

Case Study

E-literacy and Andragogy – a view through the Community Content Lens

Rónán O’Beirne
Bradford Libraries

Abstract

The Metadata for Community Content (MCC) project sought to explore how informal learning resources, once they had been assigned metadata, could be shared across a network of UK Online centres. UK Online centres are typically sited within community venues such as youth centres, public libraries, and community and village halls. During the past 7 years there has been an upsurge in community networking with initiatives such as Brixton On-line and Shipley On-line serving as examples of a practical response to national policies on social inclusion, digital citizenship and lifelong learning.

As e-learning became more formalised within universities and colleges the aim of MCC was to develop a model that would do for informal community learning what a VLE (virtual learning environment) might achieve within a formal learning institute. One aspect was the investigation into learner modelling; an attempt to understand how learners learn informally using e-literacies within a community context. From this came much debate about pedagogy along with a recognition that learners within the community are engaged by an andragogical model and in fact are ‘turned off’ by a highly instructive learning environment. The andragogical model put a high emphasis on the learners’ ability to self-direct their learning, which in turn calls for high levels of e-literacy skills. Informal support structures such as public libraries are of key importance for these learners. The case study concludes with suggestions for further research into the relationship between information literacy and informal learning, and into public libraries and their position within a postmodern philosophy.

Keywords

Andragogy, Community Learning, Information Literacy, Metadata, Postmodernism, Public Libraries.

1. Introduction

The MCC project is better described as a programme of various different projects operating in a range of geographical areas. The stakeholders are made up of a mix of

community e-learning practitioners, particularly working on Community Grids for Learning or UK Online centres, together with researchers into Community Learning from LTRI (Learning and Teaching Research Institute at London Metropolitan University). Much of the funding for the programme has come from the UK government who, through their Social Exclusion Unit, set up a series of Policy Action Teams (PAT) to investigate and ultimately address the issue of social exclusion.

As a starting point some of the early work undertaken by the MCC project evolved from discussions of the digital divide. An online debate by project practitioners along with the ContentBank team and the Digital Divide Network in the US, took place over a number of days. Participants included Community Content developers in the US and Community Grid Developers in the UK. As Garnett (2005) notes the benefits of this discussion were of high value to UK practitioners and much was learnt from the experience of the US.

It was to this backdrop of digital division that the work of the project began to take shape and focus on a clear objective. The purpose of the MCC programme was: To look at ways in which socially and digitally excluded learners learnt in Community Learning contexts with ICT and to examine what “Digital Divide Content” needed to be provided to meet their needs. Following on from this, to develop the metadata to tag this content for information retrieval purposes.

This case study gives an outline of the key developments, relevant to e-literacy, over the past 3 years. The project developed in a number of different and interesting directions not always reaching the expected outcomes. Because of space constraints it is not possible here to trace all of these directions. Instead this case study follows three important aspects that have an interesting relation to e-literacy, these three threads are; Community content, Metadata creation and Andragogy as a learning theory.

The study introduces the concept of andragogy as an important learning theory that has been overlooked in recent times but which may hold some interesting clues to how e-learning and adult learning could dovetail together in a practical environment. There is a need to emphasise the importance of accepting that this andragogic approach to learning often exists implicitly within a community networking model. Within this understanding of computer-supported learning there needs to be an acceptance that very often adult learners seek collaboration and are willing to develop content which will be shared. However the higher skill levels required to ensure that content is re-usable and interoperable through the use of metadata, are beyond the scope of most learners. At the same time, these learners are unlikely to be passive in accepting resources delivered from a repository within a Managed Learning Environment. As a consequence of this such learners require high levels of e-literacy to navigate and manage their own learning. The author draws upon first-hand experience of working in a community networking project, Shipley Communities Online in Bradford, West Yorkshire. This paper concludes with suggestions of some areas for future research, and proposes a widening of the discussion to take a postmodern view of emerging roles for public libraries in supporting e-literacy.

