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Understanding and exploring the relationships of a knowledge building community in teacher education

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This paper explores the relationships of preservice teachers as they embarked upon an alternative model of teacher education known as the Knowledge Building Community Project (KBC) at the University of Wollongong. The KBC Project was initiated as a response to research that suggested preservice teachers needed more experience with the day-to-day operation of schools, and how the daily work of teachers related to the culture of schools and classrooms. A series of revisions since the Project's inception now means that the KBC model is underpinned by four outcomes to support student learning: (i) Community collaboration, (ii) Taking responsibility for own learning, (iii) Professional problem solving using the principles of PBL and (iv) Reflective practice. The research showed that the students involved in the KBC Project benefited from the support of a community triad (the KBC facilitators, school based teachers and each other). The data showed that being members of the community triad enabled students to develop friendship and trust, which made working in collaborative school groups advantageous.

The paper demonstrates that there are key components needed in order to implement a KBC in teacher education. The key feature highlights the importance of a structure to promote social interaction between the key stakeholders. When students are given the opportunity and support of the community triad, they can develop an ownership and responsibility for their learning. A key trait is the ability of the students to link theory to practice as well as developing an increased understanding about the culture of schools and the way that they operate.

Introduction

Like most institutions charged with the responsibility for preparing teachers, the University of Wollongong's Faculty of Education has been conscious of the documented shortcomings of 'traditional' models of program delivery. These 'traditional' programs feature mass lectures and tutorials, punctuated by prescribed periods of examination and practical experience.

Traditional modes of delivery seem to produce many students who are disenchanted and bored with their university education. They complain about being faced with vast amounts of information to memorise. They admit that they forget much of what they learn, and complain what is remembered cannot be applied to the problems and tasks they later face (Cambourne, 1998). Over the last five years the Faculty of Education at the University of Wollongong (UOW) has been intent on redesigning its teacher education courses and subjects to meet the needs that the teaching profession has identified. While the new degree structure that was implemented meets many of these needs, the mode of delivery remains relatively unchanged. The aim of this paper is to demonstrate what happened to students enrolled in an alternative mode of delivery that was initiated as a means of addressing many of the shortcomings of traditional university methods identified above.

The approach undertaken by the UOW is a collaborative venture between representatives from the Faculty of Education, the NSW Department of

Education and Training (DET) and the NSW Teachers Federation. This Reference Group began meeting regularly and negotiating details in January 1997. The overall intent of the Reference Group was to explore issues inherent in changing two major aspects of teacher education at the UOW:

- The teaching/learning culture of undergraduate teacher education; and
- The traditional mindset and culture associated with practice teaching/internship in schools.

In order to adopt the above it was decided that the alternative model would seek to achieve these changes by:

- Shifting the mode of program delivery from the traditional campus-based-lecture-tutorial mode to a 'problem-based-learning-within-a-school-site' mode;
- Reconceptualising the nature of what has been traditionally known as 'practice teaching' or 'the internship' so that there is a closer link among the specialised knowledge in Education courses and the nature and culture of schools and how they do business so that it is better understood both by students and local schools and teachers; and
- Renegotiating the professional relationship between the NSW DET, the university, local schools, and the NSW Teachers Federation so that a new form of 'practice teaching' could be collaboratively developed.

It was decided that these aims would be implemented through an inquiry and problem-solving approach with a greater integration of the practical field-based component with the theoretical content. In 1999, the Faculty of Education at the UOW implemented its alternative teacher education program in initial teacher training. This project became known within the faculty and collaborative partners as the "Knowledge Building Community (KBC) Project". In 1999 the KBC Project commenced with twenty-two primary education students from the first year cohort (approximately 12.5% of the total intake) and was supported by four local schools whose staff had full commitment to the project. It has been calculated that before the students started their first class some 150 hours of formal meetings had taken place between the major stakeholders listed above.

What is a Knowledge Building Community?

