



Learning Without Walls

2015-2020

Evaluating our
Impact Summary Report

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Introduction

Ufi supports the development of technologies that help us all obtain the vocational skills we need to get more out of our working lives. We set out to develop a programme of activity that could support the development of innovation and work towards the delivery of vocational skills at a large scale.

We created a five-year funding strategy - Learning without Walls - that set out our ambitions and intentions, spanning 2015-2020. We supported a significant number of projects during this strategy cycle, developing our funding approach and programmes to support our mission.

As this strategy cycle came to a close and many of the projects we funded reached their goals, we wanted to understand the impact of our funding and the role that Ufi played as an organisation. We know that not all of the projects will have completed their work, but evaluation at this stage is important for the development of our future programmes and wider support activity.

Evaluating the impact of our funding will inform how we support organisations that deliver VocTech - technology which supports vocational learning - even more effectively in the years to come.

York Consulting carried out an independent evaluation of our work to provide robust insight into the impact of Ufi funding. The methods used in this work were varied, including interviews, online surveys and case study development and were designed both to reflect the views of the funded projects and give a more quantitative insight into the impact.

This summary highlights some of the key findings and the full reports are regularly available to view on our website ufi.co.uk

Rebecca Garrod-Waters
Chief Executive

Ufi VocTech Trust



Assessing impact: evaluating our strategy

How Ufi Funding delivered impact

The research carried out involved 59 closed Ufi funded projects, representing 250,000 beneficiaries in total. It showed that Ufi funding had impact within the vocational education sector via three main routes. These were:

- **Impact at an organisational level:** Through the increased digitisation of organisations, development of new working models, technical experience and market knowledge.
- **Impact at scale to improve learner outcomes:** By improving retention, enabling wide-scale access to learning in the workplace or at times that were convenient for learners.
- **Impact across the digital vocational sector:** Through enabling experimentation with cutting edge technology, supporting projects to develop concepts and solutions that have wide applicability, cross-sector relevance and demonstrate new technologies.

Ufi as an organisation

Ufi was also singled out for specific commendation by those involved in the research specifically for its uniqueness as a funding organisation. It was heavily praised because of:

- The flexible, non-bureaucratic nature of the funding and rounded impact offered.
- Reputational benefits of Ufi's expertise.
- Support for progression of ideas and projects and supportive approach to intellectual property (IP) ownership.
- Openness and understanding; enrichment support; providing challenge to projects when required; and influence on educational technology development.

The evaluation is a strong endorsement of our working model and approach but also contains recommendations for potential future development that we will take on board. These recommendations can be found for review on pages 14-15 at the end of this report.

Impact at an organisational level

The research noted that there were several ways in which Ufi funding had a positive impact on organisations.

Of the 21 case study interviews, most mentioned a degree of organisational development or impact as a result of the grant.

For example, half of the organisations responding to the survey stated that the contribution of the Ufi-funded project to the development of positive working practices, and/or to mainstreaming or embedding digital technology into the wider organisation, was better than expected.

Key impacts largely fell into the following areas:

- Attitudinal and behavioural change: greater digitisation within the organisation and the adoption of, future plans to increase use of technical solutions.
- Company and/or product growth/ adoption of new working models.
- Formation of partnerships or collaboration with other Ufi funded projects.
- Raising the profile of the company or organisation.

The research contains many examples of these impacts. A few are highlighted here in this summary report.

Developing strong working collaboration between partners is one impact that many of the projects who took part in the research noted as a benefit of Ufi funding. For example:

- Flavours of Reality is Grimsby Institute's approach to improving food manufacturing productivity and safety

through the use of virtual reality. For the Flavours of Reality project, Grimsby Institute collaborated with the University of Lincoln to deliver the project, in order to access MA and PhD students studying AR/VR technologies. This enabled them to raise their profile and harness support from industry partners.

- Learning Labs is a team of former teachers, linguists, techies and professionals exploring how the latest technology can make language more accessible to every student. Learning Labs secured the support of major stakeholders (Jaguar Land Rover and Make UK) in order to successfully pilot its FlashAcademy English language platform amongst around 100 employees. Learning Labs has since secured additional funding and at the time of reporting was in its testing phase of a BETA version with an estimated 500 current users and 10,000 projected users over the next 12-18 months.
- Whilst Ufi does not directly fund higher education level projects, several organisations collaborated with universities in the development of their learning solutions, a partnership approach that was believed to have a number of mutual benefits. In addition to providing projects with much needed resources, it was beneficial for students requiring practical experience in their academic field. Collaboration provided a pool of testers and, as in the case of TARGET's work with the University of Wolverhampton, rigorous testing was possible using a control group to explore change in learner outcomes behaviours.

