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Formation of a Children’s University: Formative issues and initial concerns

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Abstract

This paper will explore issues contributing to the formation of a Children’s University. The study examines the needs of stakeholders and goes on to highlight the emergence of factors that have a bearing on those needs. A Children’s University is a vehicle designed to enhance the learning of primary school pupils and to raise attainment in identified curriculum areas. In the Scarborough Borough Children’s University initiative, teacher trainees act as pupil mentors, developing positive relationships with pupils and scaffolding pupil learning. The tutor leads sessions, modelling effective pedagogy to class teachers. Principally, through the establishment of a Children’s University, there will be positive benefits for the stakeholders. Early in the formation these stakeholders will include the University tutor, teacher trainees, class teachers and their primary school pupils. The initial research question seeks to identify issues for stakeholders involved in the Children’s University. The chosen methodology is Grounded Theory, with interviews being the initial method and with subsequent constant comparison analysis using open and selective coding.

Keywords: Primary; science; education; initial teacher education; student experience.

1. Introduction

The first Children’s University (CU) was set up in Birmingham, England in 1993. It was one of a string of initiatives set up around that time by Tim Brighouse. The initiatives sought to address several problems but one central issue was the gap between educational opportunity offered to learners in the highest and lowest attaining schools. This was particularly apparent in many large cities in the UK. Successive Programme for International Student Assessment (PISA) reports emanating from the OECD (OECD, 2006-09) illustrate the persistent nature of this problem in virtually every country where schools exist. The policy response in many countries has been to put more pressure on schools and on teachers, an intensification process which has proved counter-productive to the learning and growth of many children and young people (Tymms, 2004, Galton and MacBeath, 2008 cited in Macbeath and Waterhouse, 2008).

The notion of a CU sought to address the gap between the highest and lowest attaining schools and the highest and lowest attaining pupils. The Birmingham CU inspired the birth of a CU in several cities around the UK, principally in England. Initial funding emanated from a variety of sources. In Hull, England for example the main

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source of funding was Government ‘Single Regeneration Budget’ funding. This funding source was intended to support communities within areas of social or educational deprivation. Sources of funding dwindled and the apparent successes of the CU began to fade in line with this.

A CU seeks to raise the attainment of learners by providing them with learning in contexts often not provided during a ‘normal’ school day. The programme of learning delivered to pupils is known as a module. A module comprises, generally, four taught sessions each of ninety minutes duration, i.e. one session each week for 4 weeks. A strength of the learning ‘modules’ is the supportive mentoring of pupils by individuals drawn from the local community. These mentors come from a variety of backgrounds including parents, governors, business people, school support staff, teachers and college students. The mentors undergo training by the CU manager so that they are well versed in their role. Contexts for modules can be quite diverse and include, for example, a focus on democracy including a visit to the Houses of Parliament in London, a focus on sport or healthy lifestyle linked to local sporting teams and visits to examine the operation of hotels, businesses, etc.

In recent years the CU initiative has been relaunched with funding secured from the Department for Children, Schools and Families (DCFS) and the Sutton Trust. It is now a growing national movement with 26 active centres and 10 in embryonic stage. Ten further centres have been identified for development in 2009-10. Since the rebirth 25,849 children aged 7-14 have benefited from over 250,000 hours of input in this first year (MacBeath and Waterhouse, 2008).

The author was an active participant, as a teacher ‘tutor’ in the CU initiative in Hull in the 1990s and tried to uphold the intentions of the CU by delivering innovative ‘modules’ within the school setting but linked to, and involving, the wider community. The emphasis was on raising children’s attainment in literacy and numeracy through these activities.

Some ten years on, and having undertaken a change in career direction from teacher to teacher educator, the author instigated a CU in Scarborough, England, the site of a campus of the University of Hull. Consequently the author is responsible for managing the CU, delivering its sessions as CU tutor and researching the needs of stakeholders involved in the formation of this CU. Stakeholders are the individuals involved in the formation and implementation of the CU such as the CU manager, tutors who deliver modules, teachers, children, parents and mentors. A programme was developed under the banner of Scarborough Borough Children’s University. Four schools were invited to take part. The focus for learning was agreed with each school as was the target class or classes. Our undergraduate teacher trainees were to act as mentors to scaffold the learning of pupils and to simultaneously develop positive relationships. It was intended that the author would lead the sessions, modelling effective pedagogy to observing class teachers and others within the school community such as parents and governors. The role of teacher trainees as pupil mentors by a Higher Education Institution in this way, and on this scale, is quite unique. Student participation is voluntary. The invitation to students to participate was measured, so that response could be tailored to logistical need, e.g. to arrive at appropriate pupil-student ratios. Nevertheless, approximately 25-50% of both the first year and second year undergraduate cohorts volunteered to take part.

