A Review and Evaluation of two Methods for Analysing Video Evidence in Qualitative Research

Abstract

This short paper considers how two alternative research methods can be used to analyse the same video evidence, which is being captured and used to support action research fieldwork operating within the conversational learning paradigm of Harri-Augstein & Thomas (1991). The principal researcher for this PhD project is an educational practitioner-researcher who seeks to live out his values more fully in his professional life, with the aim of making an original contribution to educational knowledge and theory that will inspire others to do the same. Building on the African notion of Ubuntu the project seeks to bring humanity closer together and to influence the education of others through the establishment and development of a partnership between a UK and South African school. Putting values at the heart of education, this research seeks to reflect on and evaluate how the education of the (principal) researcher, colleagues and students have been influenced through working with some students and their families in the township of Kwamashu in Durban, South Africa. The methodology adopts an autobiographical study undertaken from the self-critical perspective of a lead teacher operating as a participant action researcher (Carr & Kemmis, 1986). Qualitative evidence in the format of video and narrative commentary is being captured throughout the period of this project. The problem is to be able to make sense and derive useful findings from video data captured as part of the qualitative research methods.

Two methods of qualitative analysis for video sources are to be compared and contrasted. One method uses a manual review conversational paradigm Talkback procedure; whilst the other using ATLAS.ti© software (http://www.atlasti.com/demo.php, accessed: Jan-09) embeds a similar approach for eliciting findings. The main impetus for Computer-Assisted Qualitative Data Analysis (CADQAS) came from academic seminars including social researchers and computing enthusiasts in the early 1980’s (Fielding 1993). Both approaches are to be compared, contrasted and evaluated using authentic case study examples drawn from this research project, thereby providing some useful insights toward the adoption of a videocase methodology for other researchers faced with resolving a similar problem.
**The video research objectives**

The key aim is to convert case study video narrative into conversational qualitative data. Such raw data from participant learning conversations (Harri-Augstein & Thomas, 1991) can be systematically analysed into impact evaluation professional development findings. This paper will share case study findings of the international education activities engaged in by UK teaching staff working in a South African partner school. We will also explain the qualitative research process adopted and suggest two different, content free, generic procedures for making sense of narrative data.

A major contribution of this research project is the development of a conversational learning taxonomy from which to make sense of and analyse the real-life video captured narrative and other reflective data evidences obtained through participative action research. This conversational learning taxonomy builds upon the self-organised learning action research paradigm of Thomas and Harri-Augstein (1985) and Coombs (1995). By drawing on the work of Reason and Rowan (1981) and Heron (1981) we wish to highlight the importance of common dialogue and a participative ethical approach to field research that enables data-rich and valid conversational learning evidences to be used. The narrative action research methodology builds on the work of Connelly and Clandinin (1999) and McNiff, (2006) and is grounded in the framework suggested by Doyle and Carter (2003). We also agree with Snow’s (2001) assumption that the knowledge resources of excellent teachers constitute a rich resource, but one that is largely untapped because we have no procedures for systematizing it. In this short paper we outline our conversational learning taxonomy and compare and contrast it with an electronic procedure using ATLAS software. Using these two content free procedures we have engaged in a systematic process of researcher derived discourse analysis that can also be referred to and understood as discursive discourse analysis (Coombs, 1995) that underpins the qualitative analysis of any empirically derived clinical field research data whatever the obtained format (Gardner and Coombs, 2009).

**The research context**

The principal researcher for this PhD project is an educational practitioner-researcher who seeks to live out his values more fully in his professional life, with the aim of making an original contribution to educational knowledge and theory that will inspire others to do the same. Building on the African notion of Ubuntu the project seeks to bring humanity closer together and to influence the education of others through the establishment and development of a partnership between a UK and South African school. Putting values at the heart of education, this autobiographical self-study research into professional practice seeks to reflect on and evaluate how the education of the (principal) researcher, colleagues and students have been influenced through working with some students and their families in the township of Kwamashu in Durban, South Africa.

The stages to developing an international partnership were identified as establishing, sustaining and embedding continuing professional development (CPD). Engaging in this project the researcher seeks to show that there is a CPD process involved in developing an international link which has educational significance and that this link...
can be developed in different ways. The reader can then critically engage with this process and develop his or her own approach toward developing a similar international partnership.

The researcher validates his actions with reference to capturing conversational evidence as case study narrative accounts from participants engaged in the partnership activities. This will be in the form of video and text data as evidence that will be conversationally analysed in a discursive manner to show the influence of these activities on the learning of others.

This PhD research project addresses the following action research questions:

1. How has my engagement in this research enabled me to improve my practice and contribute to educational theory?
2. How have my actions in developing the partnership enabled me to live out my values of social justice, equality of opportunity and humanity (Ubuntu) more fully?
3. How can I develop the sense of the voices of others within my narrative and show what I mean by influencing their learning? What evidence can I bring to show that others are learning from the journey that I have taken through this story and are living out their values more fully as a result?
4. To what extent have I encouraged participation and democracy through my actions in linking with the South African School?
5. How can I validate my narrative and answer questions about the quality of rigour within my research?
6. What are the transferable pedagogical protocols for designing and developing international education as part of a new CPD framework?

