

CHAPTER 1

Introduction

1.1 INTRODUCTION

This essay reports on an investigation of an integrative solution to facilitating co-operative learning for new generation learners in a technology-rich environment. Of specific interest is the changing roles of learners and educators, as well as the enabling role of technology. The case study under investigation is the *Earthly Aliens Theme Day* of 31 May 2001. This same Theme Day was utilised to compile this dissertation. Data obtained by attending and observing the subsequent four Theme Days at St Alban's College, is utilised to support the answers of the research questions for this dissertation. When St Alban's College originally instituted the Theme Day concept, the College had the following in mind:

- the breaking down of barriers between subjects,
- providing the St Alban's learners the opportunity of a learning experience that is closer to reality than merely another 'typical' educational experience during a normal school day,
- introducing the learners to the concept of group work,
- allowing the learners to be creative, lateral thinkers and problem solvers,
- allowing a small committee of learners to learn managerial skills, and
- equipping learners entering the job market with the necessary life skills to cope in a technologically advanced world.

This introductory chapter covers the research methodology, the main research question and, subsequently, the sub research questions and the methods of data collection. The value and limitations of the research and the target population are included. The background to this study is described in the following section.

1.2 BACKGROUND TO THIS STUDY

Three perspectives, namely local, national and international background, serve as a preamble to this study on computer-integrated Theme Days at St Alban's College, and will be described in the following section.

1.2.1 *St Alban's College: local background*

St Alban's College has come a long way since it bought its first three Apple computers in 1980, and the StaTech centre serves as an example of a technology-intensive learning centre. St Alban's College is a private school, situated in the well-established, affluent suburb of Lynnwood Glen in Pretoria. Many learners of St Alban's College are in possession their own notebook computers, are computer literate and have access to the well-equipped StaTech computer complex. The information technology infrastructure at St Alban's is in place and the learners are privileged to have access to a richly equipped computer complex, i.e. the StaTech complex. Presently, the StaTech complex serves as a model of technology-intensive learning centre and is breaking new ground with regard to project planning, timetabling, and the utilisation of their resources and the effective use of manpower.

The management council of St Alban's College conducted a study in 1988 to establish the feasibility of technology and more specifically the integration of computers in education at the College. This study paved the way for the erection and inception of the StaTech complex, and eventually the implementation of the Theme Day concept in 1999. Computers have been integrated successfully into the College's curriculum. Computer training as such does not form part of the College's curriculum. However, the use of computers is integrated into the learners' learning processes (Lippert, 1993:127-128, 141).

Numerous educators visit St Alban's College annually. These visitors gain experience from St Alban's, as the College have been through the growing pains of developing and successfully implementing technology in education and more specific

in the concept of computer-integrated Theme Days. Many South African learners and their educators will and should benefit in future by the St Alban's experience. The abovementioned information shows that St Alban's College is an appropriate school to use for this study.

Theme Days at St Alban's College were first introduced in 1999. A Theme Day differs considerably from the traditional teaching method described in the preamble. Table 1.1 illustrates the traditional method of instruction versus the Theme Day method of instruction.

Table 1:1 Traditional method versus the Theme Day method of instruction

Traditional method	The Theme Day method
<ul style="list-style-type: none"> ▪ Learners learn by means of rote learning. ▪ The educator is the sole provider of knowledge. ▪ The education is educator-centred, and textbook bound. ▪ Passive learners. ▪ The syllabus is content-based and broken down into subjects. 	<ul style="list-style-type: none"> ▪ Learners are critical thinkers and construct meaning for themselves. ▪ The educator is not a "source of all knowledge". ▪ The role of the educator is that of a facilitator and education is learner-centred. ▪ Active learners. ▪ Learning is relevant and connected to real-life situations.

(Van der Horst & McDonald, 1997:27; Olivier, 1998:39)

With the introduction of Theme Days at St Alban's College, the College intends to equip learners with essential life skills. Life skills include the ability to collaborate, cooperate, apply lateral thinking and solve problems. The school's slogan, which is the guiding principle of St Alban's College, is *It takes a school with a vision to prepare a young man for life*. Learners entering the job market today are poorly prepared to cope with life in a technological world. The progress, from the initial idea to create a computer centre at St Alban's College, the introduction and implementation of the Theme Day concept, and the processes in the planning and management of a Theme Day will be described in Chapter 3 (Project description).

St Alban's College has been using the learner-centred model for many years, and serves as a model for many public South African schools. St Alban's realised that the standing timetable of the College was not beneficial for learner-centred learning. The normal school day timetable was abolished and Theme Days per form were implemented. Each form group now has at least three Theme Days per annum. Form 5 learners do not participate in Theme Days as their final school year is mainly dedicated to tuition and preparations for their examinations throughout the year.

