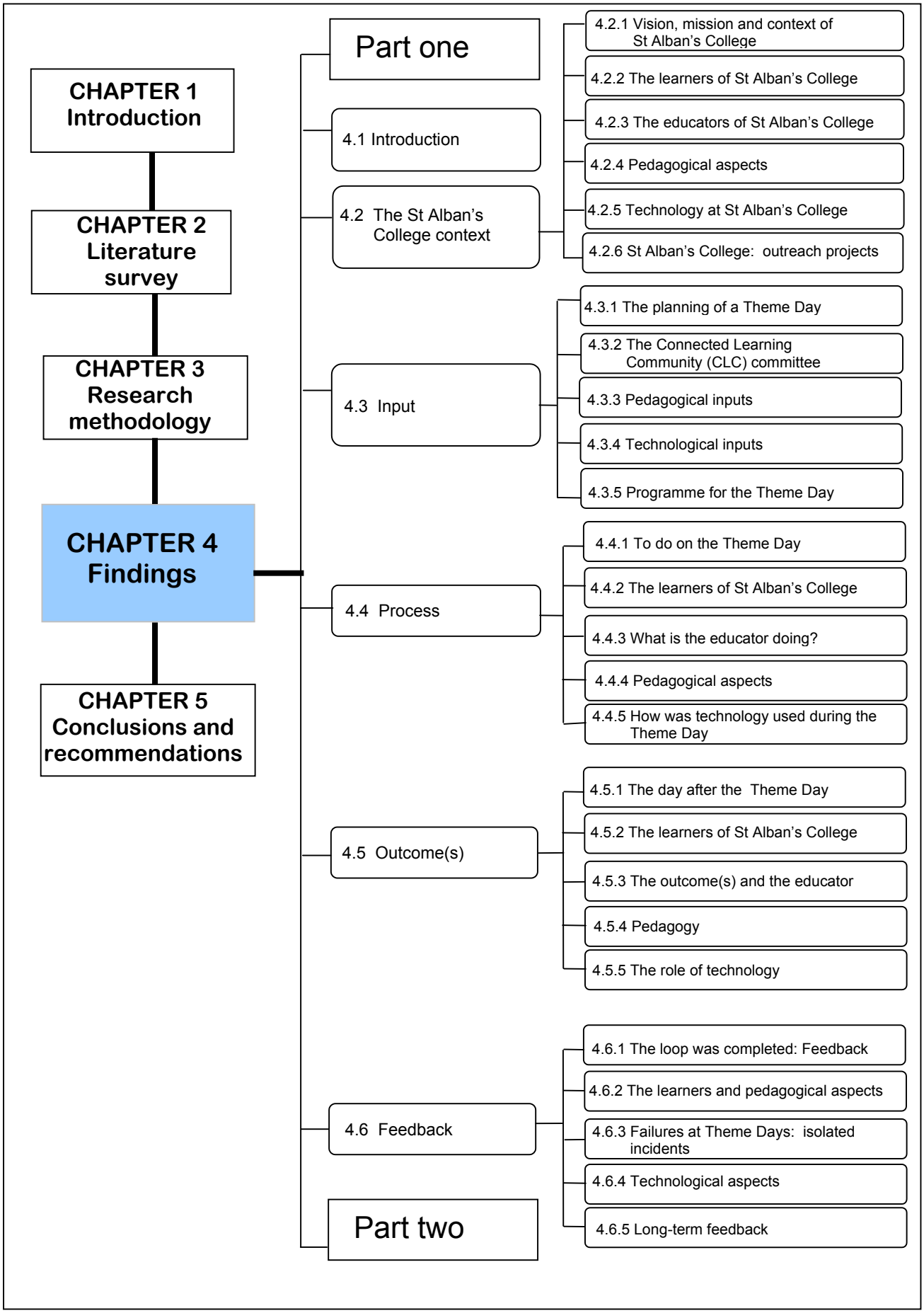
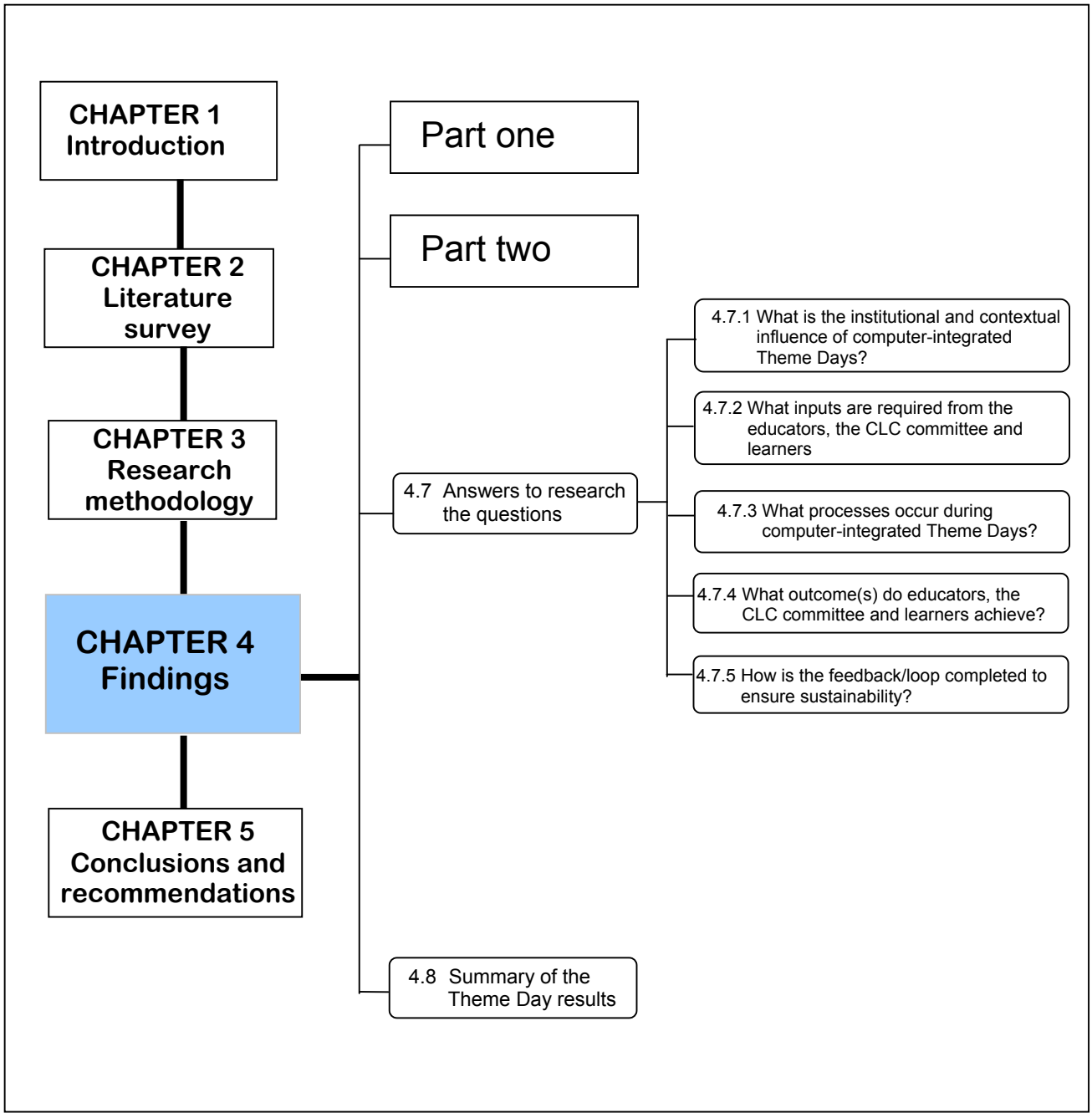

CHAPTER 1 Introduction
CHAPTER 2 Literature survey
CHAPTER 3 Research methodology
CHAPTER 4 Findings
CHAPTER 5 Conclusions and recommendations
Part one
4.1 Introduction
4.2 The St Alban's College context
4.2.1 Vision, mission and context of St Alban's College
4.2.2 The learners of St Alban's College
4.2.3 The educators of St Alban's College
4.2.4 Pedagogical aspects
4.2.5 Technology at St Alban's College
4.2.6 St Alban's College: outreach projects
4.3 Input
4.3.1 The planning of a Theme Day
4.3.2 The Connected Learning Community (CLC) committee
4.3.3 Pedagogical inputs
4.3.4 Technological inputs
4.3.5 Programme for the Theme Day
4.4 Process
4.4.1 To do on the Theme Day
4.4.2 The learners of St Alban's College
4.4.3 What is the educator doing?
4.4.4 Pedagogical aspects
4.4.5 How was technology used during the Theme Day
4.5 Outcome(s)
4.5.1 The day after the Theme Day
4.5.2 The learners of St Alban's College
4.5.3 The outcome(s) and the educator
4.5.4 Pedagogy
4.5.5 The role of technology
4.6 Feedback
4.6.1 The loop was completed: Feedback
4.6.2 The learners and pedagogical aspects
4.6.3 Failures at Theme Days: isolated incidents
4.6.4 Technological aspects
4.6.5 Long-term feedback
Part two


CHAPTER 1
Introduction
CHAPTER 2
Literature survey
CHAPTER 3
Research methodology
CHAPTER 4
Findings
CHAPTER 5
Conclusions and recommendations
Part one
Part two
4.7 Answers to research the questions
4.7.1 What is the institutional and contextual influence of computer-integrated Theme Days?
4.7.2 What inputs are required from the educators, the CLC committee and learners
4.7.3 What processes occur during computer-integrated Theme Days?
4.7.4 What outcome(s) do educators, the CLC committee and learners achieve?
4.7.5 How is the feedback/loop completed to ensure sustainability?
4.8 Summary of the Theme Day results

CHAPTER 4
Findings

4.1 INTRODUCTION

This chapter contains the discussion of the project findings, which is the result of an analysis of five Theme Days at St Alban's College. This chapter is divided into two sections. The first section is a discussion case study under investigation, and utilised to compile this dissertation is the *Earthly Aliens Theme Day* of 31 May 2001. The second part contains the data obtained by attending and observing the subsequent four Theme Days, 3 October 2001 to 9 October 2002. This data is then utilised to support the answers of the research questions of this dissertation.

