a specific intervention. Note: Attribution refers to that which is to be credited for the observed changes or results achieved. It represents the extent to which observed effects can be attributed to a specific intervention or to the performance of one or more partner taking account of other interventions, (anticipated or unanticipated) confounding factors, or external shocks. www.worldbank.org/oed/ecd/docs/annex_e.pdf
Behavioural additionality	Changes in beneficiaries' behaviours resulting from an intervention https://www.researchgate.net/publication/254452904_The_Behavioural_Additionlity_Dimension_in_Innovation_Policies_a_Review
Contribution analysis	Contribution Analysis is an approach for assessing causal questions and inferring causality. It offers a step-by-step approach designed to help managers, researchers, and policymakers arrive at conclusions about the contribution their program has made (or is currently making) to particular outcomes. The essential value of contribution analysis is that it offers an approach designed to reduce uncertainty about the contribution the intervention is making to the observed results through an increased understanding of why the observed results have occurred (or not!) and the roles played by the intervention and other internal and external factors. http://betterevaluation.org/plan/approach/contribution_analysis
Counterfactual	The situation which would have arisen had the intervention not taken place. http://ec.europa.eu/regional_policy/sources/docgener/evaluation/guide/guide_evalsed.pdf
Critical Success Factors (CSFs)	'The critical areas whose high performance or success is important' and also 'the steps taken to succeed' (Rockart, 1979)
Ex ante evaluation	An evaluation conducted before the implementation of an intervention.
Indicator	A characteristic or attribute which can be measured to assess an intervention in terms of its outputs or results. **Output indicators** are normally straightforward. **Result indicators** may be more difficult to derive, and it is often appropriate to rely on indirect indicators as proxies. Indicators can be either quantitative or qualitative. **Context indicators** relate to the environment for a project or programme. http://ec.europa.eu/regional_policy/sources/docgener/evaluation/guide/guide_evalsed.pdf
Formative evaluation	Evaluation which is intended to support programme actors, i.e., managers and direct protagonists, in order to help them improve their decisions and activities. It mainly applies to public interventions

Term	Definition and source
	during their implementation (ongoing, mid-term or intermediate evaluation). It focuses essentially on implementation procedures and their effectiveness and relevance. http://ec.europa.eu/regional_policy/sources/docgener/evaluation/guide/guide_evalsed.pdf
Key Performance Indicators	Key Performance Indicators (KPIs) make the connection between the CSFs and the KRIs. They track the ***actions*** between the CSFs and the KRIs. So, first, they have to measure a process. Second, they have to be ***key*** - i.e. the only measures that are essential to demonstrate progress towards 'results'. Third, they have to measure 'live' data - i.e. the information source used to measure process and progress is continually generating updated information. Fourth, they need to reflect 'context'. Fifth, they have to be 'metrics' - i.e. a quantifiable measure that can demonstrate progress either from a baseline or in context.
Key Results Indicators	Measure the 'results' (effects) of steps taken to succeed that are carried out in terms of the 'end result'
Participatory evaluation	Evaluative approach that encourages the active participation of beneficiaries and other stakeholders in an evaluation. They may participate in the design and agenda setting of an evaluation, conduct self evaluations, help gather data or help interpret results. http://ec.europa.eu/regional_policy/sources/docgener/evaluation/guide/guide_evalsed.pdf
Process evaluation	Focuses on learning about, and potentially improving, delivery. Tavistock Institute
Summative (or ex post) evaluation	It is conducted after completion and for the benefit of some external audience or decision-maker (e.g. funding agency, historian, or future possible users). (Scriven M., Evaluation Thesaurus).http://ec.europa.eu/regional_policy/sources/docgener/evaluation/guide/guide_evalsed.pdf
Theory based evaluation	Theory-based approaches to impact evaluation allow for a systematic articulation and testing of the assumed connection (i.e. the theory) between an intervention and the anticipated impacts. The focus of theory-based evaluations is not only on understanding whether an intervention has worked but on why and under what conditions change has been observed. Tavistock Institute
Theory of change	Theory of Change is a systematic and cumulative study of the links between activities, outcomes, and context of an intervention. It involves the specification of an explicit theory of how and why an intervention might cause an effect which is used to guide the evaluation. It does this by investigating the causal relationships between context-input-output-outcomes-impact in order to understand the combination of factors that has led to the intended or unintended outcomes and impacts. Theory of Change therefore tests, and normally develops the implementation theory of an intervention and allows this to be modified or refined through the evaluation process. Tavistock Institute

1. Evaluation Approach

1.1 Background and Context to the Evaluation

LSP-TEOC.Pro is a project that develops, tests and disseminates an innovative approach to training Languages for Specific Purposes (LSP) teachers and students. It aims to provide LSP students and teachers with a multilingual online course which allows them to acquire the competences needed for a successful implementation of teaching languages in a specific context. The developed online course targets future and early career teachers who may not have received sufficient education in LSP teaching given the prevalent gaps in LSP teacher training in the European Higher Education Area (EHEA). The online course was made available to the LSP community as an Open Educational Resource (OER) implemented as self-directed course content on a learning management system (LMS). The course content is available in all languages of the strategic partnership consortium, namely in Croatian, English, French, German, Italian, Polish, Spanish, Slovenian and Turkish. The course was delivered and tested through extensive large-scale trials involving LSP teachers and students.

The main outcomes and impacts expected following completion of the project included increased LSP, digital and inter-cultural competences for participants; the development of trans-national partnerships aimed at providing and promoting knowledge and skills for high quality teaching and learning of LSP in VET and in higher education and a more unified way of learning and teaching languages for specific purposes. Overall, it was expected that LSP-TEOC.Pro would contribute to increasing the attractiveness of LSP teaching in Europe.

To achieve these objects and expected outcomes, the project methodology and implementation incorporated a range of activities, involving different approaches, methods and tools, including:

- an analysis of existing LSP teacher education and development programmes in Europe, in terms of entry requirements, outcomes, syllabi, learning and teaching methodologies, assessment methods, ICT used, reference books and other reference materials, and forms of practical training
- development of a teaching methodology including suitable didactic elements for an online learning environment, self-directed learning units, quizzes and tests, and forms of automated feedback
- development of online course content
- integration of the content into an open-source learning management system (LMS)
- piloting of the LMS to identify and rectify usability issues
- testing of the LSP online course through extensive trials involving international LSP practitioners
- analysis of the course utilization through learning analytics, using machine learning algorithms
- dissemination of the results.

Against this background, the evaluation approach chosen for LSP-TEOC.Pro needed to reflect its particular features and characteristics. Ideally, project stakeholders – people with a 'stake' in the project results, particularly those who fund it – look to the most robust evaluation approaches available in order to demonstrate results, impact and value. These approaches usually imply using 'experimental' methods to demonstrate results and impact – in particular the use of 'Randomised controlled trials' (RCTs), which are seen as the 'gold standard' in evaluation and impacts assessment. (Campbell & Stanley, 1973). The attraction of experimental methods is that they are good at establishing the 'counterfactual' (Loi & Rodrigues, 2012). Counterfactual evaluation involves comparing the outcomes of interest of those who have benefitted from an intervention (the 'treatment group') with those of a group similar in all respects to the treatment group (the 'comparison/control group'), but who have not been exposed to the intervention. The comparison

group provides information on what would have happened to the participants in the intervention had they not been exposed to it. In the case of LSP-TEOC.Pro, this would imply i) randomly selecting the participants for the online course and ii) randomly selecting a similar group of teacher trainees and LSP professionals who did not participate in the programme iii) comparing the two groups' levels of LSP, digital and intercultural competences following completion of the programme.

However, a consistent problem identified in the literature on evaluation and impacts assessment in fields involving social interventions – as is the case with LSP-TEOC.Pro - is the difficulty in maintaining the 'temporal priority' required in RCTs - the assumption that a suspected cause precedes an event (for example, in clinical trials that the application of a particular drug will 'cause' the relief of particular symptoms). Evaluation challenges encountered in Interventions like LSP-TEOC.Pro include complexity and unpredictable change; nonlinear response outcomes; high rates of outcome variability; treatments that comprise multiple interventions; infrequent data sampling, non-existent baselines, and large measurement error; long time lag between intervention and response; complex spill-over effects (Befani et. al., 2014; Ferraro, 2009).

What is needed, therefore, is a more 'pluralist' evaluation perspective, one which combines some of the 'rigour' of experimentalism with approaches that can reflect the context of the intervention, and the perspectives of the stakeholders involved (Guba & Lincoln, 1989). The approach selected is based on 'theory-driven evaluation' (Chen & Rossi, 1990). This involves developing an underlying 'theory' about LSP-TEOC.Pro that can explain its context, its process and its 'mechanism of change' in order to explain subsequent outcomes that can be tested by observation – 'realist evaluation' (Pawson & Tilley, 1997) and which reflects the range of particular characteristics of the intervention being evaluated.

1.2 Overall Evaluation Approach – 'Realist' Evaluation

Taking the above factors into consideration, the overall conceptual framework chosen for the LSP-TEOC.Pro evaluation system is based on an adaptation of the 'realist evaluation' approach. Realist evaluation allows for context to be taken into consideration when assessing interventions. The process looks at how something is supposed to work, with the goal of finding out what strategies work for which people, in what circumstances, and how.

The key features of the approach are as follows:

- Programmes and interventions are viewed as an attempt to address an existing problem – that is, to create some level of change. The focus of evaluation should therefore be on assessing whether and how this change has occurred.
- Programmes and interventions work by enabling participants to make different choices, so a key objective of evaluation is to capture how and why these choices are made.
- Making and sustaining different choices requires a change in participant's 'reasoning' (for example, values, beliefs, attitudes, or the logic they apply to a particular situation) and the resources (e.g., information, skills, material resources, support) they have available to them. This combination of 'reasoning and resources' is what enables the programme to 'work' and is defined as a programme 'mechanism'.
- Programmes and interventions work in different ways for different people – a key task of evaluation is therefore to capture 'what works, for whom under what conditions'.
- The contexts in which programmes and interventions operate make a difference to the outcomes they achieve. Mapping context and how it affects outcomes is crucial to the evaluation – for example whether and in what ways project participants get involved in the LSP-TEOC.Pro Programme in its different pilot locations. There is always an interaction between context and mechanism, and that interaction is what creates the intervention's impacts or outcomes: Context + Mechanism = Outcome.

- The evaluation design needs to reflect a number of 'pragmatic' considerations: the 'object' of the evaluation; the purposes of the evaluation; the resources available to carry it out.

A realist approach is essentially about testing a theory about what 'might cause change', even though that theory may not be explicit. One of the tasks of a realist evaluation is therefore to make the theories within an intervention explicit, by developing clear hypotheses about how, and for whom, programmes might 'work'. The implementation of the programme, and the evaluation of it, then tests those hypotheses. This means collecting data, not just about intervention impacts, but also the processes of the intervention implementation, as well as data about the specific mechanisms that might be creating change.

Data collection and analysis needs to reflect the different positions of stakeholders and the information these stakeholders will have. So, rather than simply comparing changes for participants who have taken part in an intervention with a group of people who have not (as is done in random control or quasi-experimental designs), a realist evaluation compares mechanisms and outcomes within programmes.

Learning is key to collecting and measuring data on evaluation outcomes and impacts, but more importantly it is key to understanding whether the 'theory of change' underlying the intervention is the 'right' one. In this sense, evaluation is similar to 'action research', where a 'change hypothesis' is tested by observing how the theory works in practice.

1.2.1 Theory of Change

Two things that are crucial in carrying out realist evaluation are 'Theory of Change' and the 'mechanisms' that underpin the change process. Theory of Change tells the project 'story' – from the 'presenting problem' it addresses through to the change it hopes to make on that problem at the end of the project and beyond (i.e. the project's expected 'impacts').

Connecting the presenting problem and expected impacts are:

- Activities – actions carried out by LSP-TEOC.Pro, that lead to…….
- Outputs – things that are produced by these activities, that lead to……
- immediate outcomes – changes in awareness and knowledge, that lead to…….
- intermediate outcomes – changes in behaviour and structures.

Underlying this 'change journey' are 'theories' (assumptions and hypotheses), for example:

- A theory of what is causing the 'presenting problem'
- A theory of what is needed to bring about the desired solution
- Assumptions that if we take Action 'X', this will produce Output 'Y', which will then lead to Outcome 'Z'.

These theories, hypotheses and assumptions need to be tested as the project develops and, if necessary, revised in light of evaluation evidence. A (very simplified) Theory of Change for LSP-TEOC.Pro is presented in Figure 1 below.

The '***presenting problem'*** LSP-TEOC.Pro addresses is:

LSP has a direct relationship with the world of work, and plays a key role in creating multilingual and mobile citizen. However, not enough teachers have the necessary skills to deliver effective LSP teaching and learning. There is therefore a need for new education and development programmes that provide these skills to a wider constituency of professionals and trainee teachers.

LSP-TEOC.Pro's 'theory' about the ***causes of this problem*** is:

Too many higher education teachers have received little or no pedagogical training. Most LSP job offers tend not to be filled by qualified teachers. Pedagogical gaps in higher education and lack of university training focused on LSP teaching contribute to this mismatch. Most LSP teachers have

been assigned to teach ESP courses without any initial training. Language teachers who accept a position at a university on a LSP profile have to surmount the complexity of the context and assume a wide variety of roles, without much support.

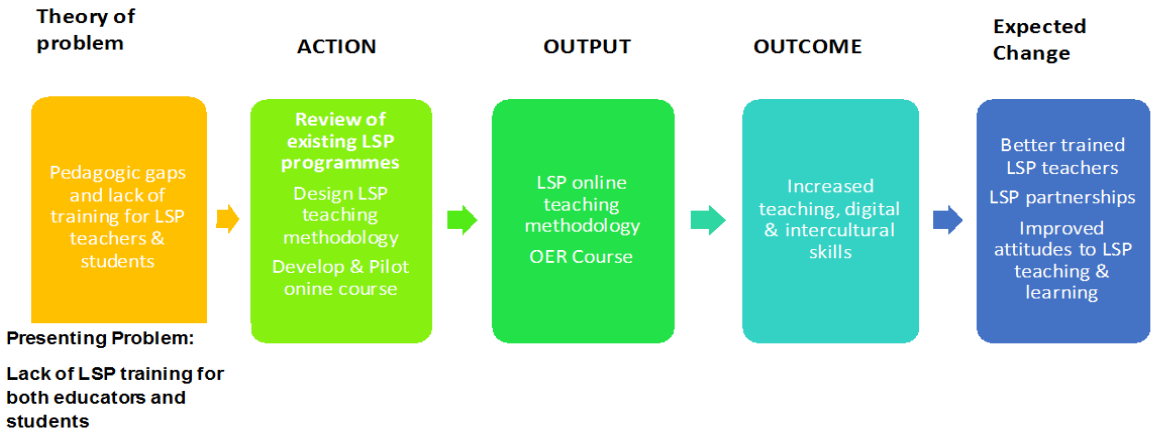

Figure 1: LSP-TEOC.Pro Simplified Theory of Change

LSP-TEOC.Pro's ***solution*** to this problem is:

- analyse existing LSP teacher education and development programmes in Europe
- develop a suitable teaching methodology
- develop online course content
- integrate the content into an open-source learning management system (LMS)
- pilot the LMS to identify and rectify usability issues
- test the LSP online course through extensive trails
- analyse the course utilization using learning analytics
- disseminate the results.

LSP-TEOC.Pro's longer term ***expected impacts*** are:

- a more unified way of learning and teaching languages for specific purposes (LSP),
- individual progression through increased intercultural awareness and innovative digital learning activities
- positive changes in the attitude towards LSP learning and teaching
- integrating project results into national and regional policy

LSP-TEOC.Pro's ***immediate outcomes*** (changes in awareness and knowledge) are:

- Increased intercultural awareness,
- Enhanced teacher trainee and LSP teacher professional self-confidence
- increased skills in LSP language teaching, digital learning tools and inter-cultural skills

LSP-TEOC.Pro's ***intermediate outcomes*** (changes in individual and institutional behaviours) are:

- for LSP professionals and trainee teachers – more extensive use of digital technologies and digitally-supported pedagogy in LSP training
- development of partnerships aimed at providing and promoting knowledge and skills for high quality teaching and learning of LSP in VET and in higher education

- new forms of collaborations highlighting the positive impact of pan-European activities
- for other stakeholders - sharing information, knowledge transfer and strengthening collaboration.

This 'baseline' Theory of Change was reviewed and revised as the project developed, in light of evaluation evidence.

1.2.2 Mechanisms

Mechanisms are key to understanding how the Theory of Change works. Mechanisms can be defined as "underlying entities, processes, or structures which operate in particular contexts to generate outcomes of interest" (Astbury & Leeuw, 2010;31(3):268). As noted above, interventions like LSP-TEOC.Pro are intended to encourage the target groups they are aimed at to make and sustain different choices – for example choosing to participate in the LSP-TEOC.Pro online course. Making these choices requires a change in the participant's 'reasoning' (for example the values, beliefs, attitudes, or the logic they apply to a particular situation). It also requires a change in the 'resources' participants have available to them. For example, LSP-TEOC.Pro will provide information, skills, material resources, and support which will in turn increase participants' individual resources (in LSP, digital competences, intercultural skills) and ultimately the resources available to their institutions and networks. This combination of 'reasoning and resources' is what enables LSP-TEOC.Pro to 'work' and is defined as a project 'mechanism'. The way the mechanism works depends on the 'context' in which it operates. LSP-TEOC.Pro's course will work – or not – in different ways for different people depending on 'contextual factors' – like the time and economic resources available to professionals and trainee teachers to participate. There is always an interaction between context and mechanism, and that interaction is what creates the intervention's impacts or outcomes: Context + Mechanism = Outcome.

The mechanism is ***not*** the intervention itself – LSP-TEOC.Pro – nor the actions and services – like the online learning programme – it provides. The mechanism is the ***response*** LSP-TEOC.Pro triggers from the actors involved – i.e. the combination of Resources (online course) and Reasoning (how actors use these resources; how this changes their awareness, attitudes and behaviours) – and how this results in outcomes.

In pharmacology, for example, the term 'mechanism of action' refers to the specific biochemical interaction through which a drug acts on the body to generate its effect. It isn't an antibiotic that 'cures' an infection. It's the 'mechanism of action' of the antibiotic acting on the cell wall of a bacterium – which inhibits bacterial cell wall synthesis and so contributes to its eventual death.

Mechanisms have five key properties, as shown in Figure 2 below:

- They define what has been described as the 'missing middle' between what an intervention does (its activities) and how these lead to desired goals being achieved
- Their 'mechanism of action' – the 'black box' or capsule in which the intervention operates – is largely invisible. The task in evaluation is open up the capsule to understand how it works.
- Interventions – and their 'mechanisms of action' – are influenced by, and in turn influence, 'resources'
- Interventions – and their 'mechanisms of action' – are influenced by, and in turn influence, 'reasoning' – the social and psychological processes by which actors make choices and changes
- Interventions – and their 'mechanisms of action' – don't always work, and sometimes miss their target. They work for some people, some of the time, in some situations.

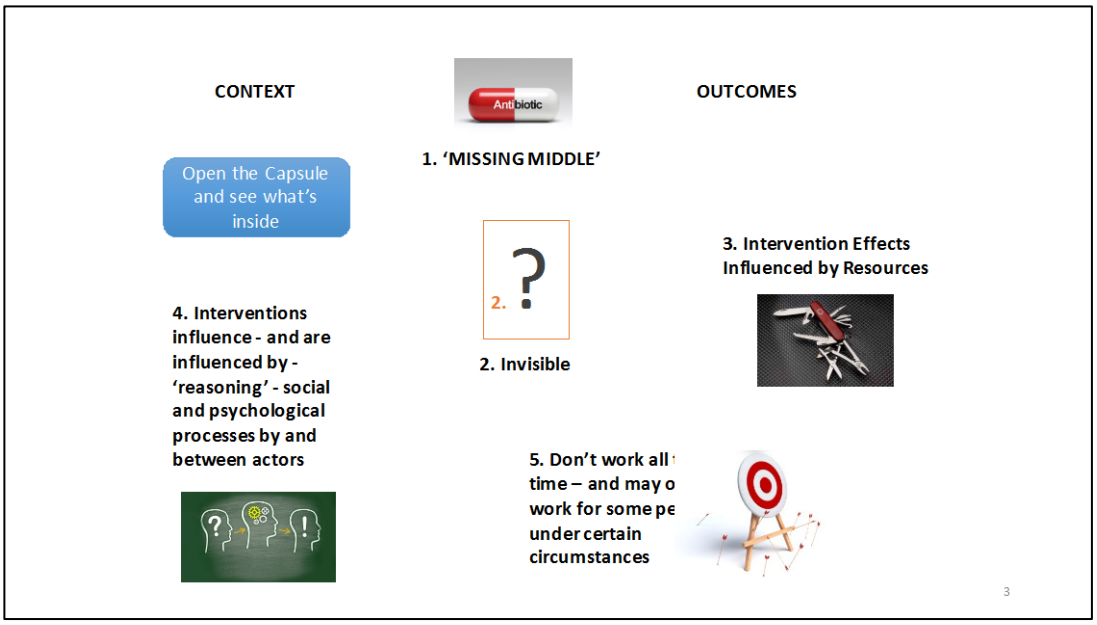

Figure 2: Five key properties of Mechanisms [1]

A key task for the evaluation is therefore to identify the 'mechanisms' that underpin LSP-TEOC.Pro's Theory of Change; how they reflect the interactions between 'resources' and 'reasoning' and how these influence LSP-TEOC.Pro outcomes and impacts.