For the purpose of the KBC Project at the UOW the following definition has been adopted:

> A Knowledge Building Community is a group of individuals dedicated to sharing and advancing the knowledge of the collective…what is defining about a Knowledge Building Community is a commitment among its members to invest its resources in the collective pursuit of understanding.   (Hewitt, Brett, Scardamalia, Frecker & Webb, 1995)

The notion of students and teachers working together in collaboration has been in educational conversation since Dewey but in the latest decade has

been taking a more definite shape in various programs (Scardamalia & Bereiter accessed January 2000). The adoption of this approach sees the class become a research team aimed at advancing its own "collective, intellectual growth through sustained, collaborative investigations" (Hewitt et. al., 1995, p. 1). Based on the principles espoused by Scardamalia and Bereiter (1989, 1991, 1993, 1996) the student teachers involved in the KBC Project at the UOW work in a learning environment that supports the continuous social construction of knowledge (Vygotsky, 1978).

The Knowledge Building Community (KBC) project was initiated as a response to research that suggested preservice teachers needed more experience with the day-to-day operation of schools, and how the daily work of teachers related to the culture of schools and classrooms. The purpose of the KBC Project is to provide an alternative model of teacher education that is designed to contextualise the delivery of instruction.

Can the KBC Project be Classified as a Model for Teacher Education?

If the aim of teacher education has at its base the production of effective and competent teachers the process of how teachers learn or have learnt the science and art of teaching needs to be examined. Traditional models of teacher education used throughout the world are very similar and have tended to focus on what teachers need to know and how they can be trained (Carter, 1990; Diamond, 1991). While there is no single base for teacher education on which everyone agrees, the body of knowledge from which teacher educators can draw when formulating an effective curriculum is substantial (Barnes, 1989).

Central to the most common teacher education models are three basic components: academic preparation in the subjects or disciplines that the preservice teacher will teach when qualified; theoretical foundations of professional education; and the student practicum or teaching in some form of internship (Diamond, 1991). Tripp (1994) however, sees teaching as comprising more than the above three tenets. He argues that teachers are expected to make learning relevant and interesting to pupils through such means as developing curricula to suit particular needs, individualise teaching, assist personal development, use affirmative action with disadvantaged minority pupils, involve the community, and in many situations take responsibility for the provision of basic nutritional and hygiene needs. As a result, preservice teachers need to learn a great deal more than the traditional, often narrow curriculum that is offered by many universities.

> All teacher education is a form of ideology. Each program is related to the educational ideology held by a particular teacher educator or teacher education institution, even though the relationship may not be made explicit. There is no such thing as a value-free teacher education just as there is no such thing as a value-free education for children.
> (Spodek, 1974. pp. 8-9)

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Since the introduction of compulsory primary education there have always been major trends identifiable in teacher education. These trends have dominated the way in which prospective teachers were taught their future craft. Teacher preparation began early in the nineteenth century and since then has always been dogged by controversy and debate over the methodology used in it.

The earliest trend in teacher education was a straight apprenticeship model where teachers learned teaching in schools by teaching at reduced rates of pay whilst under the supervision of more experienced teachers. Teachers were given accreditation when they were deemed competent by the school Inspectorate (Tripp, 1994). Since the abandonment of this model there have been at least five models that have dominated the discourse of debate in teacher education. These models of teacher education are: "behaviouristic, competency-based, personalistic, traditional-craft, and inquiry-orientated teacher education" (Zeichner, 1983). The basic composition of these five traditional models was examined and then compared to the KBC Project at the UOW for their fundamental foundation, emphasis and provision for reflection. These comparisons are shown in Table 1.