The research methodology

Using a typology of research that distinguishes between the experimental paradigm assumptions of “prove” versus “improve” (Coombs & Smith, 2003), this work lies firmly in the “improve” social manifesto paradigm (Coombs, 1995 and Gardner & Coombs, 2009). We further recognise that this approach to research is not a traditional one and that it sits firmly within the so-called category of “new paradigm research” (Reason and Rowan, 1981). Consequently, the preferred research framework that is commensurate to the research questions and objectives of this project is that of a participant action researcher operating within a small-scale ethnographic study. We have built upon the work of Schön (1995), Hall (1981), Holloway (2004) and Chomsky (1969) to support and develop this approach.

The researcher’s aim is to find a different perspective on action research from which to synthesise a useful and unique approach that also develops McNiff’s (2006) concept of a living educational theory as narrative-based inquiry. Thus, the researcher intends to extend his own learning of South African culture and education from which to develop his own and other participant teacher values as international educators.

This authentic action research field approach enables methodological inventiveness within practitioner research and validates the importance of allowing practitioners the opportunity to account for their own learning and the learning of others through a range of creative means and methods. Such a biographical case study approach
towards action research is validated by McNiff (2006) who proffers the living educational theory paradigm of developing case study narrative as authentic research evidence. This will be achieved through the extensive recording of images and video data for subsequent qualitative analysis.

Engaging in a self-study reflective research paradigm one can see how practice as a professional educator can be improved through such narrative-based inquiry and feedback as improvement to teaching (Doyle & Carter, 2003). Such an applied research process underpins Doyle and Carter’s concept of ‘Learning to Teach’ and espouses the ethical virtues of Schön’s (1995) reflective practitioner as a means of authentic on-the-job CPD. Consequently, the researcher has formulated his own question(s) and has found meaningful ways of solving it. Wright-Mills (1959) maintains that the “methods must not prescribe the problems; rather, problems must prescribe the methods”.

In designing this PhD project the researcher (as co-author of this paper) describes the nature of inquiry though the conversational first person voice:

> I have chosen to take an action research approach to my study as I have found it to be one which enables me to get on the inside of the issue. I find that I can be creative in the way that I approach the subject matter. It drives me to act and to challenge the way that I am acting. It provides a creative energy that I can turn into action. So when I want to raise money to help students in Nqabakazulu School I am spurred on to do so and to involve others in a democratic way.

We draw on the work of Reason and Rowan (1981) and Heron (1981) to highlight the social inquiry importance of dialogue within a participative approach to research that leads to conversational learning (Thomas and Harri-Augstein, 1985). This participative approach is also strengthened by the ethical arguments for a more democratic approach to research that is advanced by Hall (1981) and Chomsky (1969).

The methods used to capture qualitative data are as follows:

- Video footage of events and interviews;
- A reflective diary kept by the principal researcher as action researcher; and,
- Interviews and questionnaires with participants.

This range of qualitative methods will enable triangulation across these diverse sources of evidence.

**Outline of the Two Procedures**

The flow chart below as figure 1 outlines the steps involved in the two methods and how they can be brought together to strengthen the reliability of the findings.
QUALITATIVE ANALYSIS OF VIDEO

Video data
Any number of video clips of 2 – 15 minutes in length

Manual Review

1. Spidergrams (Rationale for filming events and Key Questions)
2. Template 1 - Data Capture Rationale
3. Template 2 – Analysis of video footage in terms of the implications for the project goals to avoid viewer misconstruing
4. Template 3 – Talkback record for identification of issues arising from cross source comparisons
5. Template 4 – Talkback record for identification of emerging themes and arguments synthesised from themes

ATLAS Review

1. Create a hermeneutic unit
2. Assign primary documents (upload video footage)
3. Play video and write memos (notes)
4. Create codes (key terms)
5. Link codes with other codes and with memos
6. Make comments on the links
7. Create an ATLAS Network map

Compare and Contrast the Techniques and the Findings

Cluster the Themes

Findings based on themes
Method 1- A video pedagogical research protocol (Manual method)

The project has developed a transferable set of conversational learning procedures (Coombs, 1995 & Harri-Augstein and Thomas, 1991) for capturing and analysing professional learning knowledge as impact evidence. Conversational procedures such as Talkback have been used to both elicit, record and analyse video data and operates within the epistemology of Thomas and Harri-Augstein’s (1985) self-organised learning (S-o-L). The pedagogical theory of S-o-L provides the following epistemological rationale for Coombs’ (2000) concept of a critical thinking scaffold:

1. elicitation of items of meaning;
2. sorting of their relationships; and,
3. display of the final pattern.

These three critical thinking steps also underpin the nature of qualitative analysis and represents what Coombs (2000 & 2001) refers to as a knowledge elicitation system (KES).

These KES conversational tools have been designed by the authors of this paper to facilitate the systematic qualitative analysis process of converting raw video data into impact evaluation professional development findings. Action research S-o-L tools such as Coombs’ (1995) Spidergram and Talkback conversational templates have been adapted for this research project from which exhibits have been illustrated in the next section.

The project video author has identified some clear educational purposes from which the research rationale defines the choice of filming. Four aspects of South African life have been identified from which to capture the social evidence to address the research questions:

1. South African cultural life;
2. Reflections by staff and students on the impact of the partnership;
3. Life in the South African School; and,

In a practical sense there are two key project stages regarding the use of video as a qualitative data source.