These mechanisms will emerge as the project develops - shaped by, for example, the results of the early research carried out by the project into LSP teacher education and development programmes in Europe. As the evaluation proceeds, it will explore these mechanisms in terms of:

- the assumptions that underpin them
- the evidence available to support them
- possible 'alternative mechanisms' - that are unconnected with LSP-TEOC.Pro - thay could make a significant contribution to the project outcomes.

As an illustration, a possible mechanism for LSP-TEOC.Pro is shown in Table 1 below.

[1] Images surces: Pixabay, MyMewsFit, Shutterstock, Netdoctor

Table 1: LSP-TEOC.Pro possible mechanism

Mechanism 1: Competence acquisition mechanism	
Description:	LSP professionals and trainee teachers find out about LSP-TEOC.Pro through the project website, multiplier events, partner awareness-raising actions and networks. They see that LSP-TEOC.Pro fills a gap in their needs and sign up for the online course. Participation in the course increases their understanding of how LSP can be applied more effectively in teaching practice. Hands-on exercises, supported through the use of digital technologies, increases their competence in LSP pedagogy and gives them the confidence to apply it in practice. On graduation from LSP-TEOC.Pro, they apply their new competences in their teaching practice. This has the aggregated and cumulative effect of improving the LSP competence base.
Resources:	Project website; project promotional materials; networks; LSP-TEOC.Pro partner skills and time; LSP-TEOC.Pro online course
Immediate outcomes:	Increased awareness of LSP barriers and LSP-TEOC.Pro potential. Positive changes in attitude towards LSP learning and teaching Increase in LSP, digital and intercultural competences of programme participants. Increased confidence in applying LSP in teaching practice.
Intermediate outcomes:	More extensive use of digital technologies and digitally-supported pedagogy in LSP training
Long term impact:	Increasing the LSP competence base in the EU. Improving the quality of LSP teaching and hence learning outcomes in teaching practice.
Assumptions:	LSP-TEOC.Pro has sufficient, appropriate resources to deliver. The offer is attractive for programme participants. Enough participants sign up. The programme suits user needs. The programme is user-friendly. Programme graduates have opportunities to apply their LSP competences in their practice.
Alternative mechanism:	The education and development programme model is ineffective. LSP professionals and trainee teachers participating in the programme use their own networks and resources to acquire competences necessary to improve their LSP practice.

1.2.3 Theory of Change Analysis

This works with LSP-TEOC.Pro's Theory of Change to deliver an evaluation 'counterfactual'. It aims to create a causal chain – or 'causal story' that links the context of the project to outcomes, through interrogating the project 'mechanisms'. It explores 'attribution' – whether and in what ways LSP-TEOC.Pro has 'caused' expected outcomes and impacts – through assessing the contribution the project is making to observed results. It sets out to verify the theory of change behind LSP-TEOC.Pro and, at the same time, takes into consideration other influencing factors' (Toulemonde, 2010; Mayne, 2012). In a nutshell, by developing a Theory of Change, we show the links between the

activities, outcomes and contexts of the project and collect evidence from various sources to test this theory (Befani & Mayne, 2014). Ultimately, theory of change analysis asks: 'what would have changed if LSP-TEOC.Pro had never happened?' In the evaluation, we will construct the causal story by measuring changes in behaviours of both individuals – for example professionals and trainee teachers participating in the LSP-TEOC.Pro online course – and organisations – for example changes in the strategies adopted by higher education institutions to support LSP training.

1.3 Evaluation Purposes and Evaluation Modes

In the context of the 'realist evaluation' approach outlined above, the LSP-TEOC.Pro evaluation has four main purposes:

- A developmental purpose - following the project 'process' and supporting the different stakeholders involved in assessing how the initiative is doing and whether it is 'on track'
- An accountability purpose - understanding whether project goals are being achieved, and whether the project is providing value for money
- A knowledge purpose - providing evidence on the outcomes and impacts of the project, including an assessment of the extent to which the project has achieved its intended objectives and outcomes, as well as contributing to an evidence base about 'what works'
- A learning purpose – on the one hand, reflecting on the activities carried out in the project as it develops to influence and improve project delivery and, at the end of the evaluation, assessing the transferability of the project results to similar initiatives in the future and contributing to supporting the replication and sustainability of the project's innovations.

These purposes mean that the evaluation has to work in four modes, as shown in Figure 3.

Figure 3: Evaluation purposes

- ***Ex-ante*** (***design)*** mode – contributing to the project design and its development. For example, reviewing the pedagogic approach applied in the course
- ***Formative (process)*** mode – putting into place a framework, mechanisms and tools to monitor project progress and assessing the effectiveness and efficiency of the project delivery. For

example, developing a 'process dashboard' to assess progress against key targets and milestones.

- ***Ex-post (summative)*** mode – designing and implementing a methodology and tools to assess project outcomes and impacts. For example, delivering a 'counterfactual' evaluation for LSP-TEOC.Pro based on 'theory of change analysis'.
- ***Learning (sustainability)*** mode – applying the results from the evaluation either through formative evaluation – for example holding regular 'action learning sets' to review the process dashboard results and their implications – or 'post-summative' evaluation – for example feeding evaluation results into an LSP-TEOC.Pro sustainability effort.

The different modes pose different evaluation questions that need to be answered. Table 2 below sets out some of these questions.

Table 2: Evaluation Questions and Evaluation Modes

Ex-ante	Process	Ex-post (Summative)	Learning
What does the analysis of LSP teaching and development programmes in Europe tell us about how the online course should be designed?	Is the project on track towards meeting its planned milestones, objectives and KPIs?	Did participation in LSP-TEOC.Pro increase LSP professional and trainee teacher competences and in what ways?	What actions need to be taken to ensure LSP-TEOC.Pro stays on track?
Are the pedagogic models and practices that shape the online course appropriate?	Are LSP-TEOC.Pro's dissemination actions delivering the right messages to the right target groups?	Did course participants apply what they had learned in their practice and in what ways?	What success factors can be identified for the LSP-TEOC.Pro project (which factors 'caused' which outcomes?)

These evaluation questions were further developed as the project evolved, in light of the results of LSP-TEOC.Pro activities.

1.4 Triangulation

Triangulation allows for the synthesis of evidence of different types and from different sources, drawn from different kinds of evaluation activities, in order to arrive at conclusions in situations where attributing causality is difficult. In particular, a key aim of triangulation is to capture and reflect the 'voice' of different stakeholders in order to identify and understand their different positions and perspectives. Triangulation is essential in a realist evaluation approach for the following reasons. First, it allows for the capture of complex contextual data. Second, it avoids relying on 'expert' knowledge and evidence (for example that derived solely from peer-reviewed journals) and third, it provides a means to consider ideologies, values and power relations between different actors. Triangulation supports generalisability and transferability of findings in a situation like this domain, where the project is innovative and evolving, and the evidence base is limited and lacks 'robustness'. This is because it increases the 'robustness' and transferability of findings through cross-checking of data derived from different sources and from different actors thus helping to boost the internal validity of the research.[2] Triangulation can be seen as the penultimate stage of the 'realist evaluation cycle'. It entails synthesis of the evaluation evidence from the different evaluation activities carried out in LSP-TEOC.Pro, i.e.: secondary data (drawn from sources such as management and quality monitoring reports) and primary data (acquired for example through user surveys), combining quantitative analysis with qualitative data.

2. O'Donoghue, T., Punch K. (2003). Qualitative Educational Research in Action: Doing and Reflecting. Routledge

1.5 Designing Indicators for the Evaluation

An important remit of the LSP-TEOC.Pro evaluation is the creation of data, data sets and measures to evaluate impact. This requires the careful creation of indicators.

1.5.1 Constructing KPIs, KRIs and CSFs

Several commentators have noted that, when people are trying to design useful and relevant indicators to measure 'success', they tend to confuse and conflate three important- but distinct - elements: Critical Success Factors (CSFs); Key Results Indicators (KRIs) and Key Performance Indicators (KPIs) (Parmenter, 2007).

Critical Success Factors (CSFs) can be defined both as 'the critical areas whose high performance or success is important' and also 'the steps taken to succeed' (Rockart, 1975). Key Results Indicators (KRIs) measure the 'results' (effects) of these steps that are carried out in terms of the 'end result' – so they are 'summative' (looking back at the impacts of an intervention). Key Performance Indicators (KPIs) make the connection between the CSFs and the KRIs. They track the ***actions*** between the CSFs and the KRIs. So, first, they have to measure a process. Second, they have to be ***key*** - i.e. the only measures that are essential to demonstrate progress towards 'results'. Third, they have to measure 'live' data - i.e. the information source used to measure process and progress is continually generating updated information. Fourth, they need to reflect 'context'. For example, it's no use having a KPI for LSP-TEOC.Pro that measures the number of visits to the website without measuring who visits and what they visit for. Fifth, they have to be 'metrics' - i.e. a quantifiable measure that can demonstrate progress either from a baseline or in context - not just a 'measure' (which is 'absolute' or 'unit-specific'). For example, if we wanted to measure the increase in LSP professionals and trainee teachers' LSP and digital competences as a result of participating in LSP-TEOC.Pro we would need to compare the increase in their mean scores before and after participating in the training programme.

A good illustration of how CSF's, KRIs and KPIs work, what are the differences between them and how they relate to each other, is a successful football team. Let's take the case of Liverpool FC (Figure 4).

This is John W Henry, founder of Fenway Sports Group, owners of Liverpool FC. His main focus is on KRIs – the key 'wins' that define overall success.

KRIs
Win Premier League
Qualify for Champions League

This is Jurgen Klopp, Liverpool FC manager. He focuses on Critical Success Factors – the actions that can be turned into 'wins'.

CSFs
Increase work rate of team
Improve passing accuracy

This is Pepjin Linders, First Assistant Coach. He's mostly interested in evaluating what happens on the training ground, then making improvements that can feed into success on the pitch

KPIs
% accurate passes
% increase in km covered per match
% shots saved

Figure 4: Creating KPIs and KRIs – the example of Liverpool FC (Source: Liverpool FC)

1.5.2 KPIs, KRIs and CSFs for the Evaluation of LSP-TEOC.Pro

The LSP-TEOC.Pro evaluation needed to combine all three elements in order to assess the success of the project - looking at the big 'wins' at project end; the critical success factors that are needed to make these happen and the key performance indicators that can tell us how we are progressing on the journey towards achieving the desired project results, as shown in Figure 5 below.

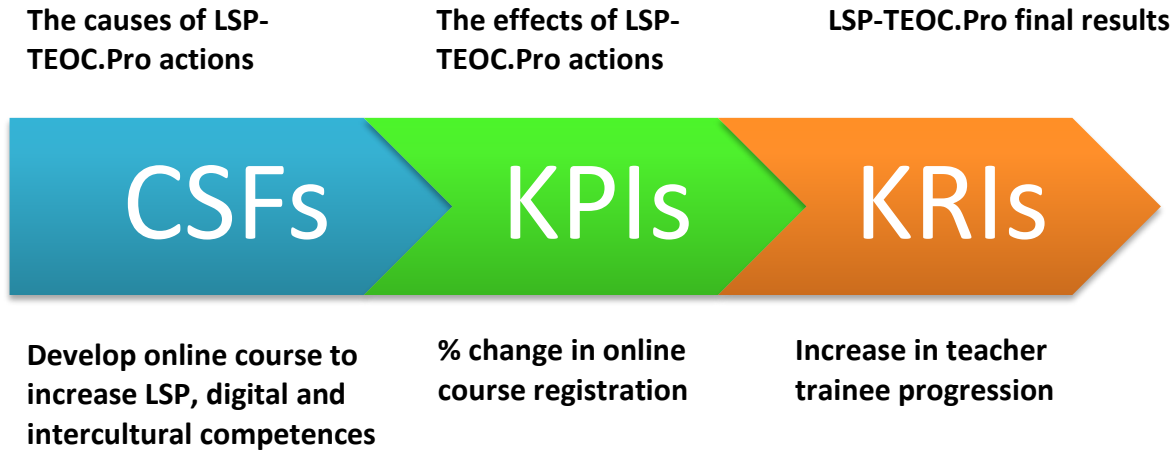

Figure 5: Relationship between CSFs, KPIs and KRIs

As the illustration shows, the 'inputs' to the project are the LSP-TEOC.Pro resources and activities – for example the pedagogic methodology and online course. These are critical to the subsequent LSP-TEOC.Pro final results (impacts) – for example contributing to increased trainee teacher progression, which is one of the 'key result indicators' the evaluation needs to measure. Connecting the course with the end results are the 'effects' of these actions – these can be thought of as 'outcomes' that need to be measured for example an expected percentage increase in participants' LSP, digital and intercultural competences. Key performance indicators give us a way of tracking how far we are on the road to achieving these expected outcomes. For example, measuring the change in registrations for the online course at points in time along the project life cycle will tell us to what extent we are likely to have enough participants to make a difference in increasing competence levels.

In LSP-TEOC.Pro, CSFs – the critical areas whose success is important, and the key steps that need to be taken to succeed - include:

- understanding the characteristics that support effective LSP training (through undertaking LSP-TEOC.Pro's analysis of EU LSP education and development programmes)
- understanding the needs of LSP-TEOC.Pro's stakeholders (and building a user-friendly and effective online course)

- understanding pedagogic and training needs of LSP-TEOC.Pro's stakeholders (and building a course that works)

LSP-TEOC.Pro's KRIs – the results (effects) of these steps that are carried out in terms of the 'end result' – include:

- building an effective EU LSP training network
- increasing the attractiveness of LSP for trainee teachers
- in the long term, improved quality of LSP teaching in the EU.

A first baseline set of CSFs, KPIs, Immediate and intermediate outcomes and expected impacts are shown in Table 3 below. These were reviewed in light of evolving project results.

Table 3: LSP-TEOC.Pro Baseline Evaluation Indicators

CSFs (activities & outputs)	CSF indicators	Immediate Outcomes	IMO Indicators	Intermediate Outcomes	INO Indicators	KPIs	KRIs (Impacts)
Research on LSP education and development programmes feeds into pedagogic framework and course outline.	No. of LSP programmes in Europe reviewed and analysed	Partners aware of LSP drivers, barriers and teaching and learning needs	No. relevant content items identified	Stakeholders, in particular HE institutions, seek more information about LSP training needs and opportunities	No. stakeholders receiving information on LSP-TEOC.Pro research results	Progress towards target LSP education & development programmes reviewed	Increase in LSP awareness across EU HE institutions
Definition of LSP teaching methodology	Production of agreed online teaching methodology with guidelines on elements to be included in online course	Partner and stakeholders aware of the didactic elements to be included into the online teaching and learning course	Increase on shared understanding of didactic elements	Transferability and take up of results at partner and EU level	No. stakeholders utilising the results	Progress towards development of online teaching methodology	Increase in awareness of needed LSP pedagogic approaches and elements across EU HE institutions
Innovative online course developed, piloted and trialled	Production of course content units; integration into LMS; piloting with partners and external users; large scale trials with participating LSP teachers and students	Course participants will improve their LSP, digital and intercultural competences Course participants will learn from each other and share experience	No. of teachers and students recruited for online course trials Increase in LSP, digital and intercultural competences after participation	Course participants apply the competences they have acquired in their teaching and learning practice	% course participants reporting they have applied or intend to apply their LSP competences in their practice % trainee teachers reporting increased progression prospects % participants reporting increased	Progress towards online course recruitment targets	Relevant and high-quality skills and competences necessary for quality LSP teaching will be developed and shared. LSP teachers will be supported in the use of digital technologies. Pedagogies using ICT will be explored and consolidated

CSFs (activities & outputs)	CSF indicators	Immediate Outcomes	IMO Indicators	Intermediate Outcomes	INO Indicators	KPIs	KRIs (Impacts)
					attractiveness of LSP teaching		Teacher trainee progression enhanced Attractiveness of LSP teaching increased
Dissemination and sustainability systems set up and actions carried out.	No. visits to project portal No. social media contacts No. attendees at Final Conference	Awareness of LSP-TEOC.Pro and key outputs, including the online course and learning analytics results and other evaluation results, increased	% Conference participants report increased knowledge of LSP issues, LSP-TEOC.Pro approach and pedagogic methodology and online course	New partnerships and networks to promote knowledge and skills in LSP teaching and learning develop Higher Education and VET institutions explore adoption of LSP-TEOC.Pro approach and curriculum in their training systems and practices Key stakeholders increase their collaboration to support adoption of LSP training in HE	No. HE and VET actors involved in LSP-TEOC.Pro-related partnership and networking activities % of collaborating HE and VET institutions indicating intention to explore adoption of LSP-TEOC.Pro approach and curriculum in their training systems and practices	Change in website visits Change in project leaflets, brochures and results reports distributed Growth in LSP-TEOC.Pro-related partnerships and networks	Partnerships providing and promoting knowledge and skills for high quality teaching and learning of LSP in VET and in higher education established. Regional authorities, policy makers, researchers, LSP communities, researchers, media, will share information and strengthen collaborations, and gain increased awareness of good European practice and knowledge transfer.

2. Putting the Approach into Practice – the LSP-TEOC.Pro Evaluation Methodology

Having set out the overarching framework for the LSP-TEOC.Pro evaluation in the previous section, this Section discusses the evaluation methods used in each of the evaluation modes: ex ante, process, summative evaluation and learning.

2.1 Ex-Ante Evaluation

2.1.1 Definition

In simple terms, ex-ante evaluation can be defined as "An evaluation conducted before the implementation of an intervention". Ex-ante evaluation is used to plan and prepare programmes and projects so as to ensure they comply with requirements, meet their objectives and deliver expected returns on investment. For example, as defined by the European Commission: "Ex ante evaluation is a process that supports the preparation of proposals for new or renewed Community actions. Its purpose is to gather information and carry out analyses that help to define objectives, to ensure that these objectives can be met, that the instruments used are cost-effective and that reliable later evaluation will be possible".

Applying this to LSP-TEOC.Pro, ex-ante evaluation means setting up systems, processes and tools to ensure that:

- the project plan is conceptually 'coherent' and reflects the project vision, aims and objectives
- the project meets its objectives and expected outcomes
- the project collects the right data to assess whether it meets its objectives and expected outcomes
- it applies these data to support continuous improvement.

2.1.2 Purposes of Ex-Ante Evaluation

Ex-ante evaluation is primarily linked to two main evaluation purposes:

- a design purpose
- a learning purpose.

The design purpose aims to help clarify the intended aims and outcomes of a project plan. Ex ante evaluation activities therefore generally tend to be concentrated in the preparatory phase of a project. However, the evaluation design for LSP-TEOC.Pro is based on a 'Theory of Change' model. This means that the assumptions about how the project is expected to evolve need to be constantly tested and, if necessary, revised – particularly at key points, or 'milestones' along the project's 'change journey'. This sometimes requires 're-design' of the work plan.

The learning purpose reflects the fact that evaluation as understood and applied in LSP-TEOC.Pro is about continuous and evolutionary improvement. Design is therefore intimately linked to 'learning'. Ex-ante evaluation was supported in LSP-TEOC.Pro through 'peer learning workshops', where the evidence from the evaluation is reviewed and reflected on, and feeds evolving knowledge from the LSP-TEOC.Pro evaluation back into the project and offers scenarios for possible future trajectories.

2.1.3 Tools for Ex-Ante Evaluation

Four main tools are used to do ex-ante evaluation:

- Theory of Change and project intervention logic
- Questionnaires and Focus Groups
- Documentation Review and Content Analysis
- Peer Learning Workshops.

Theory of Change and Project Intervention Logic

As outlined above, Theory of Change develops, and tests, the implementation theory (or 'intervention logic') of LSP-TEOC.Pro and allows this to be modified or refined through the evaluation process. The Theory of Change model specifies the underlying assumptions of LSP-TEOC.Pro and so incorporates a number of hypotheses about how the activities carried out by LSP-TEOC.Pro as the project develops will promote changes at each stage of the project. The evaluation design and implementation approach follows this 'change journey'. The evaluation data collected along the way enables these embedded change hypotheses to be tested. If the evaluation data do not support a particular hypothesis, then this hypothesis needs to be discarded or modified. Theory of Change shows the 'causal pathways' between LSP-TEOC.Pro' objectives, its activities, and its expected outcomes and impacts. It says: "if we take action X, then this will cause effect Y and this will eventually lead to outcome Z".

The Theory of Change model therefore provides a key input to the project's preparatory and planning activities. It specifies the overall 'vision' of LSP-TEOC.Pro; how this vision will be implemented through the project activities; the outputs these activities are intended to achieve; the short and intermediate outcome associated with using these outputs and how these are expected to lead to the longer-term impacts of the project. As LSP-TEOC.Pro developed, this 'baseline' theory of change was reviewed in line with emerging evaluation data. The results of this review then fed into reviewing and, if necessary, re-designing the project work plan.

The baseline LSP-TEOC.Pro Theory of Change is set out in Section 1.2.1 above.

Questionnaires, Interviews and Focus Groups

Partner surveys were delivered to understand satisfaction with project implementation and capture improvement suggestions (see process evaluation section). These surveys also included topical questions on particular and topical aspects of project implementation in order to capture ideas that could be directly fed back into implementing these activities.

Documentation Review and Content Analysis

Documentation review – including content analysis of specific documents (e.g. deliverables; management reports; website content; the project work plan; coordination meeting minutes; discussions and contributions on the website; drafts of ideas and framework developed by work packages) - fed into the ex-ante evaluation.

