eIUS: e-Dance Experience Report 1

In the text: Some barriers etc. in '{{…}}' to provide more contextual information.

Interviewee profile

Senior Lecturer in Dance (New Technologies), University of Leeds; Dancer (First Class honours Degree in Dance) and Choreographer; Co-Investigator e-Dance project

Time spent in research

40% in e-Dance and "a little additional on top of that"

Research area

e-science/e-infrastructure and its development and application in and for performing arts: in the project the interviewee is an active user of such tools in being an active dancer and choreographer

e-Dance website: "Two intersecting research questions are central to the project:

What unique opportunities does the distributed Access Grid environment provide for developing new approaches to choreographic composition and process and within this context how can we find new, appropriate and meaningful methodologies for capturing and modelling practice-led research?

How can choreographic knowledge and sensibility help to shape e-Science practice to make its applications more usable within the field of performance arts practice-led research as well as the broader Arts and Humanities context?

We will be extending our Memetic toolkit for recording, replaying and annotating sessions in the Access Grid, to create tools for choreographers to rehearse and perform distributed compositions."

The e-Dance project is a two year project and ends mid-2009. It is a collaboration between the Universities of Leeds (Co-PI, at the same time dance art practitioner, i.e. user), Bedfordshire (PI, at the same time dance art practitioner, i.e. user), Manchester (2 co-PIs plus 2 developers) and the Open University (co-PI plus one developer).

Research question(s)

"We were very interested in how the kinds of physical embodied knowledges and embodied communication of dance can challenge e-Science, what it offers in terms of thinking about things in different ways and we were interested then, reflecting back, what using the e-Science tools did to the choreographic process and what effects that had on dance as a medium, so it was very much a two way flow, and then within that we had a series of questions which were about space and time in relation to how is that portrayed and how is that understood and how does that work for choreography and what are the requirements of e-Science, but we're very much interested in how e-Science can work as a documentation tool for dance research; a lot of practice lead dance research".

Practical questions (includes **example**):

Finding ways for digitising, storing and cataloguing "hours and hours of video of studio work": e-Science, i.e. AG (Access Grid) and Compendium is offering means to manage "ways of recording multiple streams of video that can be tagged together, that can be tagged as we go along so we can jump back to key points that can be annotated; we're currently looking at developing a tool which will allow us to annotate the video directly so that then nodes appear in the video as it runs, that can then be used effectively to provide a historic mapping of the processes that were involved in reaching that moment of choreography; so that then opens up the whole choreographic process as a piece of documentation for study, for reconstruction, for all of these different kinds of things that we need to do in dance research."

The technology helps to bring together two otherwise separate things, the actual performance (video) and annotations etc. in written form. "(..) these internal marking and mapping gives us access to that knowledge in a much more effective way". This means the project drives forward the further development of tools as well as getting insights towards questions and processes that apply to the field of performing arts itself.

Research Lifecycle

Literature Review – Start of the research process in e-Dance

"We [Leeds and Bedfordshire, the interviewees of this and the other experience report, coming "from a particularly dance and technology side"] started off by doing some literature searching, but literature in our field also very much involves performance practice alongside the books and journals and articles". Then they began the collaboration with Manchester (specialised on the e-Science and AG aspects and visualisation) and the Open University (from the perspective of interface design and visualisation, especially with Compendium) and "a lot of what we were doing was pooling information and learning about each other's domains, so the very first activity that we did altogether was a sandpit which lasted for two days". On the first day the dance artists used/tried out/familiarised with e-Science tools: they already knew of the Access Grid (AG) in this context, but further tested the web-based Memetic tools (an extension of AG functionality, see the project website under http://www.memetic-vre.net/), especially Compendium (a concept mapping and visualisation tool, which can also be used on its own; it works together with ScreenStreamer, an AG screen recording tool, i.e. the video stream is connected and synchronised with annotations in Compendium). The interviewee describes these familiarisation process as quite basic, as she and the other e-Dance interviewee (see 2nd e-Dance experience report) are both not "technology minded". The second day then engaged the developers and e-Science experts in a dance workshop showing concepts of choreography and dancing. After this also readings have been exchanged between the collaborators to further establish common ground between the domains.