The learning community of St Alban's College, as well as the pedagogical and technological aspects, have an influence on the success and outcome(s) of a computer-integrated Theme Day. Analysis and interpretation of aspects such as the context, inputs, processes, outcome(s) and feedback of computer-integrated Theme Days will be discussed. In this chapter the researcher answers the main research question and sub-research questions relating to the implications of computer-integrated Theme Days for learners at St Alban's College. The St Alban's context will be discussed in the following section.

PART ONE: DISCUSSION

4.2. THE ST ALBAN'S COLLEGE CONTEXT

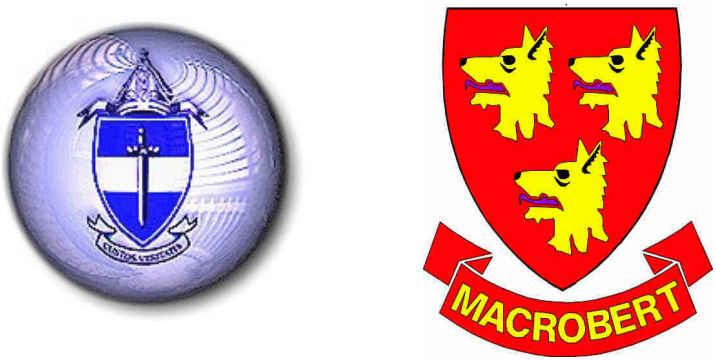
The context for this dissertation is the learning community aspects, and pedagogical and technological aspects of computer-integrated Theme Days at St Alban's College. St Alban's College is private school situated in the well-established suburb of Lynnwood Glen in Pretoria. Form 1 at St Alban's College is the equivalent of Grade 8 in South African public schools.

4.2.1. Vision, mission and context of St Alban's College

St Alban's College's vision can be described as: *St Alban's College is a learning community of students, staff and parents, connected by human networks and information communication technologies*. St Alban's College is committed to quality service and encouraging personal responsibility in the interest of the all-round development of the learner as an individual. St Alban's College is an Anglican Church School and strives for Christian values and principles (St Alban's College, 2003).

The motto of St Alban's College is *It takes a school with a vision to prepare a young man for life*. The College views itself as a pacesetter in the educational application of the latest information technology. St Alban's strives to create an exciting environment for the learners where change is stimulating rather than threatening. St Alban's College is furthermore of the opinion that a school life, which is positive, productive and purposeful, will succeed in fostering a positive, productive and purposeful approach to life beyond school (St Alban's College, 2003). Images of the St Alban's College logo and McRobert boarding house are displayed in Figure 4.1.

Figure 4.1 Images of St Alban's College logo and McRobert boarding house



The mission of St Alban's College is that they dedicate themselves to a stimulating, balanced programme, which is sensitive to the needs of individual learners. Learners are increasingly encouraged to assume responsibility for themselves. The College aims to equip learners with the technological and life skills which will enable them to make a positive contribution in an open and dynamic society. The aim of the College is, furthermore, to create a just, peaceful, united, productive and caring community (St Alban's College, 2003).

St Alban's College came into being on 1 February 1963 with 37 learners and three masters, and will be celebrating its 40th anniversary in 2003. The number of teaching staff has risen to more than thirty. The total number of learners enrolled at St Alban's College has grown to 508 in 2002. The exception is Form 1 with 108 learners for 2002. A decision was made by the management of St Alban's College to keep the number of learners at 100 per form group (Ashton, 2002).

The College follows a holistic approach. Culture and music in particular figure prominently in the life of the school. Furthermore, appreciation of the cultural diversity within the school community leads quite naturally to mutual respect (St Alban's College, 2003). The medium of instruction at St Alban's College is English to accommodate learners who do not understand or speak Afrikaans. A relative large percentage of the St Alban's learners' mother tongue is Afrikaans.

4.2.2 The learners of St Alban's College

The learners of St Alban's write the Independence Examination Board's examination at the end of Form 5 (Grade 12), and not the Gauteng Department of Education or the National Department of Education's exam papers (Denby & Ashton, 2002). The educational changes that took place at St Alban's College are, for example, the introduction and implementation of the Theme Day concept in 1999. St Alban's is taking the lead in curriculum development, problem-solving methodologies, cross-curricular modules, thinking skills and entrepreneurship (St Alban's College, 2003).

Some of the learners at St Alban's College are ‘day boys’, while the remaining ones are ‘residence boys’. The College has six college houses, three of which are boarding houses, e.g. Macrobert, and three day boy houses. Vast ranges of extra-mural activities are available for the St Alban's learners. The College emphasises the all-round development of every member of the school community in cultural and sporting pursuits. All the boys are involved in sport activities such as cricket and hockey. More recently, the boys began competing in the local rugby and basketball leagues (Carl Yssel; St Alban's, 2003).

4.2.3 The educators of St Alban's College

Male educators in the St Alban's College context are addressed as “Sir”, whereas the female educators are addressed as “Ma'am”. The ratio of male to female educators is 29 male educators including the headmaster, 9 female educators and 22 additional or support staff members which include the librarian, secretaries, administrative and financial staff members, the IT team and estate manager. The present headmaster is Mr Tom Hamilton. Mr Hamilton was appointed as the fifth headmaster at St Alban's College and took up the position of headmaster in March 2001 (St Alban's College, 2003).

4.2.4 Pedagogical aspects

St Alban's College has a concern for the individual. The College places emphasis on abiding moral values and personal interaction. Some of the strategies employed at St Alban's are computer-integrated Theme Days, which incorporate cooperative learning, a comprehensive life skills programme, conflict resolution and a learner support programme for those in dire need thereof (St Alban's College, 2003).

Far too often what goes on in the classroom is merely restricted to another 'typical' educational experience during a normal day at school where the educator makes huge assumptions about the prior knowledge of the learners. For more able learners this is not really a problem as they are able to draw on their own past experience to construct knowledge, but weaker learners have very few reference points from which to make the connections. The College is of the opinion that learners learn best when the context of their education matches their interests (Brochure of St Alban's College, 5 July 2002).

4.2.5 Technology at St Alban's College

One DOS computer and modem provided the learners with access to the Internet in 1995. Since 1995, the StaTech developed into a technologically advanced computer centre with six servers. The StaTech centre consists of 134 workstations excluding the personal computers of the day and hostel boys (Naudé, 2002). The StaTech complex, with its network of computers, provides a vital and stimulating learning environment for all the St Alban's learners (St Alban's, 2003). The StaTech complex is divided into 4 sections. StaTech 1 functions as a lecture hall; StaTech 2, StaTech 3 and StaTech 4 are computer labs. Most of the computer-integrated Theme Day activities take place in StaTech 4. Figure 4.2 displays images of the entrance to the StaTech and learners working in StaTech 3.

Figure 4.2 Images of the entrance to StaTech complex and the participants at workstations in StaTech 4

4.2.6 St Alban's College: outreach projects

St Alban's College has a long and proud history of involvement in outreach projects. During the political turmoil of the 1980s when conditions in the South African black townships were untenable, St Alban's College made its facilities available for these disadvantaged learners to write their exams. Another example of an outreach project was a group of 43 educators from Mamelodi who have never touched a computer before they attended the course at St Alban's College. Their training included Windows, spreadsheets, creating carts, manipulating tables and searching the Internet to mention just a few examples. Mamelodi is a black township adjacent to Pretoria (St Alban's College, 2003).

The inputs of the key role-players will be described in the following section.

4.3 INPUT

Learner and educator contributions, technological and pedagogical aspects form an important part of the inputs for computer-integrated Theme Days and will be described in the following section.

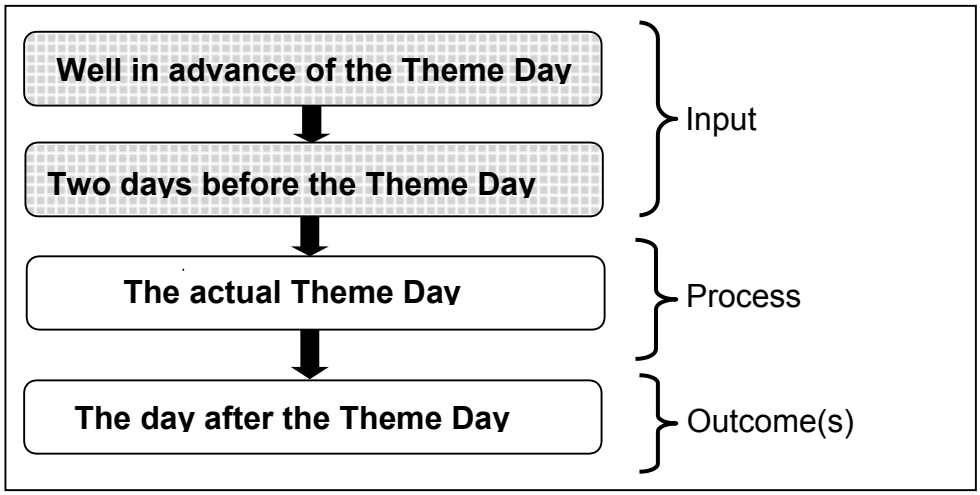
4.3.1 The planning of a Theme Day

A Theme Day cannot happen overnight and requires meticulous planning. Various role players are involved in the planning of a Theme Day, including the form's CLC team, educators and learners as the key role players. The educators and learners as members of the CLC team use a Theme Day Checklist to verify whether the Theme Day planning is progressing according to schedule. Kevin Coles, Director of Training and Development at St Alban's College, designed the Theme Day Checklist (Appendix 3). The Theme Day Checklist was presented to the delegates at the Information Leadership Conference, 4-6 July 2002 (Coles, 2002). The Theme Day Checklist is divided into the following sections:

a) Well in advance of the Theme Day.
b) Two days before the Theme Day.
c) The actual Theme Day.
d) The day after the Theme Day.

The actual Theme Day and the day after the Theme Day will be discussed in the processes and outcome(s) section of Chapter 4. Figure 4.3 illustrates the steps in the planning of a Theme Day. The section under discussion is shaded for the purpose of orientating the reader.