Peer Learning Workshops

Interactive peer learning workshops follow the principles of action learning, reflective practice of key stakeholders and joint sense-making. They provided a space for the evaluation team to communicate progress set as part of the theory of change (e.g., progress towards milestones/targets) and to enable the joint exploration of, and convergence on, what is working and why (or why not), which will feed back into the project. These were carried out using an 'action learning set' method. This involved representatives of all partners, meeting either face to face or online in order to: discuss, review and amend the evolving LSP-TEOC.Pro theory of change; review past and discuss upcoming project activities in light of the updated theory of change; review and where necessary amend evidence collection methods. For practical reasons peer learning events took place during partner meetings.

2.1.4 Evaluation Support to Partners

Evaluation support to partners focused on activities to help them evaluate their piloting activities (i.e. trialling the online course). It encompassed:

- Engaging in and communicating on the LSP-TEOC.Pro evaluation approach as it developed and when finalised (e.g., in partner meetings and partner telcos)

- Information / training sessions on specific evaluation tools - such as any data capture technologies or guidance documents designed (again, in partner meetings and partner telcos)
- Developing tools for review (in particular peer review of the training course content modules).

2.2 Process Evaluation (Internal Evaluation)

2.2.1 Definition and Purpose

The overall purpose of the process evaluation is to determine how well LSP-TEOC.Pro is working and the extent to which project activities are being implemented as intended. It focuses on the mechanisms through which the project delivers its objectives, targets and expected outcomes. It was therefore a vehicle through which we tracked the implementation process of the project in order to make sense of it as a system. This enabled partners to be supported in their own learning and understanding of whether LSP-TEOC.Pro was 'on course'.

The process evaluation was an ongoing task which happened continuously as the project was being implemented and was supported by partner and stakeholder input to particular data collection activities. Results from the evaluation fed into all of the other evaluation activities and was particularly important for the outcome evaluation (see next section). This is because they collected data that provided a basis for ensuring that any implementation issues that impacted on project outcomes were identified and worked through.

2.2.2 Tools for the Process Evaluation

The tools used for the LSP-TEOC.Pro process evaluation, outlined in more detail below, included:

- Partner surveys, which involved periodic collection and analysis of partner perceptions of project progress.
- Process dashboard, which provided a picture of where LSP-TEOC.Pro is on its 'change journey', and also fed into the evaluation 'counterfactual analysis' and overall summative (outcomes) evaluation of LSP-TEOC.Pro.
- Periodic updating of the LSP-TEOC.Pro theory of change.
- Quality System, for reviewing key project outputs.

Partner Surveys

The purpose of the partner surveys was to generate data on different aspects of the 'internal' dimension of LSP-TEOC.Pro. This included, for example, capturing views on operational and governance aspects of the project, such as: Project Management, communication systems and collaboration across the partnership, and on progress towards scheduled objectives.

Surveys were scheduled to coincide with the cycle of partner meetings. The meetings themselves provided the space for the analysis to be, presented, and collectively discussed in view of generating collective learning and improvement ideas.

The surveys therefore provided regular 'snapshots' throughout the project life cycle of the state of the project and partnership, as well as supporting joint sense-making.

Process Dashboard

The process dashboard had four purposes: i) to enable monitoring of project progress set against key progress indicators, or baselines ii) to provide a picture of where LSP-TEOC.Pro is in relation to the 'change journey' specified in the project 'Theory of Change' (and also to review whether the underlying assumptions and hypotheses embedded in the project ToC hold true or need revision) iii) to provide an evolving database and record of evidence that can feed into the implementation of the evaluation 'counterfactual analysis' iv) more broadly, to feed data into the overall summative

(outcomes) evaluation of LSP-TEOC.Pro (including the counterfactual analysis). It was a list of baseline core project outputs together with key performance indicators (KPIs) that together build up a snapshot at a point in time of the extent to which LSP-TEOC.Pro is meeting its planned operational objectives. The dashboard and associated indicators were regularly monitored and updated in line with the LSP-TEOC.Pro project and evaluation life cycle. An integrated spreadsheet containing the process monitoring data was uploaded to Google Docs. Data entry and updating enables a 'snapshot analysis' of LSP-TEOC.Pro progress to be carried out, which fed into the 'evidence snapshots' produced in the evaluation 'learning mode' and which provided a set of time series assessments that ultimately fed into the overall summative evaluation of the project.

Periodic updating of the LSP-TEOC.Pro Theory of Change

The data gathered via the activities outlined above was used for a periodic updating of the LSP-TEOC.Pro theory of change. The updated theory of change captures the 'distance travelled' by the project towards its ultimate results and also represent any developments and changes in implementation. This in turn supports the design of evaluation tools and also feeds into any ex-ante evaluation activities. For the summative evaluation, the evolution of the project as captured in the theories of change was also used for the contribution analysis (see next section) and provided valuable insight to frame and contextualise interpretation of results achieved.

Quality System

The Quality System put into place systems and tools for reviewing project outputs and ensuring they meet standards. The Quality System is set out in Annex II.

2.3 Summative Evaluation

2.3.1 Definition and Purpose

Summative (or 'ex post') evaluation is done at project end. It is mainly concerned with 'assessing achieved impacts, identifying and judging unexpected impacts and verifying the sustainability of the intervention's benefits' (european Commission, 2006). Counterfactual analysis (i.e. the question 'what would have happened in the absence of the intervention') is an integral part of summative evaluation.

The purpose of summative evaluation in LSP-TEOC.Pro is to both address the accountability and the knowledge purpose of the evaluation: to provide evidence on whether the project's goals have been met, to provide insights into the value of LSP-TEOC.Pro contribution to individual and institutional change, to assess the replicability of solutions and the usefulness and transferability of the evaluation methodology and indicators. The bulk of summative activities of the LSP-TEOC.Pro evaluation were therefore concentrated towards the end of the project – though some data collection activities took place during LSP-TEOC.Pro project implementation.

2.3.2 Tools for the Summative Evaluation

The summative evaluation consisted of the following evaluation tools and elements:

- Analysis of statistical (indicator) data
- Online Course Participant survey
- Online course Participant Focus Group
- Final Conference Participant survey
- Theory of Change analysis.

Analysis of Statistical Data

The summative evaluation carried out a quantitative analysis of the data captured around the KPIs, CSFs and KRIs in aggregated form in order to assess the success of LSP-TEOC.Pro overall and at piloting and trialling level. These indicators cover the range of LSP-TEOC.Pro activities and outputs – including results of dissemination activities, covering data on utilisation of the website, LMS and tools; participation in and satisfaction with the LSP-TEOC.Pro Final Conference. A key element of this part of the evaluation was reviewing the results of the data collected through the large-scale trials in IO6 and analysed using learning analytics in IO7.

Online Course Participant Survey

This supplemented the insights derived from assessing the user experience in IO7 by collecting additional quantitative data (on skills outcomes associated with taking the online course) and qualitative data from the participating LSP professionals and trainee teachers. The quantitative analysis focused on comparing the LSP, digital and inter-cultural skills of participating teachers and trainees before and after participating in the online course. This required a 'longitudinal' evaluation element that took place over two stages:

- Stage 1 – 'baseline' survey: a survey delivered prior to the launch of the online course, focusing on participant reasons for enrolling and their expectations. This also included an assessment of participants' existing 'baseline' LSP, digital and intercultural competences.
- Stage 2 – 'post-test' survey: at the end of the online course focusing on participant experiences and outcomes, including assessing participant's LSP, digital and intercultural competences following completion of the course. This also covered participants' intentions to apply their learning in practice and future employment strategies.

Online Course Participant Focus Group

This is a 'group interview' involving a small and representative spectrum of online course participants. The aim was to add further depth to the results of the Survey by exploring in more detail key findings that emerge from the survey as well as filling in any gaps in the survey data.

Final Conference Participant Survey

This aimed to collect data from participants in the LSP-TEOC.Pro Final Conference. The Survey was delivered through a short feedback instrument using mainly closed questions.

Capturing the Counterfactual: Theory of Change Analysis

Many discussions of impact evaluation argue that it is essential to include a 'counterfactual' (Loi & Rodrigues, op. cit.). As noted above, counterfactual impact evaluation involves comparing the outcomes of interest of those who have benefitted from an intervention (the 'treatment group') with those of a group similar in all respects to the treatment group (the 'comparison/control group'), but who have not been exposed to the intervention.

The evaluation methodology used for this counterfactual analysis was 'theory of change analysis'. As outlined above, ToC is an approach for assessing causal questions and inferring causality in interventions and aims to create a causal chain – or 'causal story' – that links actions and events to outcomes.

The counterfactual analysis implementation process begins with the LSP-TEOC.Pro baseline Theory of Change (outlined above). This baseline ToC provides the foundation for the analysis by:

- Specifying the conceptual framework for the analysis, together with the initial hypotheses to select and interpret pieces of evidence and the outcomes to be analysed.

- Specifying the attribution problem for the contribution analysis, together with the assumptions underpinning the theory of change, the risks to realisation of the intended outcomes and impacts, how strong or weak are the links in the underlying causal chain, and the strength or weakness of available evidence.

The Theory of Change was updated with each round of evaluation data collection completed. Data from the surveys, interviews and evaluation of piloting/trialing activities provide the main evidence gathering vehicles for the counterfactual analysis by identifying the key 'mechanisms' – combinations of 'resources and reasoning' that lead to outcomes – together with plausible alternative explanations for outcomes identified.

2.4 Learning

The learning purpose of the LSP-TEOC.Pro evaluation is both about feeding ongoing evaluation results into project management, to improve the delivery of LSP-TEOC.Pro, and about contributing to supporting the sustainability, of LSP-TEOC.Pro outputs. Being able to do so requires an in depth examination and understanding of the factors that contribute to success (and those that don't) and those that cause which outcomes and why.

Learning was a horizontal activity in the LSP-TEOC.Pro evaluation which was part of each mode of evaluation. Thus, three key activities formed part of the learning dimension of evaluation of LSP-TEOC.Pro: a) evidence snap-shots of the evolution of the LSP-TEOC.Pro project; b) peer learning workshops, where the evidence from the evaluation is reviewed and reflected on, which fed evolving knowledge from the LSP-TEOC.Pro evaluation back into the project system and offered scenarios for possible future trajectories and c) sustainability analysis.

The evidence snapshots consist of the data collected by partners in order to track the progress of the project, which the evaluation team collated throughout the course of the project's activities and synthesise at each of LSP-TEOC.Pro's consortium meetings. These included: monitoring data, a summary of the data collected via the process dashboard, both of which are a pre-requisite for tracking programme progress towards outcomes and impacts. While this information focused on determining what was happening, it also provided the basis for understanding how and why change is happening, which is crucial for the learning dimension of the evaluation.

This synthesised evidence was reviewed and reflected on in interactive peer learning workshops, following the principles of action learning, and joint sense-making that are important in the evaluation of projects. In practical terms, they provided a space for the evaluation team to communicate progress set as part of the theory of change (e.g., progress towards milestones/targets) and to enable the joint exploration of, and convergence on, what is working and why (or why not), which was fed back into the project.

Finally, the learning generated as part of the evaluation fed into an assessment of the overall sustainability of LSP-TEOC.Pro. This was done through synthesis from different data sources and involved a cross-comparison of outcomes and impacts data to identify 'what worked, for whom under what conditions'.

3. Evaluation Toolkit

The practical outputs of the evaluation framework outlined in this document were delivered in the Evaluation Toolkit – a practical Handbook containing all of the tools and instruments to deliver the evaluation. Because LSP-TEOC.Pro is an evolving project, which developed different outputs over the life of the project, the Evaluation Toolkit – part of IO8 - was itself seen as a living document, periodically amended and updated to reflect changing developments and changing evaluation needs.

The first iteration of the Evaluation Toolkit provided initial ***generic templates***, mainly aimed at specifying the structure and content of data collection instruments that subsequently would be

adapted and fleshed out following the results of LSP-TEOC.Pro research activities, and the production of IO1, 2 and 3. These initial templates are summarised in Table 4 below and provided in Annex I.

Table 4: List of Evaluation Instruments in Toolkit V1

Evaluation Mode	Evaluation Tool	Contents
Process	Internal Partner Survey	Collects data on partner perceptions of implementation of LSP-TEOC.Pro. Scheduled to coincide with cycle of partner meetings.
Design/ Process/ Learning	Action Learning Set	Generic tool to run interactive workshops with partners and stakeholders.
Process/ Summative	Process Dashboard	Regular monitoring of LSP-TEOC.Pro evolution and progress
Process/ Summative	Online Course Participant Survey	Instrument for collecting data on participant experience of the online course, including contribution to participant competence levels
Process	Final Conference Participant Survey	Feedback survey instrument for collecting data on participant experience of multiplier events
Design/ Process/ Summative	Stakeholder Interview	Generic tool to collect data from 'key informants'.
Process/ Summative	Focus Group Guideline	Generic Group Interview Guideline

Three additional instruments were developed as the project progressed. These are shown in Table 5 below and provided in Annex III.

Table 5: Additional Evaluation Instruments

Evaluation Mode	Evaluation Tool	Contents
Process	IO3 Peer Evaluation Instrument	Guidelines and tools for reviewing content modules in the training course
Process/summative	Observation template	Guideline and template for collecting observational data on LSP-TEOC.Pro activities, including multiplier events
Summative	LSP self-assessment tool	Pre-test/post-test instrument for collecting data on participant self-reported competence levels in each of the modules provided in the training course

4. Evaluation Results

This section presents the results and key findings derived through the application of the evaluation approach, methodology and toolkit. The first part of this section presents the results of the project 'process' evaluation, focusing on the implementation of the project, how it worked and the extent to which project activities were implemented as intended. The second part of this section presents the results of the project 'summative' evaluation, focusing on assessing the project outcomes and impacts, including the effects of the training programme on participating individuals. The final part of this section draws together and compares the evaluation data, using 'theory of change' analysis, to provide an overview of how far LSP-TEOC.Pro progressed along its 'change journey'

4.1 Process Evaluation Results

The process evaluation was implemented through two main instruments: the project Process Dashboard, and the Partner survey. The process dashboard enabled monitoring of project progress set against key progress indicators, or baselines to provide a picture of where LSP-TEOC.Pro is in relation to the 'change journey' specified in the project 'Theory of Change'. It consists of a list of baseline core project outputs together with key performance indicators (KPIs) that together build up a snapshot at a point in time of the extent to which LSP-TEOC.Pro is meeting its planned operational objectives. The dashboard and associated indicators were regularly monitored and updated in line with the LSP-TEOC.Pro project and evaluation life cycle. This fed into the 'evidence snapshots' produced in the evaluation 'learning mode' which provided a set of time series assessments that ultimately fed into the overall summative evaluation of the project.

The purpose of the partner survey was to generate data on different aspects of the implementation of LSP-TEOC.Pro. This included capturing views on operational and governance aspects of the project, covering Project Management, communication systems and collaboration across the partnership, and on progress towards scheduled objectives. Surveys were scheduled to coincide with the cycle of partner meetings, at which data from the surveys were analysed. The meetings themselves provided the space for the analysis to be presented, and collectively discussed to generate collective learning and improvement ideas.

4.1.1 Process Dashboard Analysis

As noted above, the process dashboard includes a set of key output indicators that are defined in the project proposal and Grant Agreement and which reflect the main objectives of the project. These are shown in Table 6 below.

Table 6: Process Dashboard

Dimension	Indicators	Status at: 31/8/23	Project target
Research	No. Literature review items and good practice cases reviewed	532 institutions; 12 programmes	NS
Development	No. of content modules developed in target languages	8	NS
	No. issues detected and solved (IO4)	Continuous review process	NS
	No. piloting diaries completed	41	NS
Implementation	No. LSP students and teachers participating in online course	183	NS
Dissemination	No. visits to project website	597 (public)	NS

Dimension	Indicators	Status at: 31/8/23	Project target
		1257 (combined)	
	No. contacts on social media	1894 reads 61 recommend-ations 34 followers	NS
	No. participants Final Conference	56	NS

NS = Not specified

As Table 6 shows, 8 key outputs indicators were used to track project performance over its lifecycle. These were also linked to key performance indicators (KPIs) which enable tracking of progress made on the indicators against baselines and targets. These KPIs are not shown in the Table because it shows the situation at project end (KPIs are 'progress' rather than 'outcomes' measures). It should also be noted that the project proposal and Grant Agreement did not set any targets to measure against. Nevertheless, the indicators in the process dashboard give a reasonable picture of project achievements.

Progress and achievement on the 'research' dimension was measured by the number of items and good practice cases reviewed in the analysis and synthesis of existing LSP teacher education and development programmes (IO1). This aimed to gather and review the state of the art in the LSP field – particularly on existing LSP resources, their content, teaching and learning methods and associated learning outcomes – to feed into the development of the LSP-TEOC.Pro course. As the Table shows a large number of institutions working in LSP – 532 Europe-wide – were consulted in the review and 12 LSP training programmes were analysed in depth.

On the 'development' dimension, LSP-TEOC.Pro achieved its intended objective of developing a comprehensive training programme, covering 8 modules, and translated into the nine languages represented in the partnership. The course was validated through a meticulous and protracted review process involving peer review teams for each module. This enabled issues to be detected and resolved. The validation process was supported through the participation of the project target group – LSP students and teachers – who provided over 40 detailed piloting diaries identifying issues and providing suggestions for improvements.

On the implementation dimension, a total of 183 LSP students and teachers were involved in trialling the course. This number is sufficient to enable a robust evaluation of the training course to be conducted.

The 'dissemination' dimension was assessed using three main indicators: number of visits to the project website; number of contacts on social media and number of participants at the project final conference. The data on website visits and social media traffic suggest that LSP-TEOC.Pro's engagement with its stakeholder constituency has been limited, with just over 1,200 website visits (combining 'public' visits with visits to the platform by training course participants) and just over 1,800 'reads' in total on social media. The Final Conference attracted 56 national and international participants, which is in line with the typical attendance for projects of this size and nature.

In addition to project website and social media data, the dissemination monitoring system implemented in the project logged a total of 64 dissemination actions over the project lifetime. Of these, 45 involved the use of partner websites and social media to raise awareness about the project and support recruitment of participants to the training course; 15 involved conference presentations; 2 were workshops and 2 were articles submitted to academic journals. LSP-TEOC.Pro features in a forthcoming special edition of a Journal and in Conference Proceedings. The estimated

reach of the conferences and workshops covers 1,830 stakeholders, primarily LSP scholars, teachers and researchers.

4.1.2 Results of the Partner Surveys

The Partner Surveys formed part of a package of instruments aimed at monitoring project progress. As noted above they aim at capturing views on operational and governance aspects of the project, covering project management, communication systems and collaboration across the partnership, and on progress towards scheduled objectives. Inputs to the partner surveys also included the risk monitoring systems developed in the project. The overall Project Risk Management System logged general risks that were highlighted as the project progressed. It was supported by an Ethics and Data Protection Risk Monitoring System that focused specifically on issues relating to ethics, including data privacy, for example ensuring informed consent was obtained for individuals providing data for the self-assessment survey. These documented risks shaped the perceptions partners had of the project and how it was doing, and were discussed and reviewed at partner meetings.

At project end, 14 risks had been logged in the project risk monitoring system. These reflected the challenges the project faced over its lifetime, and included the effects of Covid-19, and the resultant absence of face-to-face meetings until 2023; several coordinator changes; the loss of partners, and a new team in France; technical problems with the Moodle platform; earthquakes in Turkey and significant time challenges and delays associated with these issues. All of these risks were resolved. Only 2 risks were logged in the Ethics and Data Protection Risk Monitoring System. These both covered data anonymity and data privacy and were also resolved.

As noted above these risks influenced partner perceptions about the project. Figure 6 shows the results of the final Partner Survey – June 2023 – on the 'Project Management' evaluation dimension. The data show the average scores across all partners for each indicator, on a scale of -2 (very dis-satisfied) to +2 (very satisfied).

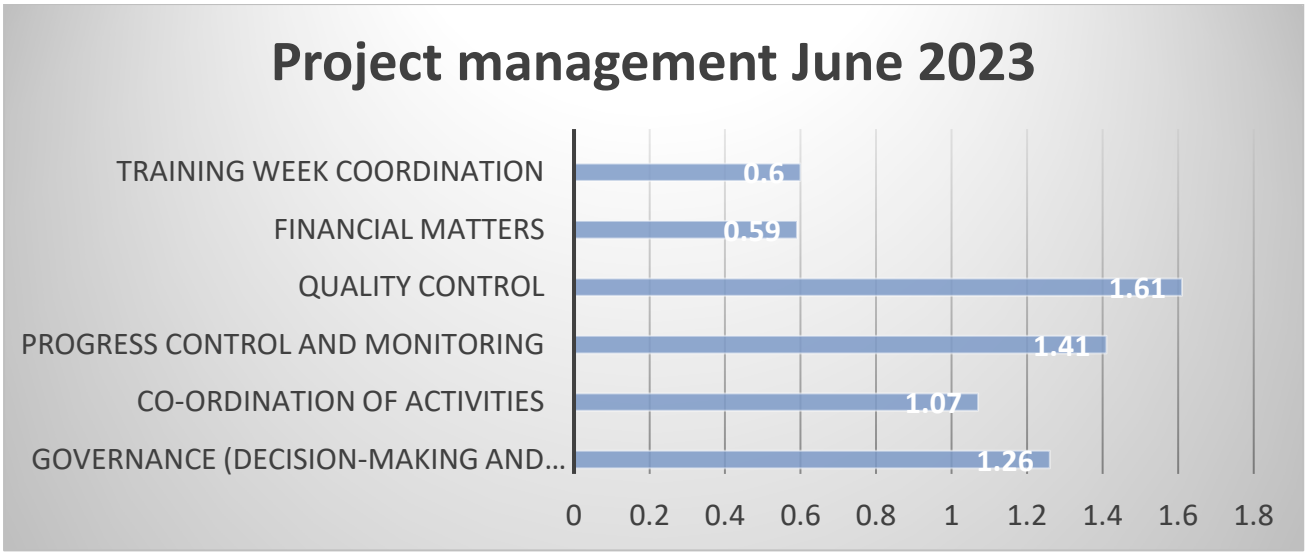

Figure 6: Partner Survey results, June 2023 – project management

As Figure 6 shows, partners were on the whole positive or very positive about project management, and scores had improved significantly since the previous partner survey. The project was thought to have recovered well from a crisis in confidence that was evident in January 2023 prior to the launch of the full IO6 pilot course. Management was considered by most partners to be well-organised, although one issue raised was the need for more flexibility in financial reporting.

