INNOVATIVE

ACCOUNTING TEACHING:

AN ACTION RESEARCH PROJECT

BY

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DECLARATION

I hereby declare that:

INNOVATIVE ACCOUNTING TEACHING:

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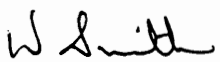
is my own work, that all the sources used or quoted have been indicated and acknowledged by means of complete references, and that this dissertation was not previously submitted by myself for a degree at any other university.



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PREFACE

TITLE	Innovative Accounting Teaching An Action research project
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Accounting is a form of communication, or the language of economic activity which has its own vocabulary and terminology. Accounting is thus categorised as the mode of communicating financial information about business activities and can be termed `the language of the business world'.

Business activities present a continuous circular flow which has to be communicated by making use of words and numbers, through the principles and procedures of Accounting. Accounting, thus involves standard methods of keeping records of all financial occurrences affecting a business concern.

Modern societies expect of education to prepare young people for their envisioned roles and responsibilities in life. Unfortunately many parents realize that the vocational opportunities of their children are not guaranteed, even with matric certificates and they realize that the best alternative option would be to start a family business.

Commercial subjects were introduced into schools with the primary aim of complementing vocational training and these subjects could be specifically useful to those aspiring to run a business.

Unfortunately, very few learners offer Accounting as a matric subject. The complaint concerning the subject is that the content taught at school is too theoretical and far-removed from Accounting practice. Beginner teachers are also faced with a dilemma that they virtually have no experience of the practical implementation of Accounting.

Present research is intended to be used by teachers in school context for Grade 8 to 10. The purpose of this research is to attempt to motivate more learners to take Accounting with the intention to teach this subject.

Research methodology includes a thorough literature study in order to facilitate understanding of the research problem. This study focuses strongly on Action research as component of the qualitative method of research. Questionnaires were utilized to ascertain what problems are experienced in the teaching of certain facets of Accounting. Interviews were also made use of to obtain information from key people.

It is concluded that teachers need assistance to teach Accounting. Innovative Accounting Teaching is designed to assist teachers with the implementation of the subject in a practical and easy-to-interpret way and could be used by student teachers, novice teachers as well as seasoned teachers.

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CHAPTER ONE

AIMS AND METHODOLOGY OF RESEARCH

> *'Like any language, accounting is a medium of communication, an instrument of conveying information' (Archer, Clarkson, De Jager, Snyman, Stander and Van der Merwe 1993:2).*

1.1 INTRODUCTION

Sharing thoughts with friends, writing letters to relatives, sending a telegram, watching a favourite television show, sending faxes about business matters and reading newspapers to keep up with world affairs, all comprise forms of communication (Steinberg 1997:1).

Human communication is a unique ability to create meaning through the use of symbols. Symbols, being defined as '*something used for or regarded as representing something else*'. Reading about communication does not produce results, considerable practice is required (Tubbs and Moss 1987:4-6).

Accounting is considered as a language, the language of economic activity which has its own vocabulary and terminology. Being the language of economic activity, it is a language which has such a great bearing on social life that everyone should be familiar

with it in some or other way (Arnold and Hope 1983:5).

Accounting is categorised as the mode of communicating financial information about business activities to the entities requiring such information. As such, accounting could also be termed the *language of the business world* (Archer et al 1993:2).

Pride, Hughes and Kapoor (1993:29) state that businesses are primarily engaged in the following interchange processes:

* money is exchanged for resources;
* resources are utilised to produce goods and services;
* these products are exchanged for sales revenue;
* sales revenue is exchanged for additional resources;
* these resources are then used for the production of goods; and
* goods are sold afresh.

These actions present a **continuous circular flow**, businesses pay wages, rent and interest, which in turn results in income of the household and this in turn becomes consumer spending. The result of consumer spending is that it becomes sales revenue, which in turn becomes wages, rent and interest, in this way completing the circular movement of money on the one hand and producing on the other hand (Pride et al 1993:29).

This circular flow has to be communicated to the user by making use of words and numbers, involving reporting financial

information through use of the principles and procedures of accounting (Faul, Van Wyk and Smith 1991:3).

Legally all profit-seeking and non-profit organizations have to keep thorough accounting records. The accounting process converts business transactions into statistical data serving people both inside and outside such organizations (Walgenbach, Hanson and Hamre 1990:3).

1.2 SIGNIFICANCE OF STUDY

The growth and development strategy of South Africa envisages the creation of 400 000 to 500 000 jobs per year by the year 2000. The formal economy has been unable to provide the necessary jobs and services in South Africa, therefore, the informal sector has to assist in the creation of jobs and services (President's Council 1993:36). This task will have to be undertaken by entrepreneurs, providing an alternative for formal employment.

Many parents realize that the vocational opportunities of their children are not guaranteed, even with matric certificates and they realise that the best alternative option would be to start a family business. To this avail, national and international research in co-operation with businesses and business organizations as well as the Department of Education of South Africa, America and England are being undertaken to provide learners with knowledge about such undertakings (Grobbelaar 1997:12). Entrepreneurship education is becoming a *sine qua non*

to the curriculum in schools throughout the country (Howden 1996:26).