Figure 4.3 The planning of a Theme Day



a) Well in advance of the Theme Day

The CLC team plays an important role in the planning of Theme Days. The CLC committee uses the Theme Day Checklist to plan a Theme Day. The CLC committee brainstorms on aspects such as the topic of a Theme Day, learning areas, the tasks and the groups participating in the Theme Days. The date and the venue of a Theme Day is planned and set well in advance. Special invitations are sent to invite guest speakers to participate in a Theme Day. A member of the Egyptian embassy was invited to *the Egyptian Theme Day* in July 2002, while Professor Mansel was invited as guest speaker to the *Earthly Aliens Theme Day* of 31 May 2001. The CLC team does a trial run after the web pages are posted to the server, and the CLC team acts as learners.

b) Two days before the Theme Day

The network manager is responsible for posting the Theme Day's web pages to the server. The participants do not have access to the Theme Day's web site until the morning of the Theme Day. The Theme Day's homepage links are not active until the official commencement of the Theme Day. The learners participating in the forthcoming Theme Day are divided into groups. A group leader is appointed for each group. The groupings need to be checked, and there should be a specialist in each

group, such as a computer wizard or artist if necessary. The CLC team buys gifts for the guest speakers (Kevin Coles, 2002).

4.3.2 The Connected Learning Community (CLC) committee

The role of the Connected Learning Community (CLC) committee, the inputs of its members for Theme Days and the requirements to become a CLC committee member will be described in the following section.

4.3.2.1 The role of the CLC committee team

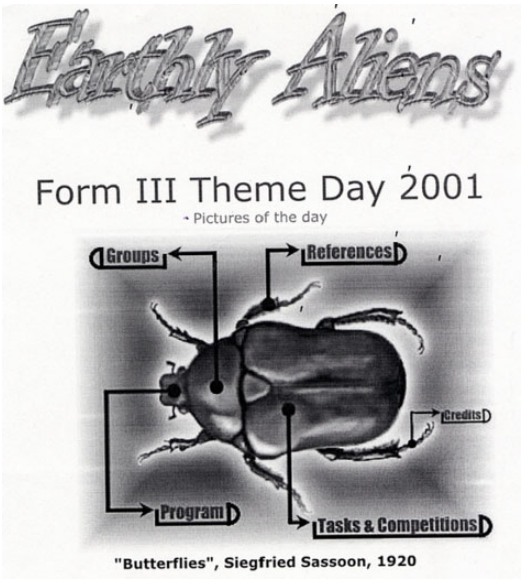
The CLC team fulfils an important function and key role during the planning of a Theme Day, as well as its management. The form CLC committees operate in collaboration with the subject departments responsible for the development and maintenance of material for the Theme Day's web page. Each form has a separate committee consisting of the form coordinator and two learners, and these two learners form the working committee for the development and management of Theme Days. The committee subdivides the workload of Theme Days because the workload is too extensive to be done by a single member. The CLC form committee meets regularly to consolidate the planning and the progression of a Theme Day. The CLC form committee invites St Alban's educators and guests, and is also responsible for mailing the guest speakers' invitations.

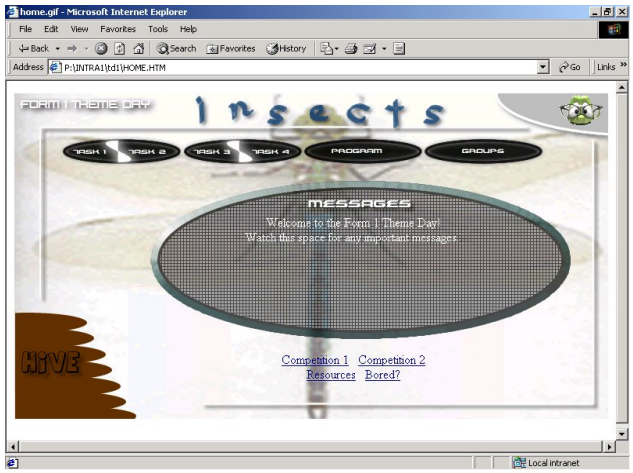
4.3.2.2 CLC form committee inputs for Theme Days

The CLC form committee inputs in Theme Days will be described in this section. The researcher obtained this information by interviewing the learners during the *Insects Theme Day*. While the *Insects Theme Day* of 9 October 2002 was still in its planning phase, Sep Vrba invited Francois Scheepers and Heinrich Willemse to become members of the form 1 CLC committee. Sep Vrba, a Form 5 learner in 2002, was in charge of the CLC committee on the *Insects Theme Day*. Francois Scheepers planned, designed and developed the *Insects Theme Day's* web site as illustrated in

Figure 4.4. This web site was only available on the St Alban's College intranet the morning of the Theme Day and not beforehand.

Figure 4.4 Images of the *Earthly Aliens* and the *Insects Theme Day* home pages





4.3.2.3 Requirements for learners to become members of the CLC form committee

A St Alban's learner needs special skills and abilities to become a member of a CLC form committee. It is recommended that the computer literacy of prospective CLC team members should be at such level that they would be able to design and construct a Theme Day web site. These learners are not necessarily the College's academically best performers, but they do perform well in subjects such as Maths (Scheepers & Willemse, 2002; Beyers, 2003).

4.3.3 Pedagogical inputs

The CLC committee inputs in pedagogical aspects such as the topic and the tasks of a Theme Day determine the successful outcome of a Theme Day. The tasks and Theme Day's topic should complement each other; furthermore, tasks must be on the level of the learners participating in the Theme Day. The educational value of tasks is of the utmost importance, and a fun element to keep the learners involved for the duration of the Theme Day has to be included. Each task has a time restriction, and the tasks must be completed within a specific time.

The topic of a Theme Day is top secret and is only announced on the morning of a Theme Day. Although some learners tried to gain access to a Theme Day's topic and tasks the day before a Theme Day took place, none of them managed to be successful. If, for instance, the topic is known beforehand, various problems might arise. For example, if the topic is Rugby and 20% of the learners do not like rugby but prefer soccer instead, they will not give their full cooperation on the Theme Day. Some learners might even persuade their parents to let them spend the morning of the Theme Day at home (Scheepers & Vrba, 2002).

The CLC committee members informed the learners the afternoon before the *Top Secret Theme Day* , 29 September 2002, that all the participants should dress in tracksuits. The announcement was made at such a short notice to keep the learners inquisitive about the following day's topic. The tracksuits were comfortable dress for the learners to participate in the obstacle course on the College's sports grounds (Vrba, 2002).

4.3.3.1 Assessment criteria

There are no formal assessment criteria on which Theme Days are presently based. The CLC form committee sets the assessment criteria.

4.3.3.2 Assigning learners into groups

Before the commencement of a Theme Day, the learners are divided into groups consisting of ten learners. One member of each group acts as the group leader. The compilation of groups must be balanced, as each group needs an artist, mathematician or computer wizard to complete the Theme Day tasks. Groups are randomly selected and it never consists of the same learners, as new groups are formed for each Theme Day (Carol Aston, Theme Day, 31 May 2001).

4.3.3.3 The design and arrangement of a classroom

The manner in which an educator arranges the classroom or computer centre, will influence the success of cooperative learning. Classroom arrangement can increase or decrease the number of discipline problems. Johnson, Johnson & Holubec (1994:32-33) suggested that educators should keep learners moving around in the classroom so that none of the learners sit at the back of the classroom for too long, without doing their work or disturbing other groups.

The seating positions of learners in the StaTech centre are rather informal, and learners can sit wherever they wish to. The learners often move around in the StaTech centre, visiting friends and comparing their tasks. The learners were occupied in the StaTech centre for the duration of the Theme Day and only left the centre for tea and lunch breaks. Refer to Figure 4.5 for a simplified layout of a cooperative computer centre.

Figure 4.5 Layout of a cooperative computer centre

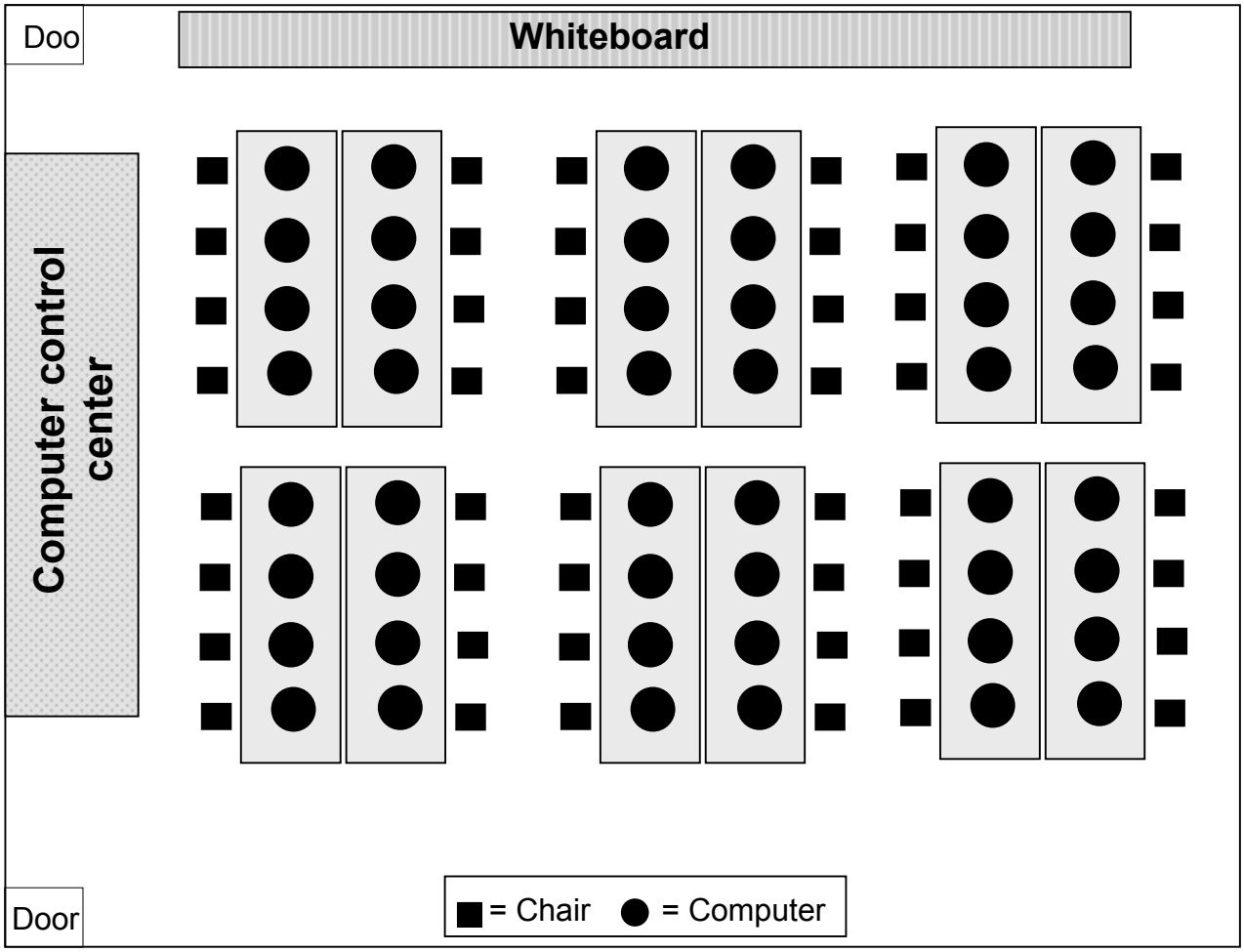


Figure 4.5 is an example of a cooperative computer lab that is more or less the same as the design of St Alban's College StaTech 4 computer centre. The technical inputs will be described in the following section.

