The impact of using Online Resources on Apprentice Functional Skills achievement

bksb

CableCom Training

Introduction

This research was needed as the organisation would like to explore the effectiveness using BKSB interactive resources as part of its Functional Skills English and Maths teaching and learning for Apprentices It also links to the wider organisation strategy of the review of the current Apprenticeship delivery model in line with the FELTAG report and its recommendations.

Historically, the organisation has relied upon face to face delivery model with locally based companies.   However, due to the rapid expansion of Apprentice numbers in various locations across the UK, this approach has to adapt to meet the needs of learners with the use of on-line technology. In addition, we wanted to use a technology that would be of the greatest benefit to both learners and staff and one which will motivate learning through a blended approach. For the purposes of the research project, a small group of Apprentices were involved across different curriculum areas including Business Administration and Telecommunications Frameworks.

Similar research carried out by other organisations in the previous academic year have proved successful in supporting learners to achieve their Functional Skills in a timely manner and CableCom would like to adopt a similar approach using technology.

Aims

The aims of the project were to find out the following:

- How effective are interactive resources in supporting Apprentices achieve their Functional Skills English and Maths in a timely fashion?
- What use is made of the interactive resources by the Apprentices?
- When are the interactive resources used?
- How much face to face support is needed if interactive resources are in place?

Methodology

To enable the team to gather information relating to the use of the online resources, questions were developed to gauge opinions and attitudes of both staff and 6 Telecommunication Apprentices in a focus group at the Stockton training centre. Learner consent was gained prior to them taking part in the Action Research project and focus groups as well as permission to use photographic images.

In addition, semi structured telephone interviews were conducted from the Stockton office to gather the views of 2 Business Administration Apprentices. Tutors also attended a Continuous Professional Development session to introduce the Action Research Project.

So simple to use - straightforward and quick to complete
Telecommunications Apprentice on the completion of Initial Assessment

" Yes – this worked particularly well by setting an exam date and giving leaners deadlines to complete the interactive resources and skills checks."
Functional Skills Tutor

Case study 1

Out of the Apprentices surveyed, only one learner accessed the online resources and took the English and Maths exams during the research phase of the project. This was purely to do with the timing of the research and which exams were due during that time.

Throughout this Apprentice's time on the programme, there were some periods of unresponsiveness, particularly relating to the completion of the Functional Skills elements of the programme.

However, this learner responded extremely well to tasking him with working through the interactive resources in English and setting an exam date which was in close proximity. This approach resulted in the learner achieving high scores in his writing and reading papers. Although he did not access the interactive resources in Maths, he did complete a diagnostic assessment which produced an ILP for him to refer to. He stated that this helped him to focus on which areas would come up in the exam and as a result, he only dropped one mark from his Maths exam.

View Uploaded Entry Spreadsheets							
	Module Name		Test Date	Result	Test Score	Pass Mark	Special Consideration
VM019	WRITING LEVEL 1	RN0433	19/01/2015 11:53	Pass	23 / 25	16	
VM019	READING LEVEL 1	RN0433	19/01/2015 11:21	Pass	19 / 20	14	

Records Per Page: 25   Refresh

Programme ▲	Test	Venue	Test Date	Result	Test Score	Pass Mark	Special Consideration
VM020	MATHS LEVEL 1	RN0433	09/02/2015 14:34	Pass	39 / 40	29	

Learner Feedback — Results

A total of 8 Apprentices responded to the following questions:

- Did you complete an online or paper based assessment?
- If online, was the IA easy to complete?
- If paper based, was the IA easy to complete?
- What aspects did you particularly like?
- What aspects could be improved?
- Did you use any of the interactive resources for Maths and English?
- What aspect did you like?
- What aspect could be improved?
- Did the activities improve your understanding of the subject studied? Please state which subject and why.
- Do you feel the resources have helped you prepare for the exam?

Of the 8 Apprentices surveyed, 100% stated they found the online Initial Assessment easy to complete. In 2 cases, Apprentices were able to compare the completion of the online assessment more favourably to the paper based assessments. They reported that they were able to gain an instant result instead of having to wait and could view their progress via the on screen progress bar as well as having images in front of you.

In the one case where an Apprentice had accessed the online resources, reported how he liked certain features such as the ability to highlight sentences, how the site created an ILP and it was clear which section you were working on and what would be covered. 2 learners had reported difficulties accessing the site at home but had contacted the tutor who had resolved the issue. One learner had reported that a set of instructions on how to use the site would be useful.

Conclusion

The research has proved very insightful and has uncovered a number of areas for future development, in particular around when and how the Functional Skills elements are incorporated into the Apprenticeship Framework. As a result of this research, key events such as Initial and Diagnostic Assessments are specifically timed and appear as an action on the e-portfolio system for each learner. The research has also informed the need to have specific dates for exams scheduled in and, as a result, a quarterly Functional Skills week now forms part of the delivery model which runs alongside the monitoring of the online resources. General support material needs to be developed to ensure learners are fully aware on how to use the system to its full potential.