Modern societies expect of education to prepare young people for their envisioned roles and responsibilities in life. The transmission of knowledge, skills and attitudes, enabling effective operation as individuals and members of society in the world of work, the community and transnational context, should thus be an educational aspiration (Verma and Pumfrey 1993:35).

Each school subject has its own structure, terminology and methodology, which accounts for the unique character which culminates in specific outcomes. Commercial subjects were introduced into schools with the primary aim of complementing vocational training. In modern times commercial subjects are integrated in the study area of economic and management sciences (Becker 1989:23).

Modern accounting is extensively acknowledged as fundamental component of business management (Walgenbach et al 1990:3) and the subject accounting was developed specifically to address the need for presenting accurate and comprehensive financial information. Accounting, therefore involves standard methods of keeping orderly and systematic records of all financial occurrences affecting a business concern (Bisschoff 1992:11). Contrary to this need, very few learners offer accounting as a matric subject.

Voight and Stander (1989:1) states that the complaint concerning the subject is that content taught at school is too theoretical and far-removed from accounting practice. The manner in which accounting subject knowledge should successfully be divulged to learners is also perceived as one of the most significant predicaments of the beginner-teacher.

Bisschoff (1992:6) agrees with above statement, when he concludes that the subject accounting has to be presented to learners dynamically, but teachers are faced with a dilemma that they have no experience of the practical implementation of accounting.

1.3 STATEMENT OF PROBLEM

A developing country such as South Africa is in dire need of more accounting expertise. In spite of this need, the education system produces fewer accounting qualifieds every year.

The problem present study intends to investigate is:

* why do so few students offer accounting as matric subject?
* considering the economic needs and the high unemployment rate in South Africa, how can learners be encouraged to take accounting?
* can an innovative teaching strategy be designed which would successfully address the problem of the school system yielding too few accounting qualifieds?

This problem implies that the following secondary research questions be addressed:

* why do learners avoid offering the subject accounting?
* is accounting regarded as a problem subject in schools?
* do learners experience problems with assimilating the content of the subject?
* what obstacles hinder successful teaching of the subject?
* in what way can learners be motivated to study accounting?

1.4 AIMS AND OBJECTIVES OF THE RESEARCH

The aim of this study is to:

* identify reasons why learners are wary of taking accounting as matric subject;
* identify problems that have to be overcome by teachers in presentation of accounting; and
* develop a didactical strategy which could assist teachers to deliver the subject to learners in a more comprehensive and learner-friendly way.

In order to realise the aims of this study, concepts integral to accounting and accounting teaching should be clarified to establish in what context said concepts are used.

1.5 DEFINITION OF TERMS

Concepts inherent to accounting, such as entrepreneurship and the entity concept (see 2.3) are elucidated in the literature study. Questions, such as, which people need to keep accounts and what accounting basically entails, are also answered in the review of relevant literature. Principles of accounting (see 2.4) and the `why' and the `how' of teaching accounting (see 2.6) receives attention.

An inquiry into all aspects mentioned, presupposes methodological research. A strategy should be developed to select the subjects and procedures of data collection which, in turn should answer the research questions (McMillan and Schumacher 1993:157).

1.6 RESEARCH METHODOLOGY

The critical starting point of research is to determine what is to be achieved. After which, the most appropriate methodology is selected (Denzin and Lincoln 1994:21). Accomplishment of said intent is based on a thorough literature study.

1.6.1 Literature study

Carefully conducted literature research could facilitate understanding of the research problem. A review of literature also provides the benefit of further insights gained pertaining to a field of research (McMillan and Schumacher 1993:112-113).

This research is based on a literature study which includes secondary and primary sources to expose the accumulated knowledge in the field of accounting didactics. Unintentional replication of previous studies is avoided and the researcher acquires improved capacity to interpret the significance of the outcomes of the study. A review of literature also indicates which methodologies proved useful in certain studies and which seem less promising (Ary, Jacobs and Razavieh 1990:67-68).

The literature study indicates that, in order to realize the aim of this study (see 1.4), the qualitative method of research should be primarily implemented. Said method also involves a descriptive element, because accurate description is an essential part of all methods of research (Anderson 1990:120).

1.6.2 Qualitative research

This study focuses strongly on the qualitative method of research, because qualitative research is an attempt to understand, not only the manner of cultural arrangements, but also the ways in which those arrangements are practised individually (Sherman and Webb 1988:2). Qualitative research also studies motives and aims, not only behaviour. *For qualitative researchers, life is not a dress rehearsal, it is the real thing* (Sherman and Webb 1988:4), therefore Glaser and Strauss (Patton 1990:85) declare that *the conscriptive, naturalistic inquiry strategy of qualitative research is one of the strengths of qualitative methods, when a setting is*

approached without intentional hypotheses.

Qualitative research is undertaken in a natural setting where the researcher is an instrument who gathers information and analyses it by focussing on the meaning expressed by participants (Cresswell 1998:14).

The qualitative research approach can also be implemented where data analysis focuses on only one phenomenon, which the researcher selects to understand in depth, notwithstanding the number of participants selected for the study (McMillan and Schumacher 1993:376). The phenomenon the researcher elects to understand and question in depth concerns all facets of accounting as represented in the subject accounting in junior and senior secondary school context through above mentioned study of relevant literature.

This study relies mainly on qualitative research which includes a major component of participatory action research.