Model	Fundamental foundation	Emphasis	Reflection encouraged
Behaviouristic Teacher Education Model (BTE)	• Positivistic epistemology • Behaviouristic psychology	• The observable development of the skills of teaching • Teaching is viewed as a science	No
Competency-based Teacher Education Model (CBTE)	Compartmentalises the act of effective teaching • That learning teaching can be achieved by watching	• That there are certain goals and tasks to be learned • Teaching is viewed as a science	No
Personalistic Teacher Education (PTE)	• Preservice teachers were taught a set of classroom strategies that they learn and applied	• PTE emphasises the reorganisation of perceptions and beliefs over mastery of teaching skills. • Emphasised the need to create emphatic and caring relationships with students.	Yes - Only since 1991 when PTE has been re-investigated
Traditional-craft Teacher Education (TCTE)	• Teaching is a craft • The preservice teacher is seen as an apprentice • The preservice teacher is a passive recipient of knowledge	• Preservice teachers acquire knowledge about teaching by trial and error	No
Inquiry-orientated Teacher Education (IOTE)	• The development of inquiry about teaching • Preservice teacher is an active agent in their teacher training	• Critical inquiry is a necessary supplement to teaching skills • To prepare teachers who have skills to do and then analyse what they are doing in terms of its effect on children • Focuses on everyday classroom life	Yes
The KBC Project at UOW	• A constructivist, problem-based approach to pre-service primary teacher education • Replacing traditional lectures, tutorials and exams by establishing a Knowledge Building Community (KBC)	• Student-centred • Friendship-based school groups • School mentors • Co-learners with facilitators and mentors • Linking theory to practice • Collaborative practice • Problem solving • Emphasises teaching as life-long learning • Prepares students on how schools and classrooms operate and do business (every day school life)	Yes

Table 1: Five Traditional models of teacher preparation compared to the KBC Project at the UOW

Since the KBC Project's inception its basic aim has been to deal with the perennial problem of contextualising students' professional learning by linking abstract theory as closely as possible to the contexts and settings to which it applies, in this case the primary school and the primary school classroom. However Table 1 also clearly illustrates that the KBC Project as well as matching the criteria of the selected traditional models of teacher preparation, shows that the KBC model has the unique feature of factoring into its structure the opportunity of social interaction.

The KBC Project's Origins

When the project was commenced in 1999 the design team stated that there were three guiding principles that would underpin the shift from the lecture-tutorial based delivery to the 'problem-based-learning-within-a-school-site' mode. They were:

- Community learning (CL);
- School-based learning (SBL); and
- Problem-based learning (PBL)

Community Learning

Community learning (CL) saw a major shift from the traditional teacher education model of lectures and tutorials and it served to strengthen the working link between the university and the participating local primary schools. It requires the development of a community of learners, which is made up of preservice teachers, the school-based teachers and university lecturers who act as facilitators on campus. This community is designed to establish a sense of trust among all of its members who are dedicated to working together to educate and develop competent and sensitive professionals.

School-based Learning

School-based learning (SBL) is the second learning principle of the KBC project. Schools are more than just a conglomeration of buildings and people rather they are a set of individual cultures which have evolved in response to the wider cultural values (Bullough, 1987). To function, and indeed survive a beginning teacher must understand this culture. This component of the KBC structure therefore aimed to develop a sophisticated understanding of school-based culture. It is important for preservice teachers to understand how schools do business and how classroom cultures operate and support the learning of all students. It is also necessary as a part of this understanding of classroom culture to know and appreciate how to create and sustain this culture. This part of the KBC project is particularly aimed at reducing the 'reality shock' by increasing preservice teacher's understanding of a teacher's multiplicity of roles in both the school and the classroom.

Problem-based Learning

Although problem-based learning has been extensively used in medical and other health professions over the last 30 years it has not widely crossed over into teacher education. The literature to support problem-based learning in preservice teacher education provides relatively few examples. Higher education has become characterised by structured subject based learning. Subject based learning has at its centre the lecture. The lecture rates poorly as a means to motivate students because the core issue of the lecture is the lecturer's intent to cover set material (Margetson, 1994). However, effective student learning does not necessarily result from the lecturer's presentation of material. It appears that no matter how well the lecturer performs during the course of the lecture, students still sit passively and are seldom involved (Margetson, 1994). Subject-based learning means that subjects are viewed in isolation from each other and it is the subject that is driving learning. This style of learning assumes that the learner is unknowledgeable (Woods, 1994) and the instructor is the source of knowledge. Duch (1995) says that faculties that incorporate problem-based learning into their courses empower their students to take a responsible role in their learning and as a result must be ready to yield some of their authority in the classroom to the students.