It can be seen that, from the outset, there are differences to the National CU model as outlined above. These include the role of Initial Teacher Education students, training to become teachers, as pupil mentors. They were the principal mentors supporting pupils. In addition, the input offered and the curriculum focus was to be decided by the school with the aim of meeting school, teacher and pupil need.

This variant of a CU adopts the module structure of the national model in terms of programme or ‘module’ timings and use of supporting mentors but it differs from the original, national model in that it takes place during normal school hours. In addition, the mentors are virtually all students who are training to be teachers rather than, as in the case of the national model being individuals drawn from the community. This removes the need to train mentors to be able to fulfil their role because they are already familiar with pedagogy, subject matter and expectations. The modules in this case are identified by the school rather than being imposed on them, as is often the case with the national model. Content, in the latter case, is often a result of tutor interest or expertise.

The rationale underpinning the formation of this CU variant is that the initiative is an example of ‘Outreach’, i.e. a way in which the University of Hull (Scarborough Campus) can forge productive links with the local community through services and learning partnerships thereby embedding the University at the heart of that community. This highlights a major difference between the Scarborough CU and other Children’s Universities nationally, i.e. that the former is managed by a University tutor with the support of his University employers whereas a CU found
nationally is largely operated as a centre that is part of a national network. People who manage a CU as part of this national network do so as their sole employment.

Furthermore, in terms of rationale, this study arose from a desire to provide students with opportunities to see modelling by leading practitioners working with a variety of age groups; to address a need for tutors to maintain their professional primary teaching skills and in so doing keep abreast of the latest developments in the primary classroom at first hand; to ensure that school based mentors and classroom teachers who oversee students in Partnership Schools are aware of the practice of University tutors and of their associated pedagogy and resultant expectations of students; and to extend the variety and breadth of school experience available to our students.

Finally, and importantly, the Scarborough CU seeks to inspire children to strive to reach their potential as individuals, friends, learners and model citizens.

2. Methodology

There has been very little research undertaken into aspects of Children’s Universities (CU). There is even less research apparent related to aspects of the formation of a Children’s University. One notable exception is the study carried out by MacBeath and Waterhouse of the University of Cambridge in 2008. However, there is scant focus on issues of stakeholder need as evidenced at source, i.e. voiced by stakeholders in the field. With this in mind it seemed appropriate to consider the use of Grounded Theory Methodology to identify those needs. A major factor influencing a focus on Grounded Theory Methodology is the dearth of literature available through which to contextualise the study and to inform testing of hypotheses.

Grounded theory methods were initially postulated by sociologists Barney Glaser and Anselm Strauss as a result of their studies of dying in hospitals. They investigated how and when professionals and their patients knew that the latter were dying and how they handled the news. They held conversations and made observations in the hospital settings and, in the course of doing this, they developed analytic techniques and methodologies in the field. Their book, The Discovery of Grounded Theory (1967), suggested developing theories grounded in data rather than deducing hypotheses from existing theories.

Initially, they suggested that Grounded Theory should comprise:

- Simultaneous involvement in data collection and analysis
- Constructing analytic codes and categories from data, not from preconceived logically deduced hypotheses
- Using the constant comparative method, which involves making comparisons during each stage of the analysis
- Advancing theory development during each step of data collection and analysis
- Memo-writing to elaborate categories, specify their properties, define relationships between categories, and identify gaps
- Sampling aimed toward theory construction, not for population representativeness
- Conducting the literature review after developing an independent analysis

Later workers such as Charmaz (2006), Bryant (2002) and Clarke (2003) moved grounded theory away from positivist elements that were apparent in the work of both Strauss and Glaser. Charmaz (2006: 9) stated that ‘in their original statement of the method, Glaser and Strauss (1967) invited their readers to use grounded theory strategies flexibly in their own way.’ She suggests that she took up that invitation to instigate the direction of her own work. The thinking of the latter three researchers is to be applauded in this respect. They suggest that, ultimately, it is the theory generated that is the main thing and that this can be arrived at through a variety of ways. It is the duty of the researcher to adopt the most appropriate methodology for the particular context of the study, i.e. it must be fit for purpose. The interplay between methodologies be they quantitative, qualitative or embedded in grounded theory approaches, is crucial to the development of theory – one methodology should support another, almost synergistically.

