REGIONAL PATHFINDERS

Regional Tertiary Pathfinders: A System Level Report

Scottish Funding Council
Comhairle Maoineachaidh na h-Alba

Cover Photos:

University of Aberdeen

Borders College

SRUC

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SECTION 5:
Future Focus: Maintaining Ambition Beyond the Pathfinder Programme

This section outlines the key strategies needed to sustain the collaboration and momentum built through the Pathfinder programme. It examines which elements can be scaled or adapted for use in other regions or sectors and addresses the complexity of scaling within multi-organisational partnerships. The focus is on managing adaptive change in complex systems, ensuring continuous collaboration through regional planning, and emphasising the importance of leadership, data-sharing agreements, and inter-regional collaboration for long-term success.

Scaling and spreading change within complex systems

The systems we operate in are characterised by uncertainty, unpredictability, and emergence. Scaling change within such a system or spreading a change or innovation across these systems is hard, especially when working through multi-partner collaborations.

Scaling change involves full-scale implementation of pilot projects. Spreading change typically refers to adapting an initiative for a different context rather than replicating it. This adaptation involves addressing infrastructural challenges across an organisation, region, or system.

In practice, these concepts often overlap, but ideas or changes that spread more quickly tend to possess certain characteristics. Research by Everett Rogers on the diffusion of innovations across many sectors identified five key factors that increase the likelihood of successful spread:

1. Clear advantage compared with current ways.

2. Compatibility with current systems and values.

3. Simplicity of change and its implementation.

4. Ease of testing before making a full commitment.

5. Observability of the change and its impact.

Some changes, particularly those that are complex, multi-faceted, or represent a significant shift from current practice, are harder to spread. In these cases, more resource may be needed to drive understanding and buy-in, or ambitions for the scale of spread may need to be adjusted in light of the challenges.

Achieving and sustaining change requires effort, resources, and a willingness to challenge deeply held cultural or professional practices. To work effectively, change involves spending money, diverting staff from their daily work, and taking risks, which can be difficult for organisations to commit to especially at time of budget pressure.

Change is dynamic. There is no simple or universally replicable way of implementing change at scale in a complex system. An educational approach or pathway that works efficiently in one setting may not work at all in another. Those adopting an idea or change often need to adapt it to fit their local or regional situation. Therefore, in spreading change it is important to focus on the key principles of the innovation, rather than specific solutions, which may not work as effectively in other contexts.

Complex systems adapt through self-organisation. This relies on individuals and teams making continuous adjustments to deliver changes in ways that fit local circumstances and resources. In making these adaptations teams need to bring people together to become aware of interdependencies and the relationships between different parts of the system and work out how to connect processes and organisations together to enable meaningful activities to be undertaken across the system. In this context, both scaling and spreading change must be managed through adaptive processes that account for the unpredictable and evolving nature of the work and wider context.

Lanham and colleagues, for example, recommend the following principles when planning major change programmes in complex systems:

Acknowledge unpredictability: designers of interventions should contemplate multiple plausible outcomes and tailor interventions to the local context. Implementation teams should embrace surprises as opportunities.

Recognise self-organisation: designers should expect their designs to be modified, perhaps extensively, as they are taken up in different settings, Implementation teams should actively capture data and feed it into the adaptation process.

Facilitate interdependencies: designers should develop methods to assess the nature and strength of interdependencies within the system. Implementation teams should attend to these relationships, reinforcing existing ones where appropriate and facilitating new ones.

Encourage sensemaking: designers should build focused experimentation into their designs; implementation teams should encourage participants to ask questions, admit ignorance, explore paradoxes, exchange different viewpoints, and reflect collectively.

What can be scaled and/or spread from the Pathfinder Programme?

Across the Pathfinder projects, several key elements emerged that demonstrate significant potential for scaling and spreading. These components, present in multiple projects, highlight the potential for replicating and adapting successful models of collaboration, engagement, and programme development across different regions, institutions, and sectors.