4.3.4 Technological inputs

The learners who are CLC form committee members, used the software available on the StaTech computers to develop the web site for the respective Theme Days. Learners may use their personal computers to develop Theme Day web sites if they prefer to do so. The educators do not prescribe the type of media the CLC committee should use to create the form's web site. The learners design and create the Theme Day's web site at their own pace but will always work according to the schedule as

displayed in the Theme Day's checklist (Appendix B). The level of difficulty of the web site and the amount of programming involved in the Theme Day web site will determine how long before the time the CLC members will start with the development of a Theme Day web site (Yssel, 2002).

The *Top Secret Theme Day* was presented in a different manner. The day's web site did not entail difficult programming. The tasks were not fully computer-integrated as two of the Theme Day's activities took place on the sports grounds of St Alban's College. The marks a group obtained at the completion of a rotation were thus not reflected on the web site during the morning but only at the closure of the Theme Day. The reason therefore was the fact that the learners rotated between the different activities (Yssel, 2002).

4.3.5 Programme for the Theme Day

The CLC team develops the programme of a Theme Day well in advance. The programme for the *Earthly Aliens Theme Day* serves as an example. This programme was published on the intranet of St Alban's College and was part of the Theme Day's web site. The layout of the day's programme is tabulated in Table 3.4 and are as follows:

Table 4.1 Programme for the day: *Earthly Aliens Theme Day* of 31 May 2001

Time	Activity
07:30 – 08:30	Dr Mervyn Mansel describes the topic of forensic Entomology. (Dr Mansel is a forensic Entomologist and was the guest speaker for the *Earthly Aliens Theme Day*.)
08:30 – 08:50	Learners divide into groups and allocate tasks to pairs.
10:30 – 11:00	Break: tea to be served.
12:00 – 12:30	Judging of Art, and all Question Mark questions to be completed.
12:30 – 13:25	Judging of the presentations and the song.
13:30	The *Earthly Aliens Theme Day* comes to an end.

The processes and the role of the learning community, pedagogy and technology will be described in the following section.

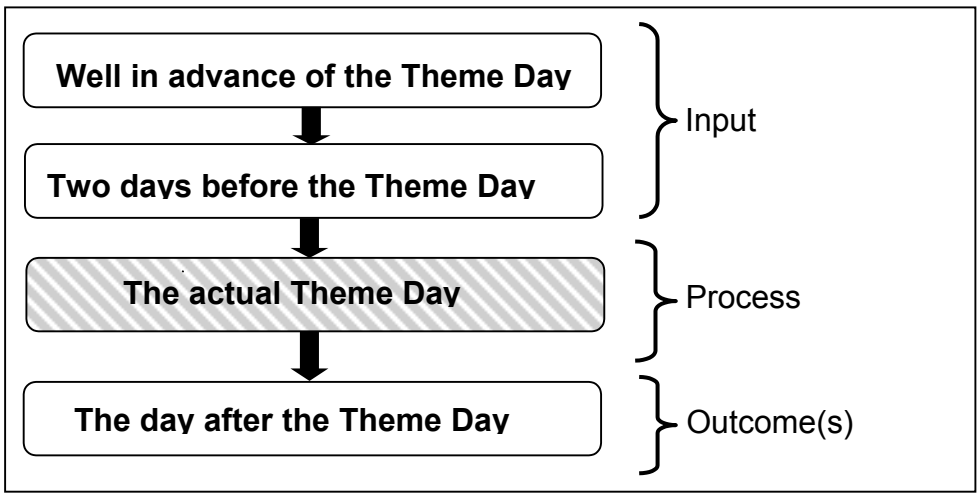
4.4 PROCESS

Learners, educators, pedagogical and technological aspects and their involvement in the processes of a computer-integrated Theme Day will be described in the following section.

4.4.1 To do on the Theme Day

Figure 4.6 illustrates the steps in the planning of the actual Theme Day. The section under discussion is shaded for the purpose of orientating the reader.

Figure 4.6 The planning of the actual Theme Day



The actual Theme Day forms part of the Theme Day checklist and the CLC form committee has a list of activities which is the "To do on the Theme Day". The activities listed on the Theme Day checklist are the following:

- The network team check to see that the system is working.
- The Head Quarters (HQ) is set up and the groups are set up per computer.
- The Intranet is linked to the Theme Day's home page.
- The introduction of the Theme Day and the guest speaker.

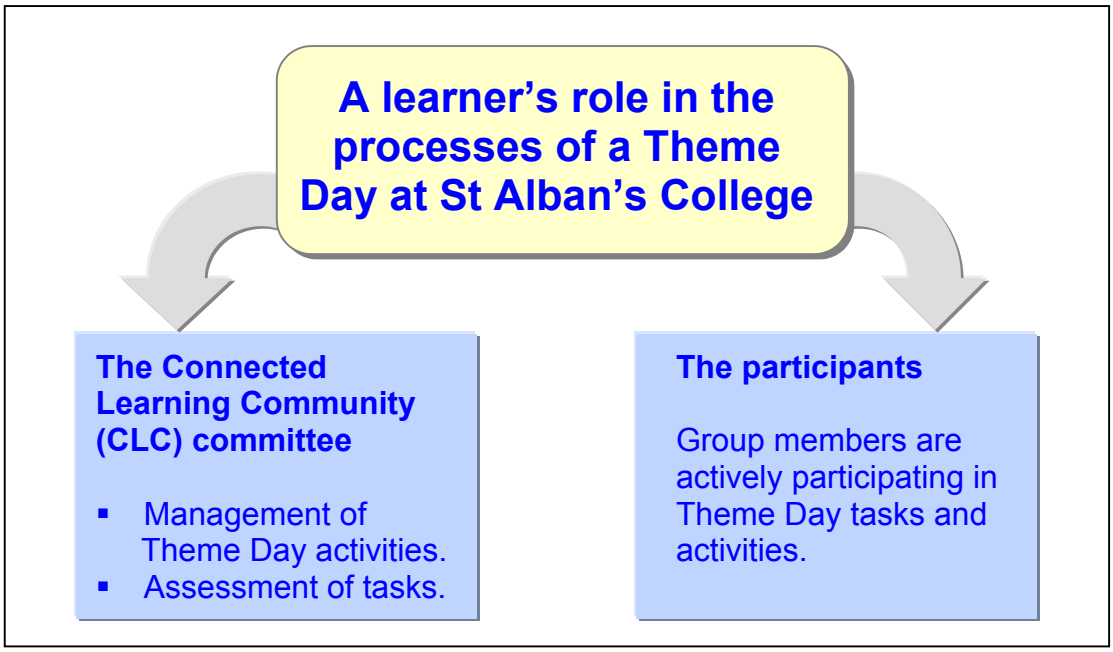
- At the conclusion of the Theme Day, the tidying-up begins (Coles, 2002).

A detailed description of the learners at St Alban's, the educators, the CLC involvement, as well as the pedagogical and technological aspects will be described in the following section.

4.4.2 The learners of St Alban's College

The learners fulfil two separate roles during a Theme Day and can be divided into two groups. One group consists of learners who participate in a Theme Day, and the other group is the learners who are CLC form committee members. The roles of the learners can be visualised by making use of Figure 4.7.

Figure 4.7 The role of the learner during Theme Days



4.4.2.1 Group behaviour and discipline

Learners participating in the Theme Day have to adhere to the behavioural code of the StaTech centre. At the commencement of each Theme Day, the learners are informed that poor behaviour and lack of interest in the activities and tasks would not be tolerated. The researcher interviewed a few learners and asked them what would

happen if one or two members of their respective group did not give their full cooperation. The learners informed the researcher that the group members and more specific the group leader would first try to solve the problem. If they had no success, the leader would call one of the educators on duty that would then intervene and solve the problem (Theme Day, 31 May 2001).

An educator informed the researcher that some of the learners were passengers and gave little or no assistance to their fellow group members during a previous Theme Day. On the morning of the *Earthly Aliens Theme Day*, all those lazy learners were placed in the same group. They assured the educator that they would cooperate and challenge the rest of the groups. Their aim was to be one of the day's winners (Carol Ashton, Theme Day 31 May 2001). The Director of Technology disqualified three learners from their group on the *Insects Theme Day*. These three learners didn't adhere to the rules of the Theme Day and could not participate in any activities for the remainder of the Theme Day. These three learners were punished with additional homework and had to complete it at the closure of the Theme Day (Theme Day, 9 October 2002).

4.4.2.2 Establishing the Head Quarters (HQ)

The CLC form committee members who manage and control the Theme Day are located at the Head Quarters (HQ). The HQ was called 'The Hive' for the duration of the *Earthly Aliens Theme Day*. The HQ manages a Theme Day from the commencement, the presentation of tasks and finally the prize-giving. The HQ is small confined space situated at the front part of StaTech 1, and contains two computers which are operated by the CLC team consisting of two to three learners. The participants of the Theme Day are not allowed to enter the HQ for the duration of the Theme Day. Learners from other forms are not allowed to enter the StaTech centre during the Theme Day, but there can be exceptions. For example, a few learners were allowed to enter if they were part of the CLC committee, or learners who had to write an outstanding computer-based test or exam in the StaTech centre. Figure 4.8 displays images of the CLC committee in the HQ during the *Insects Theme Day*.

Figure 4.8 Images of the CLC committee in the Head Quarters

4.4.3 What is the educator doing?

The role of the educator on Theme Days and the resistance towards change will be described in the following section of this chapter.

