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I am Nick Rowe, Lecturer in Operating Department Practice for Bournemouth University, based currently at UCY.

The research into Academic Posters arose through discussion with delegates and faculty at a number of conferences. I teamed up with Dragan Ilic from Monash University, Australia, in order to investigate and address issues that we felt restricted the knowledge transfer of the medium.

This has been enabled by my own participation within the Releasing Research & Enterprise Potential programme, run by Bournemouth University & a successful funding bid, granted under the universities Quick Wins initiative.

My position as a Lecturer at Bournemouth University allows me to implement a broad background of clinical practice, whilst engaging in a shared learning experience with students and colleagues. This has provided an insight into the development of clinical practitioners and the provision of educational means, by which to support them. Much of my teaching role still centres upon the clinical subject areas related to peri-operative practice, although I hold special interests in communication and development and evidence-based practice.

Working with colleagues throughout the University and within external professional organisations, my interests lie in research and activity that promotes the professional and academic development of healthcare practitioners, both pre and post-registration. I am currently engaged in projects and research at national and international levels, aiming to support the development of education within clinical practice, particularly within the inter-professional setting. Additionally, I work with the Education & Curriculum Development panels of my clinical Professional Body, with linked involvement within the University. Much of my academic and publication activity is directed to these areas.

Traditional academic posters: a suitable medium for knowledge transfer?

In 2007, four traditional Academic Posters were presented by the author at national and international level (Rowe 2007a, Rowe 2007b, Rowe 2007c). Preparation of the posters raised a number of questions as to the scope of the medium in regard to academic knowledge transfer. It was felt that the 2D, size restricted format, limited the delivery of information to its audience and failed to give a genuine insight into the subject material and intended context. Observation and discussion during the poster presentation events confirmed this thinking, both from the perspective of the presenter and the viewer. A literature search was undertaken, in order to assess the transferability of these perceptions to the wider academic field.

The presentation of academic posters within healthcare is a common means by which to disseminate information and new ideas to colleagues (Berg 2005, Duchin and Sherwood 1990). There is however an evident lack of published material that specifically addresses the concept. Whilst the poster medium was initially viewed as being an innovative approach to professional presentation, a variety of contentious issues are raised within available literature. Much of the published material stems from nursing (Berg 2005, Weaver Moore et al 2001, Duchin and Sherwood 1990, Moule et al 1998, Bushy 1990, Keely 2004, Taggart and Arslanian 2000), with some address from medical and scientific fields (Butz 2004, Adams and Patrea Pabst 2004, Erren and Bourne 2007, Shelledy 2004, Keegan and Bannister 2003, De Simone et al 2001). The main thrust of extant literature addresses poster compilation, with some insight offered into the overall aims of poster presentation. Its status as a 'printed publication' is considered by Adams and Patrea Pabst (2004) although there is little work available that evaluates the efficacy of the medium in regard to academic knowledge transfer.

Posters display a 'snap-shot' overview of a topic. Weaver Moore et al (2001) view this as a combination of creativity and scholarly activity, with the aim to

disseminate information. In common with advertising, the provision of key-point information or messaging to passers-by is paramount (Brassington and Pettitt 2006). Erren and Bourne (2007) stress that the issue of 'selling' the presenters work is a prime objective of poster presentation. To this end, the visual impact of the product, plays an important role in capturing the attention of the viewer. Whilst the generalised concept of posters may be viewed as inherently promotional, the end objective within the professional setting is to stimulate interest and participation, with an aim to developing understanding and practice within a given area. Whereas papers have the capacity to provide a greater depth of information to support an issue, posters are often supported orally by the presenter, in response to an expressed interest or enquiry. This allows for further discussion and the informal provision of supporting or clarifying information. Conceptually, the idea of poster presentation has been viewed as less formally challenging than that of an oral presentation (Taggart and Arslanian 2000). It may though be argued that the presenter is not granted the same structured opportunity to put their case with pre-collated material; but in fact required to elaborate and support issues that are open to random ad-hoc address (Weaver Moore et al 2001). Whilst a significant degree of research and assimilation takes place in the preparation of all forms of academic work, any subsequent representation is limited by the poster delivery format, and as such may require further expansion.

Irrespective of the method of presentation delivery, it remains that the poster itself is often lost to obscurity, with only the title or abstract of the presentation remaining as a matter of record (Erren and Bourne 2007). As a stand-alone medium and without presenter availability and dialogue, the traditional academic poster fails to deliver any significant depth of knowledge or information, other than that specifically displayed within the limitations of the visual field. This 'passivity' of delivery has been identified as grounds for some to oppose the idea of visual presentation (Duchin and Sherwood 1990) and to detract from the capability of the medium to transfer or impart knowledge. In their summary, Weaver Moore et al (2001) quote Polit and Hunglers view (1995, p557) that, "The most brilliant piece of work is of little value to the scientific community unless that work is known". Whilst they

propose that poster presentation may be a suitable means of knowledge transfer for the nursing profession; wider literature review shows the medium to hold limitations that would benefit from further consideration.

