



Education Scotland Professional Learning Delivery

Discovery Report | July 2020



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Version History

Version	Description	Date Issued	Updated By
V1	Initial draft issued to stakeholders for review	26/06/2020	Leanne Roarty
V2	Final report issued to project sponsor	03/07/2020	Leanne Roarty



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Executive summary

Introduction

This report is the culmination of an eight week Discovery conducted by the Digital Transformation Service on behalf of Education Scotland (ES).

Transformation of ES' Professional Learning lifecycle offers a significant opportunity to focus on the education practitioner's learning and development needs, and nurture closer relationships with them. In addition, it will improve the day-to-day experience of the staff responsible for delivering the Professional Learning service.

The Discovery project team has undertaken a user-centred, multi-disciplinary review to understand the current Professional Learning service.

The team has conducted an 'as-is' analysis to understand the current service, the needs of the

users who provide and interact with the service and the technical landscape that supports and enables the service.

With stakeholders, the team co-designed and co-created a future vision of the Professional Learning service and identified opportunities to deliver transformational change.

Executive summary

Introduction

This report summarises our main findings, including:

- A review of the current state / as-is service, including a service journey blueprint, the core users, the technical architecture and the key pain points users experience
- A vision of the potential future state / to-be service, including improvement opportunities, enablers and technical architecture
- Design principles to guide future design and development, aligned to the Scottish Government's Digital First Standards
- Recommendations for delivering:
 - An Alpha project, to begin delivering change, and the Alpha team required
 - A further Discovery project, to explore parts of the service this Discovery could not as not all users were available.

Due to the current pandemic, the project team had no access to education practitioners (the teachers). As a result, the findings and recommendations are mainly from the Education Scotland staff's perspectives. Whilst the project team made full use of teacher insight gathered in previous user research activities, the education practitioners' needs must be validated in future phases of developing the Professional Learning service.

Key findings

There is a general lack of consistency in delivering Professional Learning

Many teams across the directorates are responsible for delivering Professional Learning to education practitioners. They all follow different processes, use different tools, publish to different locations and use different technology throughout the service journey. A lack of consistency means that it takes Education Scotland staff longer to become proficient and it costs more to provide the different service solutions.

There is a lack of a communal, collaborative toolset

The teams responsible for delivering Professional Learning do not share a common toolset and do not have tools and technology that enables them to collaborate when designing, creating and publishing Professional Learning. As a result, these activities take longer to perform.

It is not easy, and it takes too long to understand the impact on education practitioners and their classrooms

There is no standard mechanism or process for gathering feedback and insight from education practitioners who have consumed the Professional Learning provided. There is a reliance on the Scrutiny teams' school reports and thematic reports to identify what is working well and not so well. A lack of data and a means to analyse it means the impact in the classroom cannot be easily measured on an ongoing basis.

Everyone finds it hard to find Professional Learning content, events and other artefacts

There is no single source of the truth – Professional Learning can be accessed from multiple websites and sources, making it difficult for education practitioners and Education Scotland staff to find it, which means some education practitioners may be missing out on development opportunities and some of Education Scotland's Professional Learning may not be up to date.

Recommended next steps

The project team has identified a number of improvement opportunities, which Education Scotland should explore to deliver the vision described in section 5.

One specific opportunity has been identified as a candidate for progressing to the Alpha phase and another for a Discovery phase. Both require input and collaboration from the education practitioners.

Alpha candidate

Create a collaborative culture and environment

Discovery candidate

Improve the short-term feedback loop

Team

A blended, agile team from Education Scotland and the Digital Transformation Services (DTS).

The Professional Learning Delivery (PLD) Discovery project was conducted by the following team from both DTS and Education Scotland:



Leanne Roarty
Senior Product Manager



Heather Fawbert
User Researcher



Dug Falby
Service Designer



Mark Dunsire
Business Analyst



Shivang Desai
Technical Architect

2 Overview

A brief outline of the scope and objectives of the Professional Learning Discovery and the approach taken by the project team

Overview

Reasons for undertaking the study

Education Scotland (ES) provides support to Scotland's education practitioners (Practitioners). This involves Education Scotland creating Professional Learning content (PL), which includes face-to-face seminars, meetings, webinars, resource material, policy guidance, videos, online professional learning activities, leadership programmes, collaborations with external stakeholders, national events and international engagement. This PL is consumed by Scotland's education practitioners.

As Education Scotland has evolved, so has its approach to supporting the professional development of Scotland's Practitioners. In April 2018, following a governance review by the Scottish Government, a new organisational structure was put in place, comprising five directorates, including the Professional Learning and Leadership (PLL) directorate.

All of the directorates provide PL to support Practitioners and their personal development.

Whilst the directorates follow a similar high-level user journey to design, create, deliver, evaluate and maintain PL, i.e. the PL lifecycle, there are many differences in the approach, the processes, the tools and the technology used.

Digital transformation of the PL lifecycle offers significant opportunities to support Education Scotland's strategy to be a leading digital public sector organisation in Scotland, have streamlined corporate systems and staff with high levels of digital skills to select and use the best technology options to deliver their work.

The recommendations outlined in this document align with Education Scotland's digital strategy, which aims to support professional learning in Scottish education. A key objective is to use digital technology to create an effective learning environment for Scotland's educators, allowing them to find and access learning activities easily and intuitively, and to record their progress without increasing teacher workload or administrative burden.

Overview

Discovery purpose

Problem statement

Education Scotland contracted the Scottish Government's Digital Transformation Service (DTS) to undertake a Discovery exercise to investigate and answer the following high level Problem Statement:



Professional Learning Delivery

How might Education Scotland easily and consistently **create and maintain impactful, compliant, relevant professional learning artefacts** to ensure Scotland's teachers are supported throughout the continual improvements in learning, teaching and assessment?

Figure 1: high-level problem statement

Overall Purpose

The overall purpose of a Discovery is to understand the problems to be solved and the needs of potential service users:



Figure 2: Discovery purpose

Overview

Discovery purpose

Specific objectives

The objectives of the Professional Learning Discovery, as agreed with DTS and documented in the Statement of Work, is split into two main areas:

An analysis of the current (as-is) state

- To understand how practitioners can consume PL from Education Scotland (e.g. webinar, CBT, video, policy guidance)
- To understand and document how PL:
 - Is created within each area of the organisation
 - Where it is stored
 - Is managed post-creation
 - Is assessed for practitioner impact
- To understand the PL lifecycle

Provide a vision of the future (to-be) state

- To understand how the PL lifecycle could be improved or automated
- To identify a proposed to-be working state for the delivery of impactful PL

Overview

Discovery purpose

Approach: An agile approach across 4 sprints

The Discovery team adopted an agile methodology, working in a series of 4 sprints. Each sprint focused on a different objective:

SPRINT 1 Mobilisation	SPRINT 2 Insights & opportunities	SPRINT 3 Future state vision & speculative design	SPRINT 4 Final report
 <p>Setting up for success</p> <ul style="list-style-type: none"> • Kick-off meeting • Agree & align on scope • Planning Discovery activities • Complete User Research ethics plan • Set up collaborative environment • Identify & meet key stakeholders • Get access to relevant insight & data 	 <p>As-is/current state analysis</p> <ul style="list-style-type: none"> • Stakeholder & SME engagement • Desk research & interviews <ul style="list-style-type: none"> • Who are the users & what are their needs • What's already in place – people/teams, processes, systems, architecture, standards • Analysis <ul style="list-style-type: none"> • User journeys & processes • Identify pain points & problem statements • Identify opportunities to explore 	 <p>To-be definition</p> <ul style="list-style-type: none"> • Validate opportunities • Co-design a future state / to-be vision <ul style="list-style-type: none"> • User needs • User experience & journey • Process maps • Technical architecture & data catalogue • Design, define and prioritise the 'features' required to deliver the future state vision • Identify potential 'feature(s)' to progress to Alpha (if appropriate) 	 <p>Share findings & recommendations</p> <ul style="list-style-type: none"> • Consolidate & document Discovery findings • Share & refine document with stakeholders • If appropriate, identify scope, resource and cost requirements for Alpha project • Finalise & issue Discovery document • Show & Tell

Figure 3: Sprint objectives

Overview

Discovery purpose

Stakeholders

As part of the first sprint, the project team developed a stakeholder engagement map (as shown on the following page). This covered both key internal and external stakeholders involved in the creation and consumption of PL in Scotland.

The project team used this map to guide engagement with representatives from the majority of stakeholder groups it identified. This facilitated the gathering of a relatively wide range of views on challenges within the system, and the exploration of scope for change.

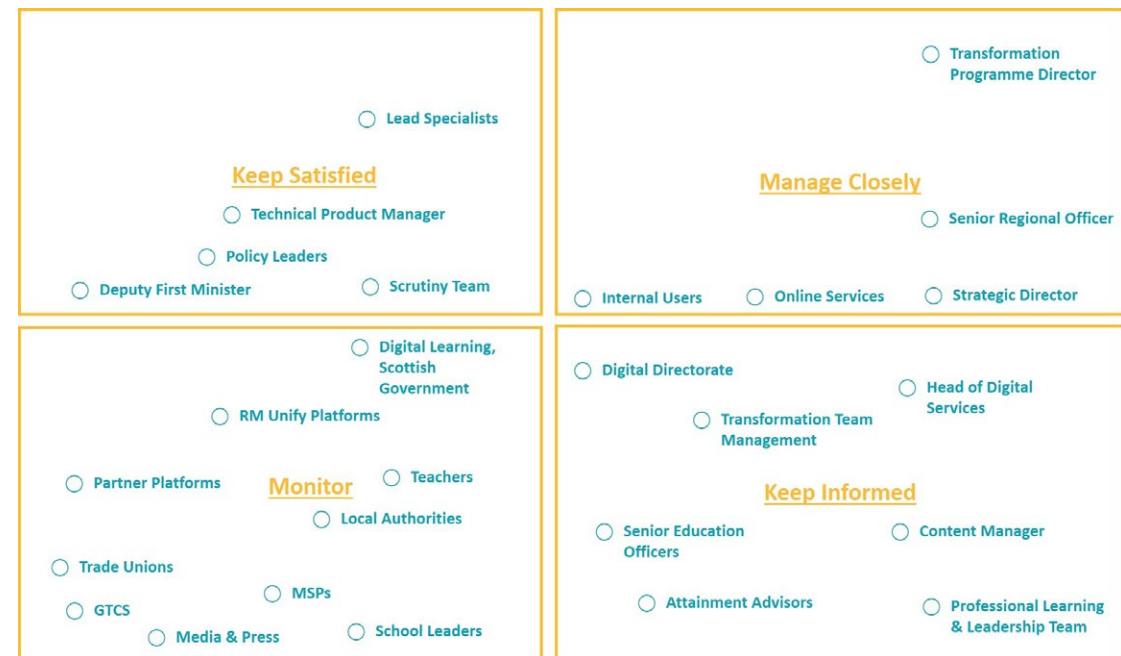


Figure 4: Stakeholder engagement map

Overview

Discovery purpose

User Research Methodology

Discussion guides

Discussion guides were written by the user researcher based on initial conversations with the project team and client. This was reviewed and validated with the project team before and after the first interview.

Sense making sessions involving the project team took place at the end of most days to discuss the main themes coming out of the interviews. Any additional insights from the project team were added to the existing Miro board.

Stakeholder interviews

Research was conducted 'as a team sport' in that, where possible, everyone in the project team was

involved in each session to reduce interviewer bias and limit the number of contacts with stakeholders.

Sessions were conducted in the form of in-depth interviews conducted via Skype calls. Over the course of the discovery, a total of 18 one hour interviews took place over a period of 6 days.

The raw insights were captured directly in Miro with user needs being pulled out and stored in an excel spreadsheet.

Due to the COVID-19 pandemic the team was unable to engage with the end users of PL, the practitioners. Education Scotland have some anecdotal insights from other research projects but this is a gap that will need to be address in the next phase of the project.

Overview

Discovery purpose

User Research Methodology

Desk research

In addition to stakeholder interviews, the project team also reviewed key Education Scotland documents and outputs from other research activities, to learn more about Education Scotland's strategy and objectives, how the organisation is structured, and understand the insight already available, so as not to 'ask the same questions again'.

Stakeholder workshops

In both the current state analysis and future state vision phases, the project team held stakeholder workshops via Skype and using Miro, to identify assumptions that should be challenged throughout the Discovery and to co-create solutions for current pain points.

Gaps

Due to stakeholder availability it is acknowledged that some gaps remain in the internal stakeholder research which should be addressed in the next phase. Further research is needed to fully understand how and when the following areas are incorporated into the journeys and processes:

- National Improvement Hub; in particular around curriculum information
- National Improvement Framework
- Scrutiny team
- Communications team.

3

The current
service
(current state)

The current service (current state)

Overview

The Professional Learning service covers the lifecycle of Professional Learning in all its varied formats, from computer-based training, guidance documents, face-to-face training, seminars, and so on.