Inter-Regional Collaboration

A consistent feature across all projects was the collaboration between institutions in different localities, aligning their programmes and resources to serve the broader region. This approach has not only reduced duplication but also created more cohesive learning pathways. Expanding this model to other sectors and regions offers the potential to improve coordination, ensuring consistent and accessible educational opportunities across local authorities.

Role of the Project Co-ordinator

The Project Co-ordinator played a critical role in ensuring project success by facilitating collaboration, engaging the right stakeholders, and maintaining continuous progress. The success of this role demonstrates its potential to be scaled and adapted for use in other projects, ensuring smooth facilitation of partnerships and sustained momentum in multi-institutional collaborations.

Data Sharing and Collaborative Analysis

Several projects benefited from data-sharing agreements that allowed institutions to analyse application and enrolment data together. Shared analysis helped align recruitment strategies, improve learner outcomes, and enhance marketing efforts. The model of using shared data to drive collaborative insights and decision-making can be scaled to other institutions, sectors, or regions, offering a framework for improving alignment between educational programmes and market needs.

Cross-Institutional Dialogue at Multiple Levels

A key feature of projects was regular dialogue between senior leaders, heads of departments, and professional service teams (including recruitment, admissions, and marketing). This dialogue enhanced collaboration at multiple levels, ensuring that institutions were aligned in their goals and activities. The multi-level dialogue model can be adopted by other institutions aiming to build closer working relationships across departments and leadership levels.

North East Pathfinder Projects: Scaling and Spreading Potential

NESA Energy Transition Skills Pathway

The NESA Energy Transition Skills Pathway project shows how regional collaboration between educational institutions and industry stakeholders can create scalable solutions that address critical skills gaps in the energy sector. This programme of work showcases how the alignment of industry needs with educational programmes can provide a model for wider application across both geographic regions and other sectors facing similar workforce challenges:

Scaling the Energy Skills Tool

The NESA energy interactive tool has significant potential for expansion and scaling, reaching a wider audience beyond its initial focus on specific areas within the energy sector in the North East of Scotland. It can be adapted to cover more areas of the energy industry or even applied across other sectors, making it a powerful resource for learners in various industries.

As a scaled-up version with additional job roles and sectors included, the tool could have a far wider reach, contributing to sustainable improved learner outcomes across Scotland and the energy industry. It could apply to all levels of learning, from school education to tertiary education, and even upskilling/reskilling.

Whilst the tool is focused on the NESA institutions and is place based to the North East of Scotland, its benefits have the possibility to impact a far wider audience. Learners across Scotland can learn from the tool, which also includes information for learners from the Rest of UK and abroad, in mapping their qualifications to those cited in the tool. The general course information is transferable, and whilst the focus remains on the NESA institutions, the knowledge gained from the tool could be transferred to other Scottish and UK institutions.

NESA Partnership

The partnership model led by NESA is unique, with NESA taking a leading role in coordinating collaboration between the three major educational institutions in the North East of Scotland. This effort, supported by Skills Development Scotland and Energy Transition Zone Ltd, has allowed these institutions to combine resources, expertise, and infrastructure, contributing towards unified and impactful educational offerings that directly align with both local and global energy sector needs.

While not a Pathfinder project output, the NESA leadership approach could be scaled and applied in other industries where cross-institutional collaboration is required to tackle sector-specific skills gaps. This model of partnership-led governance and decision-making shows how a leading organisation like NESA can drive multi-institutional.

Industry Engagement

The NESA project worked closely with industry stakeholders, ensuring that all programmes and tools were aligned with the practical skills required by the energy sector. Industry consultation played a central role in determining key career pathways, with six initial roles being identified in the pilot tool. By working directly with energy companies and industry bodies, NESA ensures learners are equipped with the skills needed for employment, reskilling, or upskilling in the energy transition sector. This industry engagement approach is a central aspect of the project's success and can serve as a model for expanding similar programmes into other sectors or regions.