1.2.2 National Education background

South Africa held its first free elections in April 1994, and the transformation from an Apartheid regime to a democratic regime created the need for reform in many areas. One of the problem areas identified by the government after the elections was the educational system. Curricula changes in a post-Apartheid environment started immediately after the elections when the National Education and Training Forum began a process of syllabus revision. The purpose of this process was to lay the foundation for a single national core syllabus in South Africa. This is based on outcomes-based education (SA, 2001:3-4; Olivier, 1998:20-21; Van der Horst & McDonald, 1997:5).

Educational change in South Africa was necessitated to provide equity in terms of educational provision, and to promote a more balanced view by developing learners' critical thinking powers and their problem-solving abilities. Another reason why educational change in South Africa was required is that a vast number of learners did not receive adequate educational and training opportunities during the Apartheid era. Curriculum 2005 (now the Revised National Curriculum Statement) aims to develop the full potential of each learner as a citizen of a democratic South Africa. It endeavours to create lifelong learners who are confident and independent, literate, numerate and multiskilled, compassionate, who have respect for the environment and the ability to participate in society as a critical and active citizen (SA, 2001:3-4; Van der Horst & McDonald: 1997, 5). Outcomes-based education is a learner-centred, results-orientated approach to learning, which is based on the following beliefs (Olivier, 1998:34; Spady, 1994:7; Van der Horst & McDonald, 1997:7):

- All individual learners must be allowed to learn to their full potential, i.e. both educators and learners must have high expectations for successful learning, regardless of background, learning style or gender.
- The learning environment is responsible for creating and controlling the conditions under which learners can succeed. The atmosphere in a classroom should be positive, and it should be conducive to the promotion of a culture learning.

The digital divide, changes and the re-engineering of learning towards an outcomes-based education system in South Africa was described in the previous section, and the international background will be described in the following section.

1.2.3 International background

The international background focuses on the availability of computers in the first and third worlds. A large percentage of the population of the third world does not have access to proper medical facilities, clean water and nutritious food. Only a small percentage of the population has access to schools with computer facilities. Friedland (2001:13) refers in his research to the 'digital divide'. According to Friedland, the term 'digital divide' has assumed a universal meaning. It is currently used to describe the widening gap between population groups who have access to information and communication technologies and are thus reaping the related benefits, and those who, up to now, have been left out. Co-operative learning, constructivism and learner-centred learning and the international perspective thereof will be described in the following section.

The *co-operative learning* model is not a new concept of the new millennium. Its roots date back to the early Greek civilisation. In 1916, the American John Dewey promoted the use of co-operative learning in the classroom. Dewey emphasised small problem-solving groups of learners searching for their own answers. More recently, the American brothers, Johnson & Johnson, did extensive research on co-operative learning. They were published widely in books and journals during the

1970s and the 1980s (Johnson & Johnson, 1991:17-20; Van der Horst & McDonald, 1997:128-129).

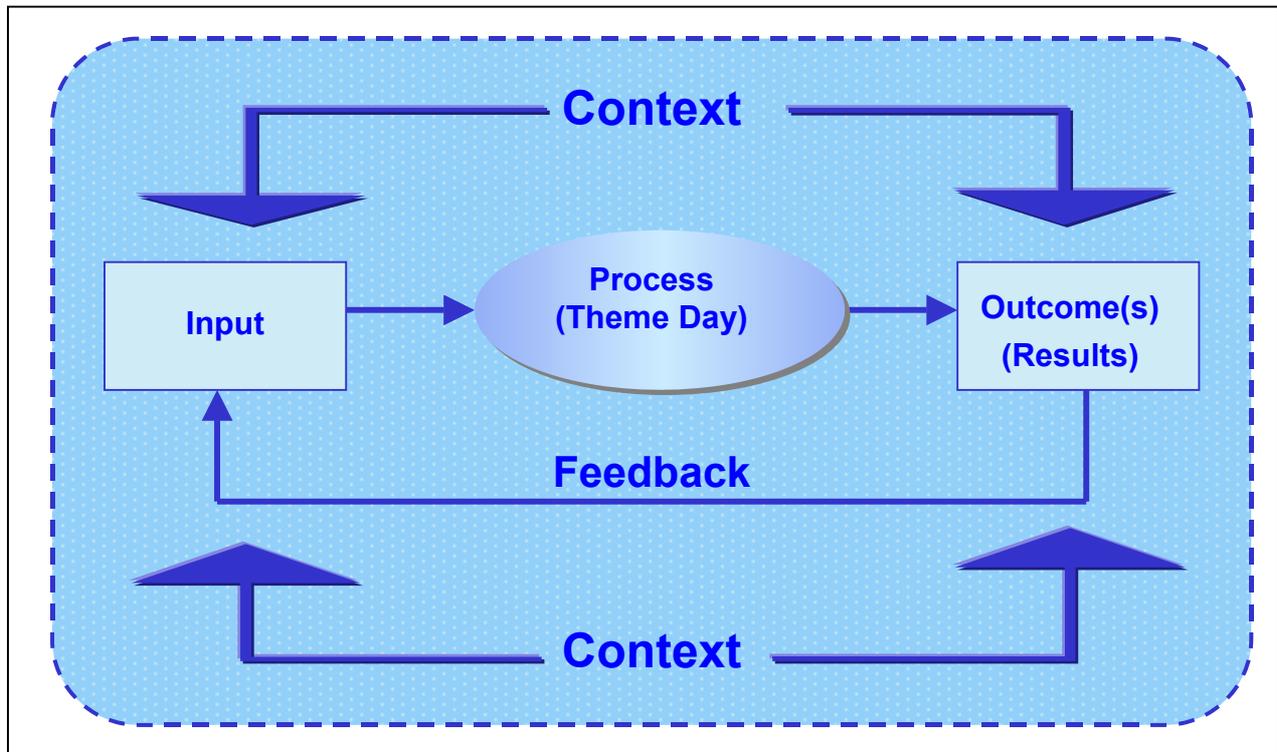
Exponents or originators of the constructivist theory are Jerome Burner, Jean Piaget and Lev Vygotsky. The term *constructivism* refers to the idea that learners construct knowledge for themselves – each learner individually (and socially) constructs meaning – as he or she learns. They are of the opinion that learning is more effective if the learners are encouraged to discover the principles themselves and are not spoon-fed by the educator (Hein, 1991:1-2).