1. Capturing the teaching and learning events themselves.
This can be called an observational phase of video with the action researcher as the observer. Ethical arrangements with the necessary permissions and agreements about the purposes and uses of the footage are put in place. The researcher’s own UK school obtains permission for the use of video for educational purposes through a consent letter sent out to parents. Filming in two different countries means that one also needs to be aware of the cultural aspects of ethics, so that, for example, filming students in South Africa does not require the same permissions as in the UK. The ethical rationale and use of video in South African schools is built upon the existing practice of video captured for entertainment and marketing purposes.

2. Capturing participant reflections.
Validity is gained for the initial observations made by using video, by carrying out a second video phase that aims to capture the reflections of the teacher (or performer) and the perspective of the students (or a third party). This participant reflection of the observed practice can be prepared for by using key focus questions drawn from the initial video observations that are also linked back to the original research questions.

A critical thinking scaffold in the form of Coombs’ (1995) Spidergram can be used to provide a rationale for the choice of events to film and for the key participant focus questions – see exhibits in figures 2 and 3.
Primary School to increase participation in the project by engaging UK Primary Schools as partners.

Lessons in Art to ascertain impact on learners.

Learners receiving grants to ascertain how they are benefiting from the experience of HE – impact of the funding.

Student and staff learners at the School to gauge the impact of our actions as a partner school.

Lessons on Citizenship to ascertain the impact on the learners.

UK participants before and after visit to ascertain expectations before and the impact made including the learning gained.

Lessons in Music to ascertain the impact on learners.
Primary School –
**Tchr** What benefit do you see a partnership bringing to your School? What actions might you take to build the partnership? What can the Schools learn from each other? What is the context of your School?

Student and staff learners at the School -
What impact is our partnership having on the learners at the School?
What impact is our partnership having on the staff at the School?
What impact is our partnership having on the community?
What can we do to have more of an impact?

Lessons in Art –
**Tchr** What is the context of the lesson? **Stds** What have you learned? How might you use this learning?

UK participants in visit
**Before** – Why are you going to South Africa?
**After** – What effect did the visit have on you?
What did you learn from the visit? Did it turn out as you expected?

Lessons in Music -
**Tchr** What is the context of the lesson? **Stds** What have you learned? How might you use this learning?

Lessons on Citizenship -
**Tchr** What is the context of the lesson? **Stds** What have you learned? How might you use this learning?

Learners receiving grants –
What has the grant allowed you to do?
What impact is the H.E. experience having on you?
What benefits do you see for your community?
Qualitative analysis and findings

From figure 2 it is clear that the researcher had planned to capture certain critical learning events and aspects of South African life. Unsurprisingly, having undertaken the *in situ* filming the researcher responded to real life events and newly discovered learning opportunities and therefore deviated from this anticipated plan to some extent. The analysis tool 1 below in figure 4 shows the degree of variation and the rationale behind it:

<table>
<thead>
<tr>
<th>Video Source Planned</th>
<th>Video Source Captured</th>
<th>Research Purpose</th>
<th>Video Author’s Post Reflection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview with learner receiving grants for HE</td>
<td>Yes. Interview with Lunga</td>
<td>Understand the influence of the partnership on him and his community</td>
<td>This was a worthwhile interview which should make a contribution to my findings.</td>
</tr>
<tr>
<td>Interviews with staff and learners at the School</td>
<td>Yes. Teaching staff, Headteacher and several students interviewed</td>
<td>To gauge the impact of our actions on the School and the community.</td>
<td>A range of perspectives were gained from these interviews. This should allow me to draw on these for my findings.</td>
</tr>
<tr>
<td>Interview with Thiris Arumugam</td>
<td>To ascertain the impact of the partnership on him, the School and the community.</td>
<td>This was not planned prior to the trip but circumstances allowed me to interview Thiris. As the person with whom I had first started the link it was useful to get his perspective on the influence that it is having.</td>
<td></td>
</tr>
<tr>
<td>Footage of the Primary School</td>
<td>Footage of a discussion at the Primary School</td>
<td>To broaden the link by engaging partner Primary Schools.</td>
<td>Using this footage with Primary Schools in the UK should enable them to get a perspective on nature of the School.</td>
</tr>
<tr>
<td>Footage of lessons being taught.</td>
<td>I captured some of a tourism lesson and small parts of a music lesson being taught.</td>
<td>To identify the specific content learning.</td>
<td>I decided that this was not what I was concerned with. The short term gains in knowledge about art, music or tourism are less significant than the longer term influence on learning through the</td>
</tr>
</tbody>
</table>
Some of the footage taken was planned prior to the visit, but some was unplanned. In the latter case, the researcher took the decision to take the footage as it presented itself, very much akin to Coombs’ (1995) rationale of recording authentic social episodes as they occurred in real life as part of the action research learning environment. Such social episodes represent key learning events over time and can be recorded as episodic events. From this ‘situated learning’ perspective the research purpose became apparent to the action researcher as he was experiencing the event. One question that was reflected upon by the researcher during his experiencing of South Africa was: How can I filter out misconceptions of South Africa? This notion of myth busting occurred fairly early on in the visit and it became a key focus issue in determining the choice of filming. The researcher was conscious of the pre-conceptions that people, and in particular his school students may have of South Africa from the media and this was an educational opportunity to challenge those pre-conceptions.

**Figure 5**

**Analysis Tool 2**

**VIDEO SOURCE - Interview with Lunga**

Descriptor – Interview with learner receiving a bursary from us to study a degree at a Higher Education institution in South Africa.