Learner Testing and Engagement

Learner feedback was central to the tool's development, ensuring it remained user-friendly and relevant. This process of continuous feedback allowed the project to adapt and evolve according to learners' needs and industry demands. The learner-centric development process will remain crucial for its success if the tool is scaled and spread in other educational contexts.Learner input drives improvements and keeps resources relevant.

Enhancing the Senior Phase

This pathway model has potential for scaling and spreading, with key elements that can be adapted and expanded across more institutions and local authorities:

Approach to Strategic Working Group

The project is built on a Strategic Working Group (SWG) approach that brought together key partners from NESCol, RGU, University of Aberdeen, and the local authorities of Aberdeenshire and Aberdeen City. This forum allowed for regular collaboration and joint decision-making, creating a formal structure for addressing shared goals across multiple work areas.

The SWG approach engaged multiple local authorities and demonstrated that joint pathway planning is beneficial in aligning the educational offer across an entire region. By coordinating senior phase education, the project has shown that regional collaboration is an effective way to meet the diverse needs of learners and institutions. This model offers a framework for multi-partner collaboration. The clear engagement of both educational institutions and local authorities ensures that the project is grounded in local needs and could be spread to other geographic areas.

Photo: North East Scotland College

Enhanced Mapping of Opportunities

One of the project's key outcomes was the creation of a map of senior phase opportunities across more than one local authority. This identified gaps and areas of overlap in provision, highlighting where existing programmes could be streamlined or expanded. The mapping approach can be applied to other regions, providing a coherent view of educational opportunities for learners.

Joint Approach to Promotion of Opportunities

The project established a joint approach to promoting senior phase opportunities across the three NE institutions. This involved coordinating outreach efforts to ensure that students and families had access to clear, cohesive information about educational pathways, and consistent messaging. By joining up resources and collaborating on outreach, this integrated promotional model can be replicated and scaled in other regions, helping institutions better inform students about their choices.

Model of Testing and Piloting

The project employed a model of testing and piloting small-scale outputs, such as the Winter Leavers Programme and enhanced HNC pathways, before scaling them up based on feedback and success. This flexible approach made sure new courses were responsive to local needs and allowed for improvements before broader implementation. This pilot-based model offers a framework for other regions to test and adapt their provision before committing to larger-scale rollouts.

Enhancing and Coordinating the Region's Simulation Infrastructure for Health and Social Care Education

This project demonstrates significant potential for scaling and spreading, both within and beyond the health and social care sector:

Approach to Partner Engagement

The Grampian Interprofessional Simulation Group brought together over 20 partners, including NHS Grampian, RGU, NESCol, and the University of Aberdeen, to identify gaps, needs, and opportunities in simulation education. This unique interprofessional collaboration, spanning institutions from Aberdeen, Aberdeenshire, and Moray, helped ensure regional challenges were addressed in a coordinated manner.

Although the focus was on health and social care, the model can be adapted to other sectors, such as digital health or green technology, where similar workforce needs exist. The development of Simulation Education Days, focused on immersive, practical training, further demonstrated the flexibility and scalability of the approach.

This multi-partner inter-professional collaboration provides a blueprint for other regions. By joining up goals and sharing resources, the project drove sustainable educational development, providing a scalable model that can be replicated across sectors.

Simulation Education Days

The project introduced Simulation Education Days, which became a platform for delivering practical training sessions. These days allowed for innovative approaches to simulation delivery, engaging participants across various institutions to improve their skills in real-world settings. This model is adaptable and can be implemented in other sectors or regions where hands-on training and simulation are important for workforce development.

Photo:Robert Gordon University

Data Collection/Analysis and Mapping of Simulation Resources

The project introduced an innovative approach to data collection and analysis, starting with a baseline study of existing simulation education resources. By gathering data from all partners and mapping it against regional needs, the project laid the foundation for ongoing improvements and data-driven decision-making.