The Evolving KBC Model

The research undertaken in 1999 and 2000 of the KBC Project showed that the attempt to combine PBL in its pure sense as the literature suggested was a bittersweet mixture of success and failure. While working in groups had provided the students with opportunities to experience and develop team and research skills, the experience of PBL in this period provided insights into the pitfalls of trying to implement what might be called a "pure" PBL model. The previous KBC models had overarching problems that had been written in an attempt to meet the requirements of the compulsory subjects. These problems proved cumbersome and in the end served only to hinder the learning of the students. Although the problems were written to meet specific curricular objectives and were anchored to current school issues they had not been tested. In fact it was the situation that the problems were trying to cover too many curriculum objectives. After the initial enthusiasm of the students had waned the problems no longer motivated the students. Instead the problems had the opposite effect, and the students became increasingly frustrated trying to force fit or resolve them in their various school settings. Yet the students who were part of the KBC during this period, despite the constraints of PBL developed a deep sense and understanding of schools, classroom work, and the multiple roles of a teacher.

As a result of these findings the current KBC model has removed the constructed or hypothetical problem. Problem-based learning principles guide the students as they negotiate to complete assessment tasks. The students devise assessment tasks based on collaborative evaluation and analysis of the non-negotiable curriculum i.e. the compulsory subject outcomes. The students then undertake negotiations with their mentor teacher at the school where they

are a Teacher-Associate to ensure that the tasks they have devised are appropriate and achievable in their setting.

The KBC facilitating team were aware that any redesigned model needed to capture and maintain the significance of the original three learning sources as well as allow the students in a KBC to develop their own learning and assessment tasks. Because the problems that were written did not suit the individual school sites here, KBC students need to develop assessment tasks that are specific to each school context. This new model would need to support the students and would help them make connections between theory and practice without the distraction of the contrived PBL problems used in the 1999 and 2000 KBC Projects.

The reworked KBC model had to give consideration as to how best to incorporate the compulsory subjects those first and second year students must enroll in at the UOW. The model needed to have enough scope to allow participating students to negotiate in their specific contexts (i.e. the school sites) and still meet the required outcomes of the subjects. To continue encouraging life-long learning the revised KBC model allowed students to practice more completely the principles of PBL and constructivism.

The KBC Project must provide for the ongoing participation of the school-based teachers, the students and the facilitating staff, as well as the KBC ideals of responsibility for learning, problem solving and reflection. The three original learning sources were hence reworked and four domains of teacher "know-how" were created

The Four Pillars of the KBC Project

The three original learning sources have now become the four pillars or structures that underpin the learning for the students enrolled in the KBC Project. The four pillars are:

- Community collaboration.
- Taking responsibility for own learning.
- Identifying and resolving professional problems using the principles of PBL.
- Becoming a Reflective Practitioner.

Three of the four pillars for teacher know-how reflect the original three sources of learning. The fourth pillar, "Becoming a Reflective Practitioner", has been added as a learning source because in the 1999-2000 KBC Project implementation of reflection was emphasised and encouraged by all facilitating staff. Dewey (1933) stated that 'reflective action' helps teachers examine the moral, ethical, political and instrumental issues that are embedded in everyday practice.

These four pillars act as support structures for the KBC students. They are also the qualities that were identified in Ramsey (2000) as the desired traits

for teachers to possess in the 21ˢᵗ Century. When interactions among the four pillars are working they will serve to drive effective approaches to any task.

Because the four pillars serve as the support structures of the KBC it is necessary to understand their function. It is therefore timely to examine each of the four pillars.

1. Taking responsibility for own learning

Within pillar number one it is expected that the students will:
- Demonstrate that they understand the importance of becoming autonomous, self- directed, independent learners
- Demonstrate that they know how to make effective, productive, learning decisions
- Identify a set of learning "strategies" and/or " tactics" that responsible, self-directed, independent learners can use and/or draw on
- Apply some of these strategies and/tactics to their own learning.

2. Learning through professional collaboration

Pillar number two expects the students to:
- Demonstrate understanding of the value and power of collaborative learning;
- Demonstrate ability to work productively and professionally as a member of a team;
- Demonstrate the ability to deal with inter-group conflict in productive ways;
- Understand how "group dynamics" work and be able to apply principles and "know-how" to maintain group cohesion; and
- Demonstrate that they can collaborate in the generation of professional knowledge which all who are members of the KBC community can share and use.