Another area of organisational benefit noted by many projects, was that Ufi funding enabled access to opportunities for recognition, awards and publications. This acknowledgement also enabled the subsequent profile raising of VocTech more widely. For example;

- Bridgwater & Taunton College's National College for Nuclear won the 2019 SEMTA award for Skills Innovation of the Year. This category showcases organisations who have harnessed innovative technology to improve skills training delivery, and the positive impact this has had on the workforce.
- LayupRite was nominated for the Combined Strength Award at the US 2018 CAMX awards (Composite and Advanced Materials Expo).
- Grimsby Institute received two awards at the 2019 Learning Technologies Awards: a gold award for 'Best use of simulations or virtual environments for learning' and bronze for 'Learning technologies team of the year'.

“The project highlighted to us the importance of constant monitoring...The website can hold a lot of data about users and how they interact with pages/material. From this, National Numeracy could spot potential gaps in the market and areas to be developed.”

Sam Sims, Chief Executive,
National Numeracy

Organisational level case study: Digital Solutions to Improving Numeracy in the Workplace:

The National Numeracy website is a free resource allowing adults to assess their current numeracy level, access learning resources and measure their improvement.

The team successfully established a 'National Numeracy Day' and developed the concept of 'career strands' whereby resources could be tailored using sector specific language and examples (e.g. within the health care sector).

The campaign attracted interest from a number of high-profile individuals, all of whom contributed to its promotion. In addition to hitting their ambitious target of doubling the number of individuals signing up to the campaign in comparison to the previous year (83,000 compared to 40,000), the project changed the way the organisation worked internally, a welcomed unintended consequence.

The project highlighted the need for greater efficiency in working practices and an increased need for monitoring and reporting to ensure developments and day-to-day decisions were well informed. New models of working were adopted including daily reporting on targets and more regular progress meetings, developments which have been embedded in the organisation and continued after the funding period. In addition, a Theory of Change was developed to run in parallel with the project, enabling engagement and impact to be measured more effectively.

Impact at a learner level

The research showed that a major factor contributing to the success of projects was user-testing. There was general consensus amongst survey respondents that this was paramount throughout to refine and develop products and technology and understand the benefits to learners.

The survey results show that more than half of Ufi-funded projects felt that participation and feedback of target groups to user-testing was better than expected.

Many projects provide examples of this impact. For example, feedback from user-testers of Cuppa, The Engineering Apprentice's Mate, FrailtySIM and TARGET showed a positive reaction to factors of accessibility and in-situ learning especially.

- Cuppacare had the potential to have a significant impact on the sector having identified and offered a personalised learning solution for some of the core gaps in health and social care training. The Cuppacare app had wide applicability and the organisation behind it had a longer-term goal of developing similar just-in-time learning support for other sectors where training funds are low, such as housing and not-for-profit businesses. During the period of Ufi funding, Cuppa engaged 70 learners during its Seed phase, 400 during Impact funding, and a further 250 since completion with a target of reaching 2,000+ by the end of 2020.

- Digging into the past developed a virtual reality enabled experience which aimed to provide a cost-effective, digital solution to training in practical tasks, bringing candidates back up to speed on key missed workshops, thus reducing course drop-out rates. For example, Scottish Waterways Trust reported that drop-out rates decreased post-adoption.

This research also indicates that learners engaged well with the learning approaches or resources across a number of projects during the testing phases. These include:

- **Interactive Videos for Horticulture:** The majority of the 35 learners responding to the feedback survey following testing said they had learned something useful from the interactive video.
- **FrailtySIM** is a virtual reality workforce development tool that improves healthcare for older people living with frailty.
- **Guided Coding Journey:** Positive feedback gathered during the developing stages. In 2019, 115 refugee or disadvantaged learners had taken up the course with an 80% graduation rate.
- **Mobile training support for field workers:** Pilot evaluation showed the microlearning and video approach to be very popular amongst learners.
- **LayupRite** uses an augmented reality (AR) training program for composites layup manufacturing. Trials run with 30 apprentices, graduates, and a trained and experienced pool of technicians highlighted positive learning outcomes.

- **The Engineering Apprentice's Mate:** The platform was developed iteratively, taking into account user feedback, ensuring the functionality and content were relevant and appropriate to the user and the concept received largely positive feedback.
- **National Numeracy:** Using a data-driven approach, National Numeracy were able to monitor levels of engagement with resources and adapt accordingly to mitigate drop-off rates. Monitoring interaction through the website helped to identify how different vocations respond in different ways, providing scope to develop content accordingly.
- **ONTAS:** User research showed that 85% would recommend the service.

Learner level case study: Wordable/Readable.