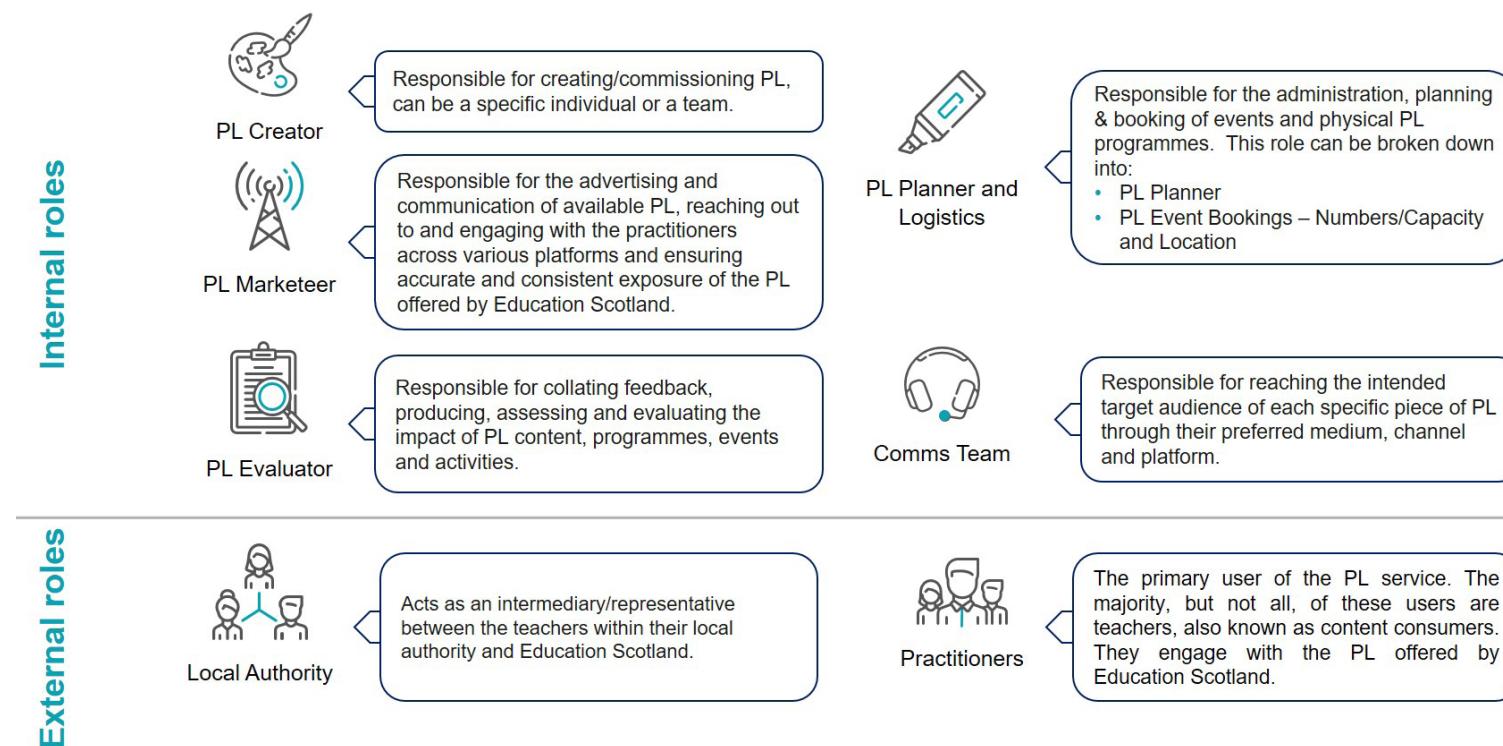
The lifecycle includes:

- **Identifying new or updated PL, which may be required**
- **Designing and creating or updating the PL**
- **Evaluating the PL before it is made available to Practitioners**
- **Publishing the PL, so it is available to Practitioners**
- **Event planning and management of live, in-person PL events**
- **Communicating and promoting PL**
- **Reviewing existing PL as a result of Practitioner feedback and reflections, changes in policy and guidance, and Scrutiny reports**

The current service (current state)

Core users - Seven primary user roles

There are many individuals who interact with and have touchpoints at various stages of Education Scotland's Professional Learning service journey. The seven, most common and vital roles, have been identified as part of this Discovery. Each of the roles, outlined below, have been deemed critical to the overall success or impact on the Professional Learning service provided by Education Scotland.



The current service (current state)

Current experience

This blueprint gives an indication of the key phases and stages, the actors, the technology and key pain points of the current 'create, publish and host PL' service journey. Whilst this journey is not consistent across all directorates and teams, the key phases are broadly similar.

Phase	The Trigger		Research				Developing			Administration			Promote & Launch					Delivery			Post Event		
Stage	Event triggers the need to initiate creating the PL programme	PL Lead puts the wheels into motion	Start to identify the gaps that need	Collaborate s with others generating	Does the research	Developing the PL programme plan	Write and develop the plan	Pre-event Comms	Plan first day	Planning / admin	Prepare/initiate promotion activities	Initiate participant application	Programme Promotion	Participant Signup	Managing attendance	Managing Applications	Iterating (PLL)	Day 1 registration	Subsequent days	Final day	Review & Reporting	Retro	Plan next event
Actors	Lead Specialist	Lead Specialist	Local Authority	Knowledge Management Lead	Lead Specialist	Lead Specialist	Lead Specialist	Lead Specialist	Lead Specialist	Lead Specialist	Business Support Assistant	Lead Specialist	Business Support Assistant	Business Support Assistant	Business Support Assistant	Lead specialist	Lead Specialist	Lead Specialist	Lead Specialist	Lead Specialist	Lead Specialist	Lead Specialist	
	Senior Education Officer	Senior Education Officer	Head Teachers	Senior Education Officer	Senior Education Officer	Senior Education Officer	Senior Education Officer	Comms	Senior Education Officer	Senior Education Officer	Senior Education Officer	Senior Education Officer	Senior Education Officer	Senior Education Officer	Senior Education Officer	Senior Education Officer	Senior Education Officer	Senior Education Officer	Senior Education Officer	Senior Education Officer	Senior Education Officer	Senior Education Officer	
	Attainment officer	Attainment officer	Development officers	Lead Specialists	Attainment officer	CLPL	Attainment officer	CLPL	Business Support Assistant	Business Support Assistant	Attainment officer	CLPL Lead	Comms	Senior Education Officer	Attainment officer	Local Authority	Participants	Evaluation officer					
	CLPL			Attainment officer	Attainment officer		CLPL			Content team	Head Teachers				Head Teachers		Business Support Assistant						
As-is Technology	Email		Skype	Skype	Scots Laptop	ES website	Scots Laptop	Social Media	Word - comments	Word	Word	Email	Email	Eventbrite	Emails	Excel	Excel	Word	Word	Word	Word	Skype	Excel
		Teams	Teams	ES Website	Email	Teams	Email	Email	Email	Email	Eventbrite	Social Media	Teams	Eventbrite	Email	Excel	Excel	Personal Device	Personal Device	Personal Device	Excel		
		Scots Laptop	Scots Laptop	iDocs	Scots Laptop	Word	ES website		Excel (for tracking)	PLL website	Teams	PLL Website	Excel	Teams		Teams	Teams	Email	Email	Email	Note of Visit		
		Email	Email	Ebsco	Excel	Word	PLL website		Eventbrite	NH website	Word	ES Website			Excel		Powerpoint	Formic	Formic	Formic	Email		
Key Pain Points	No time to check scrutiny reports.	Collaboration tools are not interactive or engaging	Not enough awareness of PLL website for teachers	Corporate templates are not easily accessible.	Many spreadsheets, hard to know who has made changes.	Content duplication across multiple platforms is a massive painpoint	Event signup is an inconsistent experience. Can cause confusion.	Don't get the same engagement or response from digital feedback tools as paper (on the day feedback)	Difficult extracting information														
	Scrutiny team do not share analysis of reports that they do.	No single view of all the learning triggers that lead into learning content across ES	Formic is clunky to use and doesn't meet needs. Need to ask for support to use effectively.	Not everyone has access to the same toolset (eg Skype)	No single point of truth.	Not always a joined up approach with comms, can result in tweets saying space when event is actually full.	It's not easy to pull together attendee information as coming from different sources.	Teams is limited to 250 attendees.	We are great at getting that initial feedback but not for longer term impact of the PL in the classroom	Lack of events calendar to enable more systematic planning													
					Each team using different event booking org with varying timescales.	Q's around GDPR and being able to contact attendees for future engagement when using Eventbrite	Lack of consistent way for participants can cause extra work for ES staff.	There is no central place that holds event data (i.e. date, topic, # attendees)	Lack of events calendar to enable more systematic planning														

Figure 5: Current Create, publish and host PL journey blueprint

The current service (current state)

Current state stories - Stories that bring the vision to life

Story 1: Teachers not finding what they need

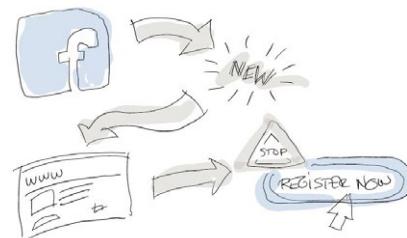


Gwen

Gwen is a secondary school teacher at a high-school in East Lothian. She's always been keen to stay on top of her CPD and do the best for her school and pupils.

Keeping up to date is not as straightforward as it seems. There are websites organised by the Scottish Government but you have to know what to look for and when. Equally, if Gwen needs CPD in a particular area as a result of a policy shift she might not know immediately of that shift or its consequences (she missed an important one two years ago; she wants to avoid that).

She communicates regularly with the Deputy Head Teacher in her school and follows colleagues on education-related groups on Facebook.



Searching, but for what exactly, and where to start?

Gwen has heard on social media that there is a new programme of courses for next year. She's not sure exactly what to search for but visits Google and searches for CPD classes.

She has heard that the Education Scotland website has some useful resources. She visits and starts to look for programmes relevant to her region, her role, her practice. She's pretty sure she's found useful things on ES before but this time she can't see a way to filter her search to make it more relevant to her specific situation. She decides to browse instead of searching and clicks through to "browse all learning activities". The website asks her to register and she realises she hasn't the time to deal with that today.



Finding, but not always the best option

Before giving up entirely, she heads to a search engine and types in some words that she thinks will help refine the search. What she had read on Facebook earlier was that there was a new "staff development" programme about additional support needs so she types these words into the search engine.

This time Gwen gets a result. East Lothian has a page dedicated to "Career Long Professional Learning for Education Staff 2020/2021" so this feels pretty good and she starts to click on the topics that look most like the ones her colleagues had mentioned.

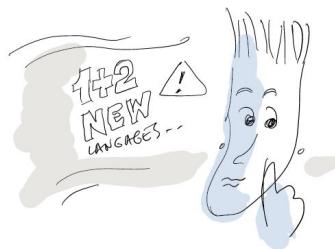
Unfortunately for Gwen her success is short lived as the links on the local authority website are broken, so after a short hopeful burst, Gwen is back where she started.

At that moment the bell goes off and her break time is over. She closes her laptop.

The current service (current state)

Current state stories - Stories that bring the vision to life

Story 2: Checking things by hand



Lauren the Senior Education Officer

Recently, a new policy objective has been introduced which updates the 1+2 approach to language learning in primary schools. Lauren is reminded to check the Education Scotland PL on the topic for compliance and quality.

Lauren is very experienced and is familiar with a lot of the material and reviews the content on the National Improvement Hub. Because she has so much experience of managing programmes at ES she has a very good picture of where she needs to look to review and update content.

As well as checking schools have the right content to drive their teachers' CPD, Lauren also reviews dependencies including the records of real world activities that are part of ES's blended learning programmes.

She reflects at this stage it would be great for ES officers to have a better view of the whole picture, but she confirms PL content is right and sets up any missing programmes over next few weeks.



PL management workflow

Unfortunately, things are not entirely as Lauren thought they were.

She has no single view of the PL so it's hard for her to know where all the materials are. She has no way of being 100% sure where a given item might be. Additionally, with so much on her plate and so many platforms it's almost impossible not to forget about something she completed months ago.

Lauren is a seasoned professional and she's done a great job with her review but in this case it wasn't enough.

A number of Head Teachers, in response to the updated guidelines have tried to be helpful and ensured their teams were using the right CPD for the new programme. They don't have time to check everything, so seeing the programmes were ES endorsed, they have led their teaching staff to use the wrong materials.



Feedback

Unfortunately as a result of this confusion, most practitioners have joined the correct programme, but some have not. Those that used the out of date materials completed their programmes and continued to work with their pupils...

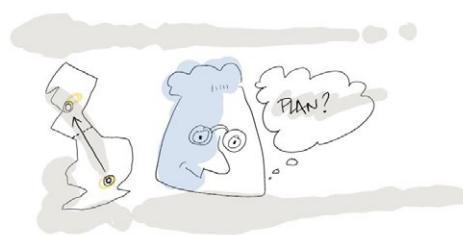
It's taken more than a year for the feedback to surface from the annual performance reviews and several months after that to work out what's happened.

Two schools are under-performing in language assessment as a result of using the wrong training.

The current service (current state)

Current state stories - Stories that bring the vision to life

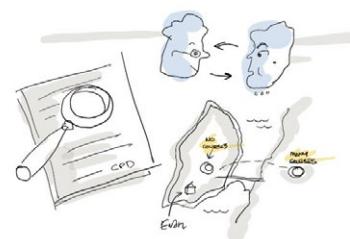
Story 3: I can't find it, and when I do I'm not sure it's right for me



Euan

Euan hasn't been teaching long. He was based in England for a few years and responded to the DfE's "Get into teaching" campaign. For family reasons he moved back up to Scotland two years ago and he's now trying to progress in the Scottish education system.

He feels that the thing he lacks is a plan. It's all very well enjoying the work and he does get a good feeling from being a teacher, but he needs to take a bit more charge of his destiny. He needs to find CPD, make a plan and find training that is relevant to his situation.



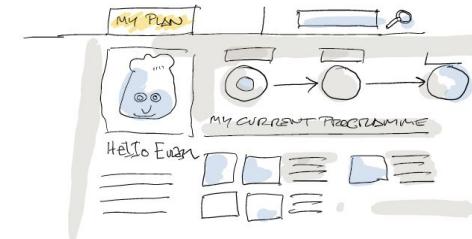
Search results

Euan is digitally literate and searches across many channels using multiple tools and techniques. Searching for topics that interest him he is able to get results which is great, but they don't seem well suited to his situation.

Because he wanted a better quality of life for his family, he is working in a school on the Isle of Skye but most of the training programmes involve trips to Inverness or central Scotland.