The United States has seen a revolution in education in the past twelve years. It entails the philosophy of how educators educate, the relationship between educators and learners, and the nature of the curriculum. At the heart of *learner-centred learning* is the idea that learners learn best when they are engrossed in the topic and motivated to seek out new knowledge and skills because they need them to solve the problem at hand (Hansen 2000:1; Norman & Spohrer,1-4). The research problem of this study is described in the following section.

1.3 RESEARCH PROBLEM

In considering the implications of Theme Days, the research for this dissertation focuses on determining aspects to consider in designing and running computer-integrated Theme Days. The researcher followed a systems approach and focused on contextual aspects, input, process and outcome(s), as well as those benefits that make Theme Days worthwhile, thus forming the feedback loop that ensures sustainability. Figure 1.1 illustrates the systems approach followed in studying Theme Days.

Figure 1.1 Diagram of the systems approach to determining the implications of Theme Days (Adapted from Roux, 1989:176)

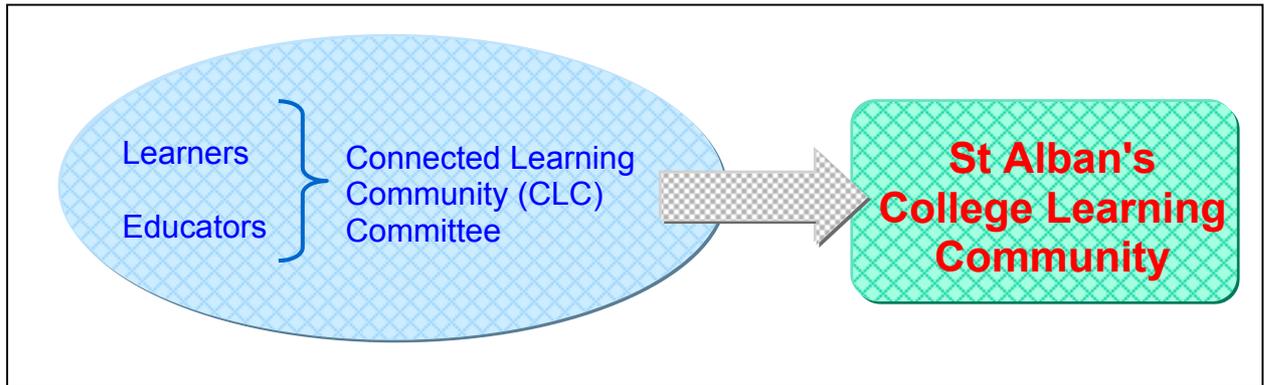


The aim of research for this dissertation will be described in the following section.

1.4 AIM OF THE RESEARCH

The aim of this study is to determine the implications of computer-integrated Theme Days for administrators, educators and learners at St Alban's College. Aspects such as the learning community, pedagogy and technology were considered to achieve the aim of this dissertation. The benefits and limitations of computer-integrated Theme Days for learners were investigated, as well as how they influenced the learning process. Figure 1.2 illustrates the learning community of St Alban's College. The learning community at St Alban's can be visualised by making use of the following figure.