Figure 7 shows the results of the final Partner Survey – June 2023 – on the 'Communication and collaboration' evaluation dimension.

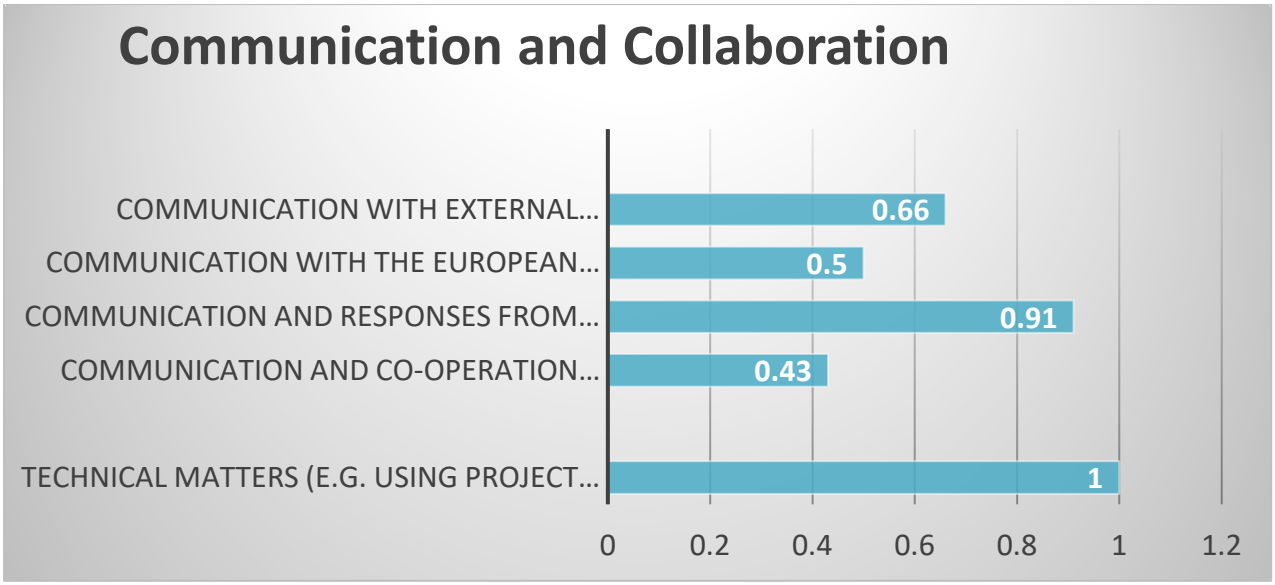

Figure 7: Partner Survey results, June 2023 – Communication and collaboration

As Figure 7 shows, communication and collaboration satisfaction scores are positive though lower than the overall management satisfaction scores, and with some mixed feedback from partners. The majority view was that the coordinator has always been available and supportive. Some frustration was expressed with partner communication, IO instructions and coordinator communications, although the latter was felt to have improved since the previous Partner survey.

Figure 8 shows the results of the final Partner Survey – June 2023 – on the 'Meeting objectives and targets' evaluation dimension.

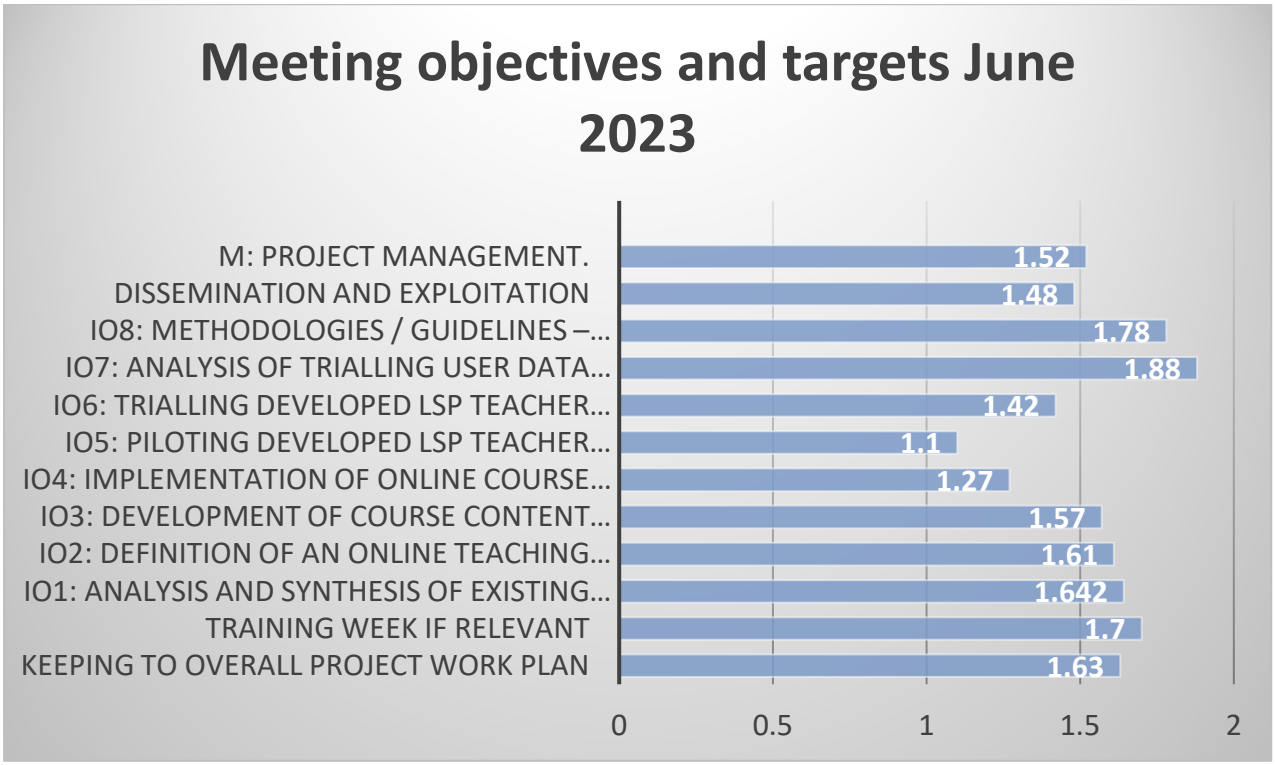

Figure 8: Partner Survey results, June 2023 – Meeting objectives and targets

As Figure 8 shows, overall partner satisfaction with meetings objectives and targets was generally positive overall, with scores at or above 1.5 for most indicators, with the exception of IO5 – piloting

– IO6 – trialling – and IO4 – course implementation. The main issue raised focused on the delay to the course development in 2022 with significant knock-on effects for 2023. However, the partnership consensus was that a good job had been collectively done.

In summary the key messages from the partner surveys are:

- The project has scored high across all indicators, and scores have improved progressively over the project life cycle – particularly on governance and decision-making; progress monitoring and quality control and meeting objectives and targets
- There have been significant challenges along the journey, but good management and team-work have combined to meet these challenges
- In particular, the core project output – the pilot course (IO6) - was delivered and piloted in the face of a significant series of crises
- Overall, partners see the project as a success story – the partners believe LSP teachers will achieve significant benefit from the course, although there are some areas for improvement that have been highlighted.

4.2 Summative Evaluation Results

The summative evaluation was implemented via a multi-methodological design combining analysis of key output indicators, statistical analysis of participation data, analysis of the use of the training platform, including learner analytics data capturing user interaction with the training course, a 'pre-test/post-test' survey of training programme participants, measuring their self-reported level of competences before and after participating in the LSP-TEOC.Pro training programme, analysis of training programme participants' quiz scores, a participant survey, participant diaries and follow up interviews and focus groups. Analysis of these data is presented in the following sections. Additional analysis is provided in LSP-TEOC.Pro IO6 – Trialling developed LSP Teacher Education online course – and IO7 - Analysis of trialling user data and application of learning analytics.

4.2.1 Course Participation and Retention

Figure 9 shows participation levels in the LSP-TEOC.Pro training programme trial.

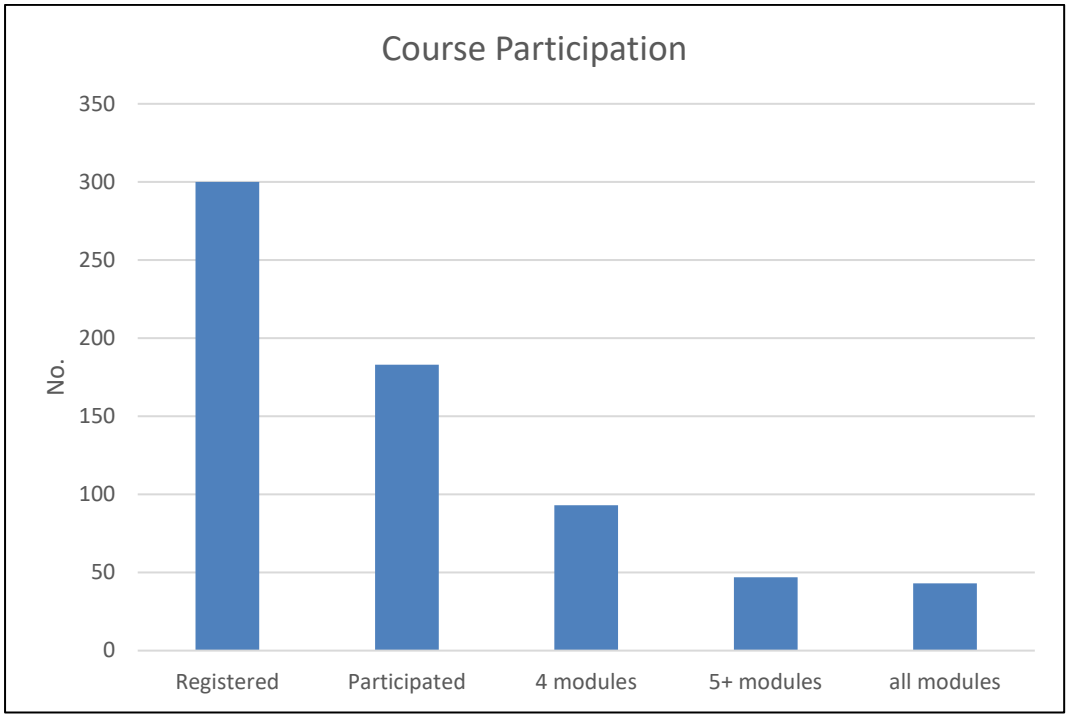

Figure 9: Participation in the LSP-TEOC.Pro training programme trial

Figure 9 shows:

- 300 LSP teachers and students registered for the programme
- Of these 183 – 61% participated in the training course
- 93 – 31% – of those registered completed 4 modules of the course
- 47 – 16% – of those registered completed 5 or more modules of the course
- 43 – 14% – of those registered completed the whole course (8 modules).

These figures suggest a high level of interest from the LSP professional community in the training programme, together with a relatively high participation rate of over 60%, but a low retention rate overall, given that only 14% of those registered completed the course. However, the retention picture is more positive if only those who actively participated in the training are considered. This shows:

- 51% of active participants completed at least half of the course (4 modules)
- 26% of active participants completed 5 or more modules of the course
- 23 % of active participants completed the whole course.

No specific data are available at the time of writing on the reasons why those who registered did not start the course or why those who did start did not complete it. However, the learning analytics data, which gathered detailed information on participant interaction with the course, including, for example, length of time taken to complete modules and quizzes were assessed to provide some clues.

Analysis of these data suggests there are no significant differences between participants who completed the course and those who did not in terms of age or experience (pre-service compared to experienced teachers). This generally holds true in terms of the different modules selected by participants. The modules most frequently chosen were Module 0 – Introduction to LSP; Module 1 – Needs analysis; Module 2 – Course/Syllabus Design and Module 4 – LSP teaching skills. No differences in module preferences were identified for Module 0 by user profile. However, pre-service teachers chose Modules 1 and 2 more frequently and experienced teachers Module 4 more frequently. Some differences were highlighted in relation to pedagogic background. LSP teachers

teaching at Masters level, and teachers in secondary schools, were most likely to complete the course. Master's degree students, and teachers working in primary schools, were least likely to complete the course.

Analysis of completion rates for the different modules, set against completion rates for the whole course, suggests that participants who completed less than four modules focused their efforts in the first set of modules – i.e., Modules 0, 1 and 2. Whether this is because the course got harder as participants progressed through it and course 'drop outs' felt they could not continue because of the difficulty is hard to say. One possible indicator of difficulty is the time taken to complete a module. The average time spent on the whole course in terms of course activities was calculated at 44 hours. This average includes extreme 'outliers', i.e., people who spent weeks on the course, and people who spent a few minutes. A more balanced indicator is median time. This is shown in Table 7 below for the course as a whole and for each module.

Table 7: Median time spent on the course

Module	N users	Median time (mins)
0	145	20.22
1	113	53.35
2	101	25.82
3	72	66.33
4	81	56.17
5	67	19.22
6	43	28.95
7	46	18.54
Whole course	154	152.53

As Table 7 shows, and as outlined above, the most popular modules in terms of number of users were Modules 0, 1 and 2. For Module 1 – Needs analysis – the median time spent was just under 1 hour – the third most time-consuming module of the course, compared with a median time of 20 minutes for the Introduction Module – Module 0 - and 25 minutes for Module 2 - Course/Syllabus Design. Module 3 - Disciplinary context – recorded the longest median time spent at 66 minutes. However, following module 4, the median time spent on modules shows a downward curve. This could be because the modules were less difficult but could also be due to participants becoming more efficient learners as they progressed through the course.

Analysis of quiz results is potentially another indicator of difficulty. 49 different quizzes were incorporated into the training course across the eight modules. Analysis of the median attempt time for these quizzes and the average score on the quizzes in principle provides an indication of difficulty. Table 8 below shows the ten highest and lowest scores on Module quizzes on average.

Table 8: Ten highest and lowest scores on Module quizzes

Highest scores			Lowest scores		
Module No.	Quiz No.	Avg. score	Module No.	Quiz No.	Avg. score
3	2	98.43	3	5	71.32
5	4	97.43	6	1	81.05
3	7	94.96	0	3	81.68
3	3	94.05	3	8	81.94
7	3	93.59	3	4	82.25

4	6	93.45	2	1	82.88
4	1	92.63	0	2	82.93
7	4	92.56	1	2	82.98
7	2	91.79	6	3	83.55
3	6	91.7	3	5	71.32

Table 8 shows that overall the highest quiz scores were achieved for Modules 7, 3 and 4 and the lowest for Modules 0, 6 and 3. There is no correlation between this pattern and the analysis of time spent on the modules, where the most time-confusing, and potentially most difficult modules were 3, 4 and 1.

Table 9 below shows the ten quizzes that took the longest time to do and the ten that took the shortest time.

Table 9: Quiz time analysis

Module No.	Quiz No.	Median attempt time (mins)	Module No.	Quiz No.	Median attempt time (mins)
3	1	10.72	7	2	0.98
4	5	10.43	6	4	1
1	4	9.7	7	5	1.33
1	3	9.57	7	3	1.43
3	7	8.87	3	1	1.73
0	2	8.83	6	5	1.92
1	2	8.73	3	4	1.98
6	2	8.57	7	1	2.13
4	7	8.42	3	2	2.25
1	6	8.2	6	6	2.43

As Table 9 shows, overall, Modules 1, 3 and 4 recorded the longest median attempt time and modules 7, 6 and 3 the shortest. This suggests there could be a correlation between length of time taken to complete a module and length of time taken to complete a quiz – the modules taking the longest time to complete also being 1, 3 and 4.

However, on the whole, the learning analytics data do not reveal a clear connection between course enrolment, progression, completion and success and variables like user profile, module selection and degree of difficulty. Additional research would be needed to shed more light on these patterns. Meanwhile, review of the learning analytics data carried out in LSP-TEOC.Pro IO7 – postulates a typology of learners for the training programme, as shown in Figure 10 below.

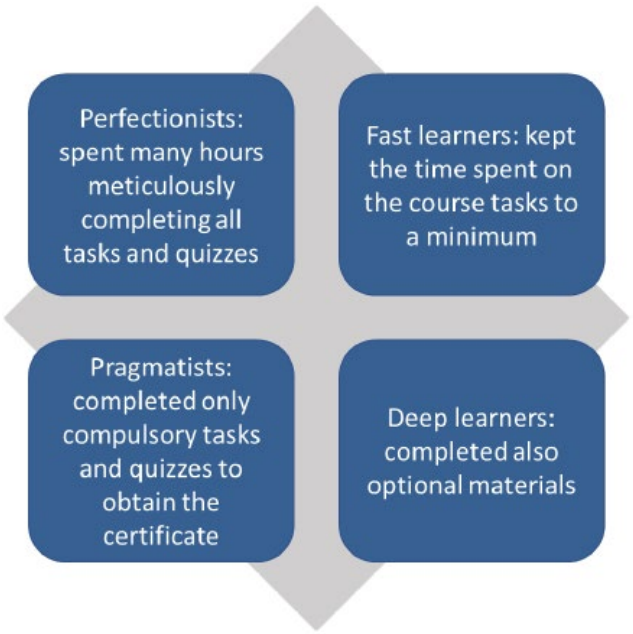

Figure 10: LSP-TEOC.Pro Learner typology (Source: LSP-TEOC.Pro IO7)

As the diagram shows, the data suggests four groups of course participants: Perfectionists, characterised by a high course completion rate, high average time spent on course activities and meticulous effort devoted to completing tasks and quizzes; Fast learners, characterised by comprehensive module coverage with minimum time devoted to course tasks; Deep learners, who spent a long time working on the course and completed optional activities and Pragmatists, who complete only the compulsory tasks and quizzes needed to obtain a certificate.

4.2.2 Participation Outcomes

How did course participation affect the acquisition of competences in LSP? To assess this the evaluation included the following:

- a pre-test/post-test' survey of training programme participants, measuring their self-reported level of competence in the areas covered by the eight modules in the course
- an analysis of the scores posted by participants in the quizzes included in the modules
- analysis of responses to the participant survey.

Changes in Self-assessed Aompetence Levels

The self-assessment survey asked course participants to rate their level of competence on a five-point scale from very low to very high. The survey was set up to try to capture both immediate and intermediate outcomes. To cover ***immediate outcomes*** - changes in awareness and increased knowledge - participants were asked to rate their level of knowledge and understanding of the competence covered by each module. To illustrate, to assess the competence level for the '***needs analysis'*** module, participants were asked to respond to the question "How would you rate your level of knowledge and understanding of needs analysis concepts and methods in an LSP context, including understanding LSP principles, challenges and constraints; understanding needs analysis concepts and methodologies; selecting appropriate tools to undertake a needs analysis?" To cover ***intermediate outcomes*** - changes in behaviour and structures – participants were asked to rate their ability to apply their understanding of a competence in their teaching practice. So, for the '***needs analysis'*** module, participants were asked to respond to the question "How would you rate your ability to carry out a needs analysis to design an appropriate needs-based LSP course in practice, by reflecting on your own current or future LSP teaching challenges, opportunities and constraints; choosing appropriate data collection methods***;*** conducting a needs analysis and synthesising and evaluating the results?***"***

Since it was not possible in the project time-frame to carry out a longitudinal survey of the teachers and students who took part in the training course – i.e. rating their actual application of the LSP-TEOC.Pro competences in their real life practice at a point in the future - the 'application' responses can be seen as a surrogate for behavioral outcomes.

Figure 11 compares the mean score on knowledge and understanding for the eight modules of the training programme as well as the mean score for the whole course (taking the 'mean of the means' for all participants who completed the self-assessment). Figure 12 shows the change in aggregated mean educator score on knowledge and understanding for the eight modules of the training programme as well as the total combined competence score after completion of the training programme. The aggregate scores for each module were calculated as a percentage of the total maximum.