He's happy with learning remotely and has joined webinars but found the lack of interaction difficult. He believes he would benefit from face to face and group activities and he'd really like to complement virtual classroom experience with some 'in real life' activity. He's finding most of this sort of CPD isn't feasible for him as the travel time and cost makes it impossible.

On the whole, while he finds information, he finds that the content and services are designed around someone else's needs; they assume things about him that aren't helpful.



Who could help me?

As Euan tries to get his plan together he is wondering who could help him decide what to do next.

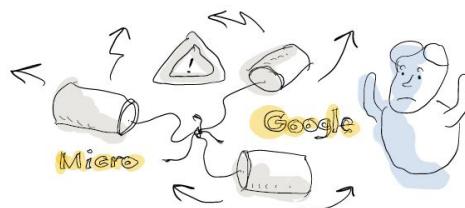
As he considers the information he reads, he is building up a wish-list of services. What if he could manage his development plan in one place? What if he didn't have to re-enter all his information every time? What if the search tool or specialist service knew what he had already done so that it could suggest what the next best action might be? What if the service meant he could count a bit more on the government helping him, but also what if he could leverage the knowledge of the crowd? What if his peers in schools around Scotland could also share their wisdom with him?

But at this stage he can't see how any of that is possible, so he puts the kettle on and grabs the third empire biscuit of the day...

The current service (current state)

Current state stories - Stories that bring the vision to life

Story 4: It's hard to collaborate with my colleagues and partners

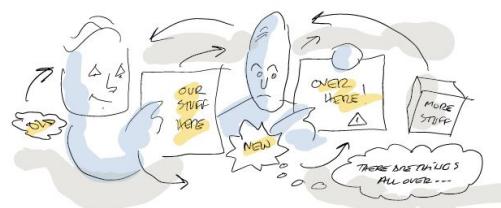


Kevin is an SEO and needs to collaborate

Kevin is trying to organise a new PL programme. He's done this many times before, so he knows what he needs, but every time he does this he finds it harder than it should be.

Next, Kevin needs to build on research into the needs of the practitioners to try and understand specifically what the PL will be tasked with achieving. In this case, he was contacted by teams in East Lothian that have already identified the needs for PL.

Once again, he finds that to be effective in his role, he needs to collaborate but the local authority in question is on a different system. He is mostly going to have to organise this over phone calls and emails.



Personal networks are important for collaboration

Once again, he finds that to be effective in his role, he needs to collaborate. He tries to reach out to teams in East Lothian where he was contacted by the development officer.

In an ideal world, Kevin and his team would have the time and budget required to explore challenges directly with practitioners, but today he needs to collaborate with a network of colleagues responsible for knowing what's needed.

Unfortunately for Kevin, the Local Authority teams, as well as teams responsible for analysing the performance of schools in the area, as well as his colleagues in ES do not have a single place to review, understand and share this data.

Kevin is very experienced and has a great personal network, not least because he was a teacher for 18 years before joining ES. This means he relies on his ability to contact the right people and ask the right questions, but he can't help thinking this is more complicated than it needs to be...



Publishing

With the programme budget and development objectives sorted out Kevin moves into a different kind of collaboration.

He is looking to create programme of blended learning so he needs to organise both real-world activities like public gatherings and also online learning tools. He needs to think about multiple places to publish his materials, he needs to use multiple tools and he is being asked to follow a number of different processes.

Kevin wishes all his colleagues could come together around a some sort of central place with common tools so that they could discuss, share, monitor, publish and maintain PL without having to hold so many different parts together by hand...

The current service (current state)

Themes from user research

Problem Statement	Impact
There is not a consistent toolset for sharing and collaborating internally between Education Scotland (ES) colleagues	<ul style="list-style-type: none"> • ES staff are unable to maximise collaboration opportunities, so duplicate effort to learn and recreate PL, increasing the cost and time it takes to create, publish, review and update PL • ES staff miss opportunities to share best practices and work with experts, so they don't have the opportunity to learn from each other • ES staff may, inadvertently, create gaps in PL, as they don't have the full picture, which could have a negative impact on the classroom.
It is not easy to identify PL that needs reviewed and updated	<ul style="list-style-type: none"> • ES staff may miss PL that needs updating, so it remains out of date, which could have a negative impact in the classroom • ES' reputation may be undermined, as their PL could be deemed untrustworthy if a Practitioner has used out-of-date PL.
It is not easy for practitioners to find all available PL	<ul style="list-style-type: none"> • Practitioners may not be aware of and utilising all the PL available to them, as a result, ES effort (time, resources and costs) is not maximised • Practitioners may spend too much time and effort trying to find PL, as they are frustrated, and time poor, they may seek external sources of PL, again undermining ES' efforts • Practitioner's needs may not be met, so they are not able to fully develop, which may have a negative impact on their classroom.

The current service (current state)

Themes from user research

Problem Statement	Impact
The current approach to creating PL can involve too many steps and too many people	<ul style="list-style-type: none"> The processes for creating and publishing PL is not streamlined, so it takes more effort and time, which means it's more costly for ES The lengthy processes can delay the delivery of PL, which means ES are not responding in a timely manner and there may be a negative impact in the classroom The convoluted processes make it complicated to execute, which can result in errors, which may have a negative impact in the classroom.
It is difficult to evaluate and understand the impact of learning provided by ES	<ul style="list-style-type: none"> PL that needs to be reviewed and improved is not identified in a timely manner, which may have a negative impact in the classroom ES are unable to provide evidence of the impact they are having on Practitioners and the classroom Practitioners' feedback is not sought on a regular basis and proven to be acted upon, as a result Practitioners may feel their opinions are not valued leading to ES' reputation being undermined and a reduction in PL sign-up/consumption rates.
It is difficult to know or view what PL is going on and planned within ES	<ul style="list-style-type: none"> ES staff are unable to plan future PL events effectively, e.g. they may arrange an event for the same date as another event, as a result, PL sign-up rates may be negatively impacted undermining ES' costs and efforts ES staff are unable to identify gaps within their PL offering, meaning some Practitioners needs are not being met, which may have a negative impact on their classroom.

The current service (current state)

Themes from user research

Problem Statement	Impact
People do not feel comfortable using the tools and processes	<ul style="list-style-type: none"> The quality of PL may not be of a standard that both the creator and the Practitioner would expect, impacting the ES staff's employee satisfaction levels It takes ES staff longer to create and publish PL Mistakes are more likely, which may result in a negative impact in the classroom.
It is not easy to organise PL events, the attendees and their data	<ul style="list-style-type: none"> It is not clear to Participants where they can find more information about or where they should sign up for the PL events ES staff are unable to provide comprehensive pre-event information and guidance, so Participants are unprepared and may decide to not participate Lack of a single event planning process and partner mean organising events is convoluted, time consuming and costly.
The current approach to advertising PL does not always lead to the expected sign-up rates	<ul style="list-style-type: none"> Risk that not all Practitioners are aware of and utilising the PL available to them, as a result, ES effort (time, resources and costs) is not maximised. <p>Note: changes imposed on ES by the pandemic have resulted in higher PL sign-up rates; it is possible that a change in approach, as well as availability, is a factor in this success, and this opportunity should be explored post-pandemic.</p>

The current service (current state)

Themes from user research

Problem Statement	Impact
It is not easy to track and report PL participant numbers, who participated and their exam performance, etc.	<ul style="list-style-type: none"> Event planning and post-event reporting is manual, with an increased risk of error Unable to communicate with all Participants after the event to gain insight into what impact the PL has had on them and their classroom, or to provide follow on guidance and recommendations.
It is not easy to review the outputs from Scrutiny evaluation and themed reports	<ul style="list-style-type: none"> There is a delay in identifying which PL is working well and which not so well, which means the PL is not reviewed and updated to make it more impactful in a timely manner Research into what may be needed, as a result of Scrutiny and school data is ad hoc; critical insight, which could be a driver for change, may not be identified.
The comms from the business areas and the Comms Team are not always joined up/aligned	<ul style="list-style-type: none"> Comms from the business and the Comms Team may conflict, which causes confusion for Practitioners ES' reputation is undermined.
Collaboration is hindered by a lack of a common, consistent, user-friendly language	<ul style="list-style-type: none"> PL created by different owners may conflict due to terminology inconsistencies, which causes confusion for Practitioners Creates an unnecessary communication barrier, hindering ES staff's ability to collaborate effectively.
It is hard to view what PL Practitioners have completed and what PL they plan to do	<ul style="list-style-type: none"> ES staff can't identify the development path a Practitioner is on, so they can't fully support them with relevant PL recommendations.

4

Current state
solutions
architecture

Current state solutions architecture

Solutions architecture diagram

A view of the current solutions architecture supporting the current 'as-is' PL service:

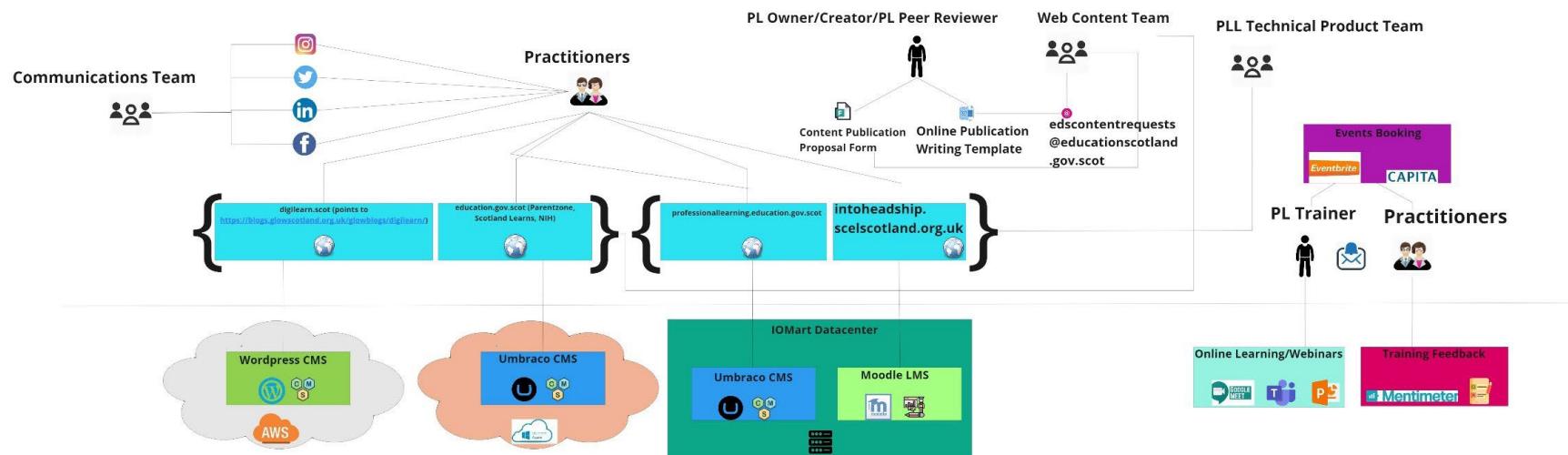


Figure 10: Current state solutions architecture diagram

Current state solutions architecture

Technical components

These components and services are responsible for delivering the current 'as-is' PL service:

Component / service name	Description
https://education.gov.scot/	<p>Education Scotland's corporate website, which contains National Improvement Hub, Scotland Learns and Parentzone Scotland content.</p> <p>The site also links to Glow Connect and Professional Leadership learning sites.</p> <p>The site is hosted on Umbraco Content Management System in Azure cloud and written in ASP.NET.</p> <p>Method4 manages the development of the Umbraco platform.</p>
https://professionallearning.education.gov.scot/	<p>A website hosting Professional Learning and Leadership activities for educators in Scotland.</p> <p>The site is hosted on Umbraco Content Management System in IOMart datacentre and written in ASP.NET.</p> <p>Innovation Digital manages the development of the Umbraco platform.</p>
https://intoheadship.scelscotland.org.uk/	<p>A website containing four leadership modules required to be completed by teachers as part of the "Into Headship Programme".</p> <p>It runs on Moodle open source Learning Management System in IOMart datacentre . Moodle LMS was developed using PHP.</p> <p>James Suttie Associates manage the development of the Moodle platform.</p>

Current state solutions architecture

Technical components

Component / service name	Description
Content Publication Proposal Form	The content publication proposal form is a Microsoft form used by PL Owner/PL Creator to notify the Web Content Team of their intention to create new web content.
Online Publication Writing Template	<p>A template in Microsoft Word used by the Professional Learning Content Creator/Author to submit publication requests to Education Scotland's corporate website, Parentzone Scotland, National Improvement Hub and Glow Blogs.</p> <p>The template is completed and emailed to the Web Content Team (edscontentrequests@educationscotland.gov.scot).</p> <p>The Web Content Team publishes the content to the appropriate site after the content is thoroughly reviewed.</p>
digilearn.scot (points to https://blogs.glowscotland.org.uk/glowblogs/digilearn/)	<p>A website hosting a range of learning information for Practitioners. It includes webinars, blogs and various other learning resources.</p> <p>The site is hosted on Wordpress Content Management System in AWS cloud and written in PHP. Affinity Digital manages the development of the Wordpress platform.</p>
Eventbrite	An online booking system used by some Education Scotland teams to enable Practitioners to sign-up for PL events.
Capita	An IT company providing a venue booking service for PL events.

Current state solutions architecture

Technical components

Component / service name	Description
Social Media Services (Twitter, Facebook, Instagram, LinkedIn)	Social media services used by Education Scotland and Practitioners to share news, content, feedback and discussions.
Google Meet, Microsoft Teams	Video collaboration tools used by Education Scotland to provide video based PL to Practitioners.
Microsoft PowerPoint	Presentation tool used by Education Scotland to present the PL to the Practitioners in classroom or online training events.
Mentimeter	An online service/tool used by some Education Scotland teams to gather post-delivery feedback of the PL.
Paper based feedback form	A form used by some Education Scotland teams to gather post-delivery feedback of the PL.