Berg (2005) considers the traditional poster medium to be thorough, by nature of its refinement. Succinct writing is an acknowledged academic skill, that many find challenging. Without the approximate 3000 to 5000 word scope provided within a professional article or paper publication, there is a demonstrable restriction in the ability to provide viewers with the supporting information, required for analytic consideration. By example, the 4-column A1 poster presentation depicted in (figure 1), achieved a 1,942 word count (Rowe 2007a). Feedback from the event showed that whilst the content was in enough depth to be self-supporting, it lent to a text-heavy appearance that was potentially demanding on the viewer.

Figure 1
Practice-based learning & HE -
let the learners lead the way
Bournemouth University
Learning and Teaching
Conference 2007



The substitution of words for imagery is appealing, and contributes to the achievement of visual impact (Berg 2005, Erren and Bourne 2007). Linked to this, Duchin and Sherwood (1990) highlight the need to create a lasting mental image that will help in informational recall. A following poster presentation (**figure 2**) (Rowe 2007b) made use of a large centrally placed emotive image, surrounded by topically headed issues. The poster presented 1,013 words, although a primary focus of compilation was placed upon the aesthetic composition of the work. Feedback from the presentation event was positive in regard to visual appeal and the coverage of the topic, although many viewers requested further discussion and background on the issues raised.



Figure 2
Comfortable With Academic Challenge ? : Releasing potential in practice-based learning & higher education. Association for Peri-Operative Practice National Congress 2007

From this, it may be taken that any engagement achieved by a visually appealing presentation, will also require a commensurate level of supporting information, in order to meet the wider needs of an academic audience. The

imagery and information presented within posters is seldom available to the viewer after the event, other than in individual recollection. Given that traditional academic posters are not ideally suited to replication or mass distribution and it is often only an abstract submission of 300 to 500 words, that is provided to conference attendees.

Experience in poster compilation can help to refine the end-product in both aesthetic and academic appeal, becoming an acquired skill in itself. As employed within the identified disciplines of science and academia however, posters often fail to fully answer the expressed needs of those involved. Visual and literary mediums compete for balance within the space limitations of the format and it is perhaps this 'trade-off' of application that detracts from the overall appreciation of the genre as being academically robust.

Professional conferences employ the medium of traditional poster presentation so as to present an opportunity for greater numbers of delegates to present their work. Reciprocally, this may help justify the institutional cost of funding delegate attendance (Berg 2005). Erren and Bourne (2007) differentiate between a poster being accepted for conference presentation (with the implication that this may be driven more by financial motivation on the part of the organiser), and any perceived endorsement of its academic content, as may be otherwise reflected in the acceptance of peer reviewed papers and journal publications. This might further serve to detract from the acknowledgement of poster presentation as a medium of publication and knowledge transfer. Erren and Bourne (2007) are clear in that it is the content of a poster as a reflection of the quality of the work represented, that is subject to peer endorsement - not the product itself. However, whilst the physical limitations of the medium continue to restrict the depth of content delivery, this remains a contentious issue.

The broader perspective of knowledge transfer is brought into question by Adams and Patea Pabst (2004) who produce legalistic consideration as to whether a poster presentation may truly constitute a printed publication. Adams cites a 2004 US Court of Appeals ruling, in which a poster

presentation depicting 14 PowerPoint slides was deemed "to foster general knowledge" of the subject concerned. No entry of the work was made into library indices or database reference, nor was there a distribution of linked written material. The display was given adequate exposure (2.5 days) to an audience of assumable expertise, and as such its content material could be noted or copied by note-taking or photographic means, in the absence of any restrictive prohibition. As such, the material was deemed to have been published and prevented the presenting author from subsequently applying for patent rights on the material described. In this case, publication was not determined in terms of the common perception as requiring the dissemination or distribution of copies of written or printed material, but along the lines of exposure & the ability to achieve knowledge transfer to a selected audience. Both from an aspect of academic accreditation and in regard to issues of intellectual property and proof of concept, it is therefore advised to establish the rights of authorship and patent clearly, as material presented within poster presentations is shown to have reasonable consideration as a 'printed publication' (Adams 2004, Weaver Moore et al 2001). The legal ruling serves to support the proposition of the genre as being suited to its intended purpose: a means to disseminate information and new ideas (Berg 2005, Duchin and Sherwood 1990).