1.6.3 Action research

The basic aim of participatory action research is to enhance practice rather than generate knowledge. Activities such as educational research and teaching are inherent to an action-research process (Elliot 1992:49). Researcher intends to make use of action research which includes utilization of workshops and free attitude and focus group interviews.

Another perspective of participatory action research explained by McKernan (1991:17) is that it comprises a reflective process in a given problem area where the purpose is to improve practice or personal understanding.

Simons (Elliot 1992:62) observes that teachers prefer to make use of questionnaires in order to escape the potentially disturbing effects which interviewing and observing can have on personal relationships. It is also pointed out that teacher researchers opt for quantitative methods of data collection, instead of qualitative methods which involve 'personalized' situations. In present research, use is made of both methods to authenticate acquired conclusions.

1.7 POPULATION AND SAMPLING

The population for this study consists of:

* teachers involved in the teaching of accounting at various secondary schools in the Free State Goldfields area;
* students taking accounting at the Welkom campus of Vista University;
* learners taking the subject in Grade 8 and Grade 12 from selected schools;
* students who visited schools in the Goldfields region during practice teaching sessions; and
* subject advisors responsible for the subject accounting in the Free State Education Department.

Use is made of sampling of convenience, by making use of teachers willing to attend workshops and class groups demarcated by such teachers to complete the questionnaire.

1.8 DATA COLLECTION

Formal workshops were held and teachers responsible for the subject accounting were invited to attend. This provided the opportunity for data to be collected by means of questionnaires based on the design of Oppenheim (1983: 207-220). Mentioned questionnaires intend to ascertain what problems are experienced in the teaching of certain facets of accounting and to obtain information re the solution of such problems.

A second questionnaire, which was distributed at schools by teachers who attended the workshops, intends to determine what problems learners taking the subject, encounter. Focus group interviews were also informally conducted with all teachers who attended the workshops.

Interviews were made use of to obtain information from key people, such as subject advisors and heads of department to determine quandaries the implementation of the subject accounting presents.

Students taking the subject accounting at first and second year level at Vista University's Welkom Campus, were also interviewed to obtain their views. Students who have visited schools in the

Goldfields region during practice teaching sessions, were also interviewed to procure information about the teaching of accounting.

1.9 DATA DISPLAY

Data procured after computerized processing is displayed in the form of tables and graphs, which accounts for the quantitative technique which complements the qualitative research.

1.10 DEMARCATION OF STUDY

This study is undertaken in the field of Educational Didactics in the subject Accounting in Secondary Schools situated in the Free State Goldfields area.

Although Qualitative research results and specifically Action research results are usually not generalisable, results of present research should be generalisable to all other regions of South Africa because the accounting syllabus is compiled by Central Education Department.

1.11 PROGRAMME OF STUDY

1.11.1 Chapter one serves as an introduction to the study and contains the aims, statement of problem and methodology of this study.

1.11.2 Chapter two constitutes perspectives on accounting as school subject as well as the applicable teaching methodology.

1.11.3 The collection of qualitative data - action research - is explained in chapter three. Use is made of various instruments, such as questionnaires, workshops and free attitude and focus group interviews.

1.11.4 Computerized analysis of data collected to establish the basis for the compilation of the teaching programme, forms the core of chapter four. Data is displayed in the form of tables and graphs.

1.11.5 Chapter five involves a general conclusion. Recommendations involve a guidebook with suggested strategies of innovative accounting teaching.

1.12 CONCLUSION

Chapter one indicates a broad outline of the aims and methodology of this research project, stating that accounting includes a problematic constituent when considered from an educational perspective.

Chapter two revolves around details concerning the essence of the subject accounting and its teaching methodology. In the form of a literature study, this chapter contains the rationale for

developing an innovative accounting teaching strategy.

Concepts integral to accounting, the basic underlying principles of accounting and different approaches in the teaching of accounting receive attention.

Prior research, which comprises four different projects each with a different aim, is also discussed in Chapter two.

CHAPTER TWO

CONCEPTS INTEGRAL TO ACCOUNTING AND ACCOUNTING TEACHING

2.1 INTRODUCTION

Chapter two focuses on a study of literature related to accounting in order to:

* determine what the concept accounting and related concepts entail; and
* to create a basis for the design of an innovative teaching strategy for accounting.

Firstly the concepts relating to accounting are examined to ascertain what the essential knowledge is that is supposed to be transmitted through an innovative teaching programme.

2.2 ORIENTATION

Accounts have been maintained for thousands of years because this process facilitates keeping track of money, by indicating where it came from and in what way it has been spent (ISE 1995:2).

Accounting affects individuals in their personal lives in the same way as it affects any business. Accounting ideas are used when planning how money should be used, how it should be spent

and how much to be saved (Woods 1996:3).

The present accounting system originated in Italy during the 12th century. This system became known throughout Europe during the Renaissance and by the 16th century, England, Germany and the Netherlands, accounting had become an accepted standard practice. The Industrial Revolution during the 18th century had considerable influence on the development of accounting practices (Faul et al 1991:8).

Accounting only became firmly established as an academic discipline in the last few decades and is taught in universities and other educational establishments worldwide (Arnold and Hope 1983:3).

The variables identified for investigation in this research study are based upon a review of literature. Therefore the inherent components need to be clarified in order to establish in what context said concepts are used in the present study.