5

Opportunities for
change

Opportunities for change

A vision of the future

Following co-creation workshops with stakeholders and analysis of the problem statements, the project team designed a vision of PL delivery in Education Scotland.

We imagine an environment where PL is created, distributed, measured and improved in such a way as to create positive feedback loops that help build long-lasting relationships and improve outcomes for Scotland's education practitioners.

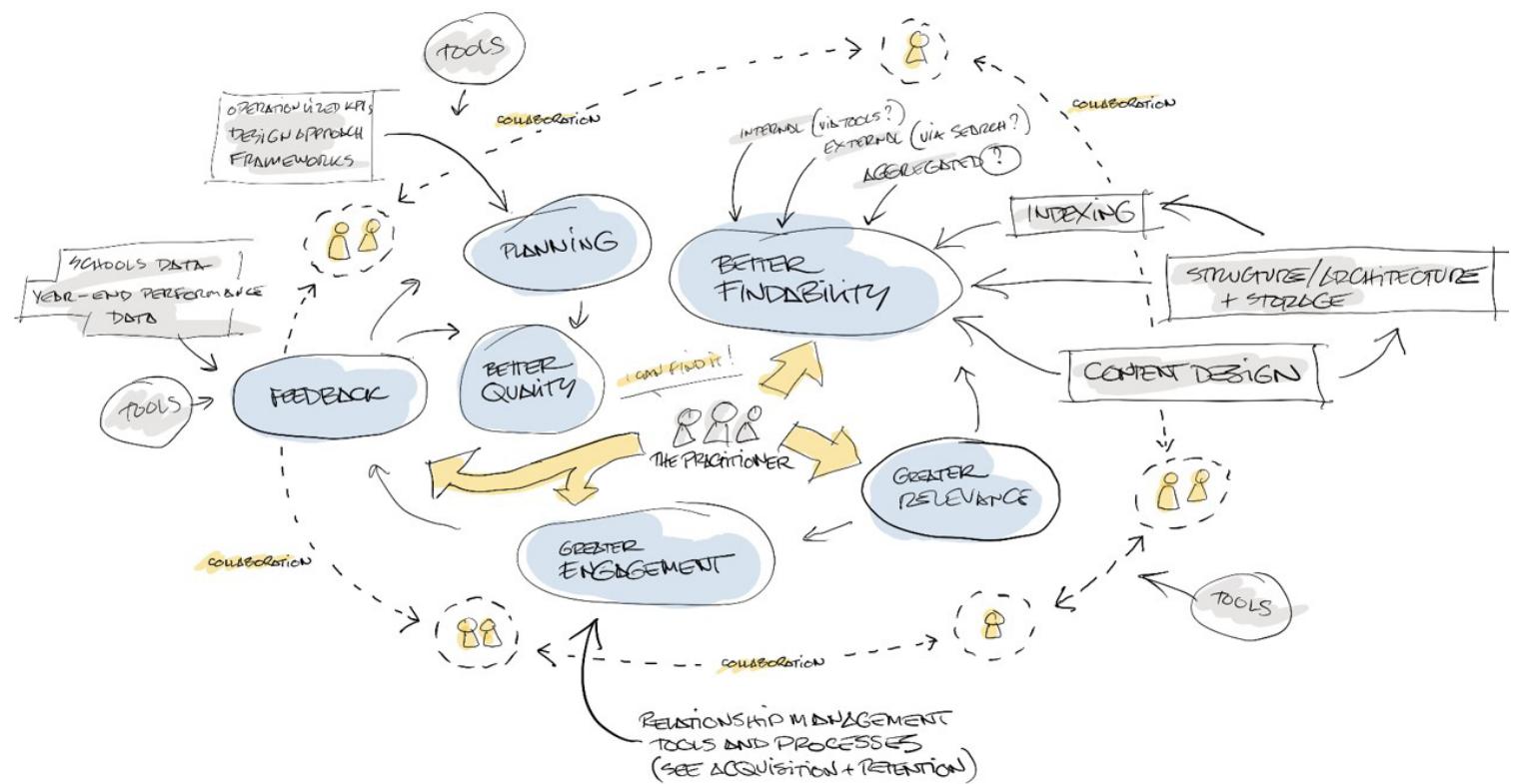


Figure 11: Future state vision diagram

Opportunities for change

A vision of the future

The vision is underpinned by four key themes.

1) Focus on the Practitioner

In the future, we will nurture closer relationships with Scotland's Practitioners.

2) Structure for enhanced findability

We will interlock our content design, information architecture, and indexing.

Findability will apply to both internal and external searches as well as in services we aggregate.

3) Organise for improved quality

We will shorten both long-term and short-term feedback loops.

We will integrate performance data with a design-led approach, supported by our educational frameworks.

4) Enable greater relevance and deeper engagement

We will communicate with intent. We will understand what our audience needs to achieve and we will tailor our services to the unique needs of the individual.

Opportunities for change

Achieving the vision

The project team have identified a number of key opportunity areas that will create meaningful change and enable the four key themes to become reality. The opportunities have been grouped into those for Education Scotland colleagues and those for Practitioners.

Opportunities from Education Scotland's perspective

 <p>Create a collaborative culture & environment</p> <p>Adopt a service design culture supported by the tools and technology to enable PL creators to collaborate with colleagues, evaluators and practitioners to understand why the PL is needed, its objectives and how success will be measured, as well as designing and creating the PL. Make sure PL delivers value.</p>	 <p>Shorten the feedback loop</p> <p>Standardise and reduce the time it takes to gather and analyse feedback from practitioners and schools. Make it easy for PL evaluators and creators to identify what's working well and not so well, both in the short-term (PL delivery) and the long-term (classroom impact).</p>	 <p>Make it easier to create, manage & publish content</p> <p>Use a single content management solution, that allows PL creators to manage PL content through its lifecycle. Make it easy for PL creators and evaluators to identify PL for review and action.</p>	 <p>Use data to identify & drive change and measure success</p> <p>Enable the PL creators' KPIs to be tracked and if they are not achieving as expected, make them aware so they can take timely action to review what's not working well. Allow stakeholders to view evidence of what PL has taken place and its impact and effectiveness</p>	 <p>Standardise & communicate workflows & processes</p> <p>Make it easy for everyone involved in creating, managing, delivering and reviewing PL to do their job, regardless of what the PL subject matter is, which directorate it's for or where it's published. Everyone knows what to do and how and when to do it.</p>
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Figure 12: Opportunities from Education Scotland's perspective

Opportunities for change

Achieving the vision

Opportunities from Scotland's education practitioners' perspective



Make PL findable

Whether it's on an ES site, a google search, a Facebook group or a twitter feed, it should be easy for them to find what they need using natural and plain English or Gaelic



Make PL & communication relevant

Find out what interests them and tailor what you show & notify them of.

Allow them to set & track their own CPD plan.

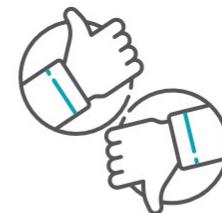
Let them see and hear their colleague's feedback to help them decide what's a good fit for them
Communicate with them in their preferred channel.



Engage with them regularly

Let them know what's going on; tell them when new or updated PL is available; ask for their feedback.

Invite them to participate in reviewing, designing and creating new PL.



Capture their feedback

Invite, encourage and make it easy for them to share their feedback.

When they take the time to share their feedback, they're letting you know this is something that's important to them.

Listen to what they have to say and use what they tell you to improve the PL and fill the gaps in your offering.

Figure 13: Opportunities from Scotland's education practitioners' perspective

Opportunities for change

Benefits of delivering the vision

Benefits that could be achieved:

- It is easier for staff to review, design, create, publish and manage PL
- Reduce the time to review, design, create, publish and manage PL
- Improve the quality of PL
- It is easier to measure and understand the impact of PL on Practitioners and the classroom
- Reduce the time to measure and understand the impact of PL on Practitioners and the classroom
- It is quicker and easier for everyone to find relevant PL

Which results in:



- Practitioners' needs are better met
 - Increased Practitioner engagement
 - Increased trust in Education Scotland
- Increased staff morale/satisfaction
 - Increased productivity
 - Reduced cost to provide the PL service

Opportunities for change

Opportunity descriptions

Create a collaborative culture and environment

Adopt a service design culture supported by the tools and technology to enable PL creators to collaborate with colleagues, evaluators and practitioners to understand why the PL is needed, its objectives and how success will be measured, as well as designing and creating the PL. Make sure PL delivers value.

Opportunities:	Enablers:	Benefits:
<ol style="list-style-type: none">1. Adopt the service design co-creation approach for designing, creating and delivering PL2. Provide a communal and consistent collaboration toolkit for meetings, workshops, white-boarding, sharing and collaboratively working on documentation and outputs3. Enable PL Evaluators and PL Creators to identify Practitioners, who have fed back on PL, and previous PL Creators and subject matter experts	<ol style="list-style-type: none">1. PL creation process, incorporating service design and system thinking methodologies, including access to staff with service design and content design skills2. Collaboration tools3. A content authoring tool, either as part of a learning management system / learning experience platform (LMS/LXP) or integrated to LMS/LXP4. An aggregated feedback solution	<ul style="list-style-type: none">✓ It is easier for staff to review, design, create, publish and manage PL✓ Reduce the time to review, design, create, publish and manage PL✓ Improve the quality of PL✓ It is easier to measure and understand the impact of PL on Practitioners and the classroom

Opportunities for change

Opportunity descriptions

Shorten the feedback loop

Standardise and reduce the time it takes to gather and analyse feedback from Practitioners and schools. Make it easy for PL Evaluators and Creators to identify what is working well and not so well, both in the short-term (PL delivery) and the long-term (classroom impact).

Opportunities:

1. Enable PL Evaluators and PL Creators to access the feedback channels that Practitioners are using; e.g. Facebook, Twitter, Teams
2. Capture feedback from multiple sources on a continual, ongoing basis
3. Enable PL Evaluators and PL Creators to access, find and analyse aggregated feedback
4. Monitor and analyse feedback in real time

Enablers:

1. An aggregated feedback solution
2. An engagement and retention client relationship management (CRM) tool
3. A social media marketing and management tool
4. A reporting / analytics tool

Benefits:

- ✓ It is easier for staff to review, design, create, publish and manage PL
- ✓ Reduce the time to review, design, create, publish and manage PL
- ✓ Improve the quality of PL
- ✓ It is easier to measure and understand the impact of PL on Practitioners and the classroom
- ✓ Reduce the time to measure and understand the impact of PL on Practitioners and the classroom

Opportunities for change

Opportunity descriptions

Make it easier to create, manage and publish content

Use a single content management solution, which allows PL Creators to manage PL through its lifecycle. Make it easy for PL Creators and Evaluators to identify PL for review and action.

Opportunities:

1. Provide a communal, consistent tool to manage the workflow of the PL lifecycle
2. Provide one view of all PL available and the owners/creators of each
3. Enable PL Creators and PL Evaluators to easily identify all relevant PL during creation and review processes
4. Publish PL once, to a single, accessible, public PL platform/portal

Enablers:

1. A content management tool
2. A single, accessible and public PL platform/portal
3. Standardised processes and workflow

Benefits:

- ✓ It is easier for staff to review, design, create, publish and manage PL
- ✓ Reduce the time to review, design, create, publish and manage PL
- ✓ Improve the quality of PL
- ✓ It is quicker and easier for everyone to find relevant PL

Opportunities for change

Opportunity descriptions

Use data to identify and drive change and measure success

Enable the PL Creators' KPIs to be tracked and if they are not achieving as expected, make them aware so they can take timely action to review what is not working well. Allow stakeholders to view evidence of what PL has taken place and its impact and effectiveness.

Opportunities:

1. Enable PL Creators to set, measure and track KPIs for their PL
2. View real-time performance data of PL
3. Enable stakeholders to generate and view PL reports; e.g. trend analysis, event attendee volumes, performance
4. Enable PL Evaluators and PL Creators to view and update the status of PL
5. Show, hide and flag PL for review based on its status

Enablers:

1. Use of service design and systems thinking methodologies enabling staff to determine KPIs and how to measure these
2. Performance analysis tools within a single PL platform
3. Reporting and data analytics tools to visualise PL related insights

Benefits:

- ✓ It is easier to measure and understand the impact of PL on Practitioners and the classroom
- ✓ Reduce the time to measure and understand the impact of PL on Practitioners and the classroom

Opportunities for change

Opportunity descriptions

Standardise and communicate workflows and processes

Make it easy for everyone involved in creating, managing, delivering and reviewing PL to do their job, regardless of what the PL subject matter is, which directorate it's for or where it's published. Everyone knows what to do and how and when to do it.

Opportunities:

1. Create a single design, create and update process
2. Create a single PL evaluation and review process
3. Create a single feedback review process
4. Make all processes accessible to Education Scotland colleagues

Enablers:

1. A collaborative culture and environment where ES staff have access to colleagues with service and process design skills
2. A single, accessible, public PL platform/portal

Benefits:

- ✓ It is easier for staff to review, design, create, publish and manage PL
- ✓ Reduce the time to review, design, create, publish and manage PL
- ✓ Improve the quality of PL
- ✓ It is easier to measure and understand the impact of PL on Practitioners and the classroom
- ✓ Reduce the time to measure and understand the impact of PL on Practitioners and the classroom
- ✓ It is quicker and easier for everyone to find relevant PL

Opportunities for change

Opportunity descriptions

Make PL findable

Whether it is on an ES site, a google search, a Facebook group or a twitter feed, it should be easy for them to find what they need using natural and plain English or Gaelic.