Research Purpose – To ascertain the impact that our actions are having on him and his community.
**Observational Questions** | **How does this connect to the video clip?** | **What are the implications for the project goals?**
--- | --- | ---
1. Lunga, can you tell us about what has happened to you and what you have been doing since we saw you two years ago? | Lunga’s response is as follows: “Since you guys came to South Africa and I asked you for financial support due to the financial constraints that I had from my family there has been a great change, because I am at the University of South Africa doing B.Com specialisation in marketing and I’m doing quite well. So from what you have contributed I am at a higher level now” | One of the aims of the partnership project is to influence the education of others. Lunga’s response is clear in that our partnership activities have given him an opportunity to further his education that he would otherwise not have had.

How do you think this will help your family and your community? Will it help them? | Lunga’s response is that there is a lack of finance available at home “and if I get the opportunity to complete my degree and to work, it will bring (provide) bread at home. My young sisters and brother who are still at School would be able to get educated, so that initiative (the bursary support) is part of building the community. Without me being in the labour force, there wouldn’t be bread at home.” | Again, Lunga in his response refers to the education of others, in this case his own brothers and sisters who are more likely to be able to stay on at School and get an education rather than having to try to find a job to provide bread for the family. One of the key aims of the partnership is to impact on the education of others.

Our second analysis tool, shown in figure 5 above, is designed to avoid “viewer” misconstruing. This enabled the researcher to make his own sense of the responses given to the focus questions and to put them in the context of the aims of the partnership for the viewer. Making the meaning explicit in this way is also a means of avoiding viewer misconstruing. Note that the researcher is operating in the conversational paradigm and hence the research narrative is recorded in the first person and represents his authentic voice. This type of conversational procedure and narrative-based analysis of action research events was developed by Coombs (1995) as part of a Talkback qualitative analysis approach of authentic field data obtained via Thomas & Harri-Augstein’s (1985) conversational psychology paradigm. The Talkback procedure and template has been developed here to analyse the project findings developed in figure 5. Consequently, figures 6, 7 and 8 represent the Talkback records themselves. Note that the Talkback procedure involves a systematic cluster analysis of identified narrative themes, but that the qualitative process employed is experientially ‘content free’ and therefore represents a transferable scaffold for similar action research projects.
Having analysed the footage in this way one can now review the qualitative data through the use of a Talkback record. First, in Figures 6 and 7 key focus questions are reviewed and laddered-up as thoughts and ideas related to the issues that arise from the responses to these questions from the video sources:

**Figure 6**

**Talkback Record – Review of Qualitative Data**

**Key Focus Question Issues**

Focus Question/Descriptor – What impact is the partnership having on the education of people in the South African community?

<table>
<thead>
<tr>
<th>Narrative Item (Data Source)</th>
<th>Flag</th>
<th>Laddered-up thoughts and salient ideas related to issues in recorded abstracts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview with Lunga</td>
<td>1</td>
<td>The impact on him and others like him that have received the bursaries are considerable. It has enabled them to access higher education when they would not otherwise have been able to do so. I later met another student who had received a bursary from us and he had in his second year obtained a scholarship from a university in the USA to study there.</td>
</tr>
<tr>
<td>Interview with Headteacher</td>
<td>2</td>
<td>It is impacting on the users of the computer facilities, those students receiving bursaries and the students that have been chosen to visit the UK.</td>
</tr>
<tr>
<td>Interview with Mr T. Arumugam</td>
<td>3</td>
<td>The impact goes beyond the direct recipients of bursaries or financial support for visiting the UK. The partnership has a motivating effect on other students who see that there are opportunities to participate in these activities. When I later spoke with one of the teachers that visited the UK he said that it had been a tremendous motivator for him in the past year, knowing that he had been chosen to visit the UK. He described it as the “best thing that had happened to him in his teaching career in the past 25 years”. The significance of the motivational effects on staff and students had not been apparent to me before.</td>
</tr>
<tr>
<td>Interview with Students</td>
<td>4</td>
<td>What stands out for me here regarding impact is the impact on their learning about other cultures and the confidence that it gives them to communicate and develop a relationship with people from a different culture. This interview led me to conduct an interview with each of them after they had visited the UK three months later to check their learning and whether they had experienced in the UK what they had expected.</td>
</tr>
</tbody>
</table>

**Cross Source Comparisons**
1 and 2 Both sources refer to the impact on the recipients of the bursaries as being significant in terms of providing them with the opportunity to access higher education. I recognise that there are issues here about whether in doing this we are concentrating our efforts on a few fortunate recipients at the expense of the many other learners. However, our bursaries are funded from a particular project, the Black Dust book project that several authors contributed to. We engage in other activities that raise funds for other projects in the School, such as the staff and student exchange and for developing curriculum links. The motivational effects of the bursaries on the students must not be underestimated. Furthermore I am seeing evidence that the recipients of these bursaries will benefit their own communities in the long run as they gain jobs that enable them to contribute to their family and the wider community.

3 and 4 Both these sources refer to the impact on the education of the student visitors to the UK. These students have been chosen by the teachers because of the contribution that they can make to the development of the partnership. Our focus curriculum areas for this year are the arts and Citizenship, therefore they have particular skills in these areas. Both sources express their belief that they will learn a great deal from the experience. Both sources also see the impact as going beyond those students directly participating in the trip, through motivational effects (Source 3) or through the communication and building of relationships between students from the different schools. We have established a pen pal project where students from the Schools write to each other.