2.3 CONCEPTS INTEGRAL TO ACCOUNTING

The following questions all need to be answered in order to clarify accounting concepts:

* who needs to keep accounts?
* why should accounts be kept?

* what does accounting entail?
* who needs accounting information?

Each question is answered under a different heading.

2.3.1 Who needs to keep accounts?

The question, 'Who needs to keep accounts?' indicates that a specific person should be responsible for this activity. Decisions about the what, how and where and when of a business, should be taken by someone, and this person is known as an entrepreneur (Stanlake 1993:37).

2.3.1.1 Entrepreneurship

The word entrepreneur is derived from the French language, meaning 'the one who undertakes tasks' (Swanepoel et al 1993:5).

During his/her life-cycle, any person can at certain stages, be considered an entrepreneur, because the entrepreneurial act involves taking risks and human experience reinforces the entrepreneurial ability of people (Schultz 1993:306).

Entrepreneurship is found in all walks of life. The term is mostly used in terms of business life, sometimes it is used in connection with small businesses and otherwise it refers to new businesses. The term actually has no correlation with the size of an enterprise, it is used to indicate a certain kind of

activity. Even giant corporations engage in entrepreneurship (Vosloo 1994:147).

An entrepreneur may be described in the broadest sense as a person *'who has the ability to explore the environment, identify opportunities for improvement, mobilize resources and implement action to maximise those opportunities'* (Vosloo 1994:147). Well educated entrepreneurs that possess business related knowledge and skills could demonstrate mentioned characteristics.

Entrepreneurial activities are universally considered essential to stimulate economic growth, to create jobs and to advance social progress. The small business enterprise has often been identified as the natural environment of the entrepreneur. This type of environment enables the entrepreneur to develop his/her talents optimally and to reach envisaged goals (Vosloo 1994:159).

Koa (Mazibuko and Struwig 1993:66) points out that an entrepreneur attempts to create value by recognizing business opportunities, by taking risks and by mobilizing human, financial and material resources, usually in the role of owner of the business or entity.

From the above it becomes clear that all subsequent activities should be recorded in some or other manner.

A business or entity also requires the recording of financial information.

2.3.1.2 Entity concept

The Chambers dictionary defines the word 'entity' as 'something with objective reality'. In accounting terms, the concept entity is used by accountants when preparing business accounts.

An entity is described as an autonomous economic unit, the financial transactions of this unit or entity are handled separately from that of another accounting entity. An entity could then be regarded as being an individual, or a number of persons in a partnership, or even a group of businesses, such as a company. Entities also include institutions such as societies and churches. Most accounting entities are demarcated by law and the following four prototypes are identified in the business sector:

* sole traders;
* partnerships;
* close corporations; and
* companies

(Faul, Pistorius, Van Vuuren and De Beer 1993:22-23).

An entity could thus be an individual or a number of persons participating in one concern, or even a group of concerns. In the accounting activity, an entity is dealt with as an autonomous unit, irrespective of any other governing interest therein (Ibid 1993:22).

Faul et al (1993:23) further mentions that churches, associations and clubs are regarded as entities without a profit motive. The State itself, municipalities and State departments are also accounting entities.

Archer et al (1991:2) mentions that it is important to distinguish between the business and the owner. In accounting terms the two should be treated as separate entities and subsequently a separate set of records should be kept for each entity.

The private transactions of the owner of a business are recorded separately from the businesses' affairs. These two states of affairs are regarded as separate entities, otherwise the business accounts will present a misleading picture (ISE 1995:11).

Regardless of the type of entity, financial information is needed to plan and control the business. It is maintained that the subsistence of a business entity relies on credible accounting information (Neely and Imke 1991:1).

Consequently, the question 'Why should accounts be kept?' should be resolved.

2.3.2 Why should accounts be kept?

All organizations where money is handled, need accounting records. The 'keeping of accounts' refers to the simple and

routine practice where business transactions are recorded and identified according to their monetary values (Stott 1989:1).

No entity, whether it is a family, a clothing outlet, a theatre, a hospital, a wholesaler or a manufacturer, can operate proficiently without accounting. Any type of entity, in order to survive, requires financial data and reliable accounting information for planning and controlling the utilization of resources (Neely and Imke 1991:1).

2.3.2.1 Purpose of accounting

Social sciences are primarily concerned with specific aspects of the role of humans in society. For example, economics concerns itself with the allocation of the scarce resources of a particular society. Law is concerned with the framework which regulates corporate and individual behaviour within such society. Politics concerns itself with the political systems under which humans live and sociology relates to the interpretation and analysis of individual and group behaviour (Arnold and Hope 1983:4).

From the above it becomes clear that there are certain links between various subjects which are recognised in the teaching of social science courses (Ibid 1983:4).

Accounting fits into the spectrum of social sciences by responding to the need for financial information and

consequently, the scope of accounting changes as the need and demands for financial information of a particular society or business concern changes (Arnold and Hope 1983:4).

Any business concern, whether big or small, requires a diversity of information in order to carry out its rightful task. The accounting system forms part of the entire information system of any undertaking or business concern. The accounting activity concerns itself with the recording of all monetary transactions within such concern and ultimately with the presentation of reports summarising the monetary results (McLeary 1995:4-5).