One of the key outcomes of this process was the creation of a regional database that mapped simulation resources, highlighting current infrastructure and available facilities. This map improved information sharing and enhanced the coordination and use of simulation facilities among partners. The approach to mapping can be replicated in other sectors or regions where resource sharing and infrastructure coordination are key for delivering educational provision.

Developing Demand-Led, Aligned, and Sustainable Pathways

This collaboration provides a model for other institutions to learn from, providing a roadmap for joint curriculum design and effective resource sharing:

Cross-Institutional Dialogue at Multiple Levels

Regular dialogue between institutions was a key component, as it ensured collaboration from senior leadership to operational teams. The Strategic Working Group included members of the Executive, Heads of Sector, and Deans of School, which improved alignment at a high level. Engagement also extended to professional service teams, such as student recruitment, admissions, and marketing, creating a multi-level partnership that deepened working relationships between NESCol and RGU. The multi-level collaboration model can be scaled and could be scaled and spread to other institutions seeking to foster cross-institutional collaboration at all levels of their organisations.

Data Sharing Agreements and Sharing Marketing Insights

A crucial element of the project was the data-sharing agreements between NESCol and RGU. By sharing application and enrolment data and holding regular meetings to collaboratively analyse it, both institutions were able to align recruitment strategies, improving local student recruitment. The data-sharing model demonstrated in this project can be spread and adapted to other institutions, offering a framework for data-driven decision-making to enhance recruitment efforts. Shared marketing insights also informed both institutions and can be used to guide other regions in enhancing data-driven student recruitment efforts.

Photo: Dumfries and Galloway College

South of Scotland Pathfinder Projects: Scaling and Spreading Potential

Developing a joint prospectus for learning and innovation in the land-based sector

This project provides models for joint curriculum design and strategic partnerships that can be adapted to other sectors and regions:

Joint Prospectus

The model of co-designing a curriculum can be applied in other sectors where institutions can collaborate to provide aligned pathways that meet regional workforce demands.

Strategic Agreement of Intent

SRUC and Borders College formalised their partnership through a strategic agreement, ensuring ongoing collaboration in delivering land-based education. The approach supports joint planning, resource sharing, and curriculum development. This model of formal partnership could be adapted by institutions in other sectors, where multiple institutions seek to collaborate to support workforce development.

Photo: SRUC

Place-Based Innovation Broker

The project's innovation framework linked education with local industries, using an innovation broker to ensure the curriculum was responsive to regional demands. The development of the Professional Development Award (PDA) in Therapeutic Horticulture showcased the project's focus on place-based innovation. The model can be adapted to other sectors to support alignment of education provision with the skills needed for sustainable regional development.

Wider Regional Partner Engagement

Collaborating with South of Scotland Enterprise (SOSE) and the South of Scotland Education and Skills Strategic Coordination Group (ESSCG) ensured the project's outcomes linked to regional priorities and were sustainable long-term. This partnership model supported strategic planning and implementation. Similar partnerships between educational institutions and key regional stakeholders can be spread across Scotland to create educational pathways that are responsive to local industry needs and regional priorities.

West of Scotland Educational Pathways

This project established a model for collaboration that can be spread to other regions:

Collaborative Portfolio Planning

The project developed a collaborative portfolio planning process to create new degree pathways that addressed regional educational needs. By aligning curricula across institutions, the project reduced duplication and streamlined education provision. This model can be scaled and applied in other regions, helping institutions meet local workforce needs more efficiently.

Data Sharing Agreements

Data-sharing agreements enabled both institutions to collaboratively analyse enrolment and application data. Regular meetings helped link recruitment strategies, improving efforts to attract local students. The success of using shared data to inform recruitment and marketing strategies can be scaled beyond Dumfries and Galloway, outlining how joint data initiatives can enhance local student recruitment and inform learners about educational opportunities more effectively.

Digital Pathfinder

This project can serve as a scalable model for other regions or sectors looking to strengthen digital skills and future-proof their workforces.