Figure 1.2 The St Alban's College learning community

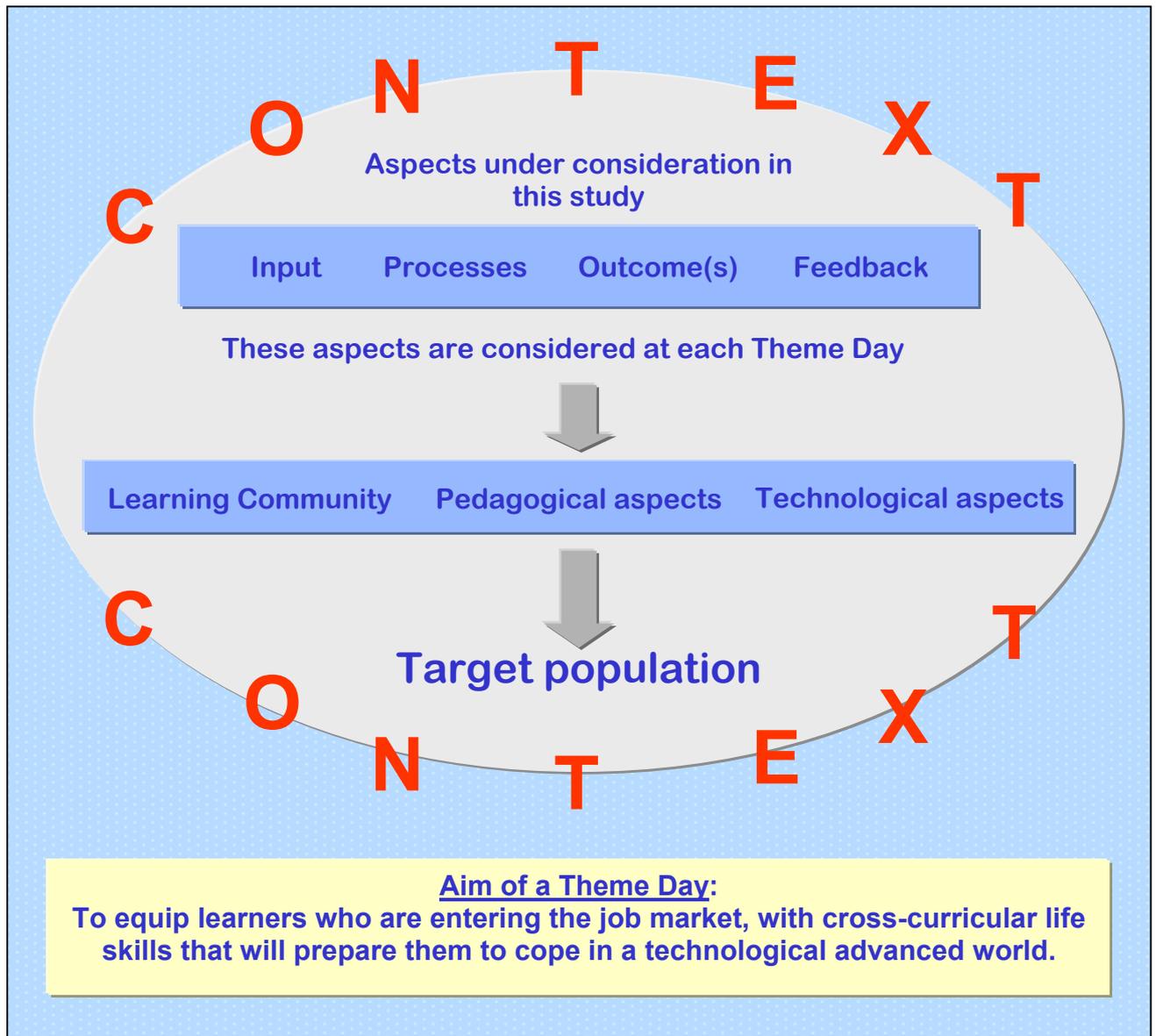


1.5 OBJECTIVES OF THE RESEARCH

The specific objectives of the research are to determine the aspects to consider in planning, implementing and evaluating computer-integrated Theme Days. Three categories of aspects have been identified, namely

- learning community aspects,
- pedagogical aspects, and
- technological aspects.

Figure 1.3 Overview of the study



The main research questions are described in the following section.

1.6 RESEARCH QUESTION

The main research question and five sub research questions, which are to be explored in this study, are the following:

**What are the aspects to consider in planning, running
and evaluating computer-integrated
Theme Days for learners at St Alban's College?**

The main research question can be refined by the following sub questions regarding the different contexts investigated in this study:

- a) What is the institutional and contextual influence of computer-integrated Theme Days?
- b) What inputs are required from the educators, the Connected Learning Committee and the learners?
- c) What processes occur during computer-integrated Theme Days?
- d) What outcome(s) do the educators, the CLC Committee and the learners achieve?
- e) How is the feedback loop completed to ensure sustainability?

The main research question and sub-questions will be answered in Chapters 2 to 5 of this study. Five Theme Days were observed during the period between May 2001 and October 2002, and are schematically represented in Table 1.2. The primary subject of this research is the *Earthly Aliens Theme Day* that took place on 31 May 2001.

Table 1.2 Theme Days observed during the period May 2001 to October 2002

Date of Theme Day	Form group involved	Topic of Theme Day
31 May 2001	Form 3 (Grade 10)	<i>Earthly Aliens (primary focus of this study)</i>
3 October 2001	Form 2 (Grade 9)	<i>Water conservation and technology</i>
5 July 2002	Form 4 (Grade 11)	<i>Entertainment</i>
29 September 2002	Form 3 (Grade 10)	<i>Top Secret</i>
9 October 2002	Form 1 (Grade 8)	<i>Insects</i>

Previous research undertaken on the NEXUS database will be described in the following section.