<table>
<thead>
<tr>
<th>Number of Sources Compared</th>
<th>Laddered-up thoughts and salient ideas regarding common issues across above data sources.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 and 2</td>
<td>Both sources refer to the impact on the recipients of the bursaries as being significant in terms of providing them with the opportunity to access higher education. I recognise that there are issues here about whether in doing this we are concentrating our efforts on a few fortunate recipients at the expense of the many other learners. However, our bursaries are funded from a particular project, the Black Dust book project that several authors contributed to. We engage in other activities that raise funds for other projects in the School, such as the staff and student exchange and for developing curriculum links. The motivational effects of the bursaries on the students must not be underestimated. Furthermore I am seeing evidence that the recipients of these bursaries will benefit their own communities in the long run as they gain jobs that enable them to contribute to their family and the wider community.</td>
</tr>
<tr>
<td>3 and 4</td>
<td>Both these sources refer to the impact on the education of the student visitors to the UK. These students have been chosen by the teachers because of the contribution that they can make to the development of the partnership. Our focus curriculum areas for this year are the arts and Citizenship, therefore they have particular skills in these areas. Both sources express their belief that they will learn a great deal from the experience. Both sources also see the impact as going beyond those students directly participating in the trip, through motivational effects (Source 3) or through the communication and building of relationships between students from the different schools. We have established a pen pal project where students from the Schools write to each other.</td>
</tr>
</tbody>
</table>

**Figure 7**

**Talkback Record – Review of Qualitative Data**

**Key Focus Question Issues**

Focus Question/Descriptor – What is the socio-economic context of the School and how can we alleviate the impact on the learners?

<table>
<thead>
<tr>
<th>Narrative Item (Data Source)</th>
<th>Flag</th>
<th>Laddered-up thoughts and salient ideas related to issues in recorded abstracts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview with Lunga</td>
<td>1</td>
<td>He refers to the financial circumstances of his family and their inability to provide any financial support for him at University. Thus, he is relying on us for financial assistance.</td>
</tr>
<tr>
<td>Interview with Mr T Arumugam</td>
<td>3</td>
<td>He refers to the learners as the “poorest of the poor” and talks about our actions giving them an opportunity to experience other circumstances</td>
</tr>
</tbody>
</table>
That will motivate them to succeed in their own lives.

<table>
<thead>
<tr>
<th>Interview with students</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>They outline very clearly the problems of poverty and HIV/AIDS in the community. They also link the problem of crime to the poverty in the community. They talk about steps that they are taking to alleviate the effects of these problems and to improve their communities. There is a civic pride in their community and a desire to improve matters.</td>
</tr>
</tbody>
</table>
Cross-source comparisons

All three of these sources refer to the financial and social circumstances surrounding the students at the School. Mr Arumugam refers to them as “The poorest of the poor”. Lunga refers to his families’ difficult financial circumstances and the students describe the problems of poverty and HIV/AIDS in the community. It is this socio-economic context that motivated me to develop the partnership in the first place and it is with this in mind that I continue to sustain and build the partnership and to engage others in doing so. The data from these sources reminds me of the thinking behind one of my key research questions; How have I promoted the values of Ubuntu, equal opportunities and social justice through my work in developing, establishing and sustaining the partnership with Nqabakazulu School?

Having laddered-up qualitative thoughts on these issues the researcher is now in a position to consider what themes emerge from the responses to the focus questions and what arguments can be elicited from them. An example is shown in Figure 8.

**Figure 8** Talkback Record – Review of Qualitative Themes

<table>
<thead>
<tr>
<th>Focus question areas compared and synthesised</th>
<th>Laddered-up comparative thoughts and arguments of key issues and salient points elicited from the data and emergent themes.</th>
</tr>
</thead>
</table>
| Focus questions 1 and 2                      | The key themes that emerge from these two focus questions are:  
The impact of the partnership activities on particular individuals.  
The impact of the partnership activities in a wider context in ways that are more difficult to measure and calculate, eg motivation, confidence, moral and spiritual development.  
The difficult socio-economic circumstances surrounding the School community and it’s members that impact on the learning.  
The moral imperative to act to alleviate these circumstances. |

Key Constructed Arguments Synthesised from Qualitative Data Themes

<table>
<thead>
<tr>
<th>Laddered-up thoughts of key elicited arguments synthesised from the above emergent themes</th>
<th>Qualitative data sources identified with supporting quotes and cross references</th>
</tr>
</thead>
</table>
| There is widespread recognition that the partnership is having an impact.                 | Source 1 – “There has been a great change”  
Source 2 - “We are benefiting a lot”  
Source 3 - The partnership has |
The partnership activities are having an impact beyond those that are directly receiving financial assistance.

<table>
<thead>
<tr>
<th>Source</th>
<th>Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source 1</td>
<td>“If I get the opportunity to complete my degree and to work, it will bring (provide) bread at home.”</td>
</tr>
<tr>
<td>Source 3</td>
<td>The students that have been chosen to visit the UK are “setting benchmarks for the others that are coming up”.</td>
</tr>
<tr>
<td>Source 4</td>
<td>“We are learning from each other how we are different and how we can relate to each other”.</td>
</tr>
</tbody>
</table>

My motivation to develop and sustain the partnership emanates from the socio-economic circumstances in which the School finds itself.

<table>
<thead>
<tr>
<th>“progressed tremendously”</th>
</tr>
</thead>
</table>

Conclusions on Method 1 – Manual Review

Through the use of these various conversational learning tools devised by Coombs the researcher has been able to convert case study video narrative into qualitative data and use the raw data from participant learning conversations to systematically analyse into impact evaluation professional development findings. These ‘content-free’ tools represent a transferable set of conversational learning procedures for capturing and analysing professional learning knowledge as impact evidence.