3. Identifying and resolving professional problems using the principles of PBL

Pillar number three encompasses the principles of PBL and therefore expects that the students will:
- Demonstrate the ability to identify and articulate professional problems, which need to be addressed and resolved;
- Demonstrate the ability to analyse the key elements in a range of professional problems;
- Make explicit and apply a set of problem- solving strategies and tactics with can be used to address and resolve such problems; and
- Demonstrate the ability to identify resources that might be needed to address and resolve a problem, and subsequently find and use such resources.

4. Becoming a reflective practitioner

The fourth and final pillar of KBC learning engages the students in reflective practice; therefore the students will be carrying out the following activities:
- Demonstrate the ability to engage in the process(es) inherent in reflective learning; and
- Students will be expected to make regular, honest, and systematic

judgments of the degree to which they believe they have demonstrated the four broad specific outcomes of KBC in the various settings (School, KBC home-room, Self-Directed Learning) by completing self-evaluation reports at regular intervals.

As stated the generic problem that is synonymous with PBL has been removed and in its place are a series of questions that have been designed to guide the students in their quest to master the outcomes of the compulsory subjects in which they are enrolled. This is a four-stage approach. At each stage there is a question that has been written to guide the students as they work towards designing their own assessment tasks. The questions at each stage are written as a means of ensuring that the students are satisfying the requirements of the compulsory subjects. The four guiding questions are:

- Stage 1 "Let's identify exactly what we are expected to learn in each of these subjects"
- Stage 2 "Let's see how we can reduce our workload by integrating and combining what we find out in Stage 1"
- Stage 3 "How can we make best use of our time in school to support what we're expected to learn?"
- Stage 4 "What sort of assessment tasks can we design and submit that will convince those who are going to assess us that we have achieved what we're supposed to have achieved?"

The students use the four pillars of KBC learning to support their work through each question at each stage. The principles of PBL are still in use because the students do not attend lectures, are constantly asking questions are engaged in problem solving research activities and they work in small teams. It is in these teams where the relationships form. These relationships are what make the KBC Project unique as a model for teacher education.

The Relationships of the KBC Project

As the students work through the above four-stage process with the four pillars of the KBC guiding them a tripartite relationship is built. This relationship highlights the importance of social interaction between the main participants. When students are given the opportunity and support of the KBC facilitators, school-based teachers and each other they can develop ownership of and responsibility for their own learning. This tripartite relationship is known as the community triad. With the support of this triad students are able to link theory to practice as well as developing an increased understanding of the culture of schools and the way that they operate.

The KBC students between 1999-2001 emphasised that the support of the community triad was the base from which all else operated. The friendship and trust that were created in the community triad directly influenced the experiences of the students during this period. This was evident in week one of Session One 1999 when Siobhan stated that she "didn't feel lonely and that she always had someone to have lunch with". She went on to question, "how

you could ever learn when you felt lonely at university". Kerrie confirmed this when she said:

> I don't think I am learning and then I go home and all this stuff comes out. I think where did that come from? It's because we talk and trust each other. If we have a problem we talk. We had so much fun with our group poster we weren't afraid to say anything. We talked so much. We hardly ever disagreed at all once someone said something we would go oh yeah that's a great idea... One of my initial concerns about this course was that my friends weren't doing it and I thought that I would be on my own but just the opposite has happened and I have made so many friends.   Kerrie

Skye via e-mail also reiterated the benefit of working in groups

> It's been great. I have loved working in-groups. I have had the best time. I have found that by working in a friendly environment you learn more. I think that everyone has different aspects that you can utilise
>   Skye

The KBC Project was established as a means of providing students with quality learning experiences. What emerged however was that the social interaction and support of each other and/or the KBC facilitators and/or the school-based teacher mentors served as the greatest influence on any or all of the students' experiences. It has been identified that the core element of the triad is trust. In order to achieve the contextual based assignment work each school-based group needs to rely on the efforts of each member of the triad.

> The ability to be able to learn from each other is a powerful tool, for example our debate yesterday got me so passionately involved in the topic, and I know that would never have happened in a tutorial group with a bunch of people that I didn't know or trust. From that experience, I can confidently say that I have knowledge about the topic, and it is making connections inside my brain, more so than sitting in the lecture.   Ryan

The reverse to this situation was demonstrated in Session One 2002 when students not carrying out their share of the workload were threatening the underpinning value of the group relationship i.e. trust.