4.4.3.1 *The educator's role on a Theme Day*

Emphasis in this study is not on the role of the St Alban's educators although they gave their inputs; their role will be described in short. St Alban's educators' roles during Theme Days are not that of policemen, as the learners work independently. Yet, in case there are uncertainties regarding Theme Day tasks, educators are available to assist learners. Educators do not have a free day if a Theme Day takes place. The educators whose learners are participating in a Theme Day are supposed to supervise the learners.

4.4.3.2 *Resistance to change*

A percentage of the staff members are against the utilisation and implementation of the Theme Day concept. Those educators with a negative sentiment are of the opinion that Theme Days increased their existing workload. The majority of the staff at St Alban's College is in a neutral position, and has the teachers for Theme Days on the one side and educators against it on the other side. The teachers who are

positive about Theme Days intend to change the attitude of their colleagues who are against the Theme Day concept (Ashton, 2001).

The pedagogical aspects such as the tasks, the assessment and learners working in groups will be described in the following section.

4.4.4 Pedagogical aspects

The tasks must be on the level of the learners but must also pose a challenge to the learners, such as Competition 1 and 2 of the *Earthly Aliens Theme Day*. The educational value of tasks is important, and all tasks have a time restriction. The programme of the *Earthly Aliens Theme Day* as displayed on the Theme Day's web site indicated the time in which all the assignments had to be completed and submitted. The programme of the *Earthly Aliens Theme Day* of 31 May 2001 is represented in Table 4.2.

Table 4.2 Tasks of the *Earthly Aliens Theme Day*

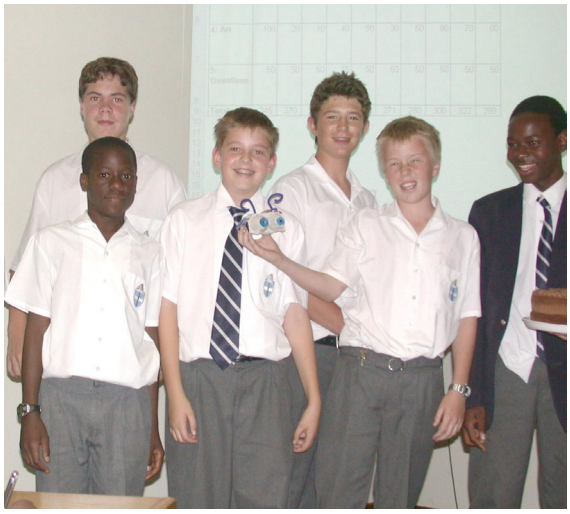
***Earthly Aliens Theme Day* included the following four tasks**	
Task 1	Insects in history.
Task 2	Insects in human culture.
Task 3	Insects did it first.
Task 4	This question is divided into two section: a. Art – Making an insect or an insect mask. b. Questions – Answers to be entered on Question Mark.

4.4.4.1 Assessment of Theme Day tasks

The assessment of the learners' work, processes and criteria will be described in the following section. The learners' tasks are continuously assessed during the Theme Day, and group scores were reflected on the Theme Day's web site. The participants could therefore see who was leading the day, which contributed to the competitive

element of the day. At the end of a Theme Day, the participants submitted their PowerPoint slide shows and completed tasks in electronic form via email to the HQ. The learners compiled their Microsoft PowerPoint slide shows and they had to reflect on their work. Theme Days end between 12:00 and 12:30 and then all the tasks have to be completed. After the boys had their lunch break from 13:15 to 14:00, they gathered in StaTech 1, which is similar to a lecture hall, to present their slide shows of no longer than five minutes. Images of presentations and assessment at the end of a Theme Day are illustrated in Figure 4.9.

Figure 4.9 Images of presentations and assessment at the end of a Theme Day



The headmaster and a few educators were invited to assist with the final assessment on the *Earthly Aliens Theme Day*. The language educator, for example, assessed the poems, while the art educator assessed the insects created by the various groups. As soon as the assessment process came to an end, the winners and the runner-up of the day were announced and prizes awarded.

4.4.4.2 Learners and group work

The welcoming note on the *Top Secret Theme Day* home page read as follows: “This is the CLC mainframe. The point of the day is to stimulate interaction and group

work. You should try to work together with your group and win big in the world of information" (Theme Day, 29 September 2002).

Cooperative learning plays an important role, and its importance is stressed at the commencement of each Theme Day. Groups are selected randomly, and group members only know to which group they belong on the morning of the Theme Day. One of the educators informed the researcher that new groups were formed for each Theme Day. Each group consisted of 10 learners, and one of the group members acted as group leader.

Competition 1 of the *Earthly Aliens Theme Day* was a murder mystery, and the whole group had to work throughout the morning to solve the mystery. Detailed information was provided on the web site, and this information assisted the learners in solving the problem. After the problem was solved, it indicated who committed the murder. For Competition 2 the learners had to answer the question "Which insect is the heaviest?" The answer to Competition 2 was worth double marks, and the first correct answer e-mailed to Head Quarters received bonus points. The competitive element of the two competitions contributed to group work that is such an important aspect of Theme Days. Figure 4.10 displays images of group work.

Figure 4.10 Images of group work during computer-integrated Theme Days

The use of technology during Theme Days will be discussed in the following section of this study.

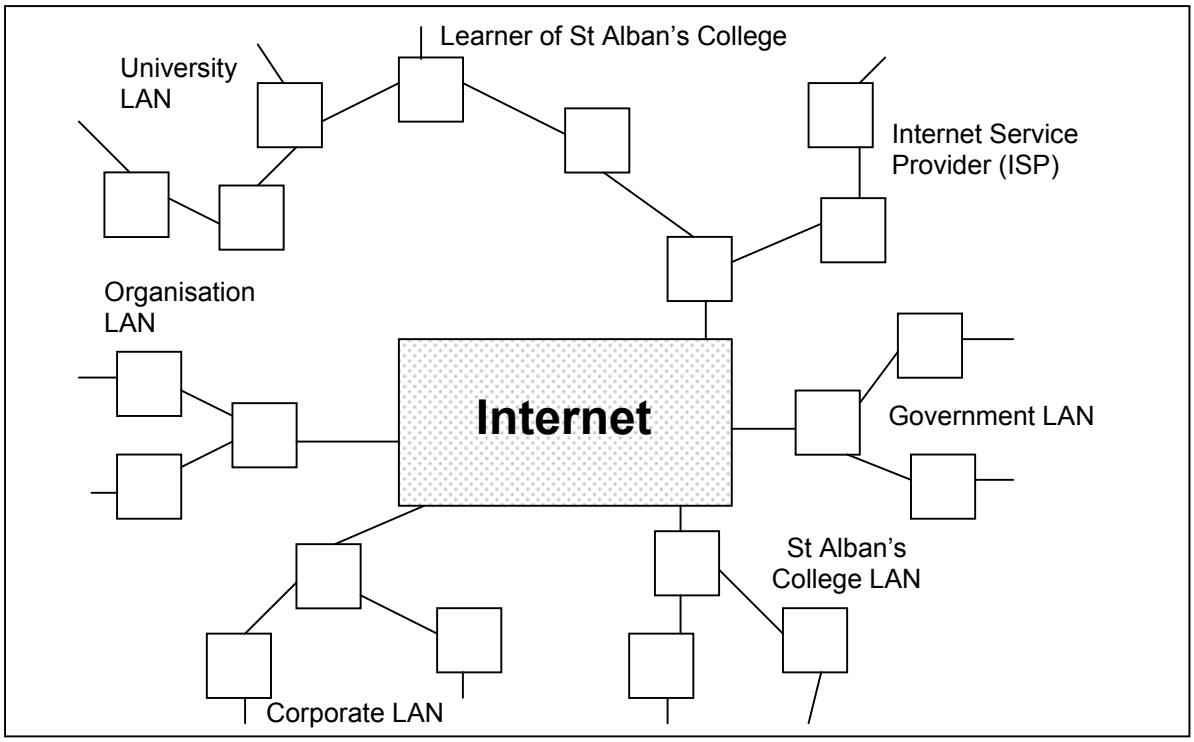
4.4.5 How was technology used during the Theme Day?

According to Lippert (1993:127), the management council of St Alban's College decided in 1988 to conduct a feasibility study regarding technology in education. A staff member did a simultaneous research in the USA and UK to review the use of computers in schools. The outcome of this study paved the way for the development and inauguration of the St Alban's Technology Centre (StaTech) and eventually the introduction of the Theme Day concept at St Alban's in 1999. The Network Manager and Leonard Tleane, the IT consultant at St Alban's, worked behind the scenes on Theme Days and were responsible for the management and maintenance of the

servers, the College's network and workstations in the StaTech centre (Naudé, 2002).

The learners could surf the Internet freely in search of information to complete Theme Day tasks. St Alban's does not have content filtering software (e.g. Net-Nanny), and the learners can assess appropriate web sites to complete their Theme Day tasks. The learners are aware of the rules of the StaTech centre as well as the consequences if they do not obey those rules. The learners who access illegal web sites such as pornographic web sites and who are caught will appear before the College's disciplinary committee (Naudé, 2002). The theoretical aspects of the Internet are described in the literature survey of this study. Figure 4.11 illustrates the Internet as a collection of computer networks and where the St Alban's College learners and the College LAN fit into that network.

Figure 4.11 The Internet as a collection of computer networks (Adapted from Heinich, 2002:263)



4.4.5.1 *How was technology utilised?*

Almost 40% of the learners have their own notebook computers. All the learners have access to the StaTech computer centre and do not necessarily bring their own notebook computers to school. The assignments are available online on the College's intranet, and the learners seldom receive assignments on paper. Some of the learners' computer literacy level is more advanced than that of the educators. The educators do not view this as a threat; rather, they feel that they have succeeded in their mission. Their mission is to equip learners who are entering the job market with cross-curricular life skills that will prepare them to cope in a technologically advanced world (Beyers, 2001).