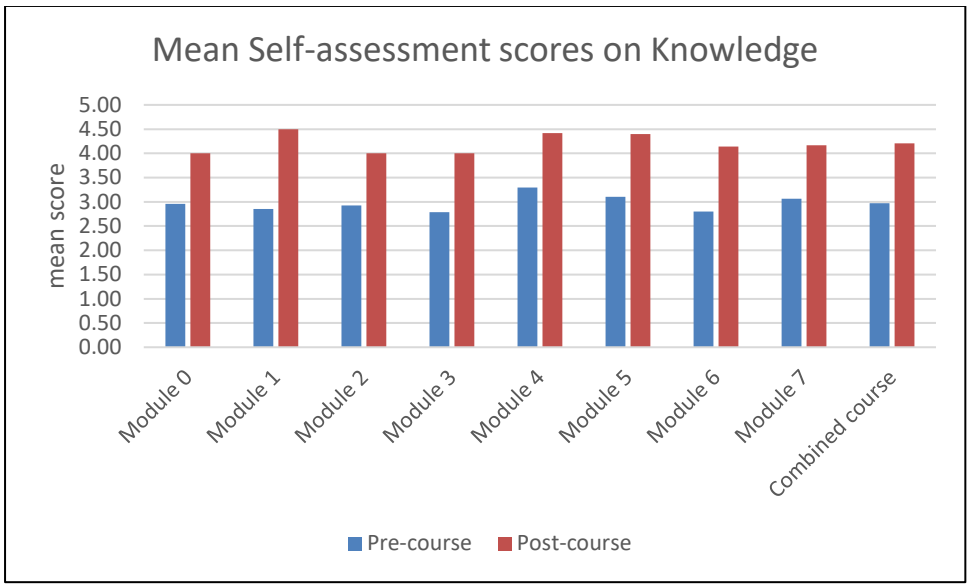

Figure 11: Comparison of mean self-assessment scores on knowledge and understanding before and after taking the training course

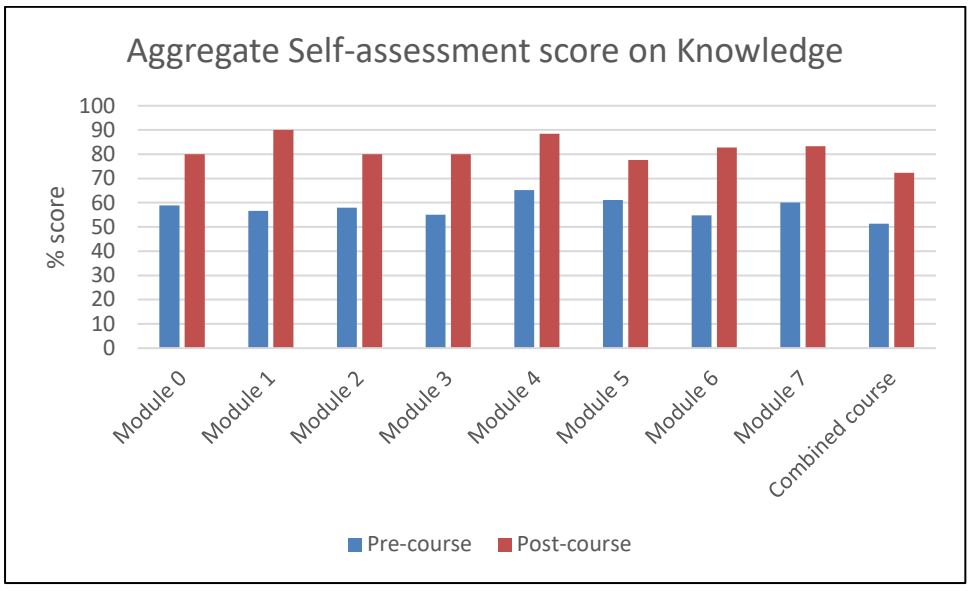

Figure 12: Comparison of aggregate self-assessment scores on knowledge and understanding before and after taking the training course

Figures 11 and 12 show:

- Measured by self-assessed rating, LSP teachers and students who took the training course significantly increased their knowledge and understanding of the topics covered. Overall, participants increased their aggregate score for the course as a whole by 40% on average - from 51 to 72 – after participating, with an average rating on the course as a whole increasing from 2.9 to 4.2 (on a scale of 1 to 5).
- These increases in knowledge and understanding were identified across all of the modules provided in the course. The largest increases were for Module 1 – Needs analysis – which saw an increase of 59% on aggregate and a mean increase from 2.8 to 4.5 – and Module 6 - Task/Project/Problem-based Learning in LSP – which saw an increase of 51% on aggregate and a mean increase from 2.8 to 4.2.
- The smallest increase was for Module 5 – LSP Materials - which saw an increase of 27% on aggregate and a mean increase from 3.1 to 4.4.

Figure 13 compares the mean score on ability to apply understanding of a competence in teaching practice for the eight modules of the training programme as well as the mean score for the whole course (taking the 'mean of the means' for all participants who completed the self-assessment).

Figure 14 shows the change in aggregated mean educator score on ability to apply understanding of a competence in teaching practice for the eight modules of the training programme as well as the total combined competence score after completion of the training programme. The aggregate scores for each module were calculated as a percentage of the total maximum.

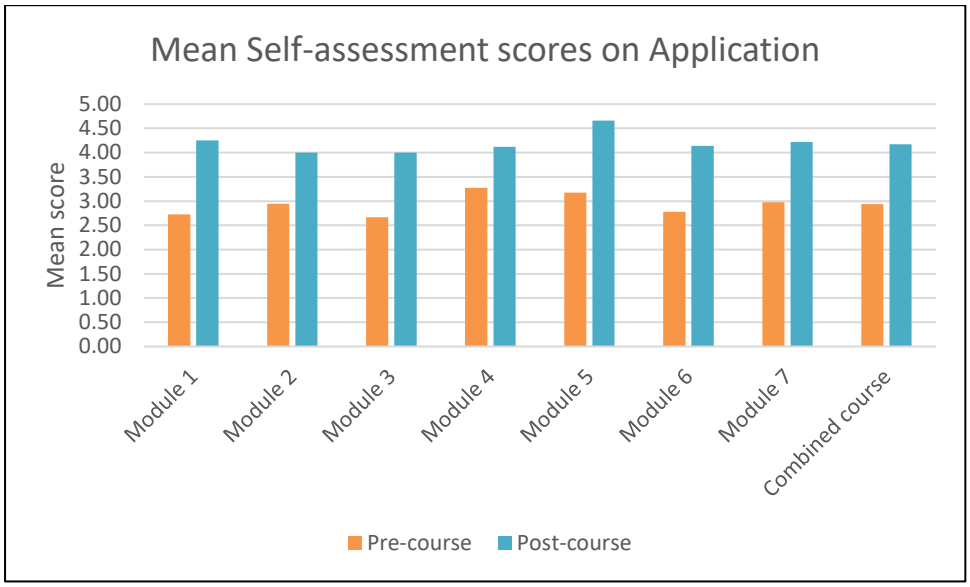

Figure 13: Comparison of mean self-assessment scores on application in practice before and after taking the training course

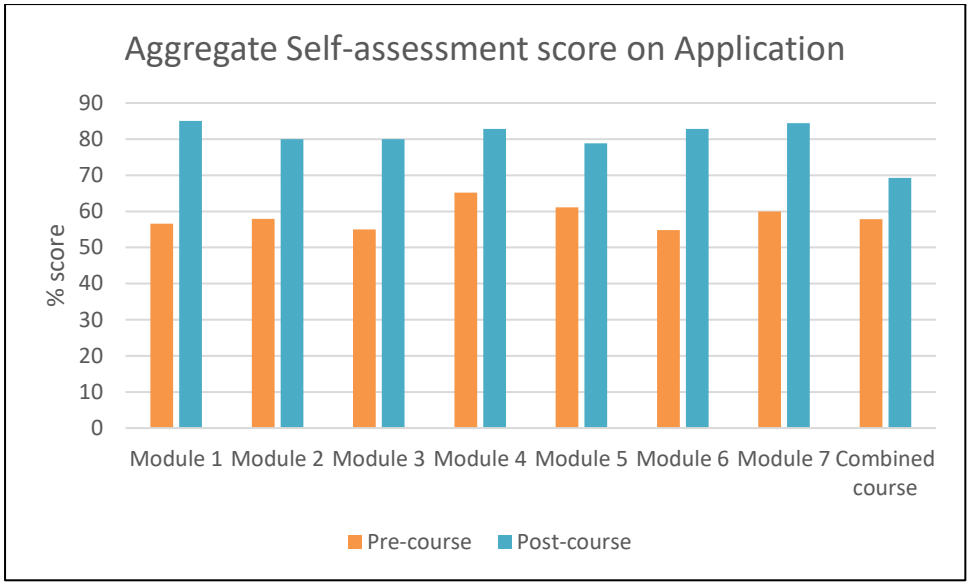

Figure 14: Comparison of aggregate self-assessment scores on application in practice before and after taking the training course

Figures 13 and 14 show:

- Measured by self-assessed rating, LSP teachers and students who took the training course significantly increased their capacity to apply their knowledge and understanding of the topics covered in practice. Overall, participants increased their aggregate score on application for the course as a whole by 20% on average - from 58 to 69 – after participating, with an average rating on the course as a whole increasing from 2.9 to 4.2 (on a scale of 1 to 5).
- These increases in capacity to apply knowledge and understanding of the topics covered in practice were identified across all of the modules provided in the course. As for knowledge and understanding, the largest increases in application were for Module 1 – Needs analysis – which saw an increase of 50% on aggregate and a mean increase from 2.7 to 4.3 – and Module 6 - Task/Project/Problem-based Learning in LSP – which saw an increase of 51% on aggregate and a mean increase from 2.8 to 4.2.
- The smallest increase was for Module 4 – LSP Teaching skills - which saw an increase of 27% on aggregate and a mean increase from 3.1 to 4.1.

A matched pair student's t-test showed that the differences in self-reported knowledge and application were statistically significant across all modules at the 0.05 confidence level. However, it should be noted that the number of participants completing the pre-test survey declined progressively from 156 for Module 0 to below 50 for Module 7 and the numbers completing the post-test survey were much lower than for the pre-test survey.

Analysis of Quiz Scores

Another indicator of changes in knowledge and the application of that knowledge associated with participation in the LSP-TEOC.Pro training programme is afforded by the results of the 'quizzes' that were incorporated in the programme. The quizzes had a dual purpose of supporting participant motivation and engagement through 'gamification' and enabling monitoring and assessment of progression. As noted in the preceding section test scores from the 49 quizzes participants completed were analysed. Taking all quiz scores combined, the mean quiz score for training programme participants is 87/100. Table 10 below shows the distribution of mean quiz scores for the 49 quizzes analysed.

Table 10: Distribution of mean quiz scores

	% quizzes
Over 90 %	33
Between 80-90 %	61
Less than 80 %	6
Total	**100**

As Table 10 shows in a third of the quizzes the mean score recorded was 90% or above. For almost two thirds of the quizzes the mean score recorded was between 80% and 90% and for only 6% quizzes the mean score recorded was below 80%. The results suggest that the LSP-TEOC.Pro participants achieved significant learning outcomes from participating in the training programme.

User Satisfaction and the User Experience

The user experience and satisfaction with the training course was evaluated through three instruments:

- A retrospective User Survey carried out with training programme participants after completion of the programme
- Dairies completed by participants over the duration of the programme
- Qualitative feedback from training programme participants collected through interviews and focus groups.

The User Survey, which was completed by just under 100 course participants, included three questions on behavioural intentionality:

- Would you recommend this course to other LSP teachers (or students)?
- In the future, do you plan to return to selected modules and/or to those, which you have not chosen this time?
- Have you acquired knowledge that you intend to put into practice after the course?

Figure 15 shows responses to the first question.

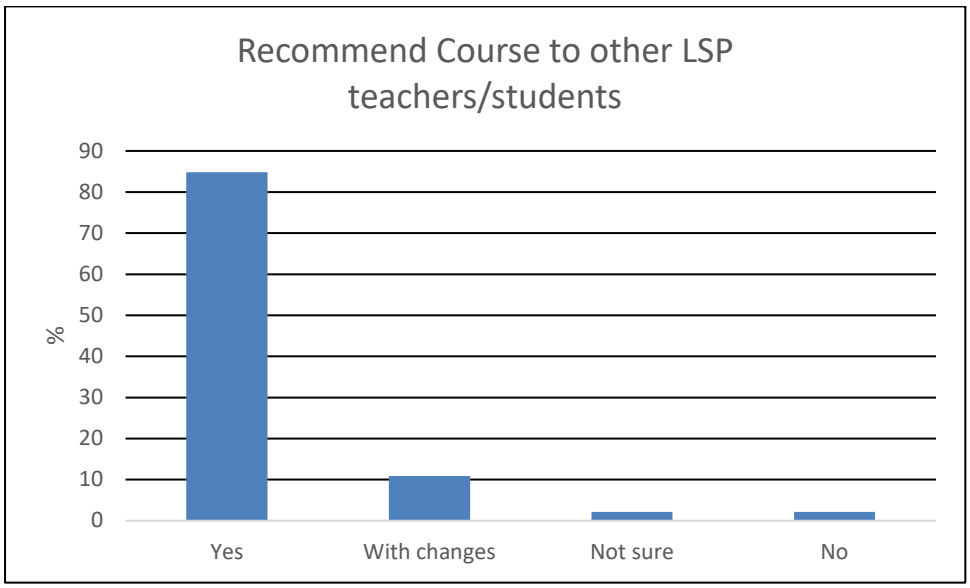

Figure 15: Participant recommendation of the training course

As Figure 15 shows, 85% of survey respondents said they would recommend the course to other LSP teachers or students; 11% said they would recommend it with changes and only 2% said they would not recommend it.

Figure 16 shows responses to the second question.

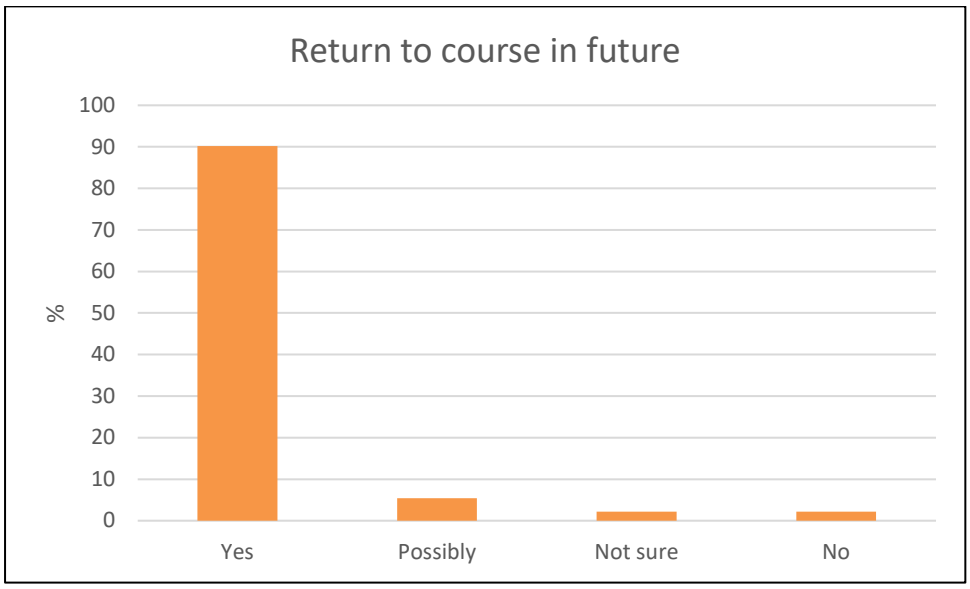

Figure 16: Participant intentions to return to the training course in the future

As Figure 16 shows, 90% of survey respondents said they plan to return to selected modules of the course in the future or modules they had not previously selected and only 2% said they no intention to return to the course.

Figure 17 shows responses to the third question.

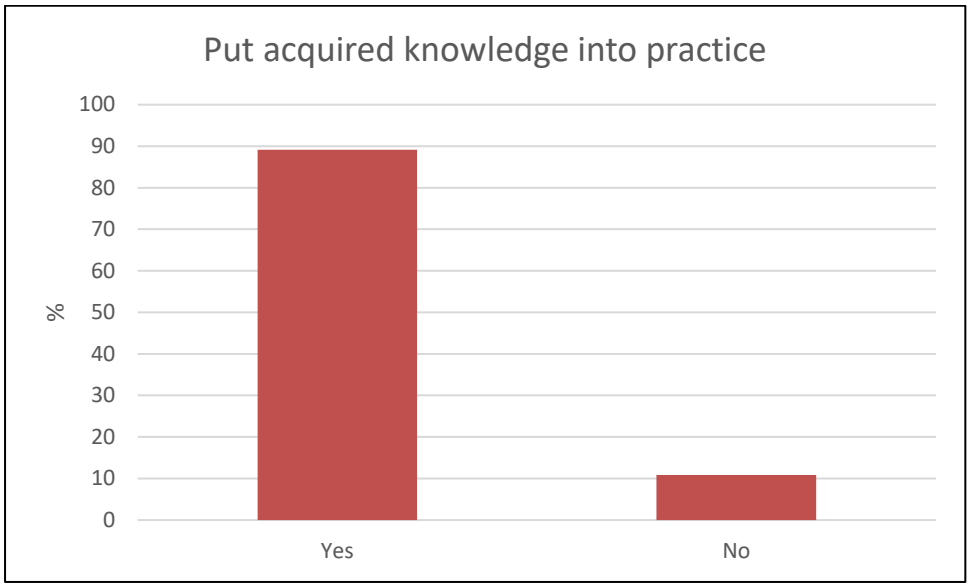

Figure 17: Participant intention to put acquired knowledge into practice after the course

As Figure 17 shows, 89% of survey respondents said they intend to put the knowledge they had acquired from the course into practice in the future. 11% reported they did not intend to put this knowledge into practice.

These results suggest that course participants have a very positive attitude to the training course, and they associate their participation with real practical benefits gained from that participation.

The positive outcomes identified through the user survey are reinforced by the results of the analysis of qualitative data derived from participant diaries, focus groups and interviews. Overall, there was strong endorsement of the training programme's usefulness, comprehensiveness and organisation expressed by respondents, together with positive comments made about the training experience. A word cloud derived from content analysis of participant responses from diaries, focus groups and interviews shows that the descriptions most frequently expressed by participants were: beneficial, insightful, thought provoking, enlightening and fun. The following extracts from the qualitative instruments used in the evaluation – which logged 62 positive reinforcements of the training programme - reinforce this picture:

> *"The course is outstanding**,** and I have enjoyed every module!"*
>
> *"Interesting topics, effective study materials, motivating activities."*
>
> *"The main strength of the course is its content: very relevant, to the point, easy to understand and practice-oriented".*
>
> *"They were concise, easy to follow and knowledgeable, good references are given to keep reading and learning from more specific learning experiences".*

Critical comments on the training experience were in a minority. However, participants did suggest some recommendations to improve the training course. These focused on three main areas:

- More balance in terms of the length of the course overall, the distribution of content and activities across modules and a broader targeting strategy to better include people with less experience and knowledge of LSP
- Paring down the breadth and content of the course to highlight core areas and essentials
- Improving the course design and user friendliness.

The following extracts from the qualitative data collected and analysed illustrate these points:

> *"More balance and co-ordination on length, level of difficulty".*
>
> *"Theoretical information is very complete, but it includes many issues that are not essential".*
>
> *"Design and videos could be more attractive to retain interest and motivation".*

4.3 The LSP-TEOC.Pro 'Change Journey'

Returning to the starting point of the evaluation – the LSP-TEOC.Pro 'Theory of Change', what do the evaluation results tell us about how far the project has travelled on its 'change journey'? As noted above in the 'evaluation methodology' section, to answer this question we need to look at the 'primary mechanism' that underpins the project theory of change and, in particular, make a judgement, based on the evaluation evidence, as to whether the 'resources' developed and applied in LSP-TEOC.Pro had the effect of changing the 'reasoning' of participants, which in turn led to changes in behaviours and structures.

The 'primary mechanism' of LSP-TEOC.Pro is summarised in the box below.

LSP-TEOC.Pro 'Primary Mechanism'

LSP professionals and trainee teachers find out about LSP-TEOC.Pro through the project website, multiplier events, partner awareness-raising actions and networks. They see that LSP-TEOC.Pro fills a gap in their needs and sign up for the online course. Participation in the course increases their understanding of how LSP can be applied more effectively in teaching practice. Hands-on exercises, supported through the use of digital technologies, increases their competence in LSP pedagogy and gives them the confidence to apply it in practice. On graduation from LSP-TEOC.Pro, they apply their new competences in their teaching practice. This has the

aggregated and cumulative effect of improving the LSP competence base. Dissemination and networking actions amongst partners lead to knowledge transfer, development of partnerships aimed at providing and promoting knowledge and skills for high quality teaching and learning of LSP in VET and in higher education; new forms of collaborations highlighting the positive impact of pan-European activities and strengthening collaboration. This in the longer term supports a base for trans-European collaboration that ultimately will have a knock-on effect on the quality of training provided for LSP teachers and students and an improvement in learning outcomes for those they teach.

Table 11 below unpacks the component parts of this primary mechanism; sets out the requirements needed to demonstrate they work and reviews the evidence in support of each component.