This project enabled the team to test different formats for learning English and ongoing engagement, eventually by adapting it into Readable, a free app that helps improve learners' general and work-based English through entertaining chat stories.

Sector specific research was undertaken throughout to inform product and content development and ensure it was of optimal relevance to users in the UK.

"We always knew we wanted to focus on vocational content, but if we had not engaged with Ufi we might have done more traditional learning content, focusing on the market outside the UK. Ufi helped us to think about the needs of people in sectors in the UK. A Ufi phone call prompted us to think differently. This was an important breakthrough."

Ziad Dajani, Wordable/Readable



Impact across the digital vocational sector

The research evidence suggests that Ufi has the potential to create a step-change in the delivery of vocational learning. Key to the organisation's impact is the funding of projects developing products and technology that can be applied and mobilised in a variety of settings, with various audiences, across different sectors. The wide applicability of concepts was one of the ways noted in which this was possible and projects that demonstrated this through this research included:

- **Relate:** There is potential for the text-based counselling approach, a key development focus for Relate, to be applied in other settings where companies (e.g. Utilities, banks) have an existing relationship with customers and might be required to have sensitive or difficult conversations, for example relating to debt or bill payments.
- **The Digital Guild:** The platform for digital badging, portfolio and community building has wide applicability and can be used in different settings. For example, the idea has been tailored with a toolkit developed for a new platform to be piloted as part of the Hastings Opportunity Area programme.
- **Ada:** Digital Assistants have the potential to have value across range of different services. The development team have a variety of ideas for the next stages of development and have already begun thinking about its use for supporting student mental health and wellbeing.
- **Digging into the Past:** Although the shorter term goal of eCom's project was to develop a 'one off' VR experience, the longer term aim was to create a 'Software as a Service' platform that would enable companies to develop and distribute their own VR training. "Throughout the project we wanted to think about how the technology could be used for other people - who could benefit from this scenario?". The project has secured further funding which will support its long-term goal of supporting businesses to adopt the software and technology.
- **LayupRite:** The project's reception has been positive across a number of sectors. Interested parties range from colleges wanting to adapt the artificial reality technology to train apprentices, to Formula One technicians. It also has the potential to have a big industry impact on Quality Assurance construction training.
- **The Engineering Apprentice's Mate:** The Group Training Associations (GTA) have recently acquired further funding to develop the app and scale it up. It may be used internally within the GTA network or there may be opportunities to roll it out commercially. The point and play concept - the key to the app's learning approach - could potentially be adapted for a number of industries.

A key benefit of Ufi funding for a number of organisations is the space afforded to experiment with new technologies, take risks and venture into the unknown and explore, often resulting in the development of cutting-edge technology and industry "firsts". Also, a number of projects demonstrated that they had the capacity to drive positive attitudes towards adopting digital learning solutions and there was evidence of several concepts being embraced by industry and higher education institutions. Projects that did this include:

- **PRACTICE:** The virtual reality (VR) room and flow rig developed by Bridgwater and Taunton College is operational and is being used on site, creating the opportunity for learning about hazardous environments without any actual hazards, allowing learners to gain experience and develop suitable behaviours in a safe setting before entering a real site. Whereas construction related VR has been used in similar ways before, it is thought that it has not been deployed at this scale.
- **Robot Trainer:** Ufi funding enabled the first demonstrator within the automotive industry of this technology. This has subsequently driven increased interest in AR/VR training across the sector.
- **Wordable / Readable:** Playingo has developed a working prototype of a chat fiction app for adult ESOL learners - a world first.
- **The Engineering Apprentice's Mate:** The app was initially developed using QR codes, but user testing established that there was a learner preference for AR. The technology was therefore developed to recognise real machinery, rather than using images. The discovery that AR technology could do much more than initially anticipated aided the development of key features of the app (e.g. linking videos together).
- **ONTAS:** The Digital Training Needs Analysis platform has been adopted by the business as a standard service offering for new customers. Other funding partners and organisations have adopted the platform within their skills projects and strategies in the UK and Europe with sustained user growth demonstrating a clear appetite for the service.
- **Ada:** Ada has the potential to reinvent administration and data interrogation systems (entry and extraction) in Further Education and other sectors where legacy systems are still very manual.

Lessons learned and recommendations

Learnings for organisations and project managers have been a major outcome from the funded activities. Key challenges and lessons learned by grantees included:

Structure and nature of project teams

- Clear planning and project management documentation, agreed in conjunction with delivery partners at project initiation stage, is essential to ensuring ongoing commitment and momentum.
- Achieving internal buy-in from senior champions is paramount.
- Utilising non-conventional approaches to project management can help overcome challenges.