1.7 PREVIOUS RESEARCH

In order to place this research project in the context of research conducted in South Africa, a review of the NEXUS database was undertaken. According to this review conducted in April 2003, six related research studies were identified. Research by Friedland is an exception, as research was done for at a university in Germany. These related studies are described in Table 1.3.

Table 1.3 Related research topics

Researcher	Title	Year	Degree	Institution
Addo, H.	Utilisation of information and communication technology for education in South Africa: An examination of the World Links for Development (WorLD) programme	2003	Ph.D.	University of Pretoria
Cossa, G.G.	Implications of introducing Information and Communication Technology in Mozambican schools	2002	M.Ed. (CAE)	University of Pretoria
Friedland, C.	The Application of Information and Communication Technologies in Learning and Training in Developing Countries	2001	Master of Computer Science	Karlsruhe University, Germany
Kennedy, I.M.	Co-operative learning with computers: Three model lessons	1993	M.Ed. (CAE)	University of Pretoria
Miller, P.A.	The integration of computers at Pinelands High School: A case study	1997	M.Ed. (CAE)	University of Pretoria
Morgan, S.K.	Computer Integration in South African Schools with reference to St Stithians College	2001	M.Ed. (CAE)	University of Pretoria

From Table 1.3 it can be seen that this research is relevant to research conducted by the researchers Cossa, Friedland, Miller and Morgan. Research by **Miller** (1997) was done in 1996 to 1997, and focused on the effective integration of computer-integrated education at Pinelands High School. The purpose of **Morgan's** (2001) research was to assess the relevance of dominant discourse. Morgan emphasises the intrinsic value of computers used in education in South African schools. **Friedland** (2001) provides an international perspective and insight for this study. **Kennedy** (1993) conducted research on co-operative learning with computers. The research of **Cossa** (2002) documents the introduction and utilisation Information and Computer Technology (ICT) in Mozambican secondary schools over a period of three years. Among the significant challenges to be addressed in the area of ICT-related education in Mozambique are the high level of illiteracy and the limited financial and technical resources. The research of Addo (2003) focuses on a World Bank initiative to introduce computers in 25 South African schools.

The value and relevance of this study will be addressed in the following section.

1.8 VALUE OF RESEARCH

South African schools may consider the implementation of computer-integrated Theme Days. Learners at public and private schools could benefit from the implementation of computer-integrated Theme Days. Learners from St Alban's College tremendously enjoyed participating in Theme Days, and at the end of the day the successes thereof proved that learning can still be fun.

St Alban's College has more than ten years of experience of ICT in education and they view themselves as pacesetters in the utilisation of the latest information technology in education. St Alban's made mistakes since their first implementation of the Theme Day concept in 1999, but has since streamlined and improved the concept to the current format. St Alban's College presented an *Information Leadership Conference* from 4 to 6 July 2002 and the conference delegates represented public and private schools. Papers presented by guest speakers included *Technology in the classroom*, *Intranets in the classroom* and the *Connected*

Learning Community. Delegates were educators teaching computer studies. The delegates attended the conference with the aim to learn from the St Alban's experience. The delegates can implement a simplified and modified Theme Day concept at their respective schools based on the St Alban's Theme Day concept, even though they don't have ample resources and a well-equipped StaTech computer complex as is the case at St Alban's College (Viljoen, 2002).

The research methodology for this study will be addressed in the following section.

1.9 RESEARCH METHODOLOGY

The research methodology for this study is discussed in this section, as well as the data collection methods which were utilised to obtain information. An evaluation matrix is provided in Table 1.4, which correlates the main research questions with the main research methods used to compile this study.

The systems approach will be described in the following section.

1.9.1 The systems approach

The systems approach was applied in this study to provide a structure and layout for the dissertation. Gillies (1994) provide a theoretical perspective of a systems approach. The five elements of the classic system were the aspects considered at each Theme Day, and these elements are important headings in chapters of this study. According to Gillies (1994:60) a *systems approach* is especially necessary for the planning and control functions of management. A *system* is a set of objects or elements that interact to achieve a specific goal. It is not just an orderly arrangement of parts but an ongoing process that consists of diverse elements and their interrelationships. The classic system elements are the environment, input, processes, outcome(s) and feedback. For the purpose of this study, the environment will be referred to as the context. Gillies (1994: 66-67) identifies the elements as follows:

- Each system is defined in relation to its *context*, and the systems context can be defined only with reference to the system and its boundaries. The context for this study is the St Alban's learning community, pedagogy and technological aspects that influence computer-integrated Theme Days.
- *Input* is the energiser and operating material of the system. Inputs may consist of information, time, money or raw material. The input component of a system is that element that receives the operating material from the context. The inputs of this study include the St Alban's College learning community, pedagogy and technology. Inputs of the aforementioned make a Theme Day a possibility.
- *Process* is a series of actions by which the system converts energy input from the context into products and services that are usable by the system itself or by the context. The process of this dissertation is the actual Theme Day, such as the role of the learning community, pedagogy or technology in the processes.
- *Outcome(s)* includes the final product or service resulting from the system processing of technical, social, financial or human inputs. If the outcomes are unsatisfactory, the inputs and process can be changed to avoid the same unsatisfactory outcomes a second time. For instance, if a few learners were lazy or did not participate in Theme Day tasks, the concept of group work will be revised, or the learners, who were passengers, will be placed in different groups during a following Them Day.
- The *Feedback* is information about some aspect of data or energy processing that can be used to monitor and evaluate system performance and guide it to more effective performance. A certain percentage of maladaptive responses can be expected in any system, feedback components are needed to detect system errors and signal need for correction. At the first CLC meeting after a Theme Day the errors of a Theme Day are highlighted, and these errors are eradicated or rectified to avoid the occurrence thereof in a forthcoming Theme Day.

The research design for this study will be addressed in paragraph 1.9.2.

1.9.2 Research design

According to Merriam (1997:27) a qualitative case study can be defined as “. . . an intensive, holistic description and analysis of a single instance, phenomenon, or social unit”. A case study could be a person such as a learner, an educator, a group such as a class, a school or a community (Merriam, 1997:27; Cohen, Manion & Morrison, 2000:181; Holloway & Wheeler, 2002:284).

Merriam (1998:41-43) mention a few examples of the strengths and the limitations of case studies. Because of its strengths, a case study is a particularly appealing design for applied fields of study such as education. According to the strengths of a case study as outlined by Merriam (1998:41), a case study design was selected for this dissertation because of the nature of the research problem and the research questions being asked.

Although strengths of case studies do exist, the limitations thereof should also be noted. Merriam (1998:42) quotes Guba and Lincoln (1981:377) as follows: "... case studies tend to masquerade as a whole when in fact they are a part – a slice of life." The researcher does not fully agree with the aforementioned statement of Guba and Lincoln. This study is a dissertation and of limited scope. If the scope of the study is broadened, the researcher will not meet the intended aim for this study, which is also reflected in the title of this dissertation. Limitations of this study do exist and are mentioned in section 1.12 of this chapter. Data collection methods for this dissertation will be described in the following section.

1.9.3 Data collection methods

Observation and interviews as well as the data collection instruments utilised to conduct research for this study will be described in the following section.

1.9.3.1 Observations

A key issue in case study research is, according to Cohen, Manion & Morrison (2000:181), the selection of information. Observations are an important data collection instrument. The case study researcher observes the characteristics of an individual unit such as a learner, a class or a school. The researcher of this study took on the role of non-participatory observer. A non-participatory observer is an observer who visits a site, sits at the back of a classroom and records notes without becoming actively involved in the activities of the participants (Creswell, 2002:200-203; Holloway & Wheeler, 2002:101).

Observations were made during five Theme Days from 31 May 2001 to 9 October 2002. The *Earthly Aliens Theme Day* of 31 May 2001 was used as the case for this study. Data obtained by attending and observing the subsequent four Theme Days, October 2001 to October 2002, are utilised to answer the research questions for this dissertation. Learners and educators as well as aspects such as the CLC, technology and pedagogy were considered at every Theme Day. The researcher observed:

- The learners by walking around in the StaTech computer centre during events and field notes were taken.
- The learners at five Theme Days. The observation was done over a period of 17 months.
- The key role players during each Theme Day.
- The use of technology and in particular the use computers and the functioning of co-operative groups.

1.9.3.2 Interview(s)

Data collection for case studies also includes a researcher conducting interviews to collect information. Interviews are the process where researchers ask one or more participants in a study general questions, open-ended questions and then record their answers. In qualitative research, open-ended questions are asked so that the

participants can best voice their experiences unconstrained by any perspective of the researcher or past research finding. An advantage of interviews is that the interviewer also has better control over the types of information received since specific questions can be asked to elicit this information. A disadvantage of interviews is that researchers might only provide filtered information that is relevant to the study (Cohen, Manion & Morrison 2000:187-188; Creswell, 2002:202-204).

Interviews were conducted with Connected Learning Community (CLC) committee members to elaborate on their involvement in computer-integrated Theme Days. The interviews were mainly conducted in StaTech 1, StaTech 2 and at the work stations while the learners were working on their tasks. Key role players interviewed during Theme Days are the:

- learners,
- Director of Technology,
- educators,
- CLC committee members,
- secretary of the Director of Technology, and
- network manager.