Literature acknowledges that the medium of poster publication is both favoured and appropriate to the presentation and dissemination of scientific and academic information, within the identified professional settings. Effective poster compilation remains an identified issue, with an emergent dichotomy in that those involved value the 'snap-shot' appeal of a visually attractive poster, yet at the same time regret the restrictions in depth of presented material.

On-going collaborative research into the topic promotes an information technology-based approach that will increase the stand-alone interactivity of the medium. Considered as a 'MediaPoster', use of commonly available touch-screen technology allows access to a greater depth of supporting information and imagery, whilst still retaining a traditional static poster image. Looking to adapt educational whiteboard technology, it is aimed to produce an

adaptable template that allows an IT-based poster compilation, with in-built links to original literature sources and feedback mechanisms.

In touching the presented image either physically within a conference style environment or via a computer-based virtual learning environment, viewers may access a full range of linked documents and imagery which open in a dedicated side area of the available screen (**figure 3**).

The original poster image and information remains unchanged and in full view for others to see, thus maintaining the desirable aspects of the medium.

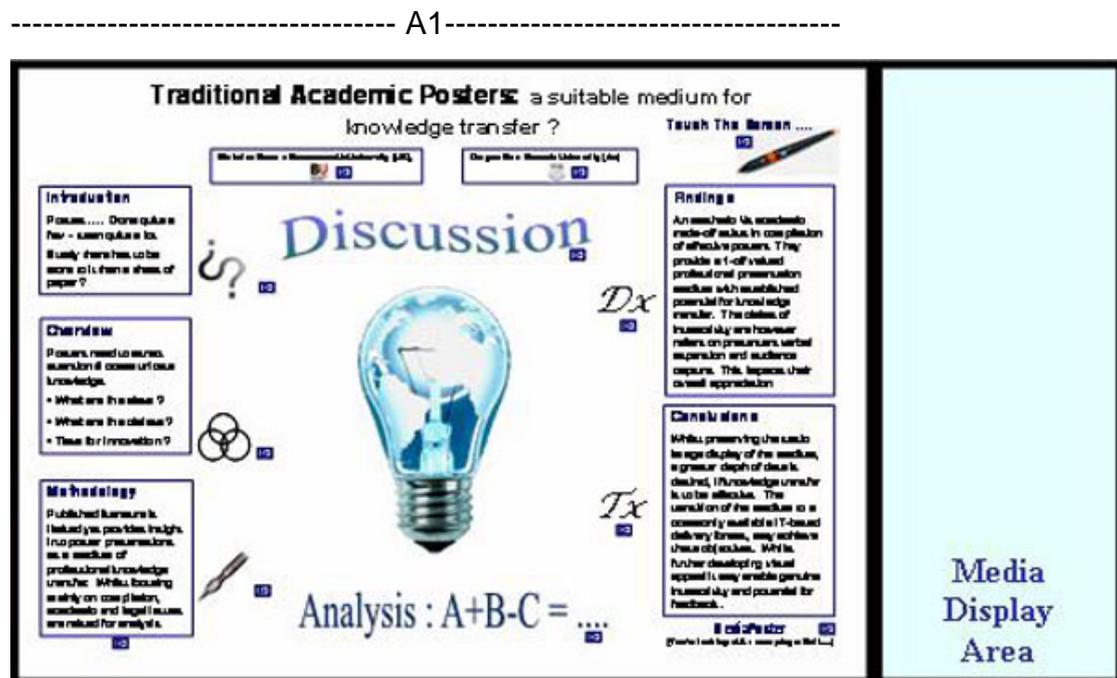


Figure 3
MediaPoster concept depiction

The concept allows for the exploration of any static 'image'. This may range from a tabled document of findings with linked secondary supporting data, to a photographic representation with descriptive or informational background. There is no limitation as to the compilation of the poster image, or its linked sources of media and information, other than the installed capability of the delivery system, to run the applications.

The combined media form the visual and literary components of a traditional poster image, yet provide a further dimension of academic depth and engagement. Feedback to the authors may be enabled by use of linked

questionnaires or live website and e-mail access. Again, these are embedded within the presentation image and accessed on-screen with a virtual keyboard or using voice-recognition technology. An audio dimension may also be provided via headphones. The MediaPoster concept is aimed to have transferability across not only academic and professional spheres, but also within those domains where interactive knowledge transfer will benefit service development and provision. In achievement, it is hoped to innovate the existing approach to poster utilisation and so develop upon the identified potential of poster publication as a means of effective knowledge transfer.

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