Table 11: Analysis of LSP-TEOC.Pro Primary Mechanism

Component	Requirements/*Indicators*	Supporting evidence	Strength of evidence
Resources	Project website; project promotional materials; networks; LSP-TEOC.Pro partner skills and time; LSP-TEOC.Pro online course. *No. of LSP programmes in Europe reviewed and analysed* *No. course content units integrated into LMS* *No. of teachers and students recruited for online course trials*	532 institutions; 12 programmes reviewed in preliminary research; comprehensive evidence base on what works 8 LSP topics developed for online course; 48 quizzes; additional optional materials; delivered through LMS 300 teachers & students registered; 183 participate in training course	Very Strong
Immediate outcomes	Increased knowledge and understanding by LSP teachers and students Increase in LSP, digital and intercultural competences of programme participants. Increased confidence in applying LSP in teaching practice. *% participants completing course* *increase in LSP competences* *Increase in application capacity of LSP competences*	14% of registered and 23% of active participants complete course; 31% of registered and 51% of active participants complete at least 4 modules and gain certificate. Participants gain high scores on course quizzes. Course participants increase their LSP knowledge and understanding by 40% on average for the course as a whole. Significant increase in LSP knowledge and understanding across all modules of the course. Course participants increase their capacity to apply LSP knowledge by 20% on average for the course as a whole, and across all modules of the course.	Rather strong
I**ntermediate outcomes**	More extensive use of digital technologies and digitally-supported pedagogy in LSP teaching	89% of course participants surveyed said they intend to put the knowledge they had acquired from the course into practice in the future.	Rather weak

Component	Requirements/*Indicators*	Supporting evidence	Strength of evidence
	% course participants reporting they have applied or intend to apply their LSP competences in their practice *% trainee teachers reporting increased progression prospects*	No hard evidence that LSP teachers and students have applied the learning acquired from course in their practice No hard evidence of impact on career progression	
Long term impact	New partnerships and networks to promote knowledge and skills in LSP teaching and learning develop Increase in LSP competence base in the EU. Improvement in the quality of LSP teaching and hence learning outcomes in teaching practice. *No. stakeholders reached through dissemination* *No. stakeholders involved in LSP-TEOC.Pro-related partnership and networking activities*	Around 1,200 visits to project public website; around 1,800 visits on social media; 56 participants at final conference; 15 involved conference presentations; 2 workshops; 2 academic articles; estimated stakeholder reach 1,830. No hard evidence of extensive LSP partnerships and networks created. No hard evidence of extensive knowledge exchange; new research actions created. However, the training course will run until 2028 and a steady throughput of trainees will provide a foundation for potential longer term impacts	Rather weak
Assumptions	LSP-TEOC.Pro has sufficient, appropriate resources to deliver. The offer is attractive for programme participants. Enough participants sign up. The programme suits user needs. The programme is user-friendly. Programme graduates have opportunities to apply their LSP competences in their practice.	The project used its available resources efficiently and effectively User experience data and feedback shows course rated very positively Participant survey and qualitative data shows the course met needs and was relatively easy to use No hard evidence that participants had opportunities to apply what they had learned in their practice	Strong

Component	Requirements/*Indicators*	Supporting evidence	Strength of evidence
Alternative mechanism	The education and development programme model is ineffective. LSP professionals and trainee teachers participating in the programme use their own networks and resources to acquire competences necessary to improve their LSP practice.	User trials support the applicability ad scaleability of the LSP-TEOC.Pro model and approach. No evidence that viable alternatives to the programme exist. The evidence shows that the course meets a need	Very weak

As Table 11 above shows, the evidence in support of the LSP-TEOC.Pro 'primary mechanism' is mixed. With regard to the 'presenting problem' LSP-TEOC.PRO aims to address, the research phase in LSP-TEOC.Pro entailed extensive review of state of the art in LSP training programmes, with 532 institutions consulted and 12 programmes extensively reviewed. The evidence from this supports the 'presenting problem' identified in the project theory of change - not enough teachers have the necessary skills to deliver effective LSP teaching and learning, and there is therefore a need for new education and development programmes that provide these skills to a wider constituency of professionals and trainee teachers.

This research and its results fed into the development of a comprehensive on-line training programme for LSP teachers and students. The programme is comprised of eight modules that reflect the competences needed to deliver high quality LSP training across a range of institutional settings. 300 teachers and students enrolled on the course and 183 - 61% - actively participated in it. These results reinforce the conclusion that there is a clear need for such an innovative programme. However, the retention and completion rates for the course are relatively low, at 23% for the whole course for active participants, with over half active participants completing only 4 modules. This evidence suggests a requirement for additional work to increase retention and progression, including more detailed analysis of the reasons behind drop-out and incomplete progression.

On balance there is very strong evidence that LSP-TEOC.Pro successfully developed the resources necessary to promote change and applied these resources to support changes. There is strong evidence that utilisation of these resources contributed to positive immediate changes, i.e. in attitudes, awareness, knowledge and the capacity to apply this knowledge in practice. However, the evidence is weaker with regard to the contribution LSP-TEOC.Pro made to intermediate outcomes, i.e. changes in actual behaviours of participants and in the systems and structures of their organisations. Although there is evidence from the evaluation that LSP-TEOC.Pro created favourable conditions for behavioural and systems change, and the vast majority of course participants aim to apply what they had learned in their practice going forward, there is little hard evidence that this was achieved in practice – not least because assessing such change would require longitudinal data to be collected on things like teacher and student classroom practices and their career progression over a period following the end of the project.

For similar reasons, the evidence to support longer term impacts at the systemic level is also weak. Although the dissemination activities carried out by the project reached a reasonable number of stakeholders, there is no hard evidence that these activities have led to significant changes in the infrastructure needed for extensive knowledge transfer, and the formation of networks and partnerships that could lead to changes in the quality of LSP teaching provided at the European level; in new research networks and in policy formulation and delivery.

It would appear therefore that, although LSP-TEOC.Pro has progressed significantly along its 'change journey', further effort is required going forward to, firstly, improve the training offer to increase retention and progression and, secondly, to support scaling up and out, so that the project has an impact at the macro level. However, the training course will run until 2028 and a steady throughput of trainees will provide a foundation for potential longer-term impacts.

There is no evidence to support the 'alternative' mechanism – that the LSP-TEOC.Pro education and development programme model is ineffective, and that LSP professionals and trainee teachers participating in the programme use their own networks and resources to acquire competences necessary to improve their LSP practice. Conversely, the assumptions underlying the project primary mechanism are supported by the evidence.

4.4 Conclusions

This document has provided a revised update to the LSP-TEOC.Pro evaluation methodology and toolkit developed in the early phase of the project. This revised version focuses in particular on the results of the evaluation, derived from the application of the approach, methodology and tools.

The key messages from the evaluation show that LSP-TEOC.Pro successfuly delivered on many of its key objectives and outputs, and is seen by partners as a success. It carried out an extensive review of state of the art in LSP training programmes, with 532 institutions consulted and 12 programmes extensively reviewed. This research and its results fed into the development of a comprehensive on-line training programme for LSP teachers and students. The programme is comprised of eight modules that reflect the competences needed to deliver high quality LSP training across a range of institutional settings.

300 teachers and students enrolled on the course and 183 – 61% – actively participated in it. These results reinforce the conclusion that there is a clear need for such an innovative programme. However, the retention and completion rates for the course are relatively low, at 23% for the whole course for active participants, with over half active participants completing only 4 modules. This evidence suggests a requirement for additional work to increase retention and progression, including more detailed analysis of the reasons behind drop-out and incomplete progression.

Course participants increased their LSP knowledge and understanding by 40% on average for the course as a whole, with significant increases in LSP knowledge and understanding across all modules of the course. Course participants increased their capacity to apply LSP knowledge in their practice by 20% on average for the course as a whole, and across all modules of the course.

As noted above there is therefore very strong evidence that LSP-TEOC.Pro successfully developed the resources necessary to promote change and applied these resources to support change. There is rather strong evidence that utilisation of these resources contributed to positive immediate changes, i.e. in attitudes, awareness, knowledge and the capacity to apply this knowledge in practice. However, the evidence is weaker with regard to the contribution LSP-TEOC.Pro made to intermediate outcomes, i.e. changes in actual behaviours of participants and in the systems and structures of their organisations. Although LSP-TEOC.PRO has progressed significantly along its ‘change journey’, further effort is required going forward to improve the training offer to increase retention and progression, capitalise on new trainees joining the course and support scaling up and out, so that the project has an impact at the macro level.

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Annex I: Evaluation Instrument Templates

1. Partners Survey

Purpose

To periodically collect data on partners' perceptions of how LSP-TEOC.Pro is being managed and how it is progressing. The data analysis feeds into LSP-TEOC.Pro's project management and also into the summative evaluation.

Procedure

The Survey is intended to be delivered as a cross-sectional 'snapshot' survey at points in time throughout the project life cycle. The Survey should be e-mailed to all members of the Consortium, i.e. everyone's views should be collected rather than one institutional survey per partner organisation. This should be done at least 2 weeks before scheduled Partners Meetings. Each successive round of surveys should be entered into the same spreadsheet to enable a time series analysis of the data to be carried out.

Partner Survey Questionnaire

NAME: _____

PARTNER ORGANISATION:_____

For each question please think about your experience of how ① Project Management, ② Communication System and ③ Scheduled Objectives have been carried out in LSP-TEOC.Pro and for each aspect indicated, write down:

in Column A, any problems you have experienced;

in Column B, what changes or improvements you would like to see;

in Column C, your satisfaction with this particular aspect of the project (write in the number which applies, using the following scale):

-2----------	-1----------	0----------	+1----------	+2----------
very dissatisfied	dissatisfied	neither satisfied nor dissatisfied	satisfied	very satisfied

VIEWS ON PROJECT MANAGEMENT ISSUES: PROBLEMS, SUGGESTIONS FOR CHANGES AND SATISFACTION RATING

ASPECT	(A) PROBLEMS	(B) CHANGES YOU WOULD LIKE TO SEE	(C) SATISFACTION (-2 TO +2)
Governance (decision-making and consultation			
Co-ordination of activities			
Progress control and monitoring			

Quality control			
Financial matters			

Are there any other points or suggestions on project management you would like to make?

COMMUNICATIONS AND COLLABORATION: PROBLEMS, SUGGESTIONS FOR CHANGES AND SATISFACTION RATING

ASPECT	(A) PROBLEMS	(B) CHANGES YOU WOULD LIKE TO SEE	(C) SATISFACTION (-2 TO +2)
Technical matters (e.g. using project platform and tools)			
Communication and co-operation between partners			
Communication and responses from co-ordinator			
Communication with the European Commission/National Agency			
Communication with external stakeholders			

Are there any other points or suggestions on communications and collaboration you would like to make?

MEETING OBJECTIVES AND TARGETS

ASPECT	(A) PROBLEMS	(B) CHANGES YOU WOULD LIKE TO SEE	(C) SATISFACTION (-2 TO +2)
Keeping to overall project workplan			
IO1: Analysis and synthesis of existing LSP programmes			
IO2: Definition of an online teaching methodology			

IO3: Development of course content			
IO4: Implementation of online course			
IO5: Course piloting			
IO6: Course Trialling			
IO7: Analysis trialling data			
IO8: Evaluation			
Dissemination and Exploitation			
Project Management.			

Are there any other points or suggestions on meeting objectives and target you would like to make?

2. Action Learning Set

Purpose

The ALS is a generic procedure and tool for group work in LSP-TEOC.Pro. Its main purpose is to support collaborative learning.

It is intended to be used in the following evaluation modes and scenarios:

- In 'design' (ex-ante) mode – through partner 'sense making' workshops. This will involve representatives of all partners meeting either face to face or online in order to: discuss, review and amend the evolving LSP-TEOC.Pro theory of change; review past and discuss upcoming project activities in light of the updated theory of change; review and where necessary amend the indicator system and evidence collection method.
- In 'developmental' (process) mode – to valorise and disseminate learning from the evaluation at key time points in the project lifecycle, for example to present and review the 'evidence snapshots' delivered over the lifecycle of LSP-TEOC.Pro
- In 'summative' mode – for example towards the end of the Project through an interactive partner workshop to reflect on lessons learned and to support future sustainability.

A specific Action Learning Set will need to be tailored to: the evaluation 'mode' in which it is applied; the topic(s) to be addressed; the participating audience (their profile and expectations).

Action Learning Set Guidelines and Template

What is a LSP-TEOC.Pro Action Learning Set?

- A group of people working with a facilitator bringing to the surface and exploring issues arising from the LSP-TEOC.Pro activities
- Sharing real issues, problems or opportunities arising from the LSP-TEOC.Pro activities
- Questioning and challenging in relation to learning from LSP-TEOC.Pro
- Making action points in order to support the over-arching LSP-TEOC.Pro objective of supporting LSP education and training

Purposes and Objectives of the ALS

The 'classical' action learning set 'cycle' is shown in Figure 1. As Figure 1 shows, the main purposes and objectives of running an ALS are:

- to identify the problems and issues that need to be explored to support the over-arching LSP-TEOC.Pro objective
- to collaboratively analyse these problems and issues in the light of available evidence
- to reflect on and evaluate the evidence
- to decide on the next steps (actions) that should be taken

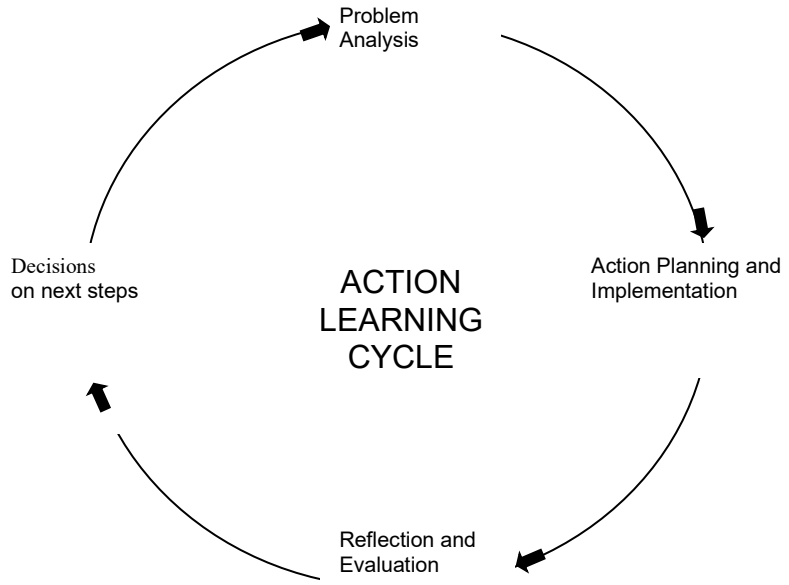

Figure 1: Cycle of learning promoted in an ALS

Procedure for Running an ALS

Introduction – facilitator explains:

- the focus and 'boundaries' within which the ALS participants will be working (e.g. if the focus of the ALS is on 'problems', define the 'presenting problems'; if the focus is on reviewing results – as in an 'evidence snapshot', specify the evidence that will be reviewed)
- the questions the workshop will explore
- how the group will work
- the agenda and timeframe for carrying out the tasks of the workshop
- the expected outputs and outcomes of the workshop and how these will be used

Implementation –the facilitator co-ordinates the running of the workshop, ensuring that the specified questions are covered within the allotted time. The tools usually required to do this are:

- presentational tools – e.g. lap-top, projector, PowerPoint
- data collection tools – e.g. flip chart, audio, video recording (ensure that 'informed consent' is obtained from participants for data collection purposes), 'post-it' notes

Summary and Review – the facilitator presents a summary of the results of the collaborative group work, using an appropriate method (e.g. flip chart). The group as a whole are then invited to:

- discuss and review the summary, identifying possible corrections, points of disagreement, additional points that need to be included
- agree on a final summary (including, if appropriate 'dissenting opinions')

Action points and close-down – the facilitator then invites a group discussion on the actions and next steps that are appropriate. This could cover:

- any follow-up group events that need to be scheduled on the topic of the ALS
- new actions/activities that could be developed
- who should be involved
- the timing of these actions/activities.

The facilitator then explains how the results of the workshop will be used (including proposed dissemination – e.g., uploading a report on the workshop to the Project platform) and then closes the workshop.

ALS Working Modes

There are a number of working modes and styles that can be adopted to run the ALS. The design of the workshop – and its working mode – should take into account who the participants are and what they would feel comfortable with. Essentially, the guiding principle of the ASL is on collaborative learning, so 'trans-missive' modes of working – for example where the participants are 'presented to' and remain largely passive consumers of information – are to be avoided.

Three modes of working that are typically used are:

- Open Forum
- 'Learning Café' style
- Role-playing

Open Forum

The Open Forum method focuses on 'whole group' work. The ALS would typically be delivered in a 'Round Table' format. The questions to be addressed and the tasks to be carried out are worked with sequentially through open discussion between the whole group, guided by the facilitator.

Learning Café

The Learning Café format adopts a combination of 'small group' and 'whole group' work. Small groups – normally around 3 in number – can be assigned a particular set of questions, or tasks to work on in a 'break-out' space. However, these small groups are fluid – i.e. participants in each small group will move on to another small group at regular intervals, so that all participants will have engaged with all the small groups over the duration of the workshop. Each small group needs to be assigned its own facilitator.

The small groups will merge into a 'whole group' at key points in the workshop – for example to review and discuss the results of each small group and produce an integrated summary for the group as a whole.

Role-Playing

The Role-Playing format adopts some of the principles, procedures and tools of Tavistock 'Group Relations' and P3C programmes, so that the classical ALS is modified to introduce an element of 'role playing', in which different stakeholder groups take on the 'point of view' of other groups in order to explore a problem or reflect on an action that needs to be done. One reason for doing this is to try to ensure a more balanced reflection of different stakeholder 'voices', since often the less powerful voices tend to be drowned by the more powerful stakeholders. The role-playing element of the ALS enables these less powerful voices to at least be represented in some form. In this form of ALS, the whole group is sub-divided into usually three small sub-groups, each of which takes on the point of view (PoV) of its assigned group in order to carry out a common task.

Reporting on Outcomes and Results

A template for reporting on the outcomes and results of the ALS is provided below.

ALS Reporting Template

Title of ALS	
Date implemented	
Facilitated by:	
Participants and their organisations	
Mode of delivery	1 Open Forum 2 Learning Café 3 Role Playing 4 Other (specify)
Purpose and Objectives	
LSP-TEOC.Pro areas covered (e.g. IO number; tasks)	
Topic(s) subjects(s) covered	
Issues covered	
Key questions covered	
Summary Report – provide a brief summary of the main results of the ALS	
Follow-up actions/activities – list any actions/activities planned, including what, who and when	
Other relevant observations/comments not covered above	

3. Process Dashboard

The Table below summarises the process dashboard that will be used in the LSP-TEOC.Pro evaluation

LSP-TEOC.Pro Process Dashboard

Dimension	Indicators	Status at: 31/5/21	Project target
Research	No. Literature review items and good practice cases reviewed		NS
Development	No. of content modules developed in target languages		NS
	No. issues detected and solved (IO4)		NS
	No. piloting diaries completed (IO5)		NS
Implementation/ Piloting	No. LSP students and teachers participating in online course		NS
Dissemination	No. visits to project website		NS
	No. contacts on social media		NS
	No. participants Final Conference		NS
KPIs	Progress towards target LSP education & development programmes reviewed		NA
	Change in website visits		NA
	Change in social media reach		
	Progress to online course participation target		NA
	% increase in LMS utilization		NA

NS = Target not specified in project proposal and workplan.

NA = Not applicable. KPIs do not have targets. They measure progress towards a specified target from a particular baseline.

4. Online Course Participant Survey

This will collect data from the LSP professionals and trainee teachers taking part in the online course. The Survey will cover:

- Participant profile
- Reasons for participating and expectations of outcomes
- Experience of participating, including issues and problems encountered
- Satisfaction with the course
- Outcomes associated with participation on LSP, digital and intercultural competences
- Intentions on using what has been learned in teaching practice and employment
- Suggestions for improving the LSP-TEOC.Pro curriculum.

Both the pre-test and post-test surveys will assess the level of participants' LSP, digital and intercultural competences using either a self-rating scale:

Example:

How would you rate your competence level on using digital presentation tools to deliver a lecture on Business English?

1	2	3	4	5
I can't do this at all	I can't do this very well	I can do this moderately well	I can do this well	I can do this very well

or by using situational knowledge-based question items:

Example:

You're giving a lecture on how to use digital tools to give a presentation on effective Business English. Which of the following tools allows you to create such presentations?

- Prezi
- Microsoft Excel
- Microsoft PowerPoint
- SurveyMonkey
- Visme

5. Final Conference Participant Survey

This will collect data from participants in the eight events organised by LSP-TEOC.Pro partners, including the Final Conference. The Survey will be delivered through a short feedback instrument using mainly closed questions - either paper-based (distributed and collected at the end of each event) or on-line (through a platform like Surveymonkey). Questions will include:

- Participant profile
- Reasons for participating and expectations
- Participant experience of the event
- Participant satisfaction with the event
- Assessment of LSP-TEOC.Pro intellectual outputs
- Intentions to participate in LSP-TEOC.Pro online course and and expectations of potential benefits

Examples of closed questions

How would you rate the event on the following criteria? Click on the button that best describes your feelings about the event

	Very poor	**Poor**	**Neutral**	**Good**	**Very good**
The way the event was organised	❍	❍	❍	❍	❍
The topics covered by the event	❍	❍	❍	❍	❍
The extent to which the event informed me about LSP-TEOC.Pro and its results	❍	❍	❍	❍	❍
The extent to which I learned something new	❍	❍	❍	❍	❍
The extent to which the event motivated me to get more involved in LSP	❍	❍	❍	❍	❍

6. Stakeholder Interview Guideline

Purpose

The Interview is a generic procedure and tool based on a semi-structured interview that enables more in-depth information to be gathered on an evaluation topic than would be possible using a survey approach. The Interview will typically be carried out with a 'key informant' with in-depth knowledge of the topic, for example a course delivery partner in LSP-TEOC.Pro.

Procedure

The instrument used for data collection is a semi-structured interview schedule. This allows scope for the interviewer to shape the questions according to the expertise and background of the interviewee and to tailor the question content to the interviewee's responses as the interview progresses.

In essence, the aim of the interview is to allow the interviewee to express his or her opinions as they emerge, with the interviewer steering the course of the interview by asking open-ended questions that are nonetheless structured to reflect the common research areas of the case study. This is based on a number of themes, preceded by an initial set of background-setting questions.

Each theme has three kinds of questions:

- main questions – these address the evaluation areas from a general perspective, by 'setting the scene' for the discussion
- supplementary questions – these drill down more deeply into the general questions. The interviewer should pose these questions on the basis of the interviewee's response to the main questions, as appropriate. The interviewee should write down the supplementary questions asked in the space provided in the Guideline below
- clarifying questions – intended to clarify and expand the responses to the additional questions, for example 'So what you are saying is ….. 'Can you give me more detail on…….. 'Can you give me an example of……..