Engaging with stakeholders and/or user groups

- Early engagement, especially when engaging with industry, is fundamental.
- Physical demonstrations of prototypes / technology are beneficial to help secure engagement.
- User-testing at various stages is essential to ensure relevance and to build a valuable evidence-base.
- Time and energy to support users through change processes should be appreciated and factored in.

Costs, resources and technological developments

- There is a need to recognise that projects are often operating in innovative spaces with cutting-edge technology and time is required to experiment.
- Project teams and organisations should appreciate the need to be flexible and that projects might change direction.
- It should be recognised that technology is only an element of the overall offer.
- Learning resources need to have tangible benefits to users and stakeholders and have the capacity to change behaviours, attitudes and improve learner outcomes.
- There is value in bringing content and authoring expertise in-house to ensure self-reliance.
- Ensuring a good quality user-experience is essential in encouraging engagement with content.

Recommendations

The report makes a number of recommendations for work in the future.

These include:

- Developing Enrichment and Project Delivery
 - Building on Ufi's programme of enrichment activities to ensure that organisations get the most from their projects
 - Developing content for start-up workshops for cohorts of projects, based on the successes highlighted in the evaluation
 - Retaining links to projects post-delivery to ensure they continue to benefit from Ufi engagement
- Engaging the VocTech community
 - Regular newsletters
 - Online digital networking opportunities
 - Facilitation of regular grantee-led meetups/hacks
 - Network app to create a community 'hub' for members
 - Developing Ufi Alumni
- A more systematic approach to data collection and impact measurement



How Ufi will respond to the research

We welcome the recommendations arising from the research and will build them into our forward planning.

Ufi is a learning organisation – in practice this means that we review each cohort/call and look at the lessons we can learn to adapt and improve. This has an implication for how we respond to these recommendations, in that some areas of our delivery have developed significantly since the experience of the closed projects included in the evaluation.

This is particularly true of enrichment, as Ufi's internal process picked up the same challenges and areas for development, and our flexible and agile approach has allowed us to make immediate improvements.

There are, however, important points raised that we will revisit to ensure that we have done all that we can to seize the opportunities highlighted.

1. Developing Enrichment and Project Delivery – Project Inception Workshops

Ufi has a continuous improvement approach to its enrichment offer, learning from each cohort. It will explore the recommendation for greater involvement of previous grantees, linked to the later recommendation on Ufi alumni.

2. Developing Enrichment and Project Delivery – 'Top Up' Fund

This is an interesting recommendation, which Ufi had previously explored and set aside, as it had unintended consequences of long-term grant reliance. Instead, we have focused on strengthening our support and guidance on sustainability and commercialisation, to ensure that projects are ready to launch into the market as soon as possible post-completion.

We feel that a better area to explore is the development of the Ufi alumni and post-funding access to Ufi's wider resources.

3. Developing Enrichment and Project Delivery – Post-funding access

The report recommends exploring the ways in which enrichment could have a 'tail' that is longer than the project itself. This is something we have started exploring as we see that this could have significant benefits for the project and the longer-term relationship with Ufi and the wider 'Ufi family'. These could include engagement in workshops, the wider comms and

outreach, engagement with challenge sessions and the development of specialist calls and focused activity.

4. Engaging the VocTech Community – Regular newsletters

We currently have a community newsletter which is issued monthly, supported by additional ad-hoc messages when necessary. We are intending to refresh these once the VocTech Integrated Management System (VIMS) is fully rolled out, as it will provide functionality that will allow us to broadcast the content in a more engaging format as well as provide options for target mailing on a more specific basis – for example technology or sector interests.

5. Engaging the VocTech Community – Online digital networking opportunities

We will explore this recommendation further, including consideration of the wider 'community engagement' that we use to support the specialist call development and ventures activity.

6. Engaging the VocTech Community – Grantee-led meetups/hacks

We will explore this recommendation further. It is something that has previously been tested, but resource constraints prevented us from pursuing. We will re-visit our thinking and review how this might be delivered.

7. Engaging the VocTech Community – Network App

App development is on our 'digital estate' plan. We are looking to explore this as part of our internal systems review.

8. Engaging the VocTech Community – Developing Alumni

We have been keen to develop a programme of support for Ufi alumni for some time and will progress this during 2020. This will also bring together some of the comms activity and the wider development of the Ufi network.

9. More systematic approach to data collection and impact measurement

We see development of the evaluation framework, and the supporting increase in standardised data collection, as a key part of evidencing our impact and creating the case for VocTech. The plan for this is already underway and represents the next phase of work now that this evaluation is complete.

We are looking to establish a set of metrics that cover a diversity of projects and outcomes, which will allow us to consistently measure and evaluate both the delivery and impact of individual projects and also the wider programme impact. This in turn will enable us to make more informed decisions about audience targeting and call focus.