In general: If the research is about choreography itself the interviewee "would be looking at other work around site specific choreography, about writings and also practice".

Further the interviewee "would primarily use the e-Science tools when I came to undertake my own practice as part of that piece of research, so what I would do is try to ensure that all the practical workshops that I did were in a venue which had Access

Grid capabilities. I would record probably not everything that I did but certainly what key moments in each period of time, so I might be working in the studio for five hours a day".

Data collection process

"We've done a series of intensive workshops where we have worked with Access Grid in various different ways; sometimes it's been a mobile Access Grid that we've brought down to Bedford and we've done some work where we just worked in one locality and effectively what we were doing was using multiple cameras through the Access Grid software in order to be able to file dancers in different locations around the space and then create a composite image out of that and using the technology to be able to record that and thinking about what that does for us because that ability to be able to record different streams of video, play them back individually and to be able to jump to different points between them is very useful for dancers in research mode".

{{"we've been very limited in the past by video cameras which aren't synced up which, it's much more complicated to do video edit, to look back at material in order to be able to review the research process."}}

"More recently we've done different remote location work and we did a workshop in November where I was based up in Manchester [with the collaborators/developers there] and [interviewee 2] was based down in Bedford with (.) [a developer from the Open University] and we've been looking at layering real time and pre-recorded material in performative mode and on that occasion we were also looking at remote choreography. Communication is the key thing, communicating between two remote spaces; how do we do that when we are trying to work with embodied physicality rather than a verbalised discussion".

Data is stored on a server in Manchester "and we can get it via the website through that web interface [of Memetic] and play it back". At the same time the data can also be used in an AG node, as the tools are based on that technology.

As a primary mode they use "Compendium as a mapping tool and what we've been looking at alternative icons that are perhaps more recognisable to us". This includes "thinking about how mapping can be done effectively by adapting the tool to work for us".

At the same time the dance artists still use hand-drawn sketches and notes along the computer-supported annotating and are currently looking at ways to combine both, e.g. with electronic tablets/digi-pads for data input, hence being able to capture this data in Compendium as well.

Example (also see under data analysis): "What I might very well do either as I go along or at the end of the day is put in some form of annotation to explain what I was thinking, what we were doing at that particular time to remind myself where that material was coming from. One of the things that we've been talking about is some kind of big red button that you can hit when something interesting happens because you don't always want to rationalise the creative process as it's happening", as in "tagging the video footage at key moments and then perhaps at the end of the day I go back and I go to my markers".

Data analysis

The use and ongoing development of the AG environment (and its visual interfaces), especially the Compendium tool as a documentation interface and ScreenStreamer as a performance recording interface is constantly analysed in the practice of performing arts. At the same time the performing arts practices themselves are constantly reflected on to improve those as well and in the end bring technology use and performing arts practice together. The developers "get given tasks (..) and they go away and develop stuff and they feed it back to us and we get together for workshops every two or three months when we look at what they've been doing and we say oh yes, this is working or can you just tweak it in this direction and they tell us the problems that they've been encountering".

The interviewee states that they as artists "have no idea what the time implications or the technology implications are, and sometimes our wonderful technical people say to us 'oh yeah, that's easy' and sometimes they go 'only if you've got five years', and part of us asking them these questions is getting them to think differently about how they do things" – and vice versa.

The dance artists between each other discuss the "implications for choreography, particularly space, but I've also become very interested in the ways in which we understand our video selves if you like, in relation to our own bodies and I'm just writing a paper about that at the moment."