Opportunities:

1. Enable Practitioners to use natural language to search for PL across multiple channels; e.g. ES site, search engines, Twitter, Facebook, LinkedIn
2. Create and manage a calendar of events, which is accessible internally and externally
3. Create one 'go-to' place for Practitioners to find all the PL that is available to them
4. Enable PL content to reach the Practitioners by marketing the PL content via social media

Enablers:

1. A single, accessible, public PL platform/portal with contextual search, better filtering and content tagging options
2. A chatbot within a single PL platform to answer questions and point the Practitioners in the right direction of the PL they are looking for
3. A social media marketing and management tool pushing PL updates when changes are made in the PL platform

Benefits:

- ✓ It is easier for staff to review, design, create, publish and manage PL
- ✓ Improve the quality of PL
- ✓ It is quicker and easier for everyone to find relevant PL

Opportunities for change

Opportunity descriptions

Make PL and related communications relevant

Find out what interests the Practitioners and tailor what you show and notify them of. Allow them to set and track their own CPD plan. Let them see and hear their colleagues' feedback to help them decide what's a good fit for them. Communicate with them in their preferred channel.

Opportunities:

1. Enable Practitioners to register their interest in specific topics and development goals
2. Keep Practitioners updated on news and PL that they are interested in, including sending push notifications
3. Tailor PL recommendations and links to PL information based on the topics and development goals they're interested in
4. Enable Practitioners to set up, manage and track their own CPD and achievements

Enablers:

1. Practitioner accounts and profiles
2. An engagement and retention client relationship management (CRM) tool
3. Notifications and alerts
4. A "create and track your own CPD progress" solution via the single, accessible, public PL platform/portal
5. PL reviews in a PL platform

Benefits:

- ✓ It is quicker and easier for everyone to find relevant PL
- ✓ It is easier to measure and understand the impact of PL on Practitioners and the classroom
- ✓ Reduce the time to measure and understand the impact of PL on Practitioners and the classroom
- ✓ Engaged Practitioners

Opportunities for change

Opportunity descriptions

Engage with Practitioners regularly

Let Practitioners know what is going on; tell them when new or updated PL is available; ask for their feedback. Invite them to participate in reviewing, designing and creating new PL.

Opportunities:

1. Engage with Practitioners in their preferred channel; e.g. Facebook, WhatsApp, Twitter, LinkedIn
2. Engage with Practitioners regularly about things that matter to them
3. Enable PL Evaluators and PL Creators to seek Practitioners' opinions and feedback
4. Enable PL Evaluators and PL Creators to invite Practitioners to collaborate on PL reviews, design and creation

Enablers:

1. An engagement approach/strategy
2. An engagement and retention client relationship management (CRM) tool
3. A feedback solution
4. A social media marketing and management tool
5. Social forums using a single, accessible, public PL platform/portal
6. A content authoring tool, either as part of a learning management system / learning experience platform (LMS/LXP) or integrated to LMS/LXP)
7. A collaborative culture

Benefits:

- ✓ It is easier for staff to review, design, create, publish and manage PL
- ✓ Reduce the time to review, design, create, publish and manage PL
- ✓ Improve the quality of PL
- ✓ It is easier to measure and understand the impact of PL on Practitioners and the classroom
- ✓ Reduce the time to measure and understand the impact of PL on Practitioners and the classroom
- ✓ It is quicker and easier for everyone to find relevant PL
- ✓ Engaged Practitioners

Opportunities for change

Opportunity descriptions

Capture Practitioners' feedback

Invite, encourage and make it easy for Practitioners to share their feedback. When they take the time to share their feedback, they are letting you know this is something that is important to them. Listen to what they have to say and use what they tell you to improve the PL and fill the gaps in your offering.

Opportunities:

1. Invite and encourage Practitioners to feedback regularly
2. Enable Practitioners to share their feedback in their preferred channel; e.g. Facebook, WhatsApp, Twitter, Teams
3. Enable Practitioners to publicly feedback on Education Scotland's site; example: TripAdvisor or Amazon review
4. Enable PL Evaluators and PL Creators to invite Practitioners, who have provided feedback, to collaborate on PL reviews, design and creation

Enablers:

1. A feedback solution, either as part of the single PL platform/portal or integrated into the PL platform/portal
2. Reporting and data analytics tools to visualise PL related insights
3. A social media marketing and management tool
4. A feedback review process
5. A collaborative culture

Benefits:

- ✓ It is easier for staff to review, design, create, publish and manage PL
- ✓ Reduce the time to review, design, create, publish and manage PL
- ✓ Improve the quality of PL
- ✓ It is easier to measure and understand the impact of PL on Practitioners and the classroom
- ✓ Reduce the time to measure and understand the impact of PL on Practitioners and the classroom
- ✓ It is quicker and easier for everyone to find relevant PL

Future state stories - Stories that bring the vision to life

Story 1: Shorter feedback loops and working more closely with Practitioners



Maureen discusses CPD courses in her Facebook groups and leaves a comment about an ES programme she has taken...

Maureen

Maureen S is a teacher at a primary school south of Aberdeen. Last year she engaged in CPD activities around the teaching of languages. She is aware of a number of places online where her friends and colleagues discuss the challenges of teaching. Some of her connections are active in other online groups (Glow?) but Maureen is most comfortable on Facebook. She has joined a group there and has posted a number of times.

She goes online and shares her experience of doing CPD with a programme established by ES. She states that the training activities were pretty good but that finding them in the first place was hard. She also comments that on the whole, she hasn't changed her practice that much as a result of taking part in the course: "I did that course organised by Education Scotland but I don't think I really got that much out of it..."

Mary monitors all channels on social media using her new, integrated tools which give her notifications and sentiment analysis

Mary

Mary used to work on the affiliate marketing desk at a big Contract publisher in Dundee. Two years ago she spotted an ad for a role at Education Scotland: Leverage your acquisition and retention skillset but put them towards making a real difference to education in Scotland.

Mary is line-managed as part of a new practice area, "Engagement", but she works in a cross disciplinary team with representatives education officers and evaluators. Her colleagues jokingly call the new team "The Soft Stuff Team" but this doesn't bother Mary as she knows she is making a real difference.

The cross-disciplinary approach is designed to make keeping the feedback loop in the quality control of PL as short as possible. In the old days, SEOs would wait for reports, but now everything happens in real time.

A notification appears on Mary's dashboard and she reacts...

Mary monitors social media activity on all the main platforms. She uses a tool that provides real-time sentiment analysis so she can focus on practitioners who need help.

Her experience tells her that the hardest challenge is helping those practitioners in the invisible middle, those who don't stand out because of poor results but whose struggles are often hidden by needier individuals. As part of ES's programme of engagement, Mary is keeping an eye out for practitioners in this group.

Mary's social media monitor tools also allow her to be notified when a particular topic or course description is mentioned.

When Maureen updated her group's wall, the ES system put a notification on Mary's dashboard. As a result, she was able to engage with the issue and respond effectively.

Prompted by Maureen's feedback, Mary assembles her team to discuss the issue...

Mary has picked up on Maureen's negative review of the ES PL programme and takes the data back to her team for discussion and assessment.

The team gathers and discusses the situation. Language teaching in primary schools is a thorny subject and the policy priorities and the guidance seem to change quite a bit.

The team has options for working with this feedback. They can take the feedback and feed it into the new PL development workflow, inviting Maureen to participate in the development of a new PL programme.

They can decide to involve Maureen in an iteration of the programme, a chance to improve or fix it where appropriate.

The option they use most frequently with Facebook group feedback is the Facebook Live. The team reaches out to Maureen and invites her to a live discussion session.

Mary and Maureen chat on Facebook and discuss the programme at length. Mary is able to build trust with Maureen...

As a result of the live discussion session the team agrees that a revision of the existing PL doesn't make sense, in particular, their research shows that teachers aren't prepared and that new guidance is due out soon. They decide to focus on bringing Maureen and other primary teachers into the future codesign workflow in order to ensure the latest guidance and PL are really solid.

Practitioner acquisition

As part of this process, Mary has worked with Maureen to understand her needs and her aspirations. As a result of their honest exchange and growing relationship, Maureen feels more comfortable participating in the new service that supports her career development with ES. By opting-in to this service (the same "Online Practitioner Account" that John in scenario 3 signs up to), Maureen has access to personalised information and notifications and help planning and finding her future CPD.

One really useful feature is the long feedback timeline which will prompt Maureen to complete her GTCS updates and also keep Maureen's feedback in a context where it will be useful to both other learners and ES.

...and eventually helps Maureen see the benefits of the online practitioner account. Maureen registers online

Practitioner retention

When Maureen opted in to the service, it became possible for ES to keep in touch and understand Maureen's needs over time. Maureen's details are safely (and legally) stored in a system which allows the engagement team to create opportunities to help Maureen and her colleagues as they go on their teaching journey.

Shorter and longer term feedback

When the guidance on language teaching in primary classes changed again Maureen was presented with options to deal with it that focused on her needs (and geographic location).

She joined another ES PL programme and completed it successfully.

The system continued to record her short term feedback but also her longer term reflexions (the content that she posted to GTCS). As well as being able to track and use feedback, Mary is now able to cross reference that longer terms feedback with school performance data, completing her picture :-)

Figure 14: Future state story 1 – shorter feedback loops and working more closely with Practitioners

Opportunities for change

Future state stories - *Stories that bring the vision to life*

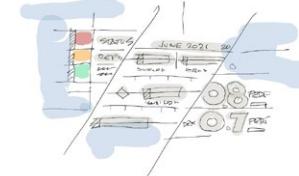
Story 1: Shorter feedback loops and working more closely with Practitioners

Benefits that are realised in this story:

- ✓ It is easier for staff to review, design, create, publish and manage PL
- ✓ Reduce the time to review, design, create, publish and manage PL
- ✓ Improve the quality of PL
- ✓ It is easier to measure and understand the impact of PL on Practitioners and the classroom
- ✓ Reduce the time to measure and understand the impact of PL on Practitioners and the classroom
- ✓ It is quicker and easier for everyone to find relevant PL
- ✓ Engaged Practitioners

Future state stories - Stories that bring the vision to life

Story 2: The PL lifecycle and workflow



Jane remembers last year when a new policy directive came in...

Changing priorities

Sine it's introduction in 2021, Education Scotland's "lifecycle workflow" process ensures that PL creation and management is always accurate, up-to-date and aligned with the current changes in policy and priorities.

Jane F is part of a broad, cross-disciplinary team made up of Education Officers; Policy experts; Content Designers; Editorial leadership; and members of the Engagement practice. Together, they manage this process. It's her job to ensure PL materials and events are kept up to date or decommissioned as appropriate.

Jane remembers when a policy directive landed last year, updating the requirements of the attainment challenge and outlining a new version of the government's "Interventions for Equity" framework.

Jane takes part in regular research and working sessions with practitioners

Her challenge was to ensure that all of ES's materials, including their dependencies, reflected the latest directives on pastoral care and mental health in the context of Scottish Attainment.

Thanks to the new tools promoting engagement and collaboration, Jane and her team are not working in a vacuum. In this instance, she knew from the research that she has close to hand and from the collaboration at local authority and national level, that teachers still feel unprepared to cope with the additional responsibility even though the training was theoretically adequate.

"I feel unprepared and I have a lack of confidence..."

Jane understands their position as the repercussions of getting this wrong could be catastrophic.

The review process happens as a team and Jane collaborates with her ES colleagues

Review and update

When Jane was made aware of the updated policy priorities, she initiated the PL editorial review, as short series of meetings with colleagues across the organization.

The review process is supported by a number of technologies and in particular, the high altitude view of all programs operating in Scotland made possible by the review of content architecture initiated in late 2020.

This gives Jane and her team the ability to see how PL is designed and contextualised, across multiple channels, both in real life and digital, on the ES web estate and beyond.

Jane and her team regularly consult the master dashboard...

Whoever needs to review the performance of the PL can find it on a dashboard that shows the life-cycle status of all PL. This introduces the idea that content has been restructured and rationalised into a single (or almost) server which can provide reporting tools with real-time information.

...which shows them at a glance the status of PL programmes as well as full history of feedback ratings

This visibility of the current state of PL in a complete and easy to understand format, e.g. traffic lights, supports the editorial review. depending on the age of the programme, the dashboard tool also includes a synthesis of the performance data for each item of PL.

Using this tool, Jane can see that while the attainment gap is still large in Scotland, practitioners gave positive feedback at the end of the programme and also in their medium-term "reflection" updates several months later. Practitioners stated that the programme influenced their daily practice.

Sometimes, at this stage of the review, Jane's policy colleague can take advantage of access to this performance information to suggest impact assessments, or consultations.

Jane allows herself a smile as a new policy needn't mean she's not already having an impact with teachers.

Jane confirms that wants to decommission the programme

Once Jane and her team have held the editorial assessment meetings with the relevant education stakeholders, she triggers the "decommissioning" cycle.

The team decides to either update the PL programme, including its materials and its dependencies, or retire it altogether and launch the creation of a replacement programme. With the new system, when Jane updates a programme, its dependencies are automatically updated if they are of a compatible type. Where they aren't of a compatible type, a banner, note or recording is added to the original to indicate the error or out of date content.

In the case of the "Interventions for equity" new policy intent, Jane and her team decided the best approach was to retire the old PL and create a new PL program.

Jane is glad that evaluation efforts and content creation efforts are now happening in cross-disciplinary teams, she gets the sense that working this way helps the organisation get things right.