2. Methodology of research

In summary grounded theory and a pilot study were used to guide the research. Grounded theory is best used in complex research situations often when the subject matter is little known. A full explanation of the research instrument and methodology can be found in (Smith & Cook 2002), where, for example, the following clarifies the approach and methodology:

“Data from detailed interviews with twelve workers and users at five centres have been transcribed and analysed using grounded techniques, where concepts (48 were identified) are classified and grouped together under a higher order, more abstract formations called categories (which were: ‘life cycle’, ‘organisational links’, ‘people/roles’, ‘informal learning’, plus a final catch all category ‘not in a category yet’). Atlas.ti qualitative analysis software was used to assist this process.”

See also <http://www.londonmet.ac.uk/ltri/research/projects/ukonline.htm>

3. Thread One - What is Community Content?

It is perhaps useful to clarify that when we talk of community content we understand community to mean a group of residents living in or around a defined geography for example a neighbourhood, a housing estate or a group of streets. Typically they will all use a community resource whether it is a library or a community centre. In the term community content there is the sense that the product of that community's efforts is made available usually in digital format. Community content is not necessarily focused in its subject matter on the actual community, but it will invariably be either created by the community or be relevant to a sub-section.

The key driver in the development of community content is the engagement of the individual. Many community networking projects are based around an adult learning agenda, participants from the community are therefore referred to as learners. Within the Shipley Communities Online project learners were given total freedom in selecting the content with which they would work. This led to the development of various collections of community content. For example, one learner with an interest in keeping fish set up a website for fellow enthusiasts. While this learner had no computer or e-literacy skills at the outset within 6 months he was capable of managing complex data transfer procedures to upload his website to third-party servers. Additionally he became knowledgeable about particular aspects of website design and willingly shared his expertise with others. In a similar vein a group of enthusiasts digitised their collection of local historical photographs. This process utilised various hardware devices and also required significant planning and data management techniques. In this instance the focus of the content was very much centred on the community and it reinforced the sense of a community as a tangible entity with a history. Yet another example was the development of the local football club's website. This again involved a group of learners seeking to develop

content that was of high interest to themselves and to their community. The website was highly collaborative with some learners taking on the technical tasks while others gathered information and content that was relevant. One interesting aspect of this website development was its currency. Supporters compiled match reports on a weekly basis and submitted these to a forum that was based on the website. For many the skills developed by writing online reports on a topic about which they were passionate was an extremely rewarding e-literate experience.

An observation that is worth reporting relates to the usage patterns of many first time users of the technology. Typically there was a general progression from casual surfing of the web through to website design. Generally there were three distinct stages; surfing, researching and publishing. All learners reached the stage of surfing and retrieving information that was of interest. A subset of these learners progressed to the stage of actively learning and of carrying out research. A further sub-set of these learners progressed to the stage of publishing some material online as outlined above. A client database was kept by the administrators which recorded the progress made by learners on the project. It was possible to extract rich research data from this source to analyse learner progression.

One interesting aspect of the group at the second, 'researchers' stage, were the subject areas which they most often investigated. Typically these were either personal health issues or involved searching for family members with whom they had lost contact. In this way this group were highly motivated and their learning as an explicit activity came secondary to the outcome of the activity. In all groups it was observed that their capacity to learn was far greater than they believed or expected. The groups that progressed to the second and third stages were less concerned about a need to 'learn' and often expressed the wish to just 'know how to do'. The group that remained at the first stage could be said to have set their own limits on their achievements and here there was a sense that in terms of e-literacy the ability to surf the web was sufficient. In terms of information literacy it is unlikely that any of the groups had an understanding of the formal frameworks promulgated by organisations such as SCONUL (Society of College, National and University Libraries).

4. Thread two – Metadata for learning objects

Early discussions within the project worked up the premise that in a digital environment the organisation and manipulation of digital content by learners would be highly desirable. Within higher education the development of e-learning utilises a digital repository of learning objects. To organise, manage and retrieve these objects and to populate the virtual learning environment in a timely fashion, learning objects need to be assigned metadata. There are many definitions of metadata and there is a considerable body of knowledge associated with different domains other than learning.