E-mail is a form of interviewing and is useful in collecting qualitative data quickly (Creswell, 2002:207). E-mails proved to be a valuable tool to communicate and to obtain information. The researcher sent e-mails to Ron Beyers, Director of Technology at St Alban's College, and *de facto* organiser of the event (Appendix 2). E-mails were utilised to obtain dates of Theme Days and which forms were to be utilised. Interviews and observations were utilised during the five Theme Days at St Alban's College. The literature survey for this dissertation is described in detail in Chapter 2.

A letter dated 8 July 2002 was sent to Mr Tom Hamilton, Headmaster of St Alban's College, requesting his permission and consent to conduct the research for this dissertation (Appendix 1). Mr Hamilton replied in a letter dated 25 July 2002 in which

the researcher was given permission to conduct a research at St Alban's College (Appendix 1).

The three main methods of collecting data were utilised in this study, as tabulated in Table 1.4, is a literature review, interviews and observations.

Table 1.4 Data collection methods/Matrix of research questions and methods

Research questions	Document analysis	Interview	Observation
1. What is the institutional and contextual influence of computer-integrated Theme Days?	✓	✓	✓
2. What inputs are required from the educators, the Connected Learning Committee and the learners?	✓	✓	
3. What processes occur during computer-integrated Theme Days?	✓	✓	✓
4. What outcome(s) do the educators, the Connected Learning Committee and the learners achieve?		✓	✓
5. How is the feedback loop completed to ensure sustainability?		✓	✓

1.9.4 Use of the first person

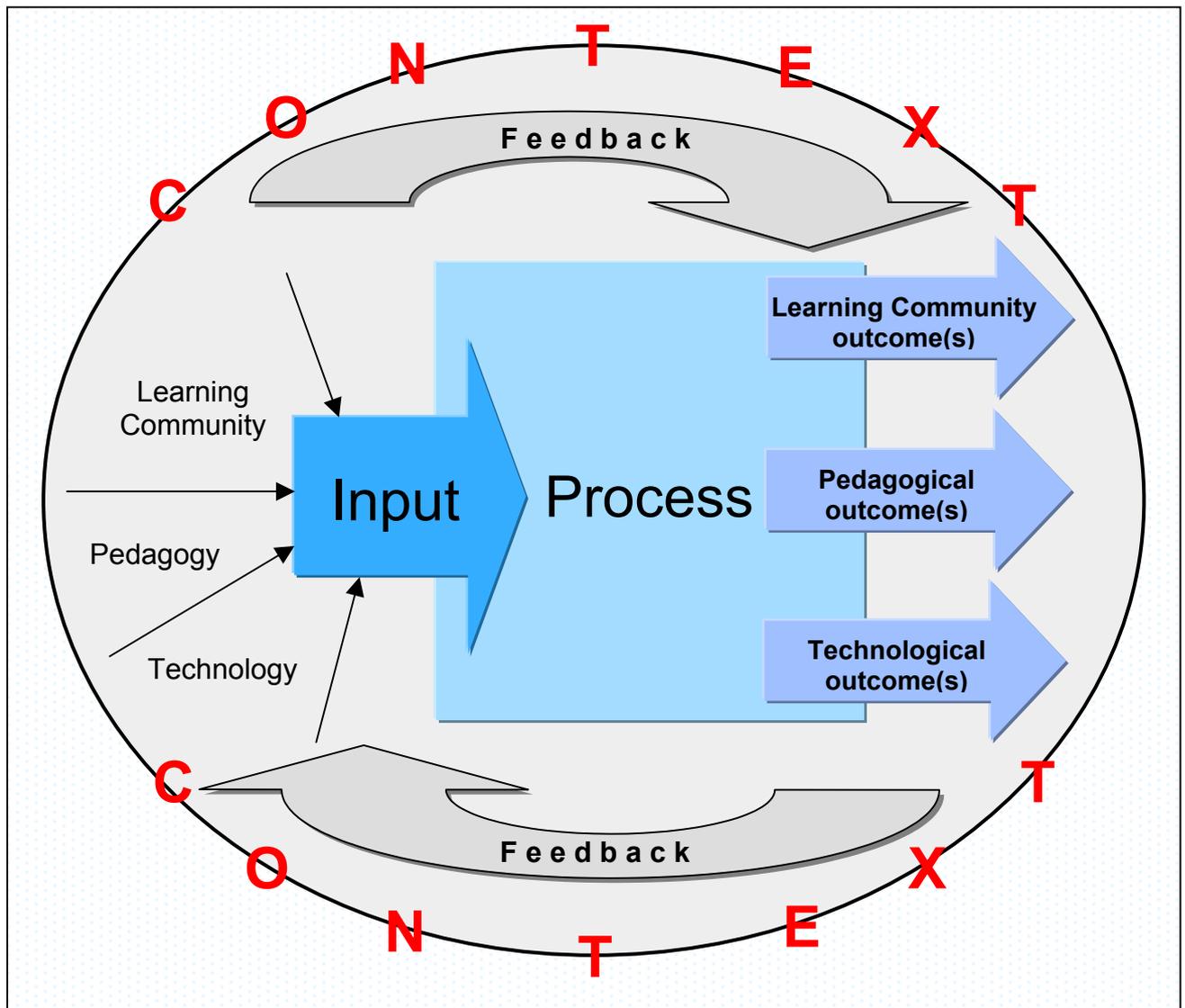
The use of 'the researcher' in first person, as it is the case in the introduction of this dissertation, is justified in literature. According to Hollow and Wheeler (2002:267) it is acceptable to write in the first person, especially when writing the introduction and the methodology. Hollow and Wheeler (2002:267) quote Wolcott (2001:21) as follows, "...the use of the first person because researcher roles become integrated into the study. For reporting qualitative research, it should be the rule rather than the exception."