The researcher now outlines the second method used to systematically analyse the video data.

Method 2 – Use of ATLAS Software

The Process

The researcher has used ATLAS.ti© software (http://www.atlasti.com/demo.php, accessed: Jan-09) as the second method for eliciting findings from the video data. This piece of software is based on the grounded theory approach whereby observations are systematically analysed to enhance understanding.

Various steps were taken in using the ATLAS software as an analysis tool:

1. Creation of a hermeneutic unit
   This is the creation of the research project itself in ATLAS. At this point the video data files that will be analysed are identified and stored electronically in preparation for assigning them in the next step.

2. Assignment of primary documents
The primary documents are the video data files that are to be analysed. This stage is the uploading of the relevant files into ATLAS and saving them in the hermeneutic (research project) unit.

3. Playing and editing of video and writing memos
At this point the researcher decides which episodes of learning are most significant in the context of the research and edits the video footage accordingly. Memos (notes) can be written about the video footage as it is being watched and edited.

4. Creation of codes
This is when one starts to identify themes or key terms that are emerging from the selected video clips as they are watched.

5. Linkage of codes with other codes and with memos (notes)
This process of linking codes with each other and with notes made between different sources of data leads to the laddering up of thoughts and ideas as one can search for patterns as they emerge from the data.

6. Identification of relationships between the links
This process leads to the identification of the themes and issues that emerge from the cross-comparison of the data from the various sources. These then become the findings.

7. Creation of an ATLAS Network map
The researcher can show how the data sources have been linked together with codes and memos and the relationships that have been created between them. It makes the process transparent in giving a summary of the thinking behind the emergent themes and ideas.

**Analysis of video data using ATLAS software**

In order to provide triangulation of evidence as an action researcher it is important to go around the action reflection cycle again and again. The researcher had used the manual review method to analyse the data collected during the visit to South Africa in 2005 (first cycle) and again to analyse the South Africans visit to the UK in 2005 (second cycle). This had enabled the identification of some themes and the reaching of some tentative conclusions, but the researcher recognised that they were based on a limited set of data. Reflection on the issues that emerged meant that the researcher was experiencing a situation where there was a contradiction between his values as a professional educator and the circumstances that were being encountered. This led to action to systematically collect further data so that the researcher could analyse the situation and identify the issues more clearly in order to act to enable him to live out his values more fully.

Visits to South Africa in 2007 and 2008 provided an opportunity to gather this data using video. This time ATLAS software was used as a means of analysing the video data gained from the visits. These are the steps in using the software to analyse the data.

1. Creating a Hermeneutic Unit and Assigning Primary Documents
First in ATLAS, the researcher created a hermeneutic unit called “SA Project” and then assigned (downloaded) four primary documents to the project. All four were video clips taken during the visits to South Africa. These were
chosen on the basis that they contained key episodes of learning with the potential to reveal themes and issues of interest through further analysis. They were titled as follows

- Interview with Cath
- Interview with Stacey P
- Cath Doing Assembly
- Hopes and Dreams

This part of the process in ATLAS can be seen as equivalent to the data capture rationale in the manual method as which episodes to analyse are chosen on the basis of their relevance to the project goals.

2. Writing memos

As the clips were played memos were written and attached to them. This was the beginning of the process of analysis as the researcher picked out the significant episodes of learning. The significance of these episodes was in terms of the implications for the project goals. Just as in the manual review method (Template 2) the purpose of the memos was to show the researchers interpretation of the episodes so as to avoid viewer misconstruing. Examples of these are shown in figure 9 below:

**Figure 9**

<table>
<thead>
<tr>
<th>Source – Interview with Cath</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Memo 1</strong> - Cath describes the wide range of actions that she has taken to develop the partnership between our Schools. This helped me to appreciate the extent of her involvement which includes fundraising, the development of curriculum projects and friendship. The development of personal relationships between individuals in the two schools is a feature in her response. I recognise that friendship is an important element in the sustaining of the partnership.</td>
</tr>
<tr>
<td><strong>Memo 2</strong> - Cath talks about the impact of the visits on our students and describes the friendship shown by our students towards the South African visitors. This had been a heartening feature of the visit. There were no instances of racism and many friendships were made. Several students from the two schools exchange letters and have developed friendships.</td>
</tr>
<tr>
<td><strong>Memo 3</strong> - Cath talks about the impact on Salisbury High School students of the partnership. She explains how the South African students were very confident in performing when they visited our School. This would have inspired some of our students to be more confident. The first visitors from Nqabakazulu School to our School were chosen for their musical, dance and drama ability and their talents in presenting artistic interpretations of zulu culture. They were outstanding at this.</td>
</tr>
</tbody>
</table>

**Coding**

Having made this commentary on the episodes, one can now look for linkages between the memos and recurring comments and ideas. The ATLAS software enables the researcher to enter codes.