Figure 15: Future state story 2 – the PL lifecycle and workflow

Opportunities for change

Future state stories - *Stories that bring the vision to life*

Story 2: The PL lifecycle and workflow

Benefits that are realised in this story:

- ✓ It is easier for staff to review, design, create, publish and manage PL
- ✓ Reduce the time to review, design, create, publish and manage PL
- ✓ Improve the quality of PL
- ✓ It is easier to measure and understand the impact of PL on Practitioners and the classroom
- ✓ Reduce the time to measure and understand the impact of PL on Practitioners and the classroom
- ✓ It is quicker and easier for everyone to find relevant PL
- ✓ Engaged Practitioners

Future state stories - Stories that bring the vision to life

Story 3: Findability and relevance

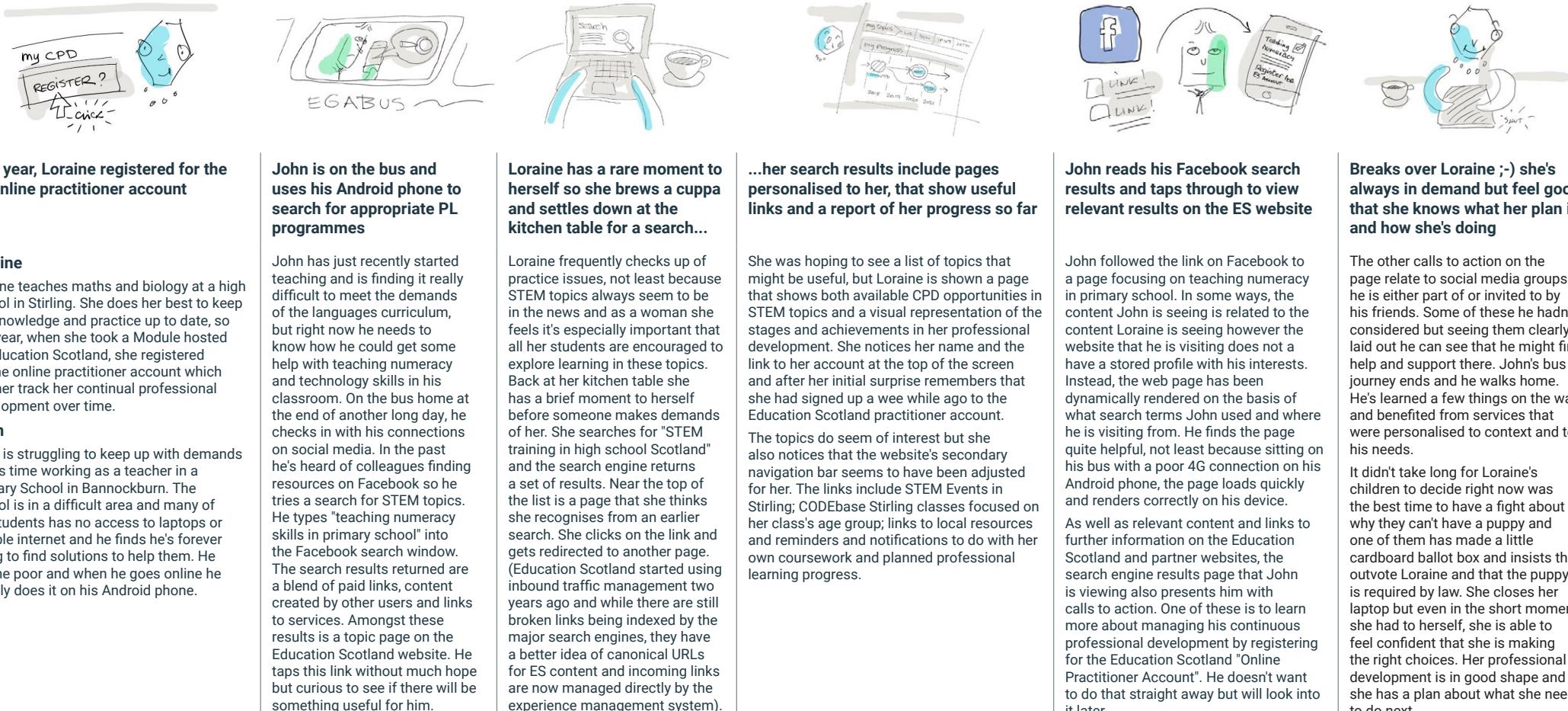


Figure 16: Future state story 3 – findability and relevance

Opportunities for change

Future state stories - *Stories that bring the vision to life*

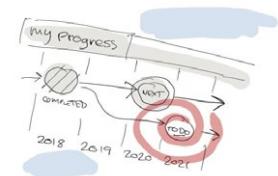
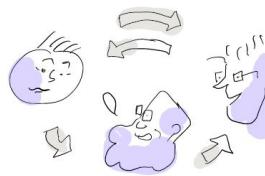
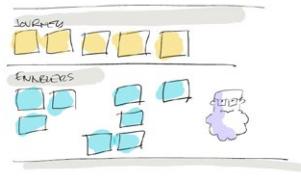
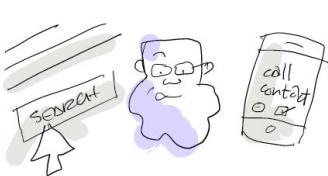
Story 3: Findability and relevance

Benefits that are realised in this story:

- ✓ It is quicker and easier for everyone to find relevant PL
- ✓ Engaged Practitioners

Future state stories - Stories that bring the vision to life

Story 4: Collaborative creation of PL



Graeme searches for ES PL which covers similar themes. He searches across channels and also reaches out to colleagues

Graeme

Graeme is a STEM SEO who is following an ES editorial review of a STEM PL programme. The programme has been decommissioned and Graeme needs to create a new PL programme.

Graeme searches for other existing ES PL, which may cover the same or similar topics. He finds a short computer-based course, that Hannah created 6 months ago, which could be a useful resources to reuse or repackaging into a new programme.

He connects with Hannah, to get her input and expertise and find out how she created the PL (what worked well, not so well)

Before creating the PL, Graeme recruits the services of Tom, an ES person, who has passed the service design accreditation and holds the ES service designer license, and other members of the ES Editorial Team.

Additionally, Graeme invites Maureen, who has provided feedback on the previous (decommissioned) programme, to get involved and help co-design a new programme.

Tom uses new service design tools which help gather his colleagues around the problem and design PL programmes together

Tom facilitates the co-design of the PL with Graeme, Hannah and Maureen. Firstly determining why this PL is needed, what the objectives of it are and how they would measure success, both in terms of practitioner experience and in the classroom.

Graeme sets up a collaborative working environment so he, Tom, Maureen and Hannah can share their findings, ideas, designs and begins to draft the PL.

Tom facilitates the co-creation of the key messages and story board of the PL.

Graeme, Hannah & Maureen and the Editorial Team draft the PL content following the designs they created with Tom adding in audio for visually impaired practitioners.

Graeme's team collaborate from local and remote locations

QA evaluation

Graeme's team is made up of editorial people and educationalists. The team's cross-disciplinary nature means that a traditional create/review QA cycle is no longer required as the work is quality-assured in large part as the team creates it. With KPIs built into the programme and the PL showing up on the master dashboard discussed in story 2 all the people who need it will have the performance data to hand.

As part of the transformation to influence change through engagement, ES has assembled a team of content designers (retraining some internal team members and recruiting some new ones). These content experts will set "acceptance criteria" for the quality, in a manner similar to how editors and sub-editors ensure the quality of a magazine is up to standards.

...it's at times like this Graeme really enjoys his job

Painless publishing

As Graeme works with his colleagues to create the programme, he finds it simple to manage.

He's heard it was a lot more painful in the old days, but he has access to modern tools with one information architecture and one place to find things (and this makes publishing a lot simpler).

The tools he uses are rationalised and simpler and one thing in particular has been well thought out, how colleagues can collaborate around creating both purely digital materials and activities and blended experiences that require organising more real life events or printed paper or a mix of the two.

The new systems means that updates are pushed automatically to those that need them...

Engaging practitioners

In the three years since ES committed to deeper engagement with practitioners supported by technology, the job of the engagement team has become a little easier.

Depending on the programme and its content design, the tools they use will trigger push notifications; initiate automated newsletter updates; write social media posts and inform registered practitioners of the new content if it is relevant to them.

The ES communications team will still need to maintain good relationships with media companies but on the whole, the teams at ES spend more time expressing the intent of their editorial and less time doing repetitive tasks like issuing messages.

...which includes status updates and messages in practitioners' online accounts

In the old days, Graeme would hope that Local Authority representatives would ensure deputy heads in schools contacted practitioners to ensure their involvement with his new STEM PL programme.

Nowadays, the STEM PL programme will appear in practitioner accounts and push notifications to opted-in practitioners will be sent without needing too much further support.

ES is committed to diversity and inclusion and also to reducing the attainment gap. This means that Graeme's programme isn't just consumed online. He gets really positive reviews for his webinars but his tools allow him to manage non-digital, or assisted-digital content like text-only, braille, closed-captioned and voice-only content ensuring his programmes are as inclusive as possible.

Figure 17: Future state story 4 – collaborative creation of PL

Opportunities for change

Future state stories - *Stories that bring the vision to life*

Story 4: Collaborative creation of PL

Benefits that are realised in this story:

- ✓ It is easier for staff to review, design, create, publish and manage PL
- ✓ Reduce the time to review, design, create, publish and manage PL
- ✓ Improve the quality of PL
- ✓ It is easier to measure and understand the impact of PL on Practitioners and the classroom
- ✓ Reduce the time to measure and understand the impact of PL on Practitioners and the classroom
- ✓ It is quicker and easier for everyone to find relevant PL
- ✓ Engaged Practitioners

6

Future state
solutions
architecture

Future state solutions architecture

Solutions architecture diagram

A view of solutions architecture required to support the future state vision of the PL service:

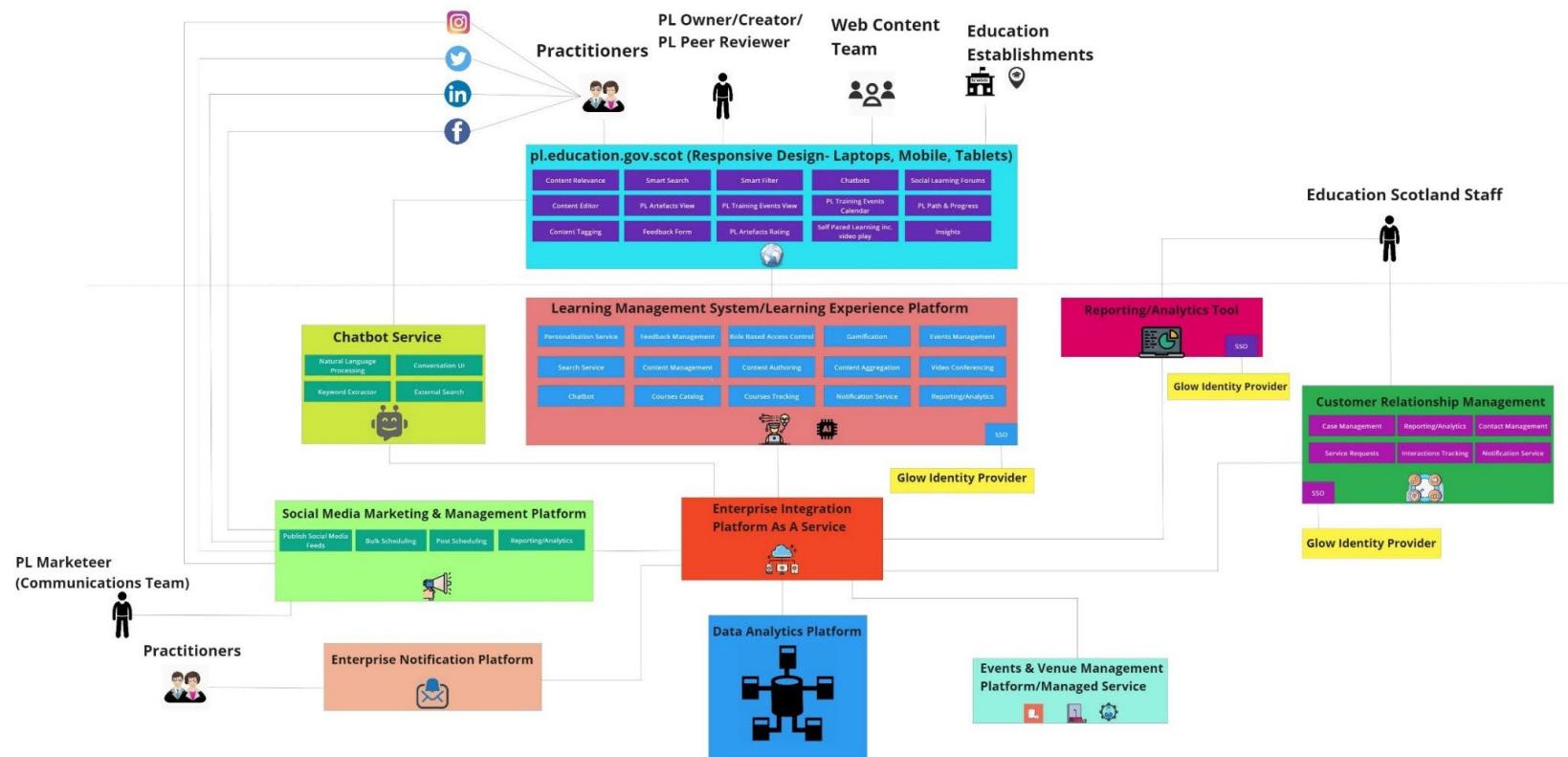


Figure 18: Future state solutions architecture diagram

Future state solutions architecture

Technical components

These components and services are required to enable the future state vision of the PL service:

Component / service name	Description
pl.education.gov.scot	<p>A single website with responsive design (mobile, tablets, laptop) hosting all PL. The website sits on a learning management system / learning experience platform (LMS/LXP). Domain name is just a placeholder and will be determined during the delivery of LMS/LXP.</p> <p>The website will have several features like showing content relevance (personalisation), content editing, content tagging, smart search and filter, feedback and ratings capture of PL artefacts and events. Some of the important features of this new website are shown in the future state solutions architecture diagram.</p>
Learning Management System/ Learning Experience Platform	<p>A learning management system / learning experience platform is a pre-packaged platform software, which can be configured and extended to satisfy the user and business needs. There are lots of learning management systems in the market and Education Scotland would need to evaluate the best LMS/LXP that meets all their user/business needs.</p> <p>Important features that LMS/LXP should provide are shown in the future state solutions architecture diagram.</p>
Chatbot Service/Platform	<p>A chatbot service is a 'software as a service' (SaaS). It will be configured to provide chatbot functionality on the single PL website, allowing website users to type in their queries related to any PL they are searching for.</p> <p>A chatbot platform, which provides the chatbot service, is capable of doing natural language processing and searching the configured sources for answers before responding to the users.</p>