Accounting is often referred to as the language of business because it describes the transactions entered into by all kinds of organisations and thus supplies financial information (Archer et al 1991:1).

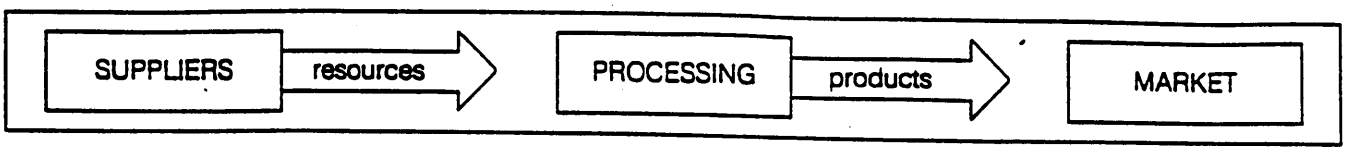
The question 'What does accounting entail? needs to be addressed to disclose the nature of accounting.

2.3.3 The nature of accounting

Faul et al (1991:2) uses the example of a furniture manufacturer to explain the nature of accounting. Mentioned manufacturer erects factory buildings, purchases equipment, raw materials, all other requirements, employs labour and then manufactures furniture. These manufactured articles are sold to retailers. This process is illustrated in figure 2.1, which indicates the

stream of resources from the suppliers to the market.

Figure 2.1 Stream of resources



When manufactured products are sold to customers, the manufacturer is compensated in the form of money, which, in its turn is utilised to make payments to suppliers. This process is referred to as a stream of money, or cash stream, which is illustrated in figure 2.2.

Figure 2.2 Cash stream



(Faul et al 1991:2)

It is imperative that issues related to the stream of resources as well as to the flow of cash should be recorded in some way. All accounts and documents need to be carefully recorded in

specified books and this gives rise to the concept accounting, but the notion accounting basically comprises two concepts: bookkeeping and accounting.

2.3.3.1 Bookkeeping

Bookkeeping represents one facet of accounting, the recording component. The actual recording of business transactions is performed by a bookkeeper (Archer et al 1993:2).

The part of accounting concerned with recording data is known as bookkeeping. Formerly all accounting data was recorded manually in books, hence the term bookkeeping. Currently accounting data is mainly recorded through the use of computers (Woods 1996:4).

McLeary (1995:6) terms bookkeeping as scorekeeping. It is resolved as the most straightforward task of simply recording transactions, listing them and adding them together, enabling answers pertaining to the total sales for the year or total expenses for a certain period of time.

All financial data firstly has to be recorded as initial step in the process, and that is named bookkeeping. On the other hand, accounting concerns itself with bookkeeping information which is then used by accountants in order to make certain decisions (Woods 1996:4).

McLeary (1995:2-3) adds to this argument by contending that bookkeeping is the process whereby records which encompasses interpretation of monetary transactions are maintained. The next step of this bookkeeping process is called accounting, whereby reports based on the information contained in the bookkeeping system is interpreted for purposes of financial decision making

2.3.3.2 Accounting

The definition of accounting establishes the philosophy of providing information to those who have to make and control the implementation of decisions (Arnold and Hope 1983:5).

Accounting, therefore, does not record transactions in a tedious manner as is done in bookkeeping, it is realized as a dynamic role player in the economic and social sphere, because it provides information needed by other players (McLeary 1995:3).

Faul et al (1993:2) maintains that *accounting measures the money value of this stream of goods, services, products and cash to determine the financial position and financial results of a concern's activities.*

Another definition of accounting by Archer et al (1993:1) states that accounting is the recording of monetary values of financial transactions of individuals and businesses with the main purpose of supplying financial information in the form of statements which can serve as a basis for decision-making.

Accounting is defined as '*the process of identifying, measuring and communicating financial information, so as to enable the users of that information to evaluate it and make decisions based on their evaluation*' (Faul et al 1991:4).

Faul et al (1993:2) explains that the main aim of accounting is to assess the money value of goods, services, products and cash in order to calculate the financial position and financial results of the activities of any concern or entity.

Accounting conveys a message from the business world, through transferral of information and thus should be understood by the recipient (Bisschoff, Bosch and Mare 1995:10). Knowledge of the 'keeping of accounts' can only be procured through relevant education.

Archer (1991:1) implies that the study of accounting involves standard methods of recording all activities affecting a business concern in an orderly and systematic way, expressed in monetary terms.

Every person spends his life, determined mainly by the decisions he has made. All decisions in any walk of life are made against a background of uncertainty. A doctor bases decisions about the physical condition of a patient on his store of medical knowledge and an examination of the patient. Information thus is a logical grouping of data into a recognisable pattern, which is the purpose of accounting (McLeary 1995:4).

Following such classifications, it will then be possible to calculate the profit or loss that has been made by the organisation during a particular period. The principal aim is then to report whether or not the business is performing well financially (Woods 1996:4).

The reporting function of accounting leads to the last question posed initially 'Who needs this type of accounting information?'

2.3.4 Users of accounting information

Many different participants are concerned with the running of an organisation. Each of these participants have their own personal views, attitudes and value systems and some views could conflict with those of others. Thus, management of mentioned organisations aim to harmonise the views of the participants within mentioned organisations by supplying financial information (Arnold and Hope 1983:9).