Grounded theory procedures will be the most appropriate in the case of this study. This is because there is a greater possibility of discovering more significant theory and in depth, relevant outcomes than if the study was set in the context of existing research. In the latter scenario the hypotheses would be derived from a survey of associated literature prior to undertaking subsequent research using a blend of quantitative and qualitative methodology. There
is a chance that the researcher would be directed down specific avenues of enquiry initiated by the literature interrogated. Resulting data may not be as rich or it may be more subjective than if techniques were carried out with an open mind, in the field, with a view to establishing grounded theory.

Why choose Grounded Theory Methods for this study? Kathy Charmaz (2006: 2) answers this question by stating that ‘...grounded theory methods consist of systematic, yet flexible guidelines for collecting and analysing qualitative data to construct theories ‘grounded’ in the data themselves.’ In short, the intention is to learn what actually occurs in the various settings related to formation of the Children’s University by studying stakeholders’ statements and trying to make sense of them analytically.

The study will take place in situ, i.e. data gathered will be measured during the course of the formation of the Children’s University. Analysis of this data will commence near the beginning of the study and this reflection on, and exploration of, findings will support the fine-tuning of research methods and analytical skills. More specifically, a constant comparative method will be employed. Ongoing outcomes will inform the path of the research and shape methods, notions and theories that may improve the accuracy of the findings and the answer to the main research question, i.e. ‘What are the issues for stakeholders informing the development of a Children’s University in Scarborough?’ This deep immersion in data collection and analysis, subsequent construction of analytical codes and categories and constant comparison of outcomes at each stage of the process is representative of Glaser and Strauss’s Grounded Theory work (1967).

Having decided to follow grounded theory methods it is important to avoid bias in data collection. Central to this was the fact that the researcher is to play an active role in securing participants and introducing the notion of Children’s University participation. Furthermore, the researcher will be involved in delivering initial teaching and learning sessions and had an obvious desire for these to be successful. Consequently, other participating adults such as teachers and student mentors may empathise with this and this may colour their responses or actions during data collection. Thus there is a fine balance between objectivity and sensitivity. As Strauss and Corbin (1998: 35) state it is important, but difficult to maintain in such an ethnographic scenario, that the researcher distances himself from research materials whilst at the same time treating them fairly in trying to keep the participant voice independent from that of the researcher. In the midst of this, the researcher needs to be sensitive to cues offered by the data. In essence, to overcome this one must aim to eliminate any subjectivity in collection or interpretation of data.

Strauss and Corbin (1998: 43-46) suggest several procedures aimed at minimising bias thus maintaining objectivity in the midst of sensitivity. They highlight the notion of thinking comparatively, i.e. comparing incident to incident in the data. Alternatively we may look for comparisons in literature or previously experienced phenomena. Other methods that may be used to maintain distance is to investigate different viewpoints of participants or collect data using a variety of techniques such as interviewing, observation or questionnaire. This is essentially triangulation of data. This is not necessarily triangulation as a means of validation of data but is a way of gaining meaning from data. It also pays to remain sceptical in this regard and to frequently revisit and interrogate data over the course of the investigation. This may mean going so far as asking respondents if their perceptions agree with some of the data currently accumulated (Strauss and Corbin: 1998: 45). This may address or remedy the fact that some respondents ‘give the researcher what they want’. It is also prudent to adhere to grounded theory procedures, alternating analysis and data collection, as this helps to eliminate worthless data and ensure validation.

Initial data was collected through interviewing of key stakeholders, specifically adult participants such as teachers and student mentors. These took place prior to delivery of learning and teaching sessions in the Children’s University context. The data collected and analysed informs subsequent question formation and consequently shapes future data collection in keeping with grounded theory approaches aligned with simultaneous data collection and analysis. It is anticipated that children will be interviewed and subsequent data may add value to overall analysis.

This study will involve some participant observation as it is essentially an ethnographic piece of research. Charmaz (2006: 21) suggests that ethnography entails recording the life (or actions) of a particular group and that the researcher undertakes sustained observation whilst participating in their setting. She says that it involves more than participant observation alone because it involves collection of other data including, possibly, interviews and questionnaires.