The key informant interview process is as follows:

- The interview should begin with an explanation of the interview objectives and how the interview will be carried out.
- The interviewer goes through the questions shown in the Guideline sequentially. The responses can either be recorded – having obtained the interviewee's permission – or the responses can be taken down in written (note) form. **Note**: there is no need to fully transcribe the interviews (unless a particular interviewer feels this would be helpful in producing the summary).

Data Analysis

On completion of the interview, the interviewer should summarise the key results of the interview using a content analysis procedure, as set out below.

Analysis of Stakeholder Interview Data using Content Analysis

In a nutshell, content analysis of interview material is aimed at scanning the material to find examples of 'evidence' that will enable us to answer the research questions. This can be done in two ways – manually, or by using software (either using 'Word' and then searching the text for key words or using a specialist content analysis software package like NVivo). The manual approach uses a method based on 'reduction' (Creswell, 1998). In practice, this requires:

- an initial reading of the item being analysed, looking for examples of the key themes and evaluation questions covered and any additional themes suggested by the Key Informant interview
- making a note of the substantive points and issues that crop up as the reading progresses in relation to these themes, and the 'emerging constructs' that can be identified that define these substantive points and issues
- returning to the notes made of the reading, and the list of constructs identified and clustering together those that are similar to make a 'master list' of key constructs.
- re-reading the item and analysing it more systematically to find examples of the 'master list' of constructs, and recording in the content analysis template descriptors of examples of each construct that can be identified in the text.

7. Focus Group Guideline

Purpose

Focus groups can be thought of as group semi-structured face to face interviews. The group discussion is 'focused' or structured by a 'facilitator', using a ‘guideline’ in the form of a set of questions and prompts. There should in addition be present one or two additional observers or recorders to gather data on the outputs of the discussion. Tape recordings of the discussion will assist in subsequent analysis of the data, but there is a trade off in using tape recorders in terms of confidentiality and respondent resistance. Transcription and analysis of tapes is also very resource-intensive and time-consuming. A flip chart will help the participants to refer back to the key points emerging from the discussion.

Who should be involved in the Focus groups?

A representative sample of the 'target' audience, for example participants in the LSP-TEOC.Pro online course. This sample needs to reflect the characteristics of the people involved in the initiative. Strictly speaking, different user groups should be separated in order that their views do not get 'tainted', or in situations where one group could feel constrained in making observations that may be controversial in the face of others’ (for example learners with instructors). However, time and resources may require a pragmatic approach in which one focus group is carried out with representatives of all stakeholders combined.

How many people to include in the focus group?

A good rule of thumb is a maximum of around ten people per group.

Procedure

The group discussion is 'focused' or structured by a 'facilitator' and there should in addition be present one or two additional observers or recorders to gather data on the outputs of the discussion The Focus Group should take between 1 and 1.5 hours in total. The proceedings of the discussion should either be recorded verbatim using an audio recorder or through written notes. Tape recordings of the discussion will assist in subsequent analysis of the data, but there is a trade off in using tape recorders in terms of confidentiality and respondent resistance. Transcription and analysis of tapes is also very resource-intensive and time-consuming

The sequencing of activities is as follows:

- Stage 1: Provide a brief presentation of the LSP-TEOC.Pro project, supplemented with a small number of visual slides.
- Stage 2: Provide a brief presentation of the purposes of the Focus Group and how it works. Establish ground rules: everyone will be asked to talk; each person’s opinion counts; participants should not interrupt each other.
- Stage 3: Introduce the discussion topics and questions in sequence. Allow around 15 minutes for participants to discuss each topic and question. Facilitator writes down question on white board/flip chart. Participants are given a few moments to jot down responses to the question. Facilitator asks each participant to present their answer in turn. Facilitator writes down on flip chart each response, noting major similarities and differences in questions.
- Stage 4: Summarise the results of the discussions. The facilitator leads group discussion about responses. The facilitator summarises group discussion, highlighting group agreements and disagreements. Focus group discussion unpicks in more detail the major agreements and disagreements.

- Stage 5: Close-down. Allow an additional 15 minutes for participants to give their feedback. Close the Focus group by thanking the participants. Provide contact details for any further questions from participants and record any requests for future involvement.
- Stage 6: Reporting. Provide a summary of the Focus Group audio tape or written notes using a Focus Group Reporting Template

The **discussion topics** depend on the evaluation purposes and questions that need to be addressed. For example, in running a Focus Group with participants in the online course, topics could cover:

- Theme 1: characteristics of participants. Ask the participants to provide brief information on demographic and socio-cultural characteristics (e.g. age, gender, job description; educational qualifications)
- Theme 2: Establish the experiences of the group before getting involved in this initiative, and their reasons for getting involved. (e.g., What made the online course attractive? What were the expectations about getting involved?)
- Theme 3: Establish the experiences of the group in relation to involvement in this initiative. What learning is carried out? How was the learning organised? (e.g., learning methods). What was actually learned? Were any problems experienced?
- Theme 4: Outcomes and impacts. What would you say was the main type of learning benefit for participants? In what ways did it contribute to their personal development? Has the experience had any unforeseen or any undesired outcomes? Has it led to other things (e.g., other learning/better job)?
- Theme 5: Improvements. In what ways do you think this initiative could be improved?

Data Analysis

Analysis of the outputs of data from Focus Groups usually involve a combination of ***content analysis*** and ***interpretation*** of Focus Group transcripts (see above for ALS).

ANNEX II: Quality System

Approach

1.1 Introduction

A full project Quality System typically incorporates three elements:

- quality planning,
- quality control and
- quality assurance

Quality planning defines the products required of the project and their respective quality criteria, methods and responsibilities. Quality control focuses on the operational techniques needed to fulfil requirements for quality and on identifying ways of eliminating the causes of unsatisfactory performance. Quality assurance provides a check that the project's direction and management are adequate for the nature of the project.

However, because LSP-TEOC.Pro is a relatively small project with limited resources available for evaluation, the approach proposed, set out below, provides for a simplified version which incorporates some of the procedures and tools that are based on the 'PRINCE2' approach[3] and which concentrates on Quality Control. This encompasses three elements:

- Internal Review of project outputs/deliverables (Peer Review)
- Supplementary Review of a small number of designated deliverables (External Review)
- Quality Register (a record of the how the deliverables have been reviewed)

1.2 Internal Review

Most Deliverables will be in the form of written documents, and most deliverables will only require 'internal review'. How this works depends on the nature of the Deliverable. There are two types of Deliverables in LSP-TEOC.Pro:

- Formal Deliverables – these are the Intellectual Outputs (IO's) of the project
- Informal Deliverables – these are outputs that have been planned in the project proposal but are internal to the project; are not 'official' project outputs and are not public.

Formal Deliverables

For these, internal Quality Control is implemented through a 'Peer Review' system, as follows:

- For each Deliverable, the deliverable owner or IO leader assigns a member of their team to run a first check on the deliverable. This is the 'Primary Reviewer'.
- The deliverable owner then assigns another reviewer (the Second Reviewer) to evaluate the deliverable. This second reviewer should be independent of the deliverable production process – i.e. not involved in the work on which the deliverable is based, or in the production of the deliverable.

The Peer Reviewers will independently review their assigned Deliverable using a Quality Control Checklist, described below. The Checklist incorporates two sets of criteria:

- a set of Minimum Quality Standards, covering things like format, readability, that all written deliverables need to conform to;
- a set of Deliverable Specific Criteria which check whether the Deliverable meets the specific 'Acceptance Criteria' applied to a particular deliverable

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The ***Minimum Quality Standards*** cover:

- Document Summary provided (with adequate synopsis of contents)
- LSP-TEOC.Pro format standards complied with
- Language, grammar and spelling acceptable
- Objectives of Description of Work covered
- Work deliverable relates to is adequately covered
- Quality of text is acceptable (organisation and structure; diagrams; readability)
- Comprehensiveness is acceptable (no missing sections; missing references; unexplained arguments)
- Usability is acceptable (deliverable provides clear information in a form that is useful to the reader)

The ***Deliverable Specific Criteria*** are additional quality standards that are specific to a particular deliverable, and which ensure that a particular deliverable is 'fit for purpose'. To specify these deliverable specific criteria, an initial task needs to be carried out by the partners responsible for producing each deliverable. This requires two things:

- Identifying stakeholder expectations
- Translating these expectations into assessment criteria for deliverables

This entails identifying all the stakeholders with an interest in the project deliverables, and then identifying what they are likely to expect from these deliverables. On the basis of this mapping, we then need to define the criteria against which the project deliverables should be assessed, and whether these expectations are likely to be met. This is because the LSP-TEOC.Pro 'products' – its deliverables – are aimed at particular audiences each of which will have different expectations about the project outputs and, hence, different expectations about the quality of these outputs. Quality expectations are normally expressed in broad terms as a means to gain an understanding of the quality requirements and then the detailed 'acceptance criteria' for a deliverable. For example, for this deiverable – IO8: Evaluation Methodology and Tool - the stakeholders are the project partners and the stakeholder expectations are 'The Evaluation Methodology and Tool has to be user-friendly for all users'. The acceptance criteria are measurable definitions of the attributes required for deliverables to be acceptable to stakeholders. They are derived from further breaking down the stakeholder expectations into specific and measurable attributes.

The first task in developing the Quality Plan for LSP-TEOC.Pro is therefore to specify the stakeholder expectations and the acceptance criteria for each deliverable. This needs to be done by each partner with responsibility for production of each of the LSP-TEOC.Pro deliverables, and the data will feed into the Quality Register, outlined below in Section 3. Table 1 illustrates how the quality expectations and assessment criteria might be defined for an example of LSP-TEOC.Pro deliverables.

Table 1: Defining Stakeholder Quality Expectations and Assessment Criteria

N°	Deliverable name	Stakeholder group	Quality expectation	Assessment criteria
1	IO8	Project partners	The Evaluation Methodology and Tool is user-friendly for all users	User friendliness

The Quality Assessment criteria then need to be:

- firstly, specified in the internal review, and used in completing the Quality Control Checklist (see below, Table 5) that needs to be completed for each deliverable

- secondly, entered into the Quality Register (see below, Section 3).

Informal Deliverables

For these, the Quality review consists of a simplified review as follows:

- The deliverable producer circulates the deliverable to all partners
- On the basis of the comments received, the producer makes any decisions necessary and produces a final version of the deliverable.

1.3 Supplementary (External) Review for Formal Deliverables

For the majority of formal deliverables, the 'peer review' method carried out through the internal review process described above will be sufficient for the Quality Control approach followed in LSP-TEOC.Pro. However, some deliverables may need an additional appraisal method as well as the peer review. Table 2 below shows which deliverables require 'simple review', those that require 'internal review' and those deliverables, which may require additional external review.

Table 2: List of deliverables and their quality control

Deliverable	Simple Review	Internal review	Supplementary review
IO1: Analysis and identification of LSP teacher education and development programmes in Europe (SVEUCILISTE U ZAGREBU)		✓	
IO2: Definition of an online teaching methodology (UCA – CADIZ)		✓	
IO3: Development of course content (UNIVERZA V LJUBLJANI)		✓	
IO4: Implementation of online course (JADE)		✓	✓
IO5: Piloting (UNIVERSITE DE BORDEAUX)		✓	
IO6: Trialling (UNIWERSYTET IM. ADAMA MICKIEWICZA W POZNANIU)		✓	
IO7: Analysis of trialling user data (UNIWERSYTET IM. ADAMA MICKIEWICZA W POZNANIU)		✓	
IO8: Evaluation Report (ARCOLA)		✓	
Dissemination and Exploitation strategy and plan	✓		
Project Website	✓		
Progress Reports	✓		
Final Report	✓		

There are two types of Quality Methods that can be used in addition to the Peer Review method:

- ***'in process' methods'*** – built into deliverables as they are developed. An example could be usability tests carried out on the LSP-TEOC.Pro tools and IO's) as they develop. This method is already built into the Project through IO4.
- ***appraisal methods*** – the means by which completed deliverables are assessed for

completeness and fitness for purpose. There are two types of appraisal methods: testing – where the criteria used are objective and quantifiable (LSP-TEOC.Pro online course curriculum and modules for example) -, and quality inspection and review – where the criteria used involve subjective judgements.

Examples are shown in Table 3.

Table 3: Examples of Supplementary Quality Methods

In-process methods			
Method	Type	What the method involves	Techniques
Piloting	Inspection	Initial testing of surveys for example with a sample of appropriate users	Observation 'Think aloud' Partner feedback Survey walk-throughs User survey
Software tools	Inspection	Analysis of performance of software/hardware/website/FB page and tools if used	Analysis of coding errors Statistical analysis of technical faults Statistical analysis of utilisation patterns Subjective critical review and feedback on usability/suitability
Workshops/Summer School Curriculum/Modules	Inspection	Critically reviewing deliverables as they develop in collaboration with user representatives	Focus Groups Critical feedback from interim partner reviews
Appraisal methods			
Method	Type	What the method involves	Techniques
Quality Review	Inspection	Structured assessment of a deliverable	Action Learning Set. The Deliverable is reviewed by a group consisting of four roles: Chair; Presenter; Reviewer; Administrator. (at a minimum the review can involve 2 people taking 2 roles each). The objective is to assess the deliverable against the set acceptance criteria.
Website/FB page	Testing	Analysis of content and layout in use, and it's user suitability	Analysis and critical feedback

The next task in developing the Quality Plan for LSP-TEOC.Pro is therefore to decide on the

additional supplementary quality methods that need to be applied for the deliverables outlined in the Table above. This needs to be done by each partner with responsibility for production of each of these deliverables. A key question is whether the quality methods already built into the project workplan – for example the usability tests in IO4 – will be sufficient or need to be supplemented y additional external review. The choice then needs to be entered into the Quality Register (see Section 3 below).

Carrying out Quality Control (Quality Management Strategy)

The Quality Management Strategy describes how the approach and activities described above will be implemented in practice within LSP-TEOC.Pro. It specifies proposals for the adoption of the Quality process and Quality Plan set out in this document, and specifies who is responsible for carrying out quality activities. The strategy proposed consists of two elements:

- overall evaluation management principles
- operational procedures

2.1 Overall Evaluation Management Principles

Overall evaluation management principles are defined as the procedures and good practices implemented by LSP-TEOC.Pro and its constituent members in its relations with external actors. This is based on a set of ethical standards and good practices for conducting research, drawn from a combination of sources including the UK Quality Assurance Agency (QAA); the UK Economic and Social Research Council (ESRC) Research Ethics Framework; EU Charter of Fundamental Rights; EU Directives on data protection; Helsinki Declaration on Human Rights. The standards and good practices cover six elements:

- Research and Evaluation should be designed, reviewed and undertaken in a way that ensures its integrity and quality
- Research staff and subjects must be informed fully about the purpose, methods and intended possible uses of the evaluation, what their participation in the evaluation entails and what risks, if any, are involved.
- The confidentiality of information supplied by evaluation subjects and the anonymity of respondents must be respected
- Research and Evaluation participants must participate in a voluntary way, free from any coercion
- Harm to evaluation participants must be avoided
- The independence and impartiality of researchers must be clear, and any conflicts of interest or partiality must be explicit.

These standards and good practices need to be adopted in instances where a designated research or evaluation activity is carried out in LSP-TEOC.Pro that involves interaction with stakeholders or other actors outside the consortium.

2.2 Operational Procedures

Operational procedures set out how evaluation is managed and monitored in LSP-TEOC.Pro, and who is responsible for which activities. The ‘quality control’ management entails a range of responsibilities and tasks. These are summarised in Table 4. The starting point for Quality Control is the Deliverable ‘owner’ (i.e. the LSP-TEOC.Pro members responsible for producing a deliverable). They are responsible for:

- specifying the ‘deliverable specific assessment criteria’ for the deliverable

- deciding on whether the deliverable requires a supplementary (external) review; what this should entail and then making sure it is successfully completed
- assigning a primary and secondary reviewer for the internal review
- making sure the two reviewers carry out the internal review
- implementing changes requested by the two internal reviewers and any external reviewer
- sending the revised deliverable back to the primary reviewer to sign it off using the Quality Control Checklist (Table 5)

The final responsibility in the quality control process lies with the project coordinator, who is responsible for ensuring that the relevant quality control procedures have been implemented and are recorded in the Quality Register.

Table 4: LSP-TEOC.Pro Quality System Roles and Tasks

Who	Role and Task	When
Project partners	Review and Finalisation of Quality System	April 2021
IO8 leader	Refinement of Quality System Monitoring of Deliverables Quality Control	End April 2021 At each deliverable delivery date
Project Co-ordinator	Maintain Quality Register Provide ongoing project monitoring data on conformance to milestones and performance indicators	Ongoing Ongoing Annual summary
Deliverable Owners	Assign internal reviewers Decide on and implement any supplementary (external) review necessary Ensure any revisions are implemented in deliverable	Ongoing
Primary Reviewer	Implement internal review Apply Quality Control checklist and sign off final deliverable	At each deliverable delivery date
IO leaders	Assign team member to carry out first Quality Control of deliverables Complete initial quality register	At each deliverable delivery date

Carrying out the Quality Reviews

As noted above, most Deliverables will be in the form of written documents, and most deliverables will only require 'simple review'. For formal project deliverables, Internal Quality Control is implemented through a 'Peer Review' system. For each Deliverable, two members of the LSP-TEOC.Pro partnership will be assigned as reviewers. These two reviewers have to be independent of the deliverable production process – i.e. not involved in the work on which the deliverable is based, or in the production of the deliverable. The Work Package leader responsible for production of the deliverable has responsibility for assigning Peer Reviewers, in consultation with the project coordinator. The Peer Reviewers will independently review their assigned Deliverable using a Quality Control Checklist. The Checklist incorporates:

- the Minimum Quality Standards, covering things like format, readability, that all written deliverables need to conform to;
- the Deliverable Specific Criteria which check whether the Deliverable meets the specific 'Acceptance Criteria' applied to a particular deliverable, as set out in the 'Quality Register' (outlined below)
- a check on whether any supplementary review has been successfully carried out.

The final Quality Control Checklist needs to be completed and signed by the primary reviewer responsible for each deliverable. If the checklist is not fully completed, the deliverable is sent back by the primary reviewer to the deliverable owner. The deliverable owner is then responsible for implementing any necessary changes recommended by the reviewers. The Deliverable is then returned to the Primary Reviewer for a second reading. Only when the deliverable successfully fully completes the quality control checklist and is signed off by the primary reviewer can it be assigned the status of an approved 'final' deliverable.

Reviewers Recommendations and Comments in the Checklist should always make precise references to the relevant Deliverable parts (chapter, paragraph). Reviewers can also add Editorial comments within the Deliverable text itself (using 'track changes' and 'comments' boxes).

The fully completed Quality Control Checklist needs to appear in every ***formal*** written final deliverable, following the cover page, as shown in Table 5 below.

Table 5: QUALITY CONTROL CHECKLIST

Quality Control Check	**Y/N**	**Reviewer recommendations/comments**
Generic Minimum Quality Standards		
Document Summary provided (with adequate synopsis of contents)		
LSP-TEOC.Pro format standards complied with		
Language, grammar and spelling acceptable		
Objectives of Description of Work covered		
Work deliverable relates to adequately covered		
Quality of text is acceptable (organisation and structure; diagrams; readability)		
Comprehensiveness is acceptable (no missing sections; missing references; unexplained arguments)		
Usability is acceptable (deliverable provides clear information in a form that is useful to the reader)		
Deliverable specific quality criteria		
Deliverable meets the 'acceptance Criteria' set out in the Quality Register (see Table 5)		
For Supplementary Review Deliverables only		
Deliverable approved by external reviewers		
Checklist completed by Name: Signature: Date:		

Following the Quality Control Checklist, each written deliverable will include a Deliverable Review history which documents the deliverable version number; its authors and reviewers; the dates authored and reviewed and the changes made. This table, shown below (Table 6), needs to be completed by the Deliverable Owner.

Table 6: DELIVERABLE REVIEW HISTORY

Version	Name	Status *	Date	Summary of changes

***Status:** Indicates if: Author (including author of revised deliverable) - A; PIR – Primary internal reviewer; SIR – Second internal reviewer; ER – External Reviewer

Informal deliverables – i.e. those which only require the 'simple review' – do not need these checklists and review histories.

2.3 The Quality Register

The Quality Register integrates all the results of the processes and activities of the Quality System, outlined above, and provides a historical record of the Quality Process and its outcomes. It entails an ongoing process of recording and updating, and provides in summary form the actual results from the quality activities.

Responsibility for oversight and maintenance of the Quality Register lies with the project co-ordinator. However, the Register will be located in Google Docs, and it is the responsibility of the individuals who carry out deliverable quality control activities, and those who finally accept and approve the deliverables, to enter the relevant information in the Register. Table 7 illustrates the structure of the Register.

Table 7: Illustration of the LSP-TEOC.Pro Quality Register

Quality activity No.	Deliverable N°	Deliverable name	Assessm-ent criteria	Quality Method	Deliv producer	Reviewer	Date Review	Result	Approve date
1	IO8.1	Evaluation Method and Tool	No. of partners rating Method-ology Guidelines and Tools as 'very user friendly'	Internal Review	Arcola	….	08/04/21	Pass	09/04/21

As Table 7 shows, the Quality Register includes for each deliverable:

- The deliverable number and title
- The 'assessment criteria' that are specific to each deliverable and against which the deliverable is assessed (taken from Table 4 above)
- The Quality Method used
- The deliverable producers and reviewers
- Date of review

- Result of review
- Date deliverable finally approved.