Future state solutions architecture

Technical components

Component / service name	Description
Social Media Marketing and Management Platform	<p>A social media marketing and management platform is used for publishing social media feeds to different social media services.</p> <p>The communications team/PL Marketeer will be responsible for managing the platform. Any content published in LMS/LXP will trigger a marketing feed to different social media services via the social media marketing and management platform.</p>
Enterprise Notification Platform	<p>An enterprise iPaaS is a cloud-based integration platform used to decouple the systems avoiding any point-to-point interactions. This has various benefits including providing cost efficiencies, business agility, removing the need for custom integrations, etc.</p>
Data Analytics Platform	<p>A data analytics platform will store all the analytical data pushed from various platforms shown in the technical diagram.</p> <p>The platform will allow Education Scotland to gather rich insights on PL activities.</p>
Reporting/Analytics Tool	<p>A reporting / analytics tool is a visualisation tool and is configured on top of a data analytics platform.</p> <p>The tool would allow Education Scotland staff to view different reports on PL activities, performance and impact.</p>

Future state solutions architecture

Technical components

Component / service name	Description
Events and Venue Management Platform/Managed Service	An events and venue management platform will allow Education Scotland's event planners to book venues and other artefacts needed to conduct PL events. This may be possible via an integration of LMS/LXP to the events / venue management platform, or a manual service provided by an external service provider.
Customer Relationship Management	A customer relationship management platform will allow Education Scotland staff to manage the cases and contacts related to Practitioners and their PL activities.
Glow Identity Provider	A Glow identity provider is currently used for single sign-on and it is anticipated that this could continue to be used to provide single sign-on capability on some of the platforms shown in the technical diagram.

Further evaluation of all components would be carried out in Alpha and Beta projects.

7

Design principles to guide change

These principles are developed in response to the insights and opportunities outlined and are aligned to Scottish Government's Digital First standards. These will guide the form of any future changes.

Overarching principle:

**Be agile, collaborate
and co-create**

Follow Service Design and
Systems Thinking, to understand
the landscape, the scope of
change and who is impacted by
the service, to ensure what is
designed and delivered meets all
the users' needs

Design principles to guide change

Business principles:

Digital Standards	User Centric	Compliance with the Law	Business Continuity	Protection of Intellectual Property	Governance
The design of services and applications will be user focused and with a presumption of alignment with the technical standards and design principles of mygov.scot	The solution should have the user at the centre and should be primarily based on their requirements and needs. This can be either internal or external users, or both	Enterprise information management processes comply with all relevant laws, policies, and regulations	Enterprise operations are maintained in spite of system interruptions	The enterprise's Intellectual Property (IP) must be protected. This protection must be reflected in the IT architecture, implementation, and governance processes	Robust and responsive governance arrangements that supports accountability, roles and decision-making

Design principles to guide change

Technology principles:

Control Technical Diversity

Technological diversity is controlled to minimise the non-trivial cost of maintaining expertise in and connectivity between multiple processing environments

Seamless Integration

Software and hardware should conform to defined standards that promote the seamless integration of data, applications and technology

Cloud First

The suitability of hosting applications and services in the cloud should be given for all requirements in accordance with Scottish Government guidelines

Use Open Standards and Open Source

Open standards must be used in all solution designs to enable interoperability

Open source software must be compared and considered alongside commercial software when selecting technology solutions

Design principles to guide change

Data principles:

Common Vocabulary and Data Definitions

Data is defined consistently throughout the enterprise and the definitions are understandable and available to all users

Data Security and Information Management

Data is protected from loss, unauthorised use and corruption, through the adoption of international standards and best practice, duly protecting the privacy of personal data and confidentiality of sensitive data

Everyone collaborates to agree information management decisions which support the business objectives

Data is an Asset

Data is an asset that has value to the enterprise and is managed to ensure its accuracy and quality to support informed business decisions

Data is Managed, Shared and Accessible

Data is accessible for users to perform their functions and present a single version of the truth

Users have access to data necessary to perform their duties; therefore, data is shared across enterprise functions and organisations

Design principles to guide change

Application principles:

Pilot New Applications & Services	Reuse Before Buy Before Build	Build Services Not Applications	Multi-channel	Ease of Use	Use Existing Services	Couple Loosely
Build a prototype, test it with users and learn from it	Business applications, system components and data will be reused wherever possible, purchased as commodity solutions if necessary and only built if there is a unique requirement that cannot otherwise be fulfilled.	Applications will be built as a collection of services that expose an Application Program Interface (API) enabling them to be combined to deliver users what they need	The design of new applications and services shall not restrict service consumers from accessing the new functionality from currently known or defined access devices	Applications should be easy to use. The underlying technology is transparent to users, so they can concentrate on tasks at hand	Execution of business processes through the applications is made as simple as possible, without unnecessary steps imposed by the solution	Keep apps loosely coupled to avoid future rework when systems are retired in the future

8

Next Steps

Next steps

From Discovery to Alpha

The next phase after Discovery is Alpha. An Alpha scope is usually, but not always, a subset of the MVP, the minimum viable product. There are many opportunities for improvement enabling Education Scotland to achieve the vision described in section 5. When designing any one of the opportunities, it is impossible to predict everything upfront.

An Alpha will allow Education Scotland to gather user feedback, learning and user research from solution and service designs at the earliest possible stage. It will also help test and validate the use of new technologies and methodologies.

The objective of the Alpha phase is to build a working prototype. This will be used by stakeholders to:

- Gain greater understanding for the future Beta and Live service
- Consider the wider impact on existing business practices and culture
- Test the design approach
- Test some technologies involved in the service
- Begin to form the team
- Gain a shared understanding of the service at coding and integration levels
- Understand what or who we will need in place to deliver a Beta.

The Alpha phase will continue to build upon and analyse the research that has already been undertaken by the Discovery project team on user needs and leverage this to set up an open engagement process with stakeholders.

Alpha and Discovery candidates

The Discovery project team has identified one opportunity that could progress to Alpha and one that should be explored in Discovery.

Next steps

Alpha and Discovery candidates

Alpha candidate: Create a collaborative culture and environment

Problem statement | How might Education Scotland create a collaborative culture and environment to make it easy to create, publish and maintain impactful, compliant, relevant PL?

User needs | These user needs emerged from the current state and future state analysis

As a PL Creator...	As an SEO...	As a member of ES staff...
<p>I need to be able to create relevant PL in a timely manner So that it gets to Practitioners when they need it</p> <p>I need to feel confident in delivering PL in new ways and platforms So that I can provide the best PL experience to Practitioners</p> <p>I need to know what feedback tools are available from knowledge management So that I use the right tool for the job</p> <p>I need to have the right expertise to deliver PL So that ES PL is of high quality</p>	<p>I need to be able to have others in my team access sensitive information So that it is accessible if I am unexpectedly off</p>	<p>I need to have a clear view of engagement So that I know who in my team has visited which Practitioners, schools, LAs</p> <p>I need to be able to access PL using my ES laptop So that I don't need to use my own potential unsecure personal devices</p> <p>I need to be able to easily share documents and information with colleagues So that we can re-use resources where possible so we are not reinventing the wheel every time.</p> <p>I need to be able to feel confident using technology to provide PL So that I can provide the best PL to Practitioners</p> <p>I need to be able to share good practices with my colleagues So that we are doing things in the right way and sharing our learning.</p> <p>As a member of ES staff I need to be able to feel confident in designing quality PL So that I can provide the best PL to Practitioners</p>

Next steps

Alpha and Discovery candidates

Alpha candidate: The team

The Alpha requires a small core team capable of rapidly iterating the solution based on input from stakeholders, including all the Education Staff who interact with the PL Delivery journey and the end users, i.e. Practitioners. For this Alpha, a team of 7 FTE staff is assumed; the roles are described below. The Alpha phase would last 13 weeks, containing a 1 week Sprint 0 and 6 x two week Sprints, 455 Man Days of effort is assumed (based on 7 FTEs).

Role	Description of responsibilities
Product Manager	Manages the development of complex products, coaches and leads teams in Agile practices, applies knowledge of design, technology and data principles and assists digital to their product and prioritises and mitigates product constraints. Owns and resolves product challenges and maintains user focus during product development. This role is responsible for the overall design of the product, prioritising feature development, managing the backlog of features and communicating how the product will meet the user needs.
Lead Service Designer	Works with service managers and programme directors to develop design concepts and assures the quality of design delivery of highly complex services. The role is responsible for implementing evidence based service design and requires the individual prioritise and mitigate constraints, plus make and justify decisions characterised by high levels of risk, impact and complexity. The individual also builds consensus between organisations, changes organisational structures to fixable and sustainable designs and marries business needs with innovative analysis.
User Researcher	Understands and applies appropriate user research skills and methodologies for different stages of the product life cycle and situations, which includes all kinds of users in appropriate research activities to help teams deliver accessible services. Turns research data into clear findings that inform product decisions.
Business Analyst	Identifies, defines and manages the objectives of a business. Specifies requirements from both a business and user perspective to enable agreed changes to be implemented effectively. Analyses and articulates information to solve product concepts and problems, explores and identifies opportunities for product improvement and represents product and business scenarios to aid product development.
Technical Architect	Provides technical leadership and takes responsibility for advising on architectural design. Their role will involve designing the detailed technical solution, identifying and mitigating technical risk and ensuring the engineering work meets the design and the agreed standard.
UX Designer	Build wireframes, work closely with Content Authors to incorporate content into the Wireframes wherever possible. Work with User Researchers to incorporate feedback from user research into the wireframes where project timescales allow.
Content Designer	Work on the end-to-end journey of a service to help users complete their goal and government deliver a policy intent. Work with User Researcher and UX Designer.

Next steps

Alpha and Discovery candidates

Discovery candidate: Improve the short-term feedback loop

Problem statement | How might we more comprehensively analyse the Practitioner's PL experience?

User needs

As a PL Creator...	As an SEO... provider...	As a member of ES staff...	As a PL Evaluator...
<p>I need to know what feedback tools are available from knowledge management</p> <p>So that I use the right tool for the job</p> <p>I need to know where to find guidance on feedback tools</p> <p>So that I can use the feedback tools effectively</p> <p>I need to see a single view of all the learning triggers (such as inspection reports)</p> <p>So that I have all the information needed when researching what support is needed</p> <p>I need to be able to automate medium term feedback requests to users of PL</p> <p>So that I can ask for that feedback without taking up lots of time asking for it</p>	<p>I need the analysis done by the scrutiny team to be easily accessible</p> <p>So that I can use the data to identify areas that require support</p> <p>I need to easily see schools doing well or that need support</p> <p>So that I can identity case studies or PL needs</p> <p>I need an easy way to extract data from notes of visit</p> <p>So that I don't waste time</p>	<p>I need to know that visit data is being consistently recorded</p> <p>So that I can be confident that stats are accurate</p> <p>I need an easy way to evaluate and understand the impact of the PL we provide</p> <p>So that I can be confident that this PL has had a positive impact on teaching in the classroom.</p> <p>I need to be able to see a view of other peoples activity in 'Notes of Visit'</p> <p>So that I know if my colleagues have interacted with a school or LA and what activities took place</p> <p>I need to have an accessible and usable feedback form tool</p> <p>So that I can create feedback forms myself without having to ask another team for help</p>	<p>I need to consistently create, store and search for feedback</p> <p>So that there is easier analysis and reporting of feedback data</p>

Next steps

Alpha and Discovery candidates

Discovery candidate: The team

The Discovery requires a small core team, comprising of the same 5 FTE roles that delivered this Discovery, described below.

The Discovery phase would last 8 weeks, 200 Man Days of effort is assumed (based on 6 FTEs).

Role	Description of responsibilities
Product Manager	Manages the development of complex products, coaches and leads teams in Agile practices, applies knowledge of design, technology and data principles and assists digital to their product and prioritises and mitigates product constraints. Owns and resolves product challenges and maintains user focus during product development. This role is responsible for the overall design of the product, prioritising feature development, managing the backlog of features and communicating how the product will meet the user needs.
Lead Service Designer	Works with service managers and programme directors to develop design concepts and assures the quality of design delivery of highly complex services. The role is responsible for implementing evidence based service design and requires the individual prioritise and mitigate constraints, plus make and justify decisions characterised by high levels of risk, impact and complexity. The individual also builds consensus between organisations, changes organisational structures to fixable and sustainable designs and marries business needs with innovative analysis.
User Researcher	Understands and applies appropriate user research skills and methodologies for different stages of the product life cycle and situations, which includes all kinds of users in appropriate research activities to help teams deliver accessible services. Turns research data into clear findings that inform product decisions.
Business Analyst	Identifies, defines and manages the objectives of a business. Specifies requirements from both a business and user perspective to enable agreed changes to be implemented effectively. Analyses and articulates information to solve product concepts and problems, explores and identifies opportunities for product improvement and represents product and business scenarios to aid product development.
Technical Architect	Provides technical leadership and takes responsibility for advising on architectural design. Their role will involve designing the detailed technical solution, identifying and mitigating technical risk and ensuring the engineering work meets the design and the agreed standard.