Faul et al (1993:2) contends that all economic activities hold financial significance for various participants of the economic system. People that own or conduct business are in the need of detailed financial information regarding all business activities to enable them to manage it competently. People outside such an undertaking need to bear knowledge of the financial implications of all business activities on a regular basis in order to plan their actions accordingly. Creditors, economic analysts and government bodies all have an interest in the

financial position and financial results of mentioned undertaking (Faul et al 1993:3).

There are many user groups depending on accounting information as fundamental to their own information systems. These groups fall in two main categories:

* internal users, or management, who are concerned with the information which is necessary to operate the concern on a day-to-day basis; and
* external users, who require mainly scorekeeping information and only are concerned with evaluating the overall performance of the undertaking over a period of time (McLeary 1995:6).

Woods (1996:4-5) identifies possible users of accounting information as the following:

* owners of the business as indication whether the business is run profitably;
* a prospective buyer of the business would opt to examine all financial information before deciding to buy;
* the bank will need information if the owner wants to borrow money;
* tax inspectors need information to calculate taxes payable;
* a prospective partner will want information before sharing ownership; and

* investors wanting to invest their money in the business, firstly will require financial information.

Arnold and Hope (1983:26) also distinguish **user groups** of accounting information, which are tabulated below:

Table 2.1: User groups of accounting information and examples of decisions for which information is required

USER GROUP	DECISIONS
Shareholders	Buy, sell or hold shares
Lenders/creditors	Increase, reduce or keep recurrent levels of credit and loans
Employees	Present claim for wage increases or a change in employment
Government	Raise taxation or inquire into the impact of the organisation on the environment
Customers	purchase the firm's products
Managers	Determine the level at which to carry out operations
General public	Evaluate the economic and `Social' impact of the firm

From table 2.1 it is clear that these different users do not always necessitate similar accounting information.

All four questions about basic accounting concepts have been clarified, but the principles of accounting are not clear yet.

2.4 PRINCIPLES OF ACCOUNTING

It is imperative that financial information is accurately presented in an unbiased manner in the world of business. Those concerns making use of financial information, require reliable and extensive data which cannot be supplied by spoken or written language. Accounting was established to satisfy this special need, because it incorporates a set of principles, techniques, procedures and conventions (Bisschoff 1992:11).

The term 'principle' alludes to the essence of basic functions or to a rule of conduct. Accounting principles are universally accepted rules with hypothetical circumstances as underpinning. These rules operate as guidelines for accounting practice (Faul et al 1993:16).

Woods (1996:5) explains that accounting is based upon a very elementary idea, called the accounting equation. This concept sounds very intricate, but in fact, is very obvious if understood. Accounting terms are also used to describe all accounting matters.

Accounting is based upon the life-cycle of all businesses and Woods (1996:5) uses the following example:

* a firm needs resources to be set up and to commence trading. Resources are mostly supplied by the owner. This can be illustrated as follows:

Resources of business = Resources supplied by owner

* the resources supplied by the owner is called 'capital'. According to the accounting equation, all resources supplied by the owner are called 'assets', which is illustrated as follows:

Assets = Capital

* in most cases, other people than the owner supply some of the assets which is then termed 'liabilities', denoting the amounts owing. The accounting equation now changes to:

Assets = Capital + Liabilities

* the accounting equation can thus be summarised as follows:

Resources: what they are = Resources: who supplied them
(Assets) (Capital + Liabilities)

The conclusion is reached that the two sides of the equation will always have the same totals, no matter how many transactions there may be (Woods 1996:5).

The primary accounting record of a business is its nominal ledger, also called the general ledger, which pages are ruled off in a form recognised as 'T' accounts. This forms the basis of double entry bookkeeping, where every financial transaction is entered into the ledger twice, once as a debit entry and once as a credit entry. This also relates to the accounting equation, because when the total of the debit entries are compared with the total of the credit entries, they should consist of identical amounts. From balances of debit and credit entries, a balance sheet is compiled and is *sometimes compared to a kind of snapshot of a business: it captures on paper a still image, frozen at a single moment of time, of something which is dynamic and continually changing*. Conventionally, a balance sheet is prepared at the end of an accounting period to indicate the assets, liabilities and capital of a business (ISE 1995:40).

From this explanation of the principles upon which accounting is based, it becomes clear that appropriate knowledge should be imparted to individuals through certain teaching methods or didactics.

2.5 DIDACTICS

The term 'didactics' is derived from Greek, 'didaskein' meaning, to instruct, to teach and to learn (Duminy and Söhnge 1983:1).

Didactics aspires to provide answers to questions such as:

* What is teaching?
* Where do we teach?
* How do we teach?
* When is teaching effective?
* How are teaching and learning related?

(Fraser et al 1993:4).

Didactic activities are identified as activities of teaching and learning. The teaching activity aims at presenting learning content to individuals in a manner that ensures that the person can learn something from it. On the other hand, learning is an activity where an individual wishes to benefit and absorb what has been taught (Ibid 1993:3).