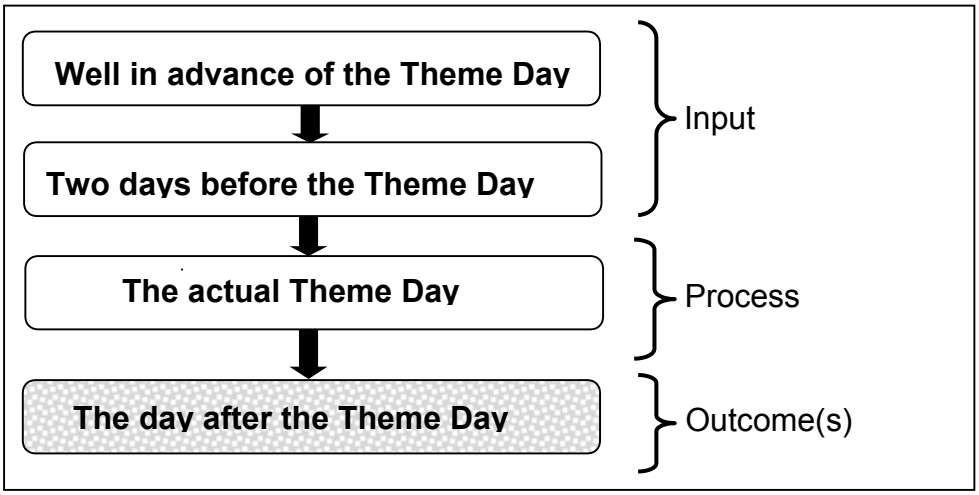
4.5 OUTCOME(S)

The learners, educators, pedagogical and technological outcomes will be described in the following section.

4.5.1 The day after the Theme Day

Figure 4.12 illustrates the activities after the Theme Day. The section under discussion is shaded for the purpose of orientating the reader.

Figure 4.12 The day after the Theme Day



The completion of the Theme Day is no guarantee that the work has been completed too. Certain functions can only be performed once the Theme Day comes to an end. Therefore, “To do the day after the Theme Day” includes the following:

- The CLC form committee writes thank you letters to the guest speakers, thanking them for all their hard work. These letters are typed and then distributed.
- Debriefing with the CLC form committee leader starts as soon as possible.
- If any problems occurred during a Theme Day, they have to be rectified so that the same problems will not occur during a next Theme Day.
- The content of the learners' tasks completed during the Theme Day must be saved on the College's server (Coles, 2002).

4.5.2 The learners of St Alban's College

The behavioural outcomes of the *Insects Theme Day* of 9 October 2002 were a bit different. This was the Form 1 learners' first Theme Day, and a few learners took their lunch break without completing their tasks or submitting it in time to the CLC team. A few learners were very nervous and uncomfortable standing in front of an audience. One learner read the entire presentation without making eye contact with the audience.

The first opportunity that the Form 1 CLC committee had to plan, implement and assess a Theme Day was for the *Insects Theme Day* of 9 October 2002. Although they were still inexperienced, they were eager to learn. The Form 4 CLC committee assisted the Form 1 CLC members in assessing the Theme Day tasks. The Form 4s participated in the *Earthly Aliens Theme Day* of 31 May 2001 and were familiar with answers as well as the assessment criteria of the tasks. The assessment of the learners' tasks will be described in more detail in outcome(s) of a Theme Day.

4.5.3 The outcome(s) and the educator

The educators put a great deal of effort into the preparations for every Theme Day. The educators and learners who are members of the CLC form teams who work side by side before, during and after Theme Days. On the other hand, the educators are awarded for their hard work and efforts at the end of each Theme Day.

4.5.4 Pedagogy

Some outcomes of Theme Days include the St Alban's learners as -

- confident ICT users who constantly learn how to utilise new media,
- dynamic group workers where learners know how to share their expertise,
- data miners by searching the Internet for relevant information,
- information and knowledge managers,
- lateral thinkers solving realistic problems,
- learning to meet deadlines, and
- being good communicators and gaining presentation skills (Tapscott, 1998:156).

4.5.4.1 Cross-curricular activities

The learners of St Alban's College benefit from the ‘hidden curriculum’ outcomes. The hidden curriculum is not part of the official curriculum followed at St Alban's College, and can be described as the skills the learners gained by participating in the Theme Day concept throughout their school careers at St Alban's College. Learners who were part of a form CLC committee gained managerial skills by being involved in the planning and executing process of a Theme Day. The topic of a Theme Day had to be determined well in advance, tasks had to be drafted, the web site had to be designed and developed and on the morning of the Theme Day, these learners were responsible for the smooth running of the day.

The CLC committee members gained conflict resolution skills. When conflict arose, the CLC team members had to resolve it. The Form 1 CLC team members reprimanded the learners who misbehaved the morning of the *Insects Theme Day,* 9 October 2002. A few learners were noisy and restless, and the CLC team assisted the educators to restore order in StaTech 1.

Theme Day participants learn how to function and how to cooperate in groups. Not the individual effort but the team effort determines at the end of day the success of the Theme Day. Learners presented their PowerPoint slide shows at the conclusion of the Theme Day. In the process of presenting slide shows, the learners became confident speakers. At the conclusion of the Theme Day, the process of tidying-up begins (Coles, 2002).

4.5.5 The role of technology

The topic of a Theme Day made the computer an inseparable part of the day. Computer training as such does not form part of the curriculum of the learners at St Alban's College. The computer is integrated into the learners' daily activities and learning processes and is thus not a subject on its own.

The bandwidth at St Alban's College at present is 128 kb/second. The College intends to expand it to 192 kb/second in the near future. Infosat is the College's Internet Service Provider (ISP), and the College pays a monthly instalment of approximately R12 000,00. The learners have unlimited access to e-mail and the Internet, and the Internet costs are included in their annual school fees (Y Naudé). Although it involves high costs to maintain the excellent standard of equipment such as computers, the network and printers in the StaTech centre, the St Alban's learners benefit from it, and it also contributes to the successful outcome of Theme Days.

No paper copy of the Theme Day tasks or programme was issued to the learners. The tasks as well as the programme of the *Earthly Aliens Theme Day* was available online on the day's web site. The *Earthly Aliens Theme Day* tasks contained useful

online references as well. The learners just had to click on the active 'click here' button, which linked directly to the references such as *K12 Educator Resources, Department of Entomology, MP3 Index* and *Entomology.UNL.* CD ROMS of insects and the Microsoft Encarta Encyclopaedia 2000 were available to the learners. Links to worthwhile search engines were available on the tasks page, and the learners could easily access the Internet via these search engines.

4.6 FEEDBACK

In the feedback section, the success and failures of Theme Days as observed by the researcher will be described.

4.6.1 The loop was completed: Feedback

The aim of a Theme Day is to equip learners who are entering the job market with life skills that will prepare them to cope in a technologically advanced world. The aim of the Theme Day is displayed in the overview of this study as illustrated in Figure 1.3. At the end of the Theme Day, the excitement and the enjoyment on the learners' faces are a reward for the CLC committee for all their hard work and preparations for the Theme Day. The loop was successfully completed and the aim of the Theme Day was reached. The success and outcomes of the various Theme Days lead to the use of at least three Theme Day activities for each Form group per annum. The Theme Day concept is a success, and the College intends to expand it to a Theme Week in the near future (Beyers, 2002).

4.6.2 The learners and pedagogical aspects

Cooperative learning and group work proved to be a success. The learners gave their cooperation to their fellow group members, and worked hard to complete their respective tasks. The learners didn't let their fellow group members down. Mr Beyers, the Director of Technology, underlined the importance of group work and cooperative learning at the commencement of each Theme Day. The St Alban's learners did work

together and that the competitive element of the Theme Day tasks contributed to cooperative learning and group work in the various groups. The learners shared their expertise with each other and assisted fellow group members where necessary. This was especially visible with arts project on the *Earthly Aliens Theme Day* on 31 May 2001, when the learners had to create an insect with the art materials provided to them at the commencement of the Theme Day. The second example was at the *Top Secret Theme Day* 29 September 2002 when the groups had to assemble a raft. The raft had to be able float in the swimming pool carrying the weight of a single learner rowing to and fro across the width of the pool. At the completion of this, the group had to disconnect all the parts of the raft before the time lapsed for the rotation.

4.6.3 Failures at Theme Days – isolated incidents

All the successes of Theme Days that were observed during the period of 17 months were reflected in this dissertation. But the researcher observed a few failures. The failures of the Theme Days were not failures as such but rather a few isolated incidents that might have a negative influence the success of the future Theme Days at St Alban's College. The negative attitude of a few educators and the behaviour of a small group of learners were identified as two prospective problem areas.

4.6.4 Technological aspects

No technological hiccups were detected or reported by the key role players of the five Theme Days. The availability of the software packages did not influence the completion of the loop. The St Alban's learners are privileged to have access to workstations with the latest software packages to complete the Theme Day tasks. The well-equipped StaTech centre contributed to the successful completion of Theme Days.

4.6.5 Long-term feedback

Presently, no direct statistical data is available to indicate whether the aim has been reached to equip learners entering the job market with life skills that will enable them to cope in a technologically advanced world. From time to time the College does receive positive feedback from graduates. These graduates report that, were it not for the CLC committee, Theme Days and/or the laptop project, they would not have succeed in what they were doing. The College also receives overwhelming support from the parents, learners and the staff for the Theme Day concept.

The research results and findings will be discussed in part two of this chapter.

PART TWO: RESEARCH RESULTS

Part two reveals the answers to the research questions. Aspects discussed in all five sub-research questions are the learning community, the pedagogical aspects and the technological aspects. The instruments to yield information to answer the research questions are observations and interviews of key role-players.

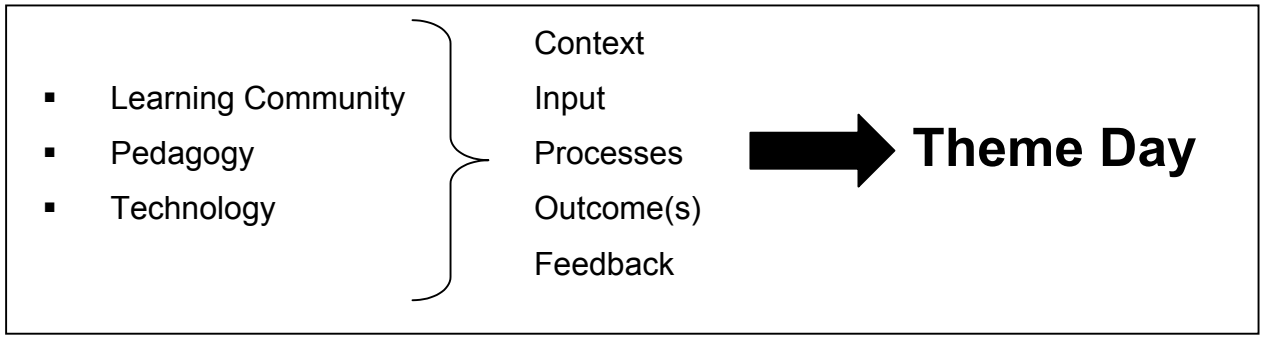
4.7 ANSWERS TO THE RESEARCH QUESTIONS

The answers to the five sub-research questions will be discussed in the following section. The sub-research questions are:

a) What is the institutional and contextual influence of computer-integrated Theme Days?
b) What inputs are required from the educators, the CLC 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?