A revised interpretation of ethnography in a grounded theory approach is offered by Charmaz (2007: 22) who states that ‘grounded theory ethnography gives priority to the studied phenomenon or process – rather than the setting itself.’ Moreover, the categories evolving and the data collected will be refined not just within a setting but between settings.
2.3 Initial Data and Findings

Four primary schools have taken part in the project so far. All four schools have elected to have input during the school day and all have requested a curriculum focus on science. Thus, there are immediate differences with the National CU approach where the foci for learning are more diverse.

2.3.1 The Needs of Teachers

A pre-intervention interview with the participating class teacher in School 1 provoked me to write this memo following reflection of the interview transcription (categories identified are in bold font):

‘Overall impression is that the school value, in this instance, input from an ‘expert’ from the university. They value community links in general but the university in particular in this case. The input may be to address low aspirations of the children arising from social deprivation.’

A category coded ‘aspirations’ arises from teacher statements such as wanting ‘what University has got to offer in terms of their [the children’s] futures’ and ‘we see the needs of our children as being quite specific in terms of raising their expectations, raising their aspirations’. This is stated in vivo when the teacher states ‘expectations are fairly low I would say so they are quite happy with... they want to stay in the area. No, the expectations aren’t low. They think they will have achieved if they stay in the area. They bring their families up in the area, that’s what they want, that’s where they see themselves.’ The need to address children’s aspirations via CU participation may stem from social deprivation in the school catchment area (in the east of the town) as manifested in teacher comments such as ‘the east side of town is poorer so therefore, perhaps, at School 1 that where all the poorer children go. The less able, the behaviour not good there.’ The teacher intimates a link between social deprivation, ability and poor behaviour.

My memo highlights the notion that ‘The teacher perceives students as effective role models. She valued exciting teaching.’

These categories stem from the teacher statement ‘From the school’s point of view we want any expertise that you can offer in any way so in Science or any new teaching methods anything the University has got to offer working with students. Students provide a different role model for our children.’ This is endorsed by a teacher in school 4 (and echoed by her colleagues) when she says ‘as primary school teachers we have to be Jack of all Trades and it’s nice for children to have an expert teaching them on a particular subject.’

These points are replicated by the Headteacher in School 2 when she says ‘From a social point of view they do get very attached to their class teacher so to invite other adults in as mentors or students or from the wider community is always very helpful because it gives them the opportunity to work with adults that they view as trusted adults, erm, so they just get the chance to develop their social skills, their self-confidence, self esteem and aspiration really.’ She also made reference to links between the less formal, practical CU pedagogy (as distinct from the more formal, measured pedagogy normally received by the children in this School 2 class) stating ‘I’m very keen for our children to approach curriculum areas from a more practical point of view. They learn better in that kind of situation although I am conscious that we do not always give them enough opportunity to develop a practical approach and I think that’s partly a historical approach to teaching based on issues around children’s behaviour. The feeling that teachers’ perceptions that teaching has to be in a controlled way yet from my own knowledge and experience I think that by giving children more freedom in how they learn actually means you have to have less control and actually the behaviour can be better through that approach but it a confidence on the part of the staff as well as, you know, as I’ve said before children’s confidence and how they work and self esteem so I was very keen to get involved with it because I knew it would be a much more practical approach.’ She intimates here that she is keen to see this pedagogy modelled for her class teacher. Her concerns centred on children’s aspirations and self esteem are also shared by teachers in School 4 one of whom says’ I think with the children it raises their self esteem.’ For instance last week’s session on Sound you asked them about their prior knowledge and they were giving YOU that knowledge and you were saying ‘Fantastic, great...my job’s over...’ and they thought ‘Wow, he’s from a University and our knowledge is relevant in this situation’ and also it acts as an encouragement for children as well to go on further because a University to Primary children is a gulf away. Yet when you get people like yourself coming in, it’s not, you’ve narrowed that gap.
The class teacher in School 3 is also concerned about her science pedagogy (and perhaps that of her colleagues) and says ‘I think it will meet my needs of teaching science in that I hope I will look at a different way of teaching science and make teaching of science more exciting and more fun for the children but I think it will suit the children at this school because some of them are lacking in motivation and I’m hoping that this sort of fun style of teaching will motivate them to learn. But also looking at it more broadly for a whole school ethos and encouraging other teachers to become involved.’ She would like to involve the community, e.g. parents and governors stating ‘We don’t have a great record of parents wanting to come into school so if we’re going to do something fun I’m hoping that will encourage them to want to come into school to see exciting ways of teaching the children.’ In a post intervention interview she said of one parent and some observing staff colleagues ‘We had a parent governor in who was really positive about it. He really enjoyed it and said that he wished he’d had that kind of experience himself at school. The science that he’d had was more or less the teacher doing it and you sat watching then go and write it up. So I think he enjoyed it, erm...the other teachers involved enjoyed it and the Teaching Assistants...they really enjoyed it...’ As seen in School 1 and 2, this School 3 teacher makes reference to the impact of the CU approach on behaviour stating ‘and somebody to talk to made a difference and there were no...because often we can have challenging behaviour with more practical. There could have been an element of some of them getting silly...’ and also ‘But I think they were really just engrossed in what they were doing so I don’t feel... I’m thinking of one little boy in particular...you know the activity with the art straws...he can be very challenging but in that activity it really met his needs and you just didn’t hear a peep out of him.’