> We have had several group meetings now where one or two members have arrived with their allotted tasks not completed. To be frank I am losing all sense of trust with them. I am concerned that we will not be able to finish our major assessment unless we have a major turnaround.   Michael

It is not easy to take a group of individuals at the start of a university session and ask them to trust people that they do not know. It is therefore important that structured processes are put in place in order for this to eventuate. Figure 1 illustrates the relationships necessary to replicate a community triad for any

future KBC cohort to include students, university and school staff. This needs to be done prior to students entering the KBC project or any of the participating schools. The creation of community between KBC facilitators and school-based staff needs to be viewed by both parties as a partnership.

The partnership between university facilitators and school-based teachers meets Ramsey's (2000) recommendation that the re-energising of teacher education needed to be supported by reconnecting universities and schools. It also demonstrates to the students that they are part of an established team. This team can only become the community triad with their inclusion.

Just as the students reflected on the relationships that they established through their involvement in the KBC so too did the school-based teachers.

> Having KBC students in the school has led to discussions about teaching philosophies and organisational matters better professional conversations not whingeing and whining...   Steve

> The students were making comments and asking questions that as a teacher I have longed to hear because what it did was reassure me that as graduates they were going to be effective teachers   Jane

Comments such as those above from the school-based teachers involved in the KBC-Mentoring Program support the existence of the community triad. However the university facilitators also make up this role and their role cannot be underestimated. The role of KBC facilitator differs from the traditional role of the lecturer. KBC facilitators cannot simply be the disseminator of facts. It is a role of multiplicity, as facilitators become counsellors, confidantes and co-learners.

The establishment of the community triad sees a positive change in the relationship between the school and the university. KBC facilitators carry out weekly school liaison visits, where it is not uncommon to sit with KBC students and 'unpack' the classroom instruction that is being observed. School based staff are also involved in the KBC homeroom as guest presenters. One of the most successful components of the community triad is the involvement of school-based staff at the planning and debriefing meetings held at the beginning and end of each university year.