At the outset of the MCC project the creation and development of a metadata system that could be used for community content purposes seemed to be the one important goal,

hence the project's title. As we will see this proved to be misleading. In terms of e-skills and indeed the skills of the learners on the project there was a need to organise and arrange digital materials so that they can be stored and retrieved effectively. An example of this is the work that was done on digital images. Many participants realised the need to name picture files in an intelligent way, however there was no agreed standard that was available. The author was aware of the benefits of metadata in this area and sought to investigate the use of metadata within the project.

Metadata is often a difficult idea to understand. The very nature of the concept of information about information can seem, at first glance, to be slightly paradoxical. Yet, in order to utilise metadata within the project learners would need not only to understand it but also to be able to use it. In an attempt to explain metadata an analogy with the public library came in useful. Learners on the project in various locations were able to understand the physical process associated with maintaining an alphabetical sequence on a shelf of library books. Moreover they could readily understand the job of the cataloguer who assigns descriptions to a book within a standardised framework. However when the learners themselves were asked to assign characteristics to their community content materials in a digital environment they were not able to do so effectively. These challenges posed by metadata and its use are not confined to this case study but are more widespread as Currier et al., (2004) indicates. It is still a matter of future debate whether a good understanding of at least the principles, if not the practicalities, of metadata should form the basis of an e-skills, e-literacy programme.

5. Thread three - Learning theory

The third thread of this case study that should be reported is concerned with learning theory. Before this discussion it is important to explain key research activity that was carried out as part of the project. The LTRI was commissioned to carry out research, using grounded theory, to elicit exactly how people learnt in UK Online centres. This work gave us some key principles about developing learning content that maps to the way socially excluded learners learn. Cook and Smith (2004) in their research proposed the lifecycles model which opened a debate within the project about community content principles and andragogic learning principles.

All the practitioners agreed that getting the learners to lead the activities they engage in is the key way of motivating them. The LTRI "Lifecycles model" also indicated that users' confidence grew as they started with their interest and slowly began to engage with wider issues. Cook and Garnett (2004) also noted that the way to implement this model of learning is to provide "animateurs" who make timely interventions within the learning activity. This was a factor in contributing to a good learner experience. Another key issue was that learners, in the main, tended to be motivated by holistic activities or social projects that would benefit their communities more than them.

The LTRI research was developed into the community development model which focuses on how to provide learning opportunities for the socially excluded and structured in a way that would 'bring them back' to socially useful acts.

Those centres taking part operated the lifecycles model of drop-in interest-driven activity with animateur intervention followed by engagement in learning. Animateurs set up their centres based on this model to allow learners to engage in their own activities at their own pace. Often they used a set of induction activities which included ICT skills diagnostics. Learners were allowed and encouraged to engage in whatever interested them and share these with others. Some of their "learning" came from fellow learners or through timely interventions from animateurs, but they themselves drove the activities.

The research had an impact not only on how the learning activity was perceived but also it raised fundamental issues about the direction the project had been taking. Quite simply the notion that community content was at the heart of learning had been dispelled. Instead it was the learner and the context of the learning that appeared to be the crucial factor. To rework one of the key phrases of the digital age, often attributed to Bill Gates, it was the context (rather than the content) that was king. Ravenscroft summed up the position: "too much emphasis is currently placed on 'content' rather than the group and community dynamics that are needed to exploit and use this content. Or, putting this another way, if we want to 'put the learning into eLearning' then we have to treat technology as a mediator of what are, essentially, social learning processes occurring in cultural contexts" (Ravenscroft, 2002)

As a result of this research a series of seminars between community e-learning practitioners and researchers were held. A model of effective community learning based around andragogy was developed. The learner moved to the centre of the project's activity and less emphasis was placed on the content and metadata developments. Furthermore the learning activity itself became the focus of attention with observations of collaborative learning providing further insights. In the language of learning theory a constructivist model was evolving which challenged the more traditional instructivist approach.

6. Andragogy a closer look

The term andragogy is used to differentiate from the more traditional term pedagogy where a behaviourist and instructivist model of learning, or more properly teaching, is typically employed. Andragogy squarely places the adult learner at the centre of the learning process. However as an accepted educational theory andragogy, because of some fundamental contradictions, has not gained widespread recognition. It is useful however in leading us to the concept of adult learners engaged in a socio-cultural or constructivist learning model, constructing knowledge that is of personal relevance and use. Andragogy can be particularly useful for reluctant or disillusioned learners. It seeks to remove the authority from the learning process and as such may prove useful in a range of community settings.