9

Appendices

Appendices

Appendix 1: Stakeholder engagement tracker

Stakeholder name	Organisation Role	Input to Project	Involvement
Dawn Adams	Glow Product Owner	Overview of Glow in the PL space	Skype Call 1/6 & 9/6
David Burgess	PLL - Lead specialist	Walkthrough of PLL and processes & Co-creation session	Skype calls 22nd May & 10/6
Val McIver	Content Team Manager	Walkthrough of content team involvement in uploading PL content on variety of platforms	Skype call 27/05 & 10/6
Louise Henderson	Technical Product Lead - Digital	Overview of role and how this fits into PL space	Skype call 26/05 & 27/05 & 9/6
Nicola Sykes	SEO - Community Learning & Development	Overview of why/how creating PL artefacts	Skype call ?
Lee Dunn	PLL - Lead Specialist	Walkthrough of PLL and processes & Co-creation session	Skype call 26th May & 10/6
Callum MacFarlane	Attainment advisor/SAC	Overview of why/how creating PL artefacts	Skype call 28/5
Ian Menzies	SEO - STEM	Overview of why/how creating PL artefacts & co-creation session	Skype call 28/05 & 1/6 & 9/6
Rachel Neil	PLL - Business Support Assistant	Walkthrough of journey map and overview of their role within PL creation	Skype call 1/6 & 9/6
Claire McAndrew	Evaluation officer - PLL	Walkthrough of journey map and overview of their role within PL creation	Skype call 28/05 & 9/6
Kirsty McFaul	SEO - Digital Learning and Leadership	Overview of why/how creating PL artefacts & co-creation session	Skype calls 27/05 & 29/05 & 9/6
Jim Fanning	Head of Emerging Technologies	Overview of role and how this fits into PL space	meeting booked 27/05 & 9/6
Stephen Edgar	Koweldge Management	Walkthrough of how KM support rest of business in respect of feedback and PL	Skype call with other project teams 4/6
Louise Glen	SEO - Regional Improvements	Overview of why/how creating PL artefacts & co-creation session	Skype call 1/6 & 9/6
Elizabeth Sommerville	Attainment advisor/SAC	Overview of why/how creating PL artefacts & co-creation session	Skype call 28/05 & 10/6
Lesley Walker	Lead Specialist - PLL	Overview of role and how this fits into PL space	Skype call 20/5
Lesley Whelan	Leadership and Learning Development	Overview of role and how this fits into PL space	
Peter McBride	Digital	Overview of ES and professional learning	Skype call 9/6

Figure 19: Stakeholder engagement tracker

Appendices

Appendix 2: Service components

Through stakeholder interviews and documentation review, the team mapped out the key service areas of the very high-level current state processes. Each of the processes included below represents a key stage in the overall designing, creating, managing, evaluating and publishing of content. From these high-level processes, the team identified a number of pain points, which were used to support their opportunities for improvement recommendations.

2.1 High-level route for the creation, publication and consumption of PL

This first process provides a general view of the high-level route for the creation, publication and consumption of PL. Stakeholder discussions allowed us to identify that there are two ways of content being published and consumed, either online to one of several ES platforms or through the delivery of a physical event.

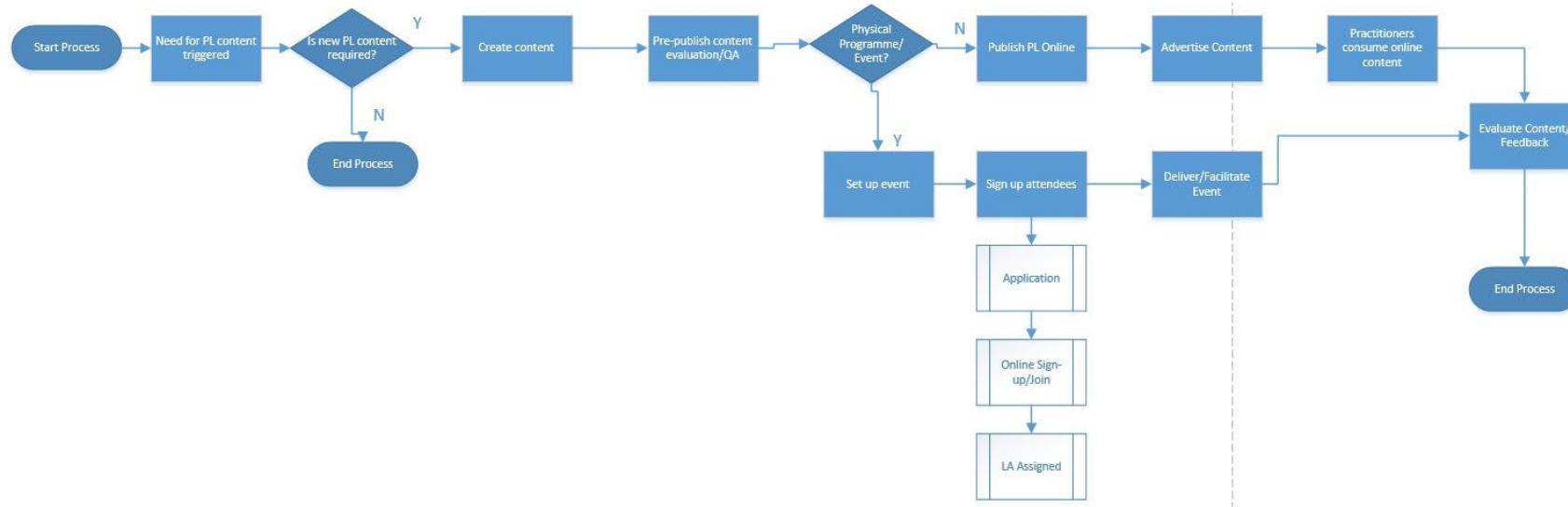


Figure 20: General view of the content lifecycle within Education Scotland

Appendices

Appendix 2: Service components

2.2 Online and external content publication and consumption process

Below is a route map view of both the online and external content publication and consumption process. Content published online can be subdivided into a formal route and an informal route.

The formal route covers the six main Education Scotland platforms and the informal route involves content that is shared amongst practitioners through their preferred informal means of engagements, such as Glow Communities, SharePoint sites and Microsoft Teams set up by teachers.

As we have not spoken with Practitioners, the informal route is based on insight elicited from Education Scotland staff and stakeholders during the stakeholder interviews.

The external route deals with the physical delivery of programmes for consumption. Stakeholder interviews indicate that Practitioners gain access to these physical events by one of three ways; by application form; signing up online via a PL website; or are volunteered by their Local Authority.

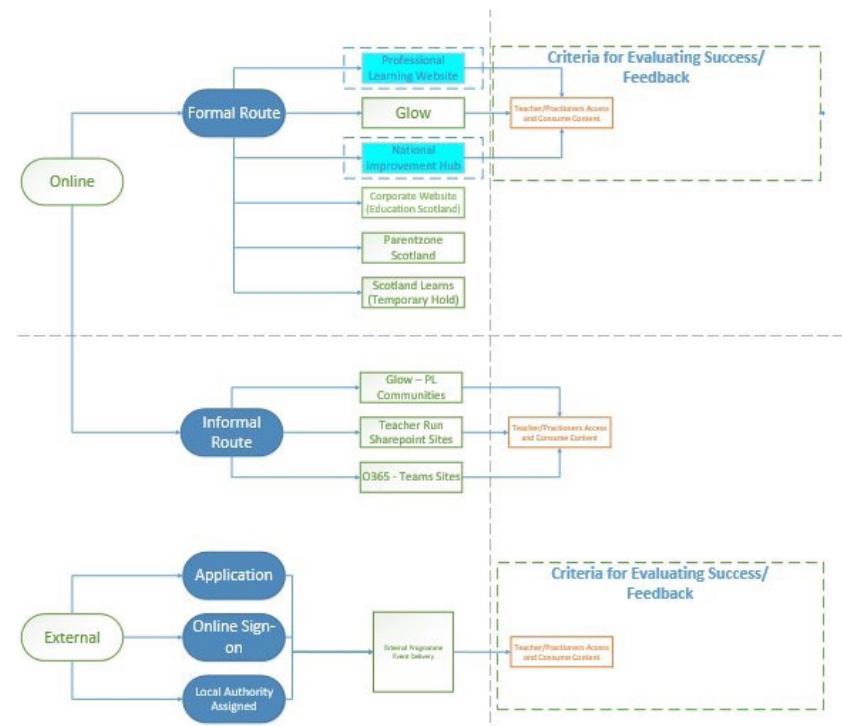


Figure 21: Microscopic view of Content Publication Route – Internal and External

Appendices

Appendix 2: Service components

9.2.3 Content publication route for the National Improvement Hub (NIH)

The following process map shows how content is published on the National Improvement Hub (NIH). It details the stages that ES content creators must go through before their content can be published to the website.

This process also highlights the various teams that have a hand in ensuring the content is up to a suitable standard, when the PL is originally publishing and throughout the entire PL lifecycle.

Teams involved in this process include; PL content creators, NIH Publishing Team, Marketing Team, Comms Team and Content Evaluators.

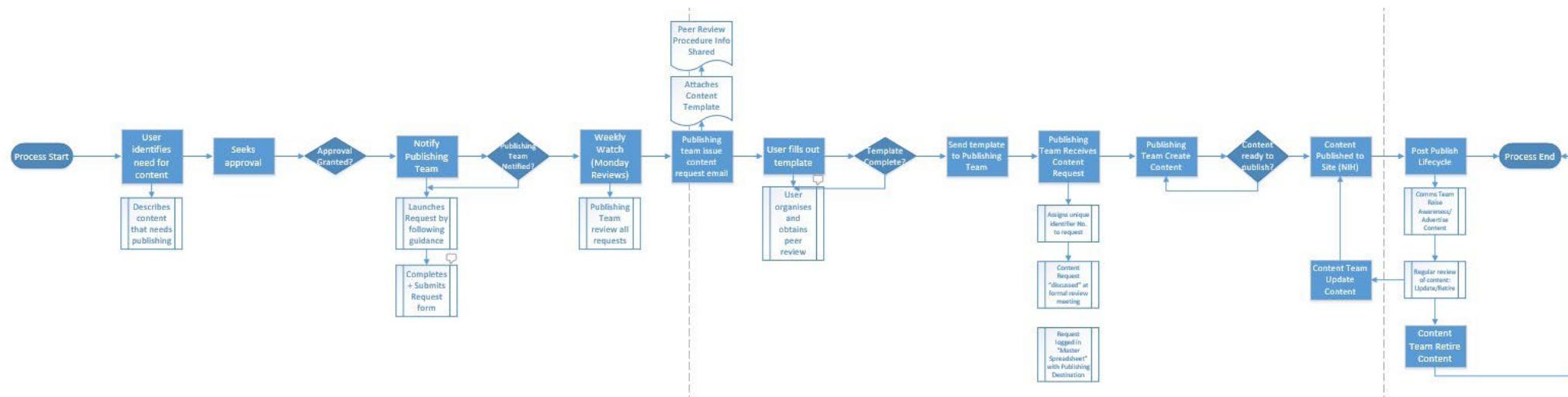


Figure 22: Content Publication Process for the National Improvement Hub Website

Appendices

Appendix 2: Service components

9.2.4 Content trigger and creation area

Stakeholders confirmed there are typically three drivers that trigger the need to create PL; policy, Practitioner demand, and requests from schools and local authorities.

There are a number of teams responsible for creating PL. Primarily, PL is created from within the Professional Learning Directorate, however, a number of other business areas also produce PL from time to time. The Senior Education Officers (SEOs) from within Regional Working and Curriculum for Excellence are two examples of other business areas identified as being PL creators.

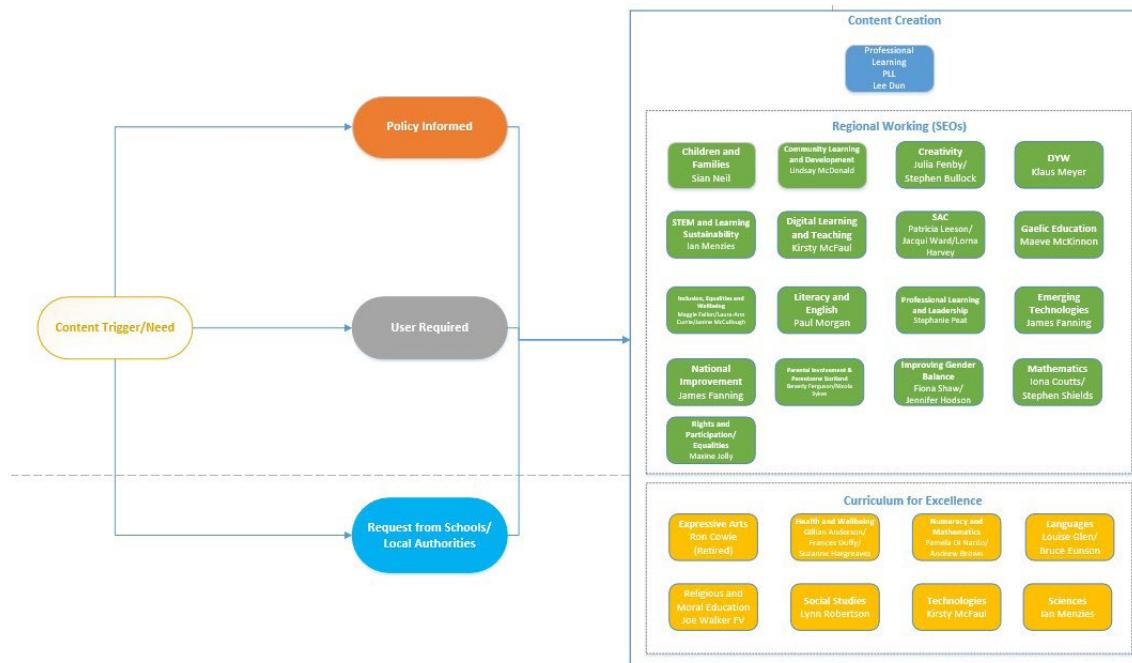


Figure 23: Content trigger and content creator map