Partner Engagement Approach

The project built on previous collaboration efforts from the South of Scotland Digital Skills Hub, bringing together key partners from local authorities, education institutions, industry representatives, and organisations like Developing the Young Workforce (DYW) and Skills Development Scotland (SDS). The collaborative model supported by a large network of partners can be replicated in other regions for similar cross-sector programmes of work.

Digital Skills Provision Map

A key output of the Digital Pathfinder was the creation of the Digital Skills Provision Map (DSPM) - an interactive tool developed in partnership with employers to help them locate and access local digital skills support and training. The map improves accessibility to training resources and can be expanded or replicated in other sectors to map skills provision for local businesses. The DSPM provides a clear, scalable framework for linking regional employers with relevant educational pathways.

Scaling and spreading 'Meet the Learner' Events

The 'Meet the Learner' events successfully engaged school and college students with digital pathways, showcasing learner journeys from school to university level. These online events, initially focused on the South of Scotland, offer a spreadable model for engaging learners in other regions. An innovative approach to CIAG, the flexibility of the online format ensures that educational opportunities can be promoted more inclusively across geographic boundaries, making it a strong candidate for replication in other subject areas or regions.

The role of SFC in sustaining Pathfinders impact

In the context of reform, it is important to consider short, medium and longer-term actions for SFC to sustain and spread the impact of Pathfinders. The Programme for Government 2024/25 states that the Scottish Government will "lead a new, national approach to skills planning and work with partners to strengthen regional approaches – bringing […] partners together to ensure the system is responsive to regional and national skills needs". Achieving this will require significant collaboration between public bodies and Government, and SFC is well positioned to draw on insights from the Pathfinders to enhance collaboration and improve the responsiveness of the education and skills system. Moving forward, SFC can consider:

Enhancing our role in regional partnerships to identify and respond to regional priorities

- Education and skills providers are at times not brought into planning early enough. Enhancing SFC's regional role could help create a more receptive authorising environment, similar to the Pathfinders approach, by enabling SFC to work closely with institutions to support deeper collaboration and improve joint planning and delivery of provision.

- Building on the Pathfinders approach, SFC can provide advisory support, facilitate networking opportunities, and offer strategic guidance to help institutions develop alliances and leverage external funding sources, such as through local or regional partnerships.

SFC can support and recognise effective collaborations by conducting reviews, developing case studies, and sharing best practice. Specifically, SFC could undertake subject or thematic reviews on a national or regional basis across groups of institutions to provide insights into the coherence of provision.

What will sustain the collaboration in the long run?

Developing a shared understanding of how to work together within the learning, skills and economy regional planning structures

Avoiding over-reliance on individual relationships, which can be put at risk due to staff turnover – take a systems-based approach instead – there is a role for SG and SFC in creating the conditions for the system to work effectively.

SFC continuing its role catalysing, facilitating change and considering how best to incentivise collaboration and curriculum transformation within existing funding limits.

Recognising that there is an institutional cost associated with co-ordination and appropriately resource the partnership element of the work.

A dual focus on doing things together and maintaining the relationships that underpin joint delivery.

Discussing and agreeing attitude to risk – how open are partners to exploring and testing innovative solutions?

Meaningful buy-in from leaders at all levels, to enable and encourage staff to take the time required to build relationships and explore opportunities for deeper collaboration.

Regular review points (as built into the Pathfinder programme) where partners step back and review, reflect and adapt together.

Facilitate better liaison with employers e.g.

- Encourage more industry engagement in curriculum
- Wider range of work-based learning opportunities

Improve data sharing e.g.

- Create central data sharing agreements and data itself to reduce institutional burdens
- Have overarching tracking data for all

Continuing to ask the questions:

- How far will what we are proposing meet learner, employer and societal needs?
- To what extent will our current proposals enable us to cope with increasingly tightening budget settlements?
- What can we learn from what's happening elsewhere?
- How do we meaningfully incorporate learner feedback to shape future collaboration and curriculum design?