Malcolm Knowles the father of Andragogy saw it in terms of identifying the characteristics of adult learners as opposed to children as learners. His five assumptions are listed below:

1. Self-concept: *As a person matures his self concept moves from one of being a dependent personality toward one of being a self-directed human being*
2. Experience: *As a person matures he accumulates a growing reservoir of experience that becomes an increasing resource for learning.*
3. Readiness to learn. *As a person matures his readiness to learn becomes oriented increasingly to the developmental tasks of his social roles.*
4. Orientation to learning. *As a person matures his time perspective changes from one of postponed application of knowledge to immediacy of application, and accordingly his orientation toward learning shifts from one of subject-centeredness to one of problem centredness.*
5. Motivation to learn: *As a person matures the motivation to learn is internal* (Knowles 1984).

Having regard to these assumptions or principles we can expect the following implications from an andragogical model:

Learners should know why they are learning and should be able to relate this to their own lives and experiences. The instruction should be mainly task-oriented, and it should be sympathetic to a wide range of learners and their educational/social backgrounds. Learners should be motivated and keen to learn something new. Where possible learners should actively participate in the planning and assessment of their learning. Learning should focus on problem solving rather than being content-based. In recent times with the evolution of e-learning, where the teacher is physically absent from the learning process, and the learner, with access to the worldwide web may gain second-hand access to many experiences, there has been renewed interest in andragogy. A further point in the resurrection of andragogy might be the vast amount of e-learning materials that a pedagogic model would need to control.

7. What about the Metadata?

Having taken note of the need to refocus from content to the context of the learner much of the impetus for learner created content or more precisely the associated metadata was lost. The difficulties mentioned earlier of actually creating and managing the metadata compounded the problem. It was felt that the interest in metadata could be sustained if it were possible to apply its principles within a more dynamic learning environment i.e. one that included learning activity. As noted by Dalziel (2003) in this area there are some interesting developments looking at multi-learner activity sequences, which may require a future use of metadata.

8. Conclusion

Learners who are involved in an andragogical model for learning set within a community-based environment have a particular need for strong e-literacy skills. To sustain their engagement there is a need for them to control their learning. This approach brings with it many advantages associated with empowerment and intrinsic motivation. One of the potential disadvantages is the loss of a teacher/mentor which may lead to isolation. Within this model then there is a clear need for excellent e-literacy skills. Moreover the need to communicate and to remain connected to peers in a collaborative environment may extend the menu of e-literacy skills from information literacy and media literacy into the area of digital communication. The increased uses of Wikis, weblogs, podcasts and more will certainly require an extension to the collection of e-literacy skills held by many.

There are three areas where further research might be useful:

Firstly, public libraries, because they offer a continual community anchor where learning can take place and where learners are independent of an educational institute.

“I can sit there and its like a wonderful bag of goodies. I’m trying to read all the old Derbyshire newspapers from 1785, and its superb – I know things the experts don’t ! When you’re studying for qualifications you go in straight lines – now I wander. (Chesterfield library user)” (Proctor & Bartle 2002).

A goal for research in Public Libraries might be to understand how best to support informal learners without providing a 'formal' framework that might threaten learners 'informal' status.

Secondly, information literacy, not just because it is tied closely to citizenship and to learning, but also because in an environment where the learner operates in a self-guided way the stakes are considerably higher when it comes to efficient retrieval and evaluation of resources.

“Modern library searches do not lead from a point A (the catalog, the reference desk) to a point B (the book, the answer, the truth), but instead invite their computer-literate users to explore on their own the many recesses of a multicursal maze, placing them again and again in decision situations, at forks or nodes where multiple paths lead down through hierarchies of subject headings, on their way to what may or may not be a useful or even existing document.” (Garrett 1991)

A goal for this research might be to explore the 'uses of information literacy' in supporting individuals. For instance the ability of an individual to evaluate the credibility of information retrieved from a website.