A teacher in School 4 stated ‘I think it raises the status of science. It does for me as a subject leader observing the children. I can see that it is raising the status.’

It can be seen that many of the comments from teachers in one school are replicated by teachers in other schools. Categories such as self esteem and aspirations of the children, science pedagogy, links with the University, student role models, effect on behaviour, etc. arose from line by line open coding using the constant comparative method.

Interviews with children revealed that they thought learning had been fun and more varied than their lessons in school. They also valued the partnerships with students.

The children, according to their teachers, seemed to be more engaged with learning experiences and were more motivated as a result. Teachers stated that it was particularly noticeable that children, who exhibit behavioural problems during the ‘normal’ school day or who show disaffection towards activities experienced on a daily basis, applied themselves positively to CU activities.

2.3.2 The Needs of University Students

The students themselves thought that it was beneficial to them to see their tutor working with a class of children rather than him simply modeling pedagogy on campus. They valued the opportunity to see science being delivered by an ‘expert’. They stated after intervention that activities allowed them to work more closely with children than they normally might and that this gave them greater insight into how children learn in practice. They felt that participation broadened their experience and allowed them to see learning take place in a slightly more informal way. They also felt that taking part in Children’s University provided the opportunity to observe the effect of innovative pedagogy on the extent of children’s engagement with learning. Students’ placement in schools during their course does not always allow them to see science being taught because their placement did not sometimes coincide with when the school had planned to teach or timetabled science. With reference to future employment, they held the initiative in such high regard that they felt that it added value to their Curriculum Vitae. They felt it helped them ‘stand out from the crowd’ in terms of potential success in the shortlisting for teaching posts.

3. Conclusion

It is apparent from initial interviews with teachers, children and students that the CU initiative appears to be meeting the needs of these stakeholders. These needs became apparent during interviews in the early phase of the research. Stakeholders, when interviewed after delivery of CU modules, state that their initial needs and desired outcomes were being addressed. It is providing the opportunity for teachers and students to observe effective, innovative pedagogy which will hopefully inspire them and give them the confidence to adopt similar approaches in their own teaching.
In addition to reflecting on categories identified through coding procedures and subsequent memo writing, situational analysis was undertaken following the mapping techniques put forward by Clarke (2003). This identified features such as teacher’s training needs, deficiencies in trainees existing subject knowledge, indications of the need for science subject specialist teaching and possible links between these categories. Similarly, these may be linked to pupil motivation and engagement, behaviour, self esteem and aspirations (all of which may be linked themselves).

In the case of the teachers, it may be worth investigating issues related to their training needs more deeply. In the case of the students, it is worth exploring their preferences towards teaching styles that they are subject to at University. It may add value to their experience if their tutors were to model good practice, in situ in the school setting, more widely. It should be noted that, although these students have undergone a formal education in science, many of the students have had poor experiences of science education. Further investigation is needed in this area to ascertain whether the students’ participation in the CU is also serving as a more beneficial revisiting of the science curriculum for them with the result that their subject knowledge is enhanced.

The children’s engagement with learning in the CU and accompanying raising of self esteem may be due to a number of things. It may be the more informal nature of the setting, the relationship with student mentors, the pedagogy, the notion that they are part of a ‘University’ or a combination of these. Further investigation will seek to identify the principal factors.

Future research will be undertaken through the use of unstructured interviews and questionnaires. Questions will be designed to generate data addressing the above issues. Opportunities will be sought to gather this data in settings as before. In addition, fresh insight may be gained by collecting data arising from participants involvement in a Children’s University Conference to take place in June 2010.

References

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