Continuing example (see before under data analysis and collection): This "helps me to reflect back upon my creative processes because when we're working in dance, in practice lead research, we're constantly shifting between functioning as an artist, in which case a lot of the noise that you're drawing on is intuitive, embodied, not necessarily verbalisable, if there is a word; but you're not able necessarily to verbalise in that moment but then when you come back to it at the end of the day, the reviewing of that material, the knowing that at that moment I hit the red button because I thought something interesting was happening, enables me to reflect upon, rationalise and begin to concretise the research process that was happening at that time, so it's potentially very useful from that reflective cycle process that we engage in regularly, and then what I would probably do as I went through the research process is try to build Compendium maps so that I begin to, as I'm hitting these red button moments and I'm rationalising them, I'm beginning to draw out the emergent strands, perhaps in particular relation to individual research questions, perhaps just in relation to concepts that I can then map together later, so there's a dual process of mapping going along alongside the practical work that is enabled by the software and the technology". In this context e-Science tools like Compendium help to give more structure, organise the process better and make information retrievable ("in the past it's been bits of documents scattered on computers or even bits of paper").

Collaboration

A two day project kick-off f2f meeting was used to get started and to explore each other's domains (developers dancing, dance artists using e-science/AG tools), followed by a series of intensive AG working sessions every two or three months in different ways (mobile AG at one location all f2f or remotely via AG).

Use of tools: An email list is the most frequent collaboration tool in the project, followed by f2f meetings and AG sessions occasionally; a Wiki exists, but is not used that often by the dance artists.

Dissemination

Blog on the project website: The "public website (.) has a blog where we put stuff that we want people to see, and sometimes we share ideas that we're developing up there with each other but also with anybody else who wants to comment as well".

"We've done a number of conference disseminations which have been 'performance and technology'; 'performance and technology' is quite an established research field in itself". Project members have been "part of a panel at the digital resources in the humanities and the arts conference which was very well received".

In the e-Science community the All Hands meeting was successfully used to publicise papers in 2007 and 2008; this led to a journal article presented in Edinburgh at the 2008 e-Science All Hands Meeting.

The interviewee currently writes a paper about "ways in which we understand our video-selves if you like, in relation to our own bodies". Both dance artists have publicised various performance orientated work together.

The developers, especially one of the Manchester Co-PIs have "done a number of more technical presentations to the e-Science community in the smaller conferences".

No matter in which domain papers are disseminated "everybody's names go on all the papers". "We have a whole range of different places where we can disseminate, and we all try to have a look at everything that goes out, even if it's more orientated towards the other end of the spectrum from where we're positioned."

At the end of the project also actual videos are considered for dissemination purposes: "we are working towards a major performance which will form the culmination of the project".

"We've got a workshop planned in March or April when we are inviting about twenty people from performance and about twenty people from e-Science, and we're bringing them all together for a day to see some of the work we've been doing and have a play with the setup that we've got and to feedback".

Workshops are also used for teaching purposes as "Access Grid technology offers so much for performance work in terms of being able to share performances".

Continuing the example from data collection through data analysis: "We're planning in the e-Dance project, to be able to at the end of the project, record the final piece of performance which is the culmination of the research and use all these maps and recordings that we've got to build a history into that recording by adding nodes into it so that somebody who's coming and looking at this piece of performance as the outcome of a piece of research can pause the video, click on the node, see all the background information behind any given moment and it can reveal far more about the research than just watching the performance in itself can do."

Other important elements about/in the research:

AG equipment: "At the moment we're mostly using technology that's come from Manchester", i.e. when "working down at the Open University some of the equipment

is from there and some of it is borrowed from Manchester – and I tend to go over and use the Access Grid node in Manchester, but the big problem with using that particular node is the fixed cameras (..) that's very limiting for us in terms of the visual aspects of what we're doing". At occasions they have been able to also use portable Access Grid equipment, which is very much better in terms of capturing the whole performance process: "we have a free floating camera that one of the dancers will actually move around in the space so that we can have the possibility to get right into what's going on, or we'll set cameras up in different locations according to the effects that we're trying to achieve at any given moment".