Tutor Feedback—Results

A total of 3 staff were involved in the project and were asked the following questions:

- Have you used BKSB to review FS progression or carry out IAs for learners?
- If so, were you able to access them easily?
- Did the resources help to support your learners and prepare them for the exam?
- What aspects were most useful and why?
- What aspects were least useful and why?
- How could the resources be improved to further support learners?
- Did the resources sufficiently support your learners to achieve their FS element of their Framework?

100% of staff surveyed stated they found the resources which the learners used easy to access and view learner progress. The most useful features were the creation of an ILP for audit purposes to monitor and feedback on learner progress. The skills checks were a particularly useful feature which gave a percentage score against each skill check completed.

Case study 2

Another Telecommunications Apprentice accessed the diagnostic assessment for English to identify areas for development at Entry 3 and Level 1. This, combined with completing practice papers, prepared the learner for the Level 1 English exam. He commented on how easy the Initial Assessment was to use and how the colours and the interface made it very user friendly. This learner had stated that he found it difficult to form his ideas in writing but the site gave him a good starting point to progress.

Programme ▲	Test	Venue	Test Date	Result	Test Score	Pass Mark	Special Consideration
VM019	WRITING LEVEL 1	MTH029	29/04/2015 16:14	Pass	19 / 25	16	
VM019	READING LEVEL 1	MTH029	13:48	Pass	18 / 20	14	

Areas for Development

- Develop a better schedule and structure of when to complete the IAs and resources in relation to exam dates
- Develop a robust course structure with key milestones and achievements
- Better internal communication of key dates within Apprenticeships
- Regular monitoring of learner progress

Adam uses coconut milk for the dessert. The coconut milk is in a can but he doesn't know how much the can holds.

The can is 12 cm high and the diameter is 8 cm.

Using the formula $V = \pi \cdot r^2h$, work out how much coconut milk is in the can. Use 3 as a value for π.

Give your answer using the correct units.

576   mm^2 cm mm^3 cm^2

Skill Checks

		Score		
Sc	Passed the Adverbs and adjectives Skill Check	78%	★★★★☆	19/01/2015
Sc	Attempted the Adverbs and adjectives Skill Check	71%	★★★☆☆	19/01/2015
Sc	Attempted the Commas Skill Check	64%	★★★☆☆	19/01/2015
Sc	Passed the Spelling Skill Check	82%	★★★★☆	19/01/2015
Sc	Passed the Apostrophes Skill Check	76%	★★★★☆	19/01/2015

Research

The research was commissioned against the backdrop of the FELTAG report where one of the workstreams refers to the need to keep abreast of change. This too reflects the needs for learners to be able to access this technology to enable them to reach their learning potential. The report also refers to the need of the sector to train the workforce to fully understand the potential of learning technology coupled with the creation of new and innovative learning environments. http://feltag.org.uk/wp-content/uploads/2012/01/FELTAG-REPORT-FINAL.pdf

Alongside this research, the capabilities of facilities such as Google Education were investigated and how this could be incorporated into the teaching and learning in the organisation, especially for those learners accessing the system remotely.   https://www.google.co.uk/edu/

Finally, the organisation wanted to draw upon existing research from projects and found a number of similar approaches where the use of technology in learning had been explored. Of particular interest, was the work carried out by Business Impact who explored the use of remotely accessible learning materials to keep learners engaged on the programme. The approach worked extremely well with positive feedback from learners which reflected in the programme retention. CableCom Training would like to adopt some of these approaches to increase learner engagement in the Functional Skills element of their Apprenticeship.

https://magic.piktochart.com/output/2267352-e-learning-action-research-report#

	Module Name	Diagnostic Result	Skill Checks Taken	Tutor Marked as Complete
	End of sentence punctuation	Very Good	No.	
	Apostrophes	Take Care	No.	
	Connectives	Very Good	No.	
	Work tenses	Very Good	No.	
	Format & structure	Very Good	No.	
	Formal language	Needs Practice		✓
	Adverbs	Needs Practice	No.	
	Vocabulary of texts	Needs Practice	No.	
	Adjectives	Needs Practice		✓

DA	Completed the Maths L1 Diagnostic Assessment	Score: 70 %		29/04/2014
IA	Completed the Maths Initial Assessment	Level 1		16/04/2014

Diagnostic Assessments

IA	Completed the English E3 Diagnostic Assessment	Score: 82 %	25/02/2015

Initial Assessments

IA	Completed the English Initial Assessment	Entry 3	24/01/2015
IA	Completed the Maths Initial Assessment	Level 1	24/01/2015

Interactive Resources

IR	Viewed the Capital Letters Interactive Resource		