The question can be raised: What do teachers know and believe about teaching? Teachers also claim certain notions about what effective teaching should comprise and such beliefs influence the choice of what teachers should do in order for effective teaching to take place. These beliefs or notions are called, theories of effective teaching (Yaxley 1991:1)

Descriptions of effective teaching postulated by teachers will vary, indicating personal theories of effective teaching. Each teacher, thus, states a different set of knowledge claims of beliefs, relating to effective teaching. These theories or sets of knowledge claims, provide various solutions to the problem of describing effective teaching (Ibid 1991:12)

Duminy and Söhnge (1983:21) makes use of the following example: The question is raised whether one could learn to be a doctor by copying certain activities in the course of his/her duties? It should be obvious that a doctor of this type could create a danger to patients ignorant of the quality of his/her training.

It is imperative that teaching and learning have to comply with certain conditions. These prerequisites or didactic principles pertaining to the teaching-learning situation, have to be taken into consideration for effective teaching and learning to take place (Singh 1996:65).

These prerequisites or didactic principles should be compiled in such a way that they can be easily understood and effected within schools and classrooms. A basis for a consistent and coherent discourse on effective teaching should be provided, which may be applied to any problem where clarification of educational effectiveness is investigated (Yaxley 1991:3).

Didactic theory does not concern itself with the teaching of a specific school subject. This falls under the category of subject didactics. Didactic theory accompanies subject didactics in providing the general structure of a specific teaching situation with the intention of realizing that particular teaching aim (Van der Stoep and Louw 1984:41).

When teaching and learning of a particular subject are studied, the subject didactics of that particular subject is contemplated

upon. Each subject didactics functions against the background of general didactic theory. The distinctive characteristics of a subject supplies instructions regarding the manner in which the subject should be taught (Fraser et al 1993:7).

The theory of accounting teaching comprising the description and explanation of accounting principles as it appears in actual life should now be given attention.

2.6 ACCOUNTING DIDACTICS

Teaching accounting is not only a matter of having knowledge of particular techniques and procedures or the application of certain skills. Any teacher should understand **why** accounting should be taught according to a certain method. Even more important is the fact that a teacher should know **how** accounting should be taught (Singh 1996:65).

2.6.1 Why accounting should be taught according to a specific method

When scrutinising the objectives of accounting teaching (see 2.6.2), it should be noted that accounting strives to develop thought processes or thinking skills which would enable learners to apply principles to new and unfamiliar situations, as well as to develop analytical ability in learners.

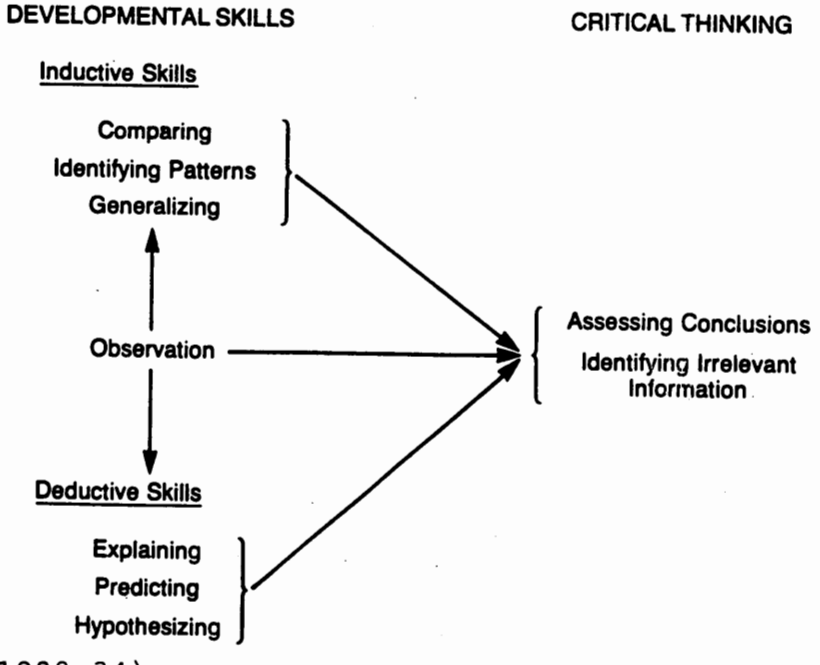
Beyer (Eggen and Kauchak 1988:25) categorises thinking skills into three major groups, which are:

* broad-minded skills such as problem-solving;
* disjunctive skills, called microskills; and
* a combination of above, which result in critical thinking.

Critical thinking can be considered as a derived skill which has as result the ability to form generalisations (Eggen and Kauchak 1988:34), which forms the core of accounting reasoning.

Thinking skills are illustrated in figure 2.3.

Figure 2.3: Thinking skills



(Eggen and Kauchak 1988:34)

Figure 2.3 represents developmental thinking skills resulting in critical thinking, which comprise inductive and deductive skills.

Mentioned thinking skills are imparted to learners via teaching methods or learning guidance. Teachers may give direct or indirect guidance to learners, giving rise to inductive or deductive directions (Briggs 1977:209).

2.6.1.1 The inductive teaching method

Socrates in the year 469-399 BC, used an elemental form of induction as questioning technique, but Francis Bacon in 1561 - 1626 actually formulated the inductive or discovery method of teaching, similar to Newton who formulated the law of gravity whilst watching an apple drop from a tree. In lessons where learners can make discoveries for themselves, the inductive teaching method should be used (Van der Horst and McDonald 1997: 126).