Aspects contributing to the answers in the five sub-research questions to be answered in this section can be visualised by making use of Figure 4.13.

Figure 4.13 Aspects contributing to the answers in the sub-research questions



Aspects such as the context, learning community, educators, pedagogy and technology will be answered in sub-question 1. This will determine the institutional and contextual influence of computer-integrated Theme Days.

4.7.1 What is the institutional and contextual influence of computer-integrated Theme Days?

4.7.1.1 The learning community aspects

The instrument that yielded the best information to answer this aspect was observations. From the observations it could be seen that the learners coped well with the technology. This is probably because they all come from wealthy backgrounds and are familiar with the Internet. The interviews confirmed this as the learners participating in the *Earthly Aliens Theme Day* utilised their personal notebooks for the Theme Day tasks that day. Observations proved that the racial context of the St Alban's learner population had no negative effect on the Theme Day activities or group work.

On the other hand, observations yielded the best information to analyse the aspects that had a negative impact on the context, such as the behaviour of the learners and the manner in which they coped with the Theme Day activities. The Form 1 learners' behaviour during the *Insects Theme Day* differed from the behaviour of senior

learners during the other Theme Days observed. The junior learners still had to get used to the Theme Day concept, whereas the senior learners participated in numerous Theme Days and know what is expected of them and how they should behave.

Interviews with the educators and the Theme Day participants determined the appropriateness of the target population for Theme Days. Interviews yielded furthermore that the Form 5 learners had no influence on the target population, as they did not participate in Theme Days due to their short academic year. The exception was a few Form 5 learners who were members of the CLC team.

Observations during the Theme Days revealed that the learners' skills levels varied from form group to form group. Form 4 learners are, in comparison with the Form 1 learners, more experienced Theme Day participants. Form 3 and 4 learners coped better with the Theme Day concept as they have been exposed to it previously, while the Form 1 learners only had one opportunity to participate in a Theme Day and had to get used to the concept. This was especially visible in the learners' behaviour and the manner in which they completed their Theme Day tasks.

Johnson, Johnson & Holubec (1994:24) is of the opinion that there is no ideal size for a cooperative learning group. The appropriate size depends on the individual lesson's outcomes, learners' ages, materials and/or equipment available and the time limits for the learning event. In an interview with an educator it was indicated that the best method to compile Theme Day groups is randomly, and this practice proved to be successful at numerous Theme Days. The learners of St Alban's are from various population groups and backgrounds across the globe, and the St Alban's learners serve as a good example of racial integration. Learners are from countries such as the Far East, Europe, Mauritius and neighbouring countries in Southern Africa. The largest percentage of the learner population at St Alban's College is from South Africa. This leads to a wide variety in cultural and religious backgrounds. The learners were observed while they were working in their groups. From the observations it was obvious that the learners did not experience racial tension and

that they worked in harmony during Theme Days. This cultural and racial diversity of the St Alban's learners never had an influence on the compilation of groups. Although the literature states that the size of cooperative learning group ranges between two and four learners per group, the average size of the St Alban's Theme Day groups was ten learners per group.

From the interviews with educators it became clear that the facilities and resources of St Alban's can presently only accommodate 500 learners per annum, i.e. 100 learners per form group. More learners place an extra burden and strain on facilities at St Alban's. The additional eight learners enrolled in the 2002 form 1 group increased the workload of the then staff members. If the College intends to increase the learner population, there would be a need to build additional classrooms, expand the facilities at the hostels and appoint additional staff members.

4.7.1.2 Pedagogical aspects

Interviews with educators and learners revealed that the Theme Day tasks were designed to incorporate more than one subject. Observations of the *Earthly Aliens Theme Day* tasks revealed that subjects included language, science and art items. These activities were thus cross-curricular and designed to break down the barriers between subjects.

4.7.1.3 Technological aspects

A literature survey and interviews with educators and support staff such as the network manger revealed that the technological aspects and the development of the StaTech at St Alban's had significant implications for computer-integrated Theme Days. The absence of a well-established computer centre and ICT infrastructure would make computer-integrated Theme Days at St Alban's College impossible. Observations could not provide the appropriate answer regarding the technological aspects and its influence on the context.

The answers regarding the inputs required from educators, the CLC committee and the learners are discussed in the following sub-question.

4.7.2 What inputs are required from the educators, the CLC committee and learners?

Aspects such as the inputs of the learning community, pedagogy and technology will be answered in sub-question 2 in order to determine what inputs are required. Interviews proved to be the best instrument to yield information regarding these inputs. No observations were used to yield information, as the role-players gave their inputs during the planning phase of Theme Days. The researcher could not observe these activities as the planning for Theme Days took place well in advance of a specific Theme Day.

4.7.2.1 The learning community aspects

Interviews with learners who are members of a CLC form committee revealed that the CLC provided their inputs before the actual Theme Day as it was during this phase that the planning was done for a Theme Day. Interviews were thus the appropriate tool to obtain data to analyse the role of the CLC committee in the planning of Theme Days. A Theme Day checklist was used plan the entire Theme Day. During this planning phase, important aspects such as the Theme Day tasks were drafted, including the design and development of the day's web site. Interviews yielded furthermore that the inexperienced Form 1 learners worked under the mentorship and supervision of senior CLC Form members such as Sep Vrba or Carl Yssel to plan the *Insects Theme Day*.

Staff members were interviewed and they revealed that educators provided their inputs by coordinating the planning of Theme Days. Educators furthermore assisted learners with the drafting of Theme Day tasks, as the learners could not determine the educational value of tasks.

4.7.2.2 Pedagogical aspects

Educators and learners were interviewed and they revealed that during the planning phase of a Theme Day, the CLC form committee identified a few possible topics for the forthcoming Theme Day. The CLC team will after discussion with the responsible educators, decide which topic is the most suitable option for a forthcoming Theme Day. A fun element is always built into the tasks of a Theme Day, as the fun element keeps the learners actively involved in all the Theme Day activities. Although the fun element is important, what the learners learn is still vital. The educational value of the topic and tasks and Theme Days are inseparable. The CLC form coordinator, who is also an educator, will as subject expert evaluate whether the tasks indeed have an educational value.

4.7.2.3 Technological aspects

Interviews with learners and educators revealed that the learners of the CLC form committee were responsible for the instructional design of a Theme Day web site. If required, the facilities of the StaTech complex were available to the learning community. Learners residing in one of the boarding houses have access to the hostel's computer but numerous St Alban's learners used their personal notebook computers or PCs and will therefore not use the facilities at the College. The percentage of educators utilising their own laptops or personal computers or that of St Alban's is not available, as this data was not collected during the five Theme Days. The learners of the CLC team indicated that they designed Theme Day web pages mainly in their private time and that their personal computers were utilised to do so.

The processes that occurred during computer-integrated Theme Days at St Alban's will be answered in sub-question 3.

4.7.3 What processes occur during computer-integrated Theme Days?

Observations and interviews yielded the answer of aspects such as the participant behaviour, the CLC committee, pedagogy and technology and their involvement in the processes of computer-integrated Theme Days. Document analysis and email interviews provided substantial information to answer sub-question 3.

4.7.3.1 The learning community aspects

Observations of Theme Day participants revealed that the learners behaved well and the educators seldom experienced difficulty to discipline them. Participant behaviour observed during the five Theme Days was compared. This comparison revealed that younger and inexperienced participants were a bit more restless and noisy than usual on the morning of the *Insects Theme Day* of 9 October 2002. The participants discussed their tasks with friends who were members of another group while other participants carried on with their work, ignoring the learners who weren't dedicated to their tasks. Form 1 participants' behaviour was different than that of the older forms because it was this form's first opportunity to participate in a Theme Day. Although these learners were more restless and noisy, their behaviour did not restrict or influence the processes of the *Insects Theme Day*.

Participant observations revealed furthermore that learners had two independent roles to fulfil during a Theme Day, i.e. those who were CLC form committee members and those who were the participants. The roles they fulfilled were different. The CLC members managed the Theme Day, whereas the participants actively took part in the Theme Day activities and tasks.

The Director of Technology and staff members were interviewed and they remarked that the level of computer literacy of the St Alban's learners is high. The levels varied from learner to learner and from form group to form group. Observations revealed

that it was especially noticeable in the PowerPoint slide show presented by the learners at the conclusion of a Theme Day. Observations furthermore yielded that a learner's computer literacy level also determined the swiftness of that learner's work. Some of the learners with lesser skills, for instance the Form 1 learners, were irresponsible and didn't even save their work during the *Insects Theme Day*. The literacy levels of these learners could influence the process.

Observations revealed that the learners obtained all the necessary information they needed for the duration of a Theme Day. Tasks of the *Earthly Aliens Theme Day* were available on the day's web page as well as the day's programme. Links to worthwhile search engines were available on the tasks page, and the learners could easily assess the Internet via these search engines.

Theme Days cannot occur without the CLC committee. Interviews with key role-players revealed that the CLC committee of St Alban's consists of educators as well as learners who are members of a form CLC team, and they have numerous roles to fulfil during Theme Days. The role of the educator is that of facilitator and coordinator of the process. The learners as CLC committee members work on 'grassroots level' with Theme Day participants. The CLC provided the learners as participants with assistance where required. The CLC committee assessed tasks during the morning and when the completed tasks had been submitted. Educators supervised the Theme Day activities.

4.7.3.2 Pedagogical aspects

Interviews with educators yielded that Theme Day tasks incorporated more than one subject. The *Earthly Aliens Theme Day* tasks included subjects such as science, technology, art and language.

Learners were observed while working in their cooperative groups. Observations revealed that the learners responded well to cooperative learning and that they enjoyed group work. Two to three learners worked together on a task at a single

workstation and shared their ideas and expertise. Group members themselves decided who in the group would be responsible for which task. The graphic artist had to build the insect item for the *Earthly Aliens Theme Day,* while the computer wizard had to compile the day's slide show.