Figure 1 is a representation of the processes and structures that lead to the formation of a KBC at the UOW. A dominant feature of this figure is the heavy black line that connects the major stakeholders. As the learning in a KBC model requires a coherent relationship between learning in school and at university the role of members of the triad is crucial to the success of the program. The role of each of these stakeholders is discussed on page thirteen.
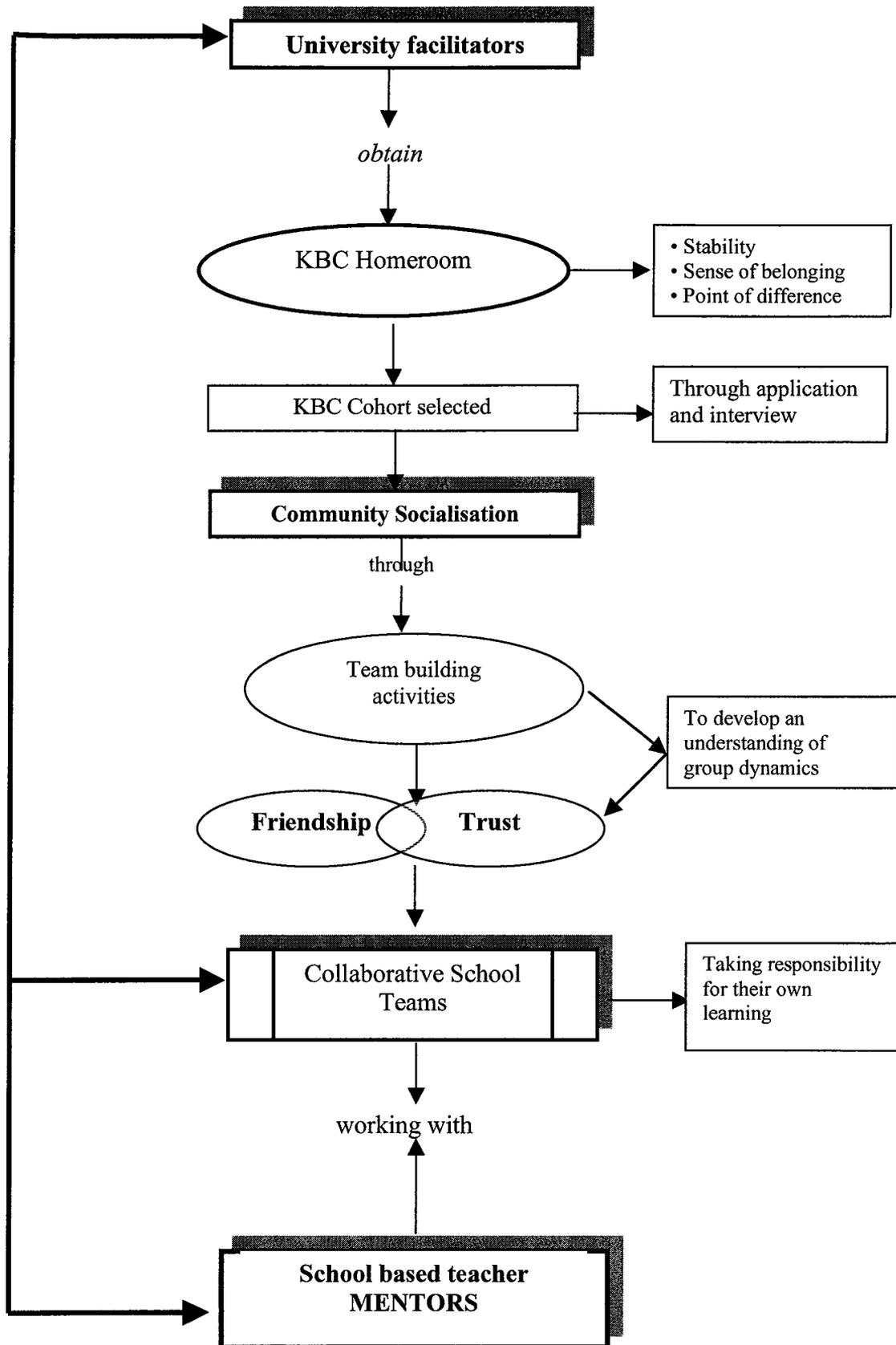
Figure 1: The relationships of the KBC Project

University Facilitators

The university facilitators are responsible for the coordination of the program, the school liaison and the recruitment of students. In terms of the coordination it is the facilitators' duties to ensure that students meet the outcomes of the subjects in which they are enrolled. This aspect requires meetings with mainstream subject coordinators and lecturers, as well as regular KBC facilitator meetings that discuss and debrief the students' progress. In 1999 when facilitators were not meeting regularly or were indeed not seen to be working as a team the students quickly noticed it. It is important in a project such as this that unity and teamwork is not regarded as only a student expectation.

The KBC Homeroom

An important component of the KBC Project is that the KBC facilitator team must arrange a designated homeroom and it must be obtained prior to the students' arrival on campus. The homeroom must not be a common teaching area; it needs to be for the sole purpose of KBC teaching and learning activities. This physical space plays a vital role in the establishment of the KBC. The homeroom provides stability, a sense of belonging, and a place to display work products and emphasises a point of difference from the traditional mainstream. It is the location where all workshops are held. The impact of not having access to the homeroom was not fully understood until Session One 2000. The situation of having two groups and only one homeroom meant that the KBC 2 students were without a permanent base and although teaching rooms were obtained for workshops, they were common teaching areas and the students could not stay in the rooms longer than the booking allowed. Quite often the rooms were located in buildings other than those that were designated to the Faculty of Education. The overlap of students saw KBC 2 students displaced and disorganised. KBC 2 students were often seen working in the cafeteria. Fran stated that they had lost their sense of identity; Katherine complained that they were no longer special; but Siobhan summed it up by saying that being on the move from room to room made the students feel that they were just another tutorial group. It became obvious that creative timetabling was necessary in order to accommodate two groups in one room.