The outline of this dissertation as well as a diagrammatic illustration of the dissertation will be provided in the following section.

1.10 OUTLINE OF THE DISSERTATION

This dissertation comprises five chapters, of which an outline is tabulated in Table 1.5. This is followed by a diagrammatic illustration of the outline of the dissertation, as depicted in Figure 1.5.

Figure 1.4 Outline of the dissertation



The outline of this dissertation is tabulated in Table 1.5.

Table 1.5 Outline of dissertation

Chapter	Name of chapter	Description
1	Introduction	The framework within which the research problem is situated, is described in this section. This chapter outlines the main points of the study, i.e.: What are the implications of computer-integrated Theme Days for learners at St Alban's College? The research questions are posed in this introductory chapter.
2	Literature review	A review of relevant literature on aspects related to a community of learning, pedagogical aspects and technology. The context of the research for this dissertation is outlined in this chapter.
3	Research methodology	This chapter discusses the research context, which is St Alban's College, and the research methodology used during the research for this study.
4	Findings	The first part of this chapter discusses the <i>Earthly Aliens Theme Day</i> of 31 May 2001. The second part of this chapter contains the data obtained by attending and observing the subsequent four Theme Days, 3 October 2001 to 9 October 2002.
5	Conclusions and recommendations	In this concluding chapter, a description will be provided of "how the loop is completed". The concluding chapter of this study reports on the successes and failures of the study and includes recommendations for future research.

The demarcation, inclusions and exclusions from this study are described in the following section.

1.11 DEMARCATION, INCLUSIONS AND EXCLUSIONS FROM THIS STUDY

The target population used for the research on the implications of computer-integrated Theme Days for learners at St Alban's College are learners in Form 1 to Form 4. Form 1 is the equivalent of Grade 8 in South African public schools. The learners are all males, and the age group of these learners range between 14 to 17 years. The Form 4 learners did not participate in any Theme Day in October 2002. These learners prepared for their November 2002 examinations. The Form 5 (Grade

12) learners didn't participate in any Theme Day in 2002 and are not included in the research for this dissertation. The reason is that their academic year is rather short due to preparations for their mock exams in August and end of the year exams in October and November. An exception does exist. Two Form 5 learners who are members of the Connected Learning Committee team were involved in the Theme Days of 29 September and 9 October 2002.

Extensive research at other schools in Pretoria was excluded from the research for this dissertation. The integration of computers in schools was also excluded from this study because research was previously done in that specific field. Two former Master's in Computer-Assisted Education students, PA Miller (1997) in Pinetown and SK Morgan at St Stithian's College (2001), undertook the research. The racial groupings of the learners of St Alban's College were excluded from this dissertation due to the sensitivity of the issue in South Africa. Limitations of this study are described in paragraph 1.12.

1.12 LIMITATIONS OF THIS STUDY

Certain limitations were experienced in this study, namely:

- The research on computer-integrated Theme Days was limited to only one school. St Alban's College is a private school and has a well-equipped computer centre namely the StaTech Computer Centre. St Alban's College is a school rich in resources and cannot be regarded as representative of the broader South Africa school community where many schools lack educators who have received proper training, textbooks and libraries. Moreover, regular access to facilities such as well-equipped computer centres do not exist.
- This dissertation represents a single case study (*Earthly Aliens Theme Day*). Limited comparative studies were made to determine the impact of computer-integrated Theme Days at other schools, e.g. private or public schools in Pretoria or surrounding areas.
- Dissertations and theses in computer-assisted education focuses mainly on the use of computer-assisted education at tertiary institutions. The reason therefore

might be that students who enrol for the Master's degree in Computer-Assisted Education are mainly from tertiary or training institutions and the business sector.

- The case studies dealt with small segments of the subjects. The reason therefore was that only small segments of the subjects or curriculum were covered in the Theme Days.
- Research for this dissertation proved that a limited number of resources was available on the subject.
- No statistical analysis of data was included in this study due to the small segment of learner population utilised during the research process for this dissertation.

1.13 SUMMARY

The dissertation reports on the implications of computer-integrated Theme Days for learners at St Alban's College. This section provided a framework within which the research problem is situated, the background and the research methodology of this study. Chapter 2, the literature survey, sets out to answer the main research question and the five sub-questions by undertaking a literature review in order to contextualise the research for this study. Chapter 3 is the description of the project.