ANNEX III: Additional Evaluation Instruments

Peer Review Course Content Evaluation Instrument

Purpose of the Instrument

This instrument provides a procedure and tool for carrying out a peer review of LSP-TEOC.Pro IO3 – Development of course content for LSP teacher education and development. IO3 includes provision for review by partners of the content developed for the online LSP teacher education and development course in IO3. The 'Course Content Development Guidelines' produced to support this content development specify the production and use of a peer review content evaluation instrument to enable feedback on the course to be collected and analysed, so as to improve the course structure and content as necessary. Each module of the course is reviewed by a representative of a partner who has had no involvement in the production of that module.

Peer Review Methodology

The methodology for the Peer Review is based on 'co-design' and 'Usability Study' principles. This aims to involve reviewers not merely as passive 'guinea pigs' in a validation exercise but as co-collaborators who will contribute to improving the usability, user-friendliness, efficiency and effectiveness of the Training Course. It incorporates two elements:

- An initial hands-on 'walk-through' by the reviewer of the Module content as presented in the IO3 course
- A follow-up self-reported structured feedback questionnaire that collects the reviewer's observations on the suitability and efficacy of the Module course content.

Peer Review Procedure

The Peer Review covers three stages:

- Walk through
- Structured feedback questionnaire
- Analysis

Walk Through

- Provide the reviewer with a copy of the content Module. This should include all files in whatever formats are included in the module (e.g., word, PowerPoint etc.)
- Ask the reviewer to make sure that the 'track changes' and 'all markup' functionalities are enabled in the document (using the 'Review' tab in Word, or equivalent in PowerPoint)
- Ask the reviewers to work through the Module from start to end, making any revisions to the text/presentations where they think these are required (using track changes), and adding any comments (using the 'New Comment' functionality in Word) they think are relevant – for example highlighting examples in the text that are unclear, or inaccurate, or need elaboration
- On completion of the walkthrough, the reviewer should save the file(s), adding a file extension to the document file name, e.g. by adding their initials

Structured Feedback Questionnaire

Module name:

Reviewer Name:

Introduction

On this feedback questionnaire I'd like you to record your answers to the following questions about what you think of the Module; whether you think it's suitable for the purposes of the training course and what aspects you think could be improved.

1. Suitability

This first section covers how suitable you think the Module is for helping existing or aspiring LSP Teachers learn more about the LSP specific competences that will prepare them for LSP Teaching in practice.

1.1 Do you think the Module is fit for purpose? (Prompts: does it provide relevant learning? is the content appropriate?)

1.2 Do you think the Module will help aspiring or existing LSP teachers acquire the additional skills they need to do the job? (Prompts: does the content module fit the competences needed? does the module demonstrate sufficient scope that will help in the role? does the module reflect the concrete work LSP Teachers need to do in a range of differing LSP contexts on the ground?)

1.3 Which particular elements of content in this module most clearly reflect the work that LSP Teachers need to do and which elements are not clear? (Prompt: give reasons for your answers)

2. Comprehensiveness

This section looks at whether the Module covers the ground necessary to train LSP Teachers.

2.1 Do you think the Module covers everything it should? (Prompts: is the content comprehensive enough? is the balance between the different sections – e.g. introduction, tasks, activities, self-assessment - right?)

2.2 Is there content not included you think should be included? (Prompts: what is missing?)

3. Interest and engagement

This section looks at whether you think the Module is sufficiently interesting and motivating.

3.1 Do you think the Module is sufficiently interesting and engaging? (Prompts: are there aspects of the Module that you feel are boring or demotivating? what makes these uninteresting or demotivating?)

3.2 How could the Module be made more engaging for trainees? (Prompts: changes in content? changes in the pedagogic approach used?)

3.3 Do you think the participant dedication time for the Module as a whole is appropriate? (Specify whether too long, too short and suggest appropriate adjustments)

3.4 Do you think the participant dedication time for particular sections of the Module is appropriate? (Prompts: Specify which particular section of the Module need adjustment and in what ways)

4. Challenges and improvements

This section looks at any difficulties you had with the Module – and difficulties you think learners might have with it - and how these could be addressed.

4.1 Did you find any aspects of the Module challenging or difficult to understand? (Prompts: which particular elements did you find challenging? why?)

4.2 How do you think the Module could be improved?

5. Technical aspects

This section asks for recommendations for changes you feel are required to the 'technical' elements of the module, i.e. the specific content items. Please use the Table below to provide your recommendations. Please be specific.

Introduction	
Item	**Recommended changes**
Learning outcomes	
Module structure	
Participation time	
Graphic representation	
Section 1: Theoretical input	
Item	**Recommended changes**
Introduction	
Input	
Teacher insight	
Self-assessment	
Section 2: LSP learner	
Introduction	
Receptive Task	
Receptive & productive task	
Teacher cognition task	
Section 3: LSP teacher	
Item	**Recommended changes**
Introduction	
Lesson Plan Design	
Teacher cognition task	
Module Conclusion	
Item	**Recommended changes**
Outcomes checklist	

6. Peer evaluation

Finally, can you give your rating of the Module on some key evaluation criteria.

Please rate the module overall on the following. Select the number on the scale you think applies.

Evaluation criteria	**Rating**				
Comprehensiveness and coverage of overall LSP teacher training needs	1 poor	2 limited	3 moderate	4 good	5 very good
How easy the content is to understand	1 not at all easy	2 not easy	3 moderately easy	4 very easy	5 extremely easy
Extent to which the Module meets the need for an Innovative LSP Teacher Training course	1 not at all	2 a little	3 moderately	4 a lot	5 very much
Relevance of the Module for LSP Teacher Training needs	1 not at all	2 slightly	3 quite	4 very	5 extremely
How Interesting and motivating the Module is	1 not at all	2 slightly	3 quite	4 very	5 extremely
Extent to which the Module is likely to improve trainee understanding of LSP Teacher Training competences and how they can be taught in a teaching and learning setting?	1 not at all	2 slightly	3 moderately	4 a lot	5 very much
Extent to which the Module will provide trainees with learning that LSP teachers could apply in their professional practice	1 not at all	2 slightly	3 moderately	4 a lot	5 very much

LSP Self-Assessment Instrument

The LSP-TEOC.Pro Assessment Tool provides a simple and quick way for LSP-TEOC.Pro course participants to review their LSP knowledge and skills before and after participating in the training programme.

This is not a 'Knowledge test' and will not contribute to any assessment of how 'well' you do in the LSP-TEOC.Pro programme.

The main purpose of this tool is to contribute to the evaluation of the LSP-TEOC.Pro project.

It will help us to assess the success of the LSP course, and the extent to which participating in the course made a positive contribution to increasing the LSP knowledge and skills of participants.

At the same time, the Tool helps participants to review and reflect on their LSP knowledge and skills, to help them plan for professional and personal learning and development in the future.

The assessment tool consists of 16 questions – two questions for each of the 8 Modules that make up the course.

- The first question – a 'Knowledge' question – asks you to rate your ***overall level of understanding and knowledge*** of the topics covered in each Module.
- The second question – a 'Practice' question – asks you to rate your ***ability to apply this understanding and knowledge in LSP teaching and learning practice.***

Please choose the rating that applies to you for each question and each module.

Module 0: Introduction to LSP

Knowledge assessment

How would you rate your level of knowledge and understanding of the concepts, methods and tools in LSP teaching and learning

including:

- the main theoretical assumptions and techniques used in LSP teaching and learning
- the main methods used
- the key tools used

Choose a number on the scale below that best represents your level of knowledge and understanding				
1	2	3	4	5
very low	low	moderate	high	very high

Practice assessment

How would you rate your ability to apply these concepts methods and tools in LSP teaching and learning practice

Choose a number on the scale below that best represents your ability to do this.				
1	2	3	4	5
I can't do this at all	I can do this a little	I'm moderately good at this	I can do this well	I can do this very well

Module 1: Needs Analysis

Knowledge assessment

How would you rate your level of knowledge and understanding of needs analysis concepts and methods in an LSP context

including

- understanding LSP principles, challenges and constraints
- understanding needs analysis concepts and methodologies
- selecting appropriate tools to undertake a needs analysis?

Choose a number on the scale below that best represents your level of knowledge and understanding				
1	2	3	4	5
very low	low	moderate	high	very high

Practice assessment

How would you rate your ability to carry out a needs analysis to design an appropriate needs-based LSP course in practice

by

- reflecting on your own current or future LSP teaching challenges, opportunities and constraints
- choosing appropriate data collection methods
- conducting a needs analysis and synthesising and evaluating the results?

Choose a number on the scale below that best represents your ability to do this.				
1	2	3	4	5
I can't do this at all	I can do this a little	I'm moderately good at this	I can do this well	I can do this very well

Module 2: LSP Course and Syllabus Design

Knowledge assessment

How would you rate your level of knowledge and understanding of relevant concepts and methods in the design and development of an LSP course or syllabus

Including:

- identifying possible LSP teaching/learning objectives and outcomes of the course/syllabus
- designing the methods through which the objectives and outcomes should be achieved
- developing methods and tools to evaluate the effectiveness of the course/syllabus and to review and reflect on this evaluation?

Choose a number on the scale below that best represents your level of knowledge and understanding				
1	2	3	4	5
very low	low	moderate	high	very high

Practice assessment

How would you rate your ability to design, develop, implement and evaluate an LSP course or syllabus in practice

by

- creating a plan of learning activities
- designing an LSP syllabus that is based on a prior needs analysis
- implementing appropriate methods and tools to assess the effectiveness of the course and applying the assessment results to improve the course?

Choose a number on the scale below that best represents your ability to do this.				
1	2	3	4	5
I can't do this at all	I can do this a little	I'm moderately good at this	I can do this well	I can do this very well

Module 3: LSP Communities, Disciplinary genres and Corpora

Knowledge assessment

How would you rate your level of knowledge and understanding of the different forms of co-operation and collaboration that could apply in LSP communities and of the different disciplinary genres that make up LSP communities

including:

- identifying the different LSP stakeholder groups and communities that could be involved in co-operation and collaboration activities
- identify areas, forms and tools to support LSP co-operation collaboration, including digital tools and information
- knowing where to find different disciplinary genres, and comparing different approaches to the research of disciplinary genres?

Choose a number on the scale below that best represents your level of knowledge and understanding				
1	2	3	4	5
very low	low	moderate	high	very high

Practice assessment

How would you rate your ability to apply your knowledge and understanding of LSP disciplinary genres to develop and use disciplinary genre-based concepts and tools in teaching practice

By:

- analysing the discipline-specific genres through the use of ICT tools,
- creating an outline of disciplinary genre-based teaching materials
- reflecting on and evaluating your own and others' outlines of disciplinary genre-based teaching materials?

Choose a number on the scale below that best represents your ability to do this.				
1	2	3	4	5
I can't do this at all	I can do this a little	I'm moderately good at this	I can do this well	I can do this very well

Module 4: LSP Teaching Skills

Knowledge assessment

How would you rate your level of knowledge and understanding of the concepts, principles, and theories used in LSP teaching and learning

including

- LSP vocabulary teaching and learning
- Developing the comprehension of LSP input, for example choosing appropriate LSP texts
- Developing LSP output, for example the writing and speaking skills to be practiced by LSP learners

Choose a number on the scale below that best represents your level of knowledge and understanding				
1	2	3	4	5
very low	low	moderate	high	very high

Practice assessment

How would you rate your LSP teaching and learning skills in practice

by:

- using methods and tools – including digital tools - to help learners to expand their LSP vocabulary and improve their grammatical proficiency
- designing appropriate tasks for the development of LSP learner's reading/listening/audio-visual comprehension skills
- design appropriate tasks for the development of LSP learners' text-production skills?

Choose a number on the scale below that best represents your ability to do this.				
1	2	3	4	5
I can't do this at all	I can do this a little	I'm moderately good at this	I can do this well	I can do this very well

Module 5: LSP Materials, Evaluation and Design

Knowledge assessment

How would you rate your level of knowledge and understanding of the advantages and disadvantages of designing and using different types of material in LSP teaching

including:

- knowing about the different sets of criteria for the evaluation of LSP teaching materials
- understanding and explaining the role and function of LSP teaching materials (available and tailor-made) in the LSP teaching/learning process
- identifying the advantages of multimodal material creation?

Choose a number on the scale below that best represents your level of knowledge and understanding				
1	2	3	4	5
very low	low	moderate	high	very high

Practice assessment

How would you rate your ability to evaluate and design LSP materials in practice

by:

- evaluating existing print and/or digital/interactive resources in terms of their usefulness for LSP teaching/learning

- formulating the criteria for the selection and design of materials for your own LSP group
- supporting LSP learners in familiarizing themselves with the potential of digital technologies (e.g., smart phones, tablets, and computers as hardware, and apps as software)?

Choose a number on the scale below that best represents your ability to do this.				
1	2	3	4	5
I can't do this at all	I can do this a little	I'm moderately good at this	I can do this well	I can do this very well

Module 6: Task/Project/Problem-based Learning in LSP

Knowledge assessment

How would you rate your level of knowledge and understanding of the theories, concepts, method and tools used in task, project and problem-based LSP teaching/learning

including:

- the main theories and practices in task-/project-/problem-based teaching/learning in LSP settings and their differences
- what multimodal learning is and why it is important for LSP teaching/learning
- the main theories and techniques of autonomous and self-directed learning

Choose a number on the scale below that best represents your level of knowledge and understanding				
1	2	3	4	5
very low	low	moderate	high	very high

Practice assessment

How would you rate your ability to apply the theories, concepts, method and tools used in task, project and problem-based LSP teaching/learning in your practice

by:

- preparing and presenting a sample task-/project-/problem-based outline for a specific group of LSP learners, including a task requiring cooperation among LSP learners
- engaging LSP learners in a multimodal literacy learning process
- identifying and using printed and online resources for autonomous learning

Choose a number on the scale below that best represents your ability to do this.				
1	2	3	4	5
I can't do this at all	I can do this a little	I'm moderately good at this	I can do this well	I can do this very well

Module 7: LSP Assessment

Knowledge assessment

How would you rate your level of knowledge and understanding of LSP assessment

including:

- the different types of LSP assessment such as formative and summative tests, and placement, achievement and proficiency tests, and how these can be adapted to teaching/learning needs
- the concepts of construct validity, content validity, criterion validity and intra-rater and inter-rater reliability
- the pros and cons of paper-based and computerised assessment?

Choose a number on the scale below that best represents your level of knowledge and understanding				
1	2	3	4	5
very low	low	moderate	high	very high

Practice assessment

How would you rate your ability to design and implement appropriate assessment methods and tools in LSP teaching and learning practice

by:

- identifying and creating an assessment sample that fits an individual teaching context and a specific LSP content
- developing and using tools to measure validity and reliability
- developing different assessment features related to your own LSP assessment requirements?

Choose a number on the scale below that best represents your ability to do this.				
1	2	3	4	5
I can't do this at all	I can do this a little	I'm moderately good at this	I can do this well	I can do this very well

LSP-TEOC.Pro Event Observation Template

What this Template is For:

The template provides a guideline for carrying out structured observation of a LSP-TEOC.Pro Project event – for example a multiplier event, training or workshop session - using a classic observational analysis approach [4] [5]**.** The main objective of this method is to capture what happens during the event 'as seen through the eyes of the different actors involved'. The template should be completed by one of the LSP-TEOC.Pro staff delivering the event (e.g. participating as an observer/facilitator). Ideally, the template should be completed in real-time as the event progresses – but it can be completed retrospectively if necessary.

The observational dimensions – or 'units of analysis' - of the observation (i.e. 'what to observe?') cover:

- The environment (the physical space in which the event takes place)
- People and their body language, their interactions and their verbal behaviour
- Objects – the 'devices' used (for example the course units; the digital tools used)
- Process - how the event is delivered and the effectiveness of the pedagogic approach applied
- Outcomes – what participants appear to learn from taking part.

The Observational Analysis will be carried out using the Observation Template provided below. The Observation Template also includes two techniques to gather information on audience behaviours - the MARCS audience response analysis tool [6] and the audience response rating scale – ART –[7].

The Templates can be used in a number of ways:

- as the sole medium for observation data capture – i.e. the event is recorded in real-time as it happens by the researcher/observer taking notes, using the Template as a Guideline to structure the notes
- as an 'ex-post' analysis tool – i.e. the event is recorded in real-time on video by the researcher/observer and the images are subsequently analysed using Template as a content analysis guideline
- in 'hybrid' mode – the event is recorded in in real-time in note form by the researcher/observer, using the Template, and is also recorded on video.

[4] Bryman, A. (2001). *Social Research Methods*. Oxford University Press.

[5] Angrosino, M. V. (2005). *Projects in Ethnographic Research*. Waveland Press.

[6] Cowie, R., Douglas-Cowie, E., Savvidou, S., McMahon, E., Sawey, M., & Schroeder, M. (2000) FEELTRACE: an instrument for recording perceived emotion in real time In R.Cowie, E Douglas-Cowie & M. Schroeder (eds) *Speech and Emotion: Proceedings of the ISCA workshop* (pp 19-24). Newcastle, Co. Down

[7] Glass, R. (2006). The Audience Response Tool (A.R.T.): The impact of choreographic intention, information and dance expertise on psychological reactions to contemporary dance. Unpublished doctoral dissertation, MARCS Auditory Laboratories, University of Western Sydney

Observation Template

Site location **Date Observation Carried out** **Observation carried out by** **Time Observation started** **Time Observation Finished**	
Dimensions	**Questions**
Environment	Describe the space in which the event takes place. *quite big conference room with seats, spacious, comfortable space;* Impressions of atmosphere of the space (e.g., welcoming; friendly; forbidding) *welcoming, friendly, quiet, calm, allowing the audience to focus;* Other observations on environment *The environment enabled the audience to focus on what is going on during the event.*
People	Who is present in this space and what are their roles? organizers, *participants of the project, presenters, listeners - they are taking part in the conference (active or passive role, so presenting or listening);* How do LSP-TEOC.Pro event participants interact with staff? (e.g., collaborative; isolated) *collaborative, very helpful, friendly, eager to talk with other participants, involved, positive attitude;* Other observations on participants *They are listening carefully, involved in presenting.*
Objects	What props/objects – e.g., technologies – are used, by whom and for what purposes? *computer, Internet connection, Zoom, presentations, web camera, projector, microphone - used by the participants who are giving a lecture/presenting at a particular time + to communicate with people who are taking part in the conference online;* Do participants experience any issues/problems with using these props/objects? *no serious problems*
Process	What learning takes place over the duration of the observation? how is this learning delivered? ● who is involved? *all the participants present in the conference room*

	● what methods are used to deliver learning? *lecture, visual elements (presentations), presenting the webpage of the project* ● how effective are these methods? *effective, listeners are involved in the lectures, they are listening with interest, even laughed a few times, they are reacting to what is presented* ● can any problems/issues be identified that prevent learning? *There were moments, when a part of the audience had some problems with the reception (audibility) or the presenter was talking too quietly, but these problems were quickly solved by using the microphone.* *There was a moment, when the view (presentation) was too small, but it was also solved by changing the source of sharing the screen.* ● are there particular things about the way learning is delivered that appear to work well? *presentations, which contained the main points, because they helped the audience focus;* *graphical elements (images, charts, etc.);* *giving lectures in an interesting way (tone of voice, diction, etc.);* What important things happen over the duration of the event – what are the critical incidents? For each critical incident listed, specify: ● What leads up to the incident (the 'causes') ● Who is involved in the incident ● What happens Any organisational/management issues that can be identified?
Outcomes	What would you describe as the main outcomes of the event? *The audience was interested in and involved in what was presented, they reacted to particular aspects, some participants were talking with each other and pointing at something at the presentation, some people were taking photos;* What would you say were the participant views on the usefulness, usability and relevance of the event? *They seemed to be interested in what was presented - they were listening carefully and reacted to what they heard, so this suggests that they found the event useful and relevant.* Any evidence identified on how it might be improved?

Audience Response Analysis

Using the rating scales below, provide an assessment of the audience/participant reaction to the event observed. Add any observations in the comments box for each scale.

Please tick one box for each item on this list	**Not at all**	**A little**	**Moderately**	**A lot**	**Very much**	**Comments**
	1	2	3	4	5	
How interesting did the audience find the event					5	They were listening with interest. They were involved in what was going on.
How much did it grab their attention					5	They were focused on the event.
To what extent did they understand what was going on					5	Everything seems to be clear.
How much did it make them think				4		They were talking with each other during the presentations, so it seemed like the event made them think.
To what extent did they learn something new				4		They were interested, so it could be something new for them.
How much did they enjoy participating					5	They were happy, interested in what was going on.
To what extent did it get them emotionally involved				4		They seemed to be emotionally involved.
To what extent did they work together as a group					5	The presenters and the audience were cooperating during the event.

Using the Table below, provide an assessment of the audience reaction to the event observed. The assessment covers two response analysis elements: how active – passive is the audience response; how positive – negative is the audience response. Base this assessment on your observation of the whole event from start to finish. It's possible the audience response may vary from active to passive and from positive to negative as the event progresses. Use your judgement to provide a balanced assessment. Circle ANY of the words you think apply in the Table.

Very Negative - Very Passive		**Very Positive - Very Passive**	
Indifferent Bored Sad	Depressed Despairing	**Relaxed** Content	**Serene** Blissful
Very Negative - Very Active		**Very Positive - Very Active**	
Angry Afraid	Furious Terrified Disgusted	**Pleased** **Happy** **Interested**	Delighted Excited Exhilarated