KBC Cohort Selection Process

Another role that the KBC facilitator plays is that of recruitment of KBC students. In 1999 students were informed of the KBC Project via brochures that were handed out on enrolment day in January and then again on the Faculty of Education's information day in February. This process was repeated in 2000. Students that expressed an interest in joining the project were asked to write a letter of intent and including Curriculum Vitae. It was thought that the number of students seeking admission to the program would dictate an interview process. A panel of three senior lecturers was selected to cull the applications and then carry out any subsequent interviews. As previously reported this process was not necessary, as the numbers of students

did not warrant it. It is however a step that must be included into any 'formula' that attempts to outline the steps required forming a KBC Project.

Community Socialisation

When the students have been recruited through an application and interview process the KBC facilitators then undertake the process of community socialisation. Workshops and *team building activities* that allow students to meet and work with each other and learn about *group dynamics* can foster a sense of community. As the students spend time together *friendships* emerge. As the students begin to grasp the principles of group work and get to know one another and how one another works then *trust* will also begin to play a role.

When students develop *friendships* and *trust* they have the basis of a foundation that should enable them to work *collaboratively in school teams* with their school-based mentors.

Collaborative School Teams

Collaborative school teams are needed for the triadic relationship to form. These *collaborative school teams* share the roles of educational anthropologists, problem solvers and mentee.

As educational anthropologists, the students develop structures and processes that help them to understand their mentors' classroom. They also need to be able to as identify teacher 'informants', these teachers may wish to offer other insights and information about teaching, learning, children and schools. When the school teams are working *collaboratively* they will begin to share *responsibility for their learning* ensuring that they work as an efficient team of learners who collectively find and share knowledge.

Ideally these teams will be able to work outside of their school team, sharing insights with all members of the KBC. The process of knowledge building often takes place when the teams return to the homeroom but as seen in 1999 this is a process that needs facilitation it doesn't happen immediately. Success is reliant on the facilitating team carrying out their role in regards to school liaison and ensuring that all participating schools and mentors know their roles and responsibilities in the KBC Project. For example, in 1999 when one school site offered different learning opportunities and experiences it was not anticipated that this school's model would have the ramifications that it did on the whole KBC community. The differences at this school site caused angst not only for the students who attended this school but for the other school groups who reported feeling guilty that their school experiences were operating smoothly and productively.

The School-based Teacher Mentors

The third aspect in the community triad is the role that the teacher mentor plays. This role cannot be underestimated. When the students commence in

the schools after approximately five weeks of session one, it will be their teacher mentor that they turn to for advice and support. The relationship that is created between mentor and mentee will be pivotal for the SBL phase. The pioneer students rated their time in schools as beneficial because it was here that they were able to experience the day-to-day operations and come to grips with the multi-faceted role of teachers. Just as the students reported that they were learning from their mentors, the mentor teachers reported that they too were learning from the Teacher Associates.

In order to maintain the working relationship/partnership between the university and the schools the university facilitator must maintain a presence in the schools. When the facilitator, the school-based teacher and the KBC students are all in schools at the same time it cements the triadic relationship that underpins the KBC Project.

A number of major benefits or themes have emerged since the implementation of the KBC Project at the UOW. Firstly students have learned the value of their community triad in regards to their learning and they have realised that learning from each other is a powerful tool. The KBC Project allows students to identify and act on professional problems in a collegial manner and then have the ability to reflect upon the course of action taken. Moreover they have developed a deep sense of understanding about the roles of the members of the community triad, the multiple roles of the classroom teacher and the need to have functional groups for effective productivity. One of the most impressive facets to emerge however has been the fusion of a positive working relationship between the KBC facilitators, the students and the cooperating schools.

Some, (not all) of the assumptions inherent in KBC are radically different from those that underpin the mainstream teacher-education programs. The KBC Project is proving itself as a credible alternative to mainstream teacher education and through a series of revisions has designed a way to link abstract theory to classroom application and at the same time the link for joint responsibility for teacher education between the schools and the university has been strengthened.

The adoption of a 'KBC' model may not be viable or desirable for all teacher education programs but the tangible benefits cannot be overlooked. The provision of authentic learning experiences in authentic environments in a supportive community triad provides the catalyst for knowledge building. As one student from the KBC reflected:

> I think the benefit of the group work is that we are less focused on the outcome and more focused on the learning. Therefore gaining real knowledge through action and experience rather than just cramming in the theory in order to move onto the next subject which, we may forget.   Dianne

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