4.7.3.3 Technological aspects

Document analysis reveals that the management council of St Alban's College decided in 1988 to conduct a feasibility study regarding technology in education. Another staff member did a simultaneous research in the USA and UK to review the use of computers in schools (Lippert, 1993:128). The outcome of this study paved the way for the development and establishment of the St Alban's Technology Centre (StaTech), and eventually the introduction of the Theme Day concept at St Alban's College in 1999. Since then, numerous successful Theme Days were presented at St Alban's College.

According to an interview with the Network Manager, she and Leonard Tleane, the IT consultant of St Alban's, worked behind the scenes on Theme Days. They were responsible for the management and maintenance of the College's servers, the network, intranet and workstations in the StaTech complex. Observations furthermore revealed no technical hiccups during the five Theme Days. The learners and the educators didn't complain about or experience any technical problems. If any technical problems did arise and the problems could be solved easily, it was either not observed at all, or the extent of the problems was so small that it went by unnoticed.

The answer to the outcome(s) that educators, the CLC committee and the learners achieved will be answered in sub-question 4.

4.7.4 What outcome(s) do educators, the CLC committee and learners achieve?

Observations and interviews yielded the information regarding aspects such as the outcome(s) that educators, the CLC committee and learners as the participants achieved on computer-integrated Theme Days at St Alban's College. The first aspect to be discussed is the learning community.

4.7.4.1 *The learning community aspects*

The outcome(s) of computer-integrated Theme Days at St Alban's included the College learners as:

- confident users of information technology to its maximum potential,
- dynamic and independent group workers where the learners know how to share their expertise with fellow group members,
- information and data miners searching the Internet for appropriate information to answer and complete the Theme Day tasks.

Interviews with key role-players revealed that a small percentage of the St Alban's educators are against the Theme Day concept. These educators are of the opinion that the learners learn little during a computer-integrated Theme Day and that they use valuable time in the StaTech centre to play with the computers or to surf the Internet. Interviews revealed furthermore that some of the educators viewed Theme Days as their ‘day off’, and that they are thus relieved from the normal school day's duties while colleagues are taking care of their learners. The percentage of educators against the Theme Day concept was not documented and is thus not available.

Although the negative sentiment of a few educators might influence the outcomes of computer-integrated Theme Days, the fact that the learners enjoyed participating in Theme Days is a reward for the educators and all their inputs. The Theme Day concept is a learning process for learners and educators at St Alban's. The repetitive

application of the Theme Day concept led to the smooth running thereof due to the fact that experience proved to the educators what worked and what didn't, which activities are popular with the participants and which ones are not.

The entire management and planning processes of a computer-integrated Theme Day at St Alban's College had a significant impact on the outcomes thereof. Selecting a topic that "grabs the attention and imagination of the boys", drafting the tasks and the subdividing the workload contributed to the successful outcomes of a computer-integrated Theme Day.

4.7.4.2 Pedagogical aspects

Observations revealed that cooperative learning had a significant influence on Theme Days. Form 1 constitutes the junior learners of St Alban's, and these learners are not as skilled in the concept of cooperative learning as for instance the form 4s. From the interviews conducted during Theme Days it became clear that the Theme Day topic and tasks had to correlate and that a fun element is important. The fun and competitive elements prevented participant boredom.

4.7.4.3 Technological aspects

A Theme Day usually starts with the Director of Technology welcoming the participants, guest speaker(s) or any other guests attending the Theme Day. After the word of welcome, a data viewer is used to present a PowerPoint slide show, presenting information to the participants, which is relevant to the Theme Day's topic. On the *Earthly Aliens Theme Day,* a video was shown to the learners about forensic Entomology, with specific reference to the fly. At the end of the video, the learners divided into groups, left StaTech 1, and moved to StaTech 4 to start with their tasks.

The monthly instalment of the St Alban's ISP is approximately R12 000, and this pays for the bandwidth of 128 kb/second. This unlimited access to the Internet was maximally utilised by the participants to complete their respective tasks. The

availability of and accessibility to high-tech equipment in the StaTech complex had a positive influence on the outcomes of computer-integrated Theme Days at St Alban's. The implications thereof are the implementation of at least three Theme Days for each form group annually. The possibility of introducing Theme Weeks is being investigated. The completion of the loop to ensure sustainability will be discussed in the following section.

4.7.5 How is the feedback/loop completed to ensure sustainability?

Observations and interviews yielded the answer to aspects such as the learning community, pedagogy and technology to describe how the feedback is completed to ensure sustainability.

4.7.5.1 The learning community aspects

Observations yielded that cooperative learning was effectively stimulated during Theme Days. Learners shared their expertise with each other and that the learners assisted fellow group members where necessary. This was especially visible with arts project on the *Earthly Aliens Theme Day* of 31 May 2001, when the learners had to create an insect with the art materials provided to them at the commencement of the Theme Day. Observations revealed furthermore that cooperative learning was effectively stimulated during the *Top Secret Theme Day* of 29 September 2002. On that day, group members had to assemble a raft. The raft had to float in the swimming pool carrying the weight of a single learner rowing to and fro across the width of the pool. At the completion of this, the group had to dissemble all the parts of the raft before the time lapsed for the rotation.

The emphasis of this study is the implications of computer-integrated Theme Days for learners at St Alban's College. This study thus focussed on learners (the participants and learners of the CLC form committees) and their involvement in Theme Days. Learner participation in computer-integrated Theme Days had a

significant influence on the feedback to ensure sustainability. Learner participation is the heart and soul of Theme Days, and without the participation of the learners, computer-integrated Theme Days at St Alban's College have no right of existence. The usage of the high-tech StaTech complex is a change in environment and this restricts boredom in the school life of St Alban's learners. The calendar and timetable of St Alban's College was adjusted to accommodate at least three Theme Days for each form group annually.

Groups were randomly selected, and new groups were formed for each Theme Day. The learners worked in harmony even though groups were compiled of a learner population coming from a variety of cultural backgrounds. Observations revealed that the compilation of groups had no significant influence on the feedback.

Although the participants are the heart and soul of a Theme Day, Theme Days don't just happen without the involvement of educators. In this study, the main focus was on the implications of computer-integrated Theme Days for learners at St Alban's College. Even though less focus falls on the educators, they play an indispensable role in the various phases of a Theme Day, be it the planning, inputs, process, and eventually the completion of the loop to ensure sustainability.

It took thorough planning of the CLC committee to devise and draft, implement and manage a Theme Day that will motivate and ensure participant involvement throughout the day. The wrong selection of topic and related tasks might lead to bored and unmotivated learners that will directly influence the feedback and the sustainability negatively.

4.7.5.2 Pedagogical aspects

Learners gained multiple skills by participating in computer-integrated Theme Days. The learners of the CLC committee learnt managerial skills, while the Theme Day participants gained cooperative learning skills. Peer assessment was viewed in a positive manner, and the learners who were assessed were not offended in any

manner. When conflict arose, the learners had to solve the problem among them and in the process acquired conflict resolution skills.

E-mail interviews revealed that presently no statistical data is available to determine whether those learners, when entering the job market, have indeed been equipped with appropriate cross-curricular life skills that will prepare them to cope in a technologically advanced world. Fortunately there has been an increase in the number of distinctions per Form 5 candidates in the final examinations. The main aim of Theme Days is to change the attitudes of learners from purely behaviouristic learning towards a constructivist approach.

4.7.5.3 Technological aspects

Literature has revealed that technology is constantly upgraded and adapted to ensure that the learners can use the high-tech equipment to its maximum potential. Document analysis reveals that St Alban's College initially had one DOS computer and modem, which provided the learners and educators with Internet access in 1995. In an interview with the network manager, it was revealed that the StaTech complex presently has 134 workstations with unlimited access to the Internet. A bandwidth of 128 kb/second makes this possible. The computer literacy of learners contributed to them using the maximum potential of the advanced technological equipment of the StaTech complex. The availability of technology in the StaTech complex positively influenced feedback to ensure sustainability. No technological hiccups were detected or observed, but unforeseen circumstances such as a power failure might restrict the completion of the loop and may have a negative impact on sustainability.

The summary of the research results will be discussed in the following section.

4.8 SUMMARY OF THE THEME DAY RESULTS

The target population and the compilation of the participant groups had no influence on the context. The additional eight Form 1 learners enrolled at St Alban's College in

2002 had an additional impact on the educators and StaTech. The impact thereof was that the workload of the educators increased, and strain was put on the facilities of the StaTech complex and the hostel's kitchen. A decision was made by the management structure of the College not to increase the learner population above 100 learners per form, as additional learners require additional staff members, access to the StaTech and additional rooms in the hostel.

Cooperative learning was notably stimulated during Theme Days. The senior Theme Day participants have adapted to the concept of cooperative learning, while the junior learners in form 1 will gradually adapt to the concept, once they have been exposed to more Theme Day experiences. Although the Theme Day participatory groups consisted of learners from various cultural and religious backgrounds, it had no influence on the context.

The senior participants coped better with the computer-integrated Theme Day concept than the younger participants, as the former have already took part in at least three to four previous Theme Days. The CLC committees assisted with the selection of Theme Day topics and tasks to keep the learners stimulated and motivated to complete the Theme Day tasks, while boredom was avoided.

Many educators carry the additional workload of computer-integrated Theme Days with dignity and do not complain about it. Unfortunately, some of the educators do not accept the Theme Day concept. They complain about the workload and are of the opinion that the learners do not really benefit when participating in computer-integrated Theme Days. Their attitude should change. If not, they might influence the sustainability of computer-integrated Theme Days at the College.

Theme day tasks were cross-curricular, and learners were thus exposed to more than one subject during a specific Theme Day.

The computer literacy levels of the St Alban's learners are high and none of the learners displayed any symptoms of computer anxiety. The learners furthermore

used the high-tech equipment available in the StaTech complex to its maximum potential. This is probably because many of the learners are from privileged backgrounds and are exposed to computers and digital equipment at home and at school from an early age.

Although the implications of computer-integrated Theme Days for learners of St Alban's College was the main focus of this study, the *Top Secret Theme Day* was not completely computer-integrated. The learners rotated between the workstations and the obstacle course on the sports grounds of the College. They had just as much fun as on the other Theme Days. This is an example to other schools that might be interested in implementing the computer-integrated Theme Day concept at their schools even if they do not have the same high-tech equipment or a computer centre that matches the facilities of the StaTech complex at St Alban's College.

Chapter 5 is the concluding chapter. In this chapter the conclusions and recommendations arising from the results of this study are presented.