Finally a postmodern perspective; because there is a fascinating contrast between a pedagogical instructivist approach with its acceptance of an objective body of knowledge,

and the constructivist socio-cultural approach with its postmodernist reliance on discourse and subjective truth.

A goal for this research should focus on the perceptions of 'guardians' of information such as librarians and website content managers in order to assess their understanding of the body of knowledge required to support learning.

Much of the debate on learning within the MCC project centred on the passive reception of facts or information set against the active enquiry to obtain knowledge. The socio-cultural aspect of learning, prevalent in andragogy, requires the learner to share, discuss, critique and perhaps dismiss various views and understandings. To do this the types of e-skills required are not confined to information literacy but extend to communication skills. Typically in the Virtual Learning Environment there is much discussion and social intercourse. Whether this is conducted in a forum, or live chat or email or indeed via the plain old telephone system, it is still a key component of that learning. In fact in the constructivist approach all of these channels of communication could generate learning content which could be regarded as learning objects.

The andragogical approach and a socio-cultural learning paradigm bring into question the learners' need to access a definitive body of knowledge such as a library of books or a collection of digital content. This has a strong echo in the writings of post-modern thinkers, where the grand narrative of modernity has been brought under close scrutiny (Lyotard 1984). The use of a digital repository for learning materials can be seen to perpetuate the failings of the traditional library and is closely aligned with a pedagogic model. If we are to accept the shortcomings of pedagogic and instructivist learning and pursue an andragogical path we need to rethink the scope, structure and management of current learning content including the use of metadata.

Just as the postmodernist needs to deconstruct the epistemology of modernity the andragogic learner needs to negotiate a path through the instructivist architecture of the library or repository.

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10. References:

Cook, J. and Smith, M. (2004). Beyond Formal Learning: Informal Community eLearning. *Computers and Education*, CAL03 Special Issue, 43(1-2), 35-47.

- Currier, S., Barton, J., O'Beirne, R., and Ryan, B. (2004)
Quality assurance for digital learning object repositories: issues for the metadata creation process. ALT-J, Research in Learning Technology Vol. 12, No. 1, March 2004 DOI 10.1080/0968776042000211494
- Dalziel, J (2003) Discussion Paper for Learning Activities and Meta-data
<http://www.lamsinternational.com/documents/LearningActivities.Metadata.Dalziel.pdf>
- Garnett, F. (2005) "Digital Divide Content Issues"
<http://www.aclearn.net/technical/metadata/digitaldivide/content/>
- Garnett, F. and Cook, J. (2004). *Community Development Model of Learning*. Association for Learning Technology Conference (ALT-C), University of Exeter, 14 to 16 September
- Garrett, J. (1991) Missing Eco: Reading the name of the rose as library criticism. *Library Quarterly* Vol. 61 (4) pp373-388
- Knowles, M. et al (1984) *Andragogy in Action. Applying modern principles of adult education*, San Francisco: Jossey Bass.
- Lyotard, J. F. (1984) *The Postmodern Condition: A Report on Knowledge*, Manchester. Manchester University Press.
- Proctor, R & Bartle, C., (2002) *Low Achievers Lifelong Learners An Investigation into the Impact of the Public Library on Educational Disadvantage* *Centre for the Public Library and Information in Society, Dept. of Information Studies, The University of Sheffield*. Library and Information Commission Research Report 117 Sheffield, 2002
- Ravenscroft, A. (2002). Communities, communication and cognitive change: social processes and designing engaging e-learning discourse, in Driscoll, M. & Reeves, T. C (eds.) *Proceedings of E-Learn 2002*, Association for the Advancement of Computing in Education (AACE), Norfolk, USA, pp. 792-797.
- Smith, M & Cook J. (2002). Final Report for 'Study of UK Online Centres' Learning Technology Research Institute London Metropolitan University. Available from:<http://www.londonmet.ac.uk/ltri/research/projects/ukonline.htm>

Address for Correspondence

Rónán O'Beirne
Principal Libraries Officer: Information & Learning
Bradford Libraries, Archives and Information Service
Central Library
BRADFORD
West Yorkshire