Figure 10 lists the codes for the issues that emerged from the data.
List of codes identified:
Confidence
Equal Opportunities
Friendship
Future actions
How we can help
Inequality
Lead Person
Living out Values More Fully
Motivation
Practical Experience
Pride
Student Learning
Teaching Methods
The Importance of Education
What Learners Want

Linking Codes and Memos
The next step is to triangulate these issues by making cross source comparisons and linking the memos and codes. These are issues that are recurring in the data across the different data sources. This part of the process can be seen as equivalent to the Talkback record for identification of issues arising from cross source comparisons (Template 3) in the manual review method. Having done this using ATLAS one can replay the parts of the video clips that refer to a particular issue. This allows the checking of the researchers interpretation and allows the holding of the inner learning conversation again. It also enables the researcher to check their interpretation with the participants so that it can be validated by them.

Identifying Relationships Between the Links and the Network Map
An ATLAS Network Map can then be created showing the links between the codes and memos. This allows one to identify associated pieces of data to strengthen the emergence of themes from the clips and to elicit findings from the themes in relation to the research questions. Figure 11 shows part of the Network Map that I created from the analysis of the video.
This Network Map indicates the associations that the researcher made between the issues, so that for example, teaching methods have been linked with equal opportunities.

Eliciting Findings
Themes can now be reviewed and findings elicited against the research questions in much the same way as we did using the Talkback record for identification of emerging themes and arguments synthesised from themes (Template 4) in the manual review method.

Here are some findings in response to some of the research questions:

Research questions 1 and 2
How has my engagement in this research enabled me to improve my practice and contribute to educational theory?
How have my actions in developing the partnership enabled me to live out my values of social justice, equality of opportunity and humanity (Ubuntu) more fully?

In the interview with Cath she identified that I had been a "lead person" in the partnership who sustains the partnership by "keeping the momentum going". She talks about my role in "motivating and involving people" and "keeping the students involved". This indicates that I have played a central role in developing the partnership. I can associate this with Cath’s comments on the inequality of opportunity between our two schools in that tackling such inequality is one of the main motivators for me in developing the partnership.

In the interview with Siyabonga he talks about the impact that the bursaries are having on the recipients. They are providing them with hope and enabling them to escape the poverty of their surroundings. This is an example of how my involvement in the partnership is enabling me to live out my values more fully. In addressing the question of how we can help further Siyabonga talks about ways in which we can improve the equality of opportunity for learners at Nqabakazulu School and their community.

Research Question 3
How can I develop the sense of the voices of others within my narrative and show what I mean by influencing their learning? What evidence can I bring to show that others are learning from the journey that I have taken through this story and are living out their values more fully as a result?

The voices of Cath, Stacey and Siyabonga are very clearly represented here. They are co-participants in my research. It was Cath who interviewed Stacey and asked the questions that enabled me to elicit findings for the research project. Both Cath and Stacey are very clear that they are learning from the partnership and express themselves in terms of changes in perception and changes in behaviour. I can associate their actions with living out their values more fully as they both talk about pride and inequality of opportunity.
I can also associate comments made by Cath and Stacey about student learning with the “touching of students” in the sense that Sayers means it in talking about citizenship education here:

*Imparting citizenship is not just about teaching but “touching” something that is real and has meaning to the children – living the life of a good citizen, teaching by example*” (Sayers 2002)

Both Cath and Stacey talk about how the students from Salisbury High School visiting Nqabakazulu School and visits from Nqabakazulu School students and staff to the UK have provided personal contact with people of a different culture allowing personal relationships and friendships to develop. Through these visits the opportunity has arisen to explore, reflect upon and experience their own qualities and to decide how to act in response to the issues raised. The students have been “touched” and this has made the meaning of good citizenship real to the students and staff. Cath also talks about the students experience of the partnership activity giving them increased confidence.

I am able to associate Siyabonga’s comments about how the students from the School that are receiving the bursaries and progressing through Higher education will benefit their communities with student learning and enabling them to live out their values more fully as a result of the activities of the partnership.

Research Question 4
To what extent have I encouraged participation and democracy through my actions in linking with the South African School?

Asking questions of the participants about how we can take the partnership forward is an indication that I am open to ideas for activities to achieve this. The fact that Cath took the initiative in interviewing Stacey shows that she is willing to be a co-researcher. The responses show that together we are looking for ways to extend participation in the partnership.

Conclusions on Method 2 – ATLAS Review
The researcher has demonstrated that he has been able to use the ATLAS software as a second way of converting video narrative into qualitative data and using the raw data from participant learning conversations to systematically analyse into impact evaluation professional development findings. Just like the Manual Review method outlined earlier this is a ‘content-free’ tool that provides a transferable set of conversational learning procedures for capturing and analysing professional learning knowledge as impact evidence and is researcher independent.

Comparison of the Two Methods
The two methods that have been used to analyse the video data can be compared. Method 1 was the Manual Review method. Figure 12 shows some of the pros and cons of using this method.
**Figure 12**

<table>
<thead>
<tr>
<th><strong>Manual Review Method</strong></th>
<th><strong>Pros</strong></th>
<th><strong>Cons</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>There is no need for digital technology. It is a low technology option. This may be attractive on the grounds of expense.</td>
<td>It is time consuming because of the need to transcribe the video footage.</td>
</tr>
<tr>
<td></td>
<td>It encourages a thorough review of the footage as I found myself playing and re-playing footage to enable me to transcribe it accurately.</td>
<td>There is the possibility of some repetition as the different sources are transcribed.</td>
</tr>
</tbody>
</table>

Method 2 is the ATLAS software review method. Figure 13 shows the pros and cons of using this method of analysis:

**Figure 13**

<table>
<thead>
<tr>
<th><strong>ATLAS Review Method</strong></th>
<th><strong>Pros</strong></th>
<th><strong>Cons</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The video footage can be edited in ATLAS making it easy to manipulate the data and identify episodes of learning without the need for transcription.</td>
<td>There can be some technical difficulties in loading the software and uploading the video clips.</td>
</tr>
<tr>
<td></td>
<td>Use of ATLAS allows the possibility for shared viewing of the video footage in a research focus group thus enabling the validation process to take place.</td>
<td>There are some difficulties in accessing the language used by the ATLAS software. Terms such as hermeneutic units, primary documents, codes and networks have specific meanings which take some time to understand.</td>
</tr>
<tr>
<td></td>
<td>ATLAS allows the data to be manipulated more easily. For example, relevant video clips can be accessed by double clicking on codes that have been identified.</td>
<td>There is much more to ATLAS software than has been shown here. There are other aspects of the software that would aid the analysis of qualitative data.</td>
</tr>
</tbody>
</table>

**Using both techniques together to analyse data**

Using both techniques enables the researcher to compare the two methods in terms of their accessibility, time taken, fitness for purpose and potential. Figure 14 below lists some of the benefits of using both techniques to analyse data.
Benefits of using both techniques

- Develops further reflection on the social episodes captured and this helps to identify critical learning events.
- Personal Construct Theory (Kelly 1955) – self analysis as a systematic method of re-construing events leading to experiential learning.
- Unearthing of subsumed themes.
- Enables analysis of the two sets of findings – how are they similar/different?
- Triangulation of findings from sources.
- Some removal of bias

Research Question 5
How can I validate my narrative and answer questions about the quality of rigour within my research?
As an action researcher it is invaluable to use both methods to analyse the video data that has been collected as it enables me to develop the triangulation of findings from a wide range of sources and facilitates their validation by co-participants and research focus groups. Making the processes transparent also helps to reduce the bias. This has helped me to address my fifth research question and to enhance the rigour of the research.

Research Question 6
What are the pedagogical protocols for designing and developing international education?
Looking now at the findings from my analysis using both methods I can begin to identify some of the pedagogical protocols that have emerged for me thus far as follows:
- It is useful to have a recognisable lead person who sustains the partnership and keeps the momentum going.
- Focus on values and develop a shared understanding of what the values are that underpin the partnership. Emphasising this can motivate the participants to act.
- It is important to involve as many staff and students as possible in the partnership.
- It is important to extend the partnership into the school's communities as much as possible.
- Exploit the potential for learning through the partnership for all participants. Develop useful curriculum projects and promote exchanges of people and documentation to maximise learning.
Expect a reciprocal relationship where each side contributes to learning, but at the same time recognise the inequalities that exist and work to redress these.

Developing an international partnership is a way of “touching” students, staff and other members of the community and motivating them to become active citizens. This is citizenship education in a highly developed sense through the creation of a meaningful situated learning environment as part of an international CPD project.

The development of friendship and recognition of each others humanity is a fundamental element in the pedagogy for the development of international partnerships.

Conclusions
Through the use of these various conversational learning tools and procedures we have so far been able to convert case study video narrative into qualitative data and use this raw data from participant learning conversations to systematically analyse them into impact evaluation professional development findings. These ‘content-free’ tools represent a transferable set of conversational learning procedures for capturing and analysing professional learning knowledge as impact evidence.

In relation to the significance of our research as a contribution to educational knowledge we also agree with Snow’s (2001) point that the knowledge resources of excellent teachers constitute a rich resource, but one that is largely untapped because we have no procedures for systematizing it. Hence, a major contribution of this paper has been the development of a conversational learning taxonomy for qualitative analysis of action research narrative findings. This allowed the action researcher to make sense of and analyse the real-life narrative and other reflective data evidences obtained through participative action research.

The follow-up video recording of the participant responses to the focus questions means that these responses can be re-visited and not forgotten. This suggests that there is not only the potential for the initial learning through the reconstruction of thought processes, but also for subsequent learning from the same conversation when the video sequence is played back and interpreted again. This can lead to another reconstruction of thought processes from the same outer conversation, i.e. a laddering-up of knowledge through deeper reflective experience via a conversational procedure of learner-learning. In our view the video is a tool that supports the role of Harri-Augstein & Thomas’ (1991) learning coach metaphor in developing deeper learning through enabling the internal self-organised learning conversation.

Video also acts as a potentially motivating tool for learning and therefore represents a rich learning resource, one that has the potential to change teaching (Stigler and Gallimore, 2003). Seeing oneself on camera is often a novel experience for people and the intensity of the learning experience is greater and more enriched, thus enhancing the learner’s Capacity-to-Learn (Harri-Augstein & Thomas, 1991). Video therefore serves as a useful tool for learning and has the ability to enhance the criticality of a learner-learning
event, which is where it can support real-time field learning events engaged in by the participatory action researcher. Use of video represents one type of engaging visual learning environment that can be used to successfully manage and motivate a learner's experience to elicit new knowledge and understanding. However, there are other types of visual learning tools and environments from which to scaffold new knowledge and understanding; concept maps, graphical taxonomies, flowcharts and networks.

The key partnership conclusions drawn so far from this project suggest the next stage of the PhD, which will be to develop further new approaches around international partnership working that link more closely to the design and evaluation of international CPD programmes. The interim results obtained suggest that the partnership is widely recognised as having a meaningful educational impact and that this has also happened upon others outside the immediate participant remit of this project.

References