

5-03 Metadata Project

Executive Summary

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The tasks of the project were organised and undertaken with the intention of addressing the following areas of interest:

The Repurposing of Existing Resources

- Given a limited timeframe, what are the issues that need to be addressed in translating existing resources for electronic delivery?
The issues may include the nature and format off the legacy materials that are used, access to the best quality originals for artwork and text and the workload necessitated by the proofreading and text verification process.
- Access to Subject Specialists
Regular, planned intervention and feedback sessions with these staff ensures the accuracy and relevancy of the materials to the student corpus under consideration.
- Integration with existing workloads
This is a key issue as perceived by subject specialists. Remittal of time from other commitments on a regular planned basis contributes to maintaining timeliness of the authoring process
- Design and Typographical constraints
The constraints of the delivery platform and requirements of accessibility
- Image Management
The maintenance of a clear and consistent scheme for images with regard to sizing, placement and accessibility alternatives.
- Ensuring accessibility issues are addressed
See above comments

Location of Appropriate Ancillary Resources

- Location of these resources – images, text, video
The skills of internet research and the ability of non subject specialists to “hoover” resources for later assessment by specialists as to appropriacy and relevance to the learning experience
- Clarification of Copyright and IPR
Development of an exemplar clearance request text, with regard to the limited scope of the present project. Assessing the level of response to such requests.
- Necessary modifications/editing to enhance suitability for current purpose
The skills necessary to gather materials from divergent sources into a consistent style without undue violence to the source files.
- Harmonisation of layout using resources from diverse sources

Creation of appropriate Formative and Summative Assessments

- Evaluation of the available tools for assessment generation
Predicated in the current instance by the delivery platform. The tools for assessment and the types settled on with some regard for the opportunity to use these assessments to build the users' more general computer skills.
- Evaluation of delivery platform for finished resources and the tracking issues raised
The suitability of the college's chosen VLE system for delivery of the final materials.
- Addressing the technical and design issues related to the use of images in assessments
This is a particular issue with the chosen delivery platform; it has some bearing on the transportability of the final assessments to other VLE environments.

Metadata Authoring

- Development of appropriate vocabulary within existing guidelines
Examination of current schemas and selection of the appropriate one
- Timescales for the above
Who should author metadata, who should enter it, what specialist skills are necessary?
- Applicability of metadata vocabularies within horizontal and vertical applicable uses
Integration of the learning units into diverse curricula, possibilities for usage at different levels for different purposes, e.g., introductory at a first level source, revision materials for the more advanced student.

Business Case

- Generation of appropriate data regarding the copyright, IPR, timescales and workload issues engendered by work of this type.
The business case is determined to a large degree by the time and labour needed to produce materials, with attendant effect on price to the end user.
- Commercial viability of output materials in terms of usefulness and acceptance by the student corpus
The team considers this to be central to the business case. Students must consider the materials to add value to their learning experience if compliance with this mode of learning is to be used.

Evaluation

- Selection of the most germane strategies of evaluation to address the central questions of the project
- Interview vs. Observation
- Perceptions vs. Observed Behaviours and Experiences
- Influence of delivery platform features/limitations on the perceptions of users and tutors
- Development of appropriate common strategies and methods for participant observations during evaluation to ensure consistency of data for qualitative analysis.

Locating any disparity between the real student experience and the perceptions of the students may offer insights into strategies to stimulate greater usage of this style of learning by addressing the perceived shortcomings of the materials. The necessity of a feedback model of some sort suggested by our experiences during evaluation of the current project.

Main Findings of the Project:

Both in terms of the experience gained within Stoke on Trent College and the perceived benefits to students, it can reasonably be concluded that the project has been a success.

The key areas upon which the project has focussed have afforded the team opportunities to develop their technical and evaluative skills, as well as helping raise the profile of ICT within two curriculum areas that are sometimes a little difficult to engage.

The key commentworthy findings of the team are:

It is critical to the success of a project such as this that all the agencies, both internal to the college and external, engaged at any level respect agreed deadlines for completion of project phases. The innate interdependency of different phases of the authoring and evaluation process means that small slips in schedule can lead to cumulative large delays and stallings. This is amply demonstrated by the failure of the project to complete the areas related to E-Brary.

Copyright and IPR are major areas of concern. As is quite clearly demonstrated by the level and type of responses we achieved in requesting re-use of materials, there seems to be a degree of either indifference or apathy amongst the owners of web sites with regard to the legal status of their own content. The possibility of inadvertent illegal usage of images etc. can only be avoided by seeking clear written permissions for all resources used; this however may not protect the author from problems arising due to misleading or incomplete information being used by the presumed copyright holder in formulating the granting of such permissions.

The authoring process is relatively straightforward. Provided issues surrounding consistent usage of minimal styling information for all pages of content, held centrally, are addressed and adhered to rigorously, the materials should admit of accessibility solutions based on relatively simple technologies.

Assessments, both formative and summative, are a sticky area; the complement of proprietary VLE solutions used within the further education community and elsewhere do not admit of interoperability of assessment materials at present. In effect, the assessments created in the present materials are "hard wired" for use only within the instance used in this study. They will not even import successfully to any other installation of a Granada Media VLE without some re-coding. This issue may admit of resolution when updates to the relevant specifications are released.

Generally, the materials were positively received by both staff and students.

Relatively small imperfections or omissions within the materials and/or assessments can cause students to form negative opinions of both their experiences with the particular learning unit and towards the whole field of computer mediated learning methods. It would appear that carefully planned and executed testing of materials to eliminate such issues as far as possible before use with the main student body would pay enormous benefits in helping gain acceptance of this mode of learning. This has potentially large scale implications for timescales for materials production, dependent on the amount of supplementary or revisional work that the early drafts require. Of course, it is hard to predict how much work will be created by this process.

Metadata generation proved one of the more difficult aspects of the current project. Although the schema used was predicated by the software used during the aggregation process, the generation of suitable and sufficient vocabularies necessitated an ongoing approach to metadata as the learning units developed; It was apparent that metadata generation was a greater time-expenditure than at first expected. The subject specialists expressed concern at their lack of expertise in this area. At present there is no material available for training purposes to assist the learning process for generating relevant and apposite metadata. Despite an abstract of the UK-LOM being created for reference by the subject specialists, with attention to minimisation of the usage of technical or over-academisation, both subject specialists and the library staff team member felt they were to some extent groping in the dark. There is a need for a non-specialist paper or introductory guide to assist non-technical, subject-focused staff in understanding the nature and primacy of metadata.

Conclusions

The key conclusions of the project are:

There is certainly a business case for the development of materials for distribution within the wider FE community. Subject to caveats identified in the full report, centring mainly on timescales for work and the bottlenecks that arise in the clarification of Copyright and IPR, the project has proven the viability of generating appropriate content for use in the tested environment and in the chosen style of delivery.

The actual authoring and materials development process itself is a good springboard for more general awareness raising within the FE environment of the possibilities of ILT. It is a valuable natural opportunity to focus on staff ILT skills needs.

The current status of interoperability with regard to the assessment components of learning units raises concerns as to the viability and value of widespread distribution of such materials for use on a wide range of delivery platforms, both VLE based and viewer based. At present, the only solution appears to lie in the use of assessment creation software that explicitly does not offer tracking integration with the VLE delivery platform. This is clearly unsatisfactory.

The evaluation process has highlighted the need for ongoing testing and usage of the materials during development to address any shortcomings unperceived by the materials designers with regard to content completeness, accuracy and sufficiency. This applies particularly to the assessment content if user input is in the form of textual entry.