The teacher could present a number of instances of two unlike items and then, through questioning, lead learners to discover the difference between the items. This may not only give the learner the satisfaction of finding his/her personal solution to an issue, but learning could be retained and generalised in a better way, because the solution was largely discovered (Briggs 1985:209).

In accounting, the purpose of the inductive method is to direct learners towards accumulating facts which would guide them towards discovering rules and laws emerging from details (Bisschoff et al 1995:38; Voight and Stander 1989:62).

The discovery of accounting rules and laws involves a procedure where new facts should be compared with those already familiar to learners creating generalisation of certain particulars. In accounting, learners should, after numerous examples, detect that assets and expenses are indicated on the debit side of ledger accounts, whereas liabilities and income are credited (Bisschoff et al 1995:38).

2.6.1.2 The deductive method of teaching

Aristotle, the great Greek thinker, in 384-322 BC, was the foremost advocate of the deductive method of teaching. The influence of mentioned method was so intensive that it is still used today (Van der Horst and McDonald 1997: 125).

The deductive method of teaching has as departure a general rule which is then applied to particular instances. This method of teaching requires explaining and analysing the problem initially so that a clear conception of the facts should be obtained. After this, the general principles and rules related to the instance should be sought, which, in turn should be applied to the problem in order to reach a conclusion (Bisschoff et al 1995:39; Voight and Stander 1989:62).

Deductive guidance involves giving a rule, followed by examples. It is then expected from the learner to firstly identify the rule and then supply his/her own examples, securing learner reinforcement through successful application of rules (Briggs

1985:209).

In accounting, the fact that an asset purchased should always be recorded on the debit side in the general ledger, could lead to the deduction that all asset accounts will have debit balances (Bisschoff et al 1995:39).

These above mentioned two teaching methods also comply with the present stipulations in South Africa, where traditional rote-learning is changed to outcomes-based learning, which involves critical thinking, reasoning and reflection (National Department of Education 1997: session 3, resource 1).

2.6.2 The HOW of teaching accounting

There are many different opinions of **how** teachers should teach, but first and foremost, teaching methods should be selected to suit particular circumstances (Van der Horst and McDonald 1997: 124). This study primarily concentrates on the teaching of accounting.

Particular objectives in the teaching of accounting should firstly be realised, these are to:

* equip learners with knowledge of concepts, principles and procedures of accounting compatible with generally accepted accounting practice;

* develop logical thought processes, instead of relying upon a set of rules, enabling learners to apply principles to new and unfamiliar situations;
* develop analytical ability;
* encourage sound judgement and a systematic approach to the solution of problems; and
* develop individual qualities such as neatness, orderliness, thoroughness, precision and competence (Singh 1996:4).

2.6.2.1 Different approaches to the teaching of accounting

The main purpose of teaching accounting is to familiarize the learner with the logical succession of business events. A certain routine should be followed when entering transactions. All transactions are firstly entered into various journals and then transferred to the ledger. The accuracy of this procedure is verified by drafting a trial balance. The final accounts and balance are drafted at the end of the financial period. This procedure is repeated for the next accounting cycle (Bisschoff 1992:162).

It is important to commence accounting education with an approach which has significance to the learner, starting with types of businesses in their immediate vicinity. The reason why all transactions should be recorded, should also be discussed in detail (Voight and Stander 1989:53).

The approach used to introduce the study of bookkeeping, which is the initial stage of accounting, will have a significant influence on the sequence by which other subsequent topics are presented. The initial approach and the order of presentation have a bearing on one another, depending on the phase in the circular flow which is addressed (Bisschoff 1992:162).

When teaching accounting, the teacher has a choice of certain methods of presentation. There are four methods in use, which are:

* the ledger method;
* the balance sheet or accounting equation method;
* the journal method; and
* the cash book method (Bisschoff et al 1995:69; Voight and Stander 1989:53).

(a) The ledger method

This particular method is most widely used in teaching accounting. It is maintained that the ledger is the most important book in the accounting system and subsequently this teaching method is self-explanatory. The main advantage of this approach is that it is a mechanical method allowing learners to learn accounting rules (Bisschoff et al 1995:70).

This method is explained in the following way (Bisschoff et al 1995:70; Voight and Stander 1989:57).

* the ruling of the ledger, comprising of a debit and a credit side is explained;
* various columns and their headings are explained;
* separate accounts for each type of transaction is indicated; and
* the principles of double entry is illustrated, whereby the receiving account is debited and the account which gives is credited.

Accounts are drafted in T-form, illustrated in table 2.2 where the owner deposits his/her capital contribution into the bank account of the business (Voight and Stander 1989:57).

Table 2.2: Example of a T-account

Capital account	
	Bank R20 000
Bank account	
Capital R20 000	

(Voight and Stander 1989:57).

(b) The accounting equation method

This method is of a calculating nature (Bisschoff 1992:163; Voight and Stander 1989:53) and starts with the firm's possession which were originally contributed by the owner at the onset of

business. The teacher should accentuate that both sides of the equation should always be equal, as in the example:

If an owner contributes R80 000 in cash to start a business, the accounting equation will be:

Table 2.3: Effect on the accounting equation

Assets = Owner's equity				
No.	Effect	Reason	Effect	Reason
1.	+80 000	Cash increases	+80 000	Owner's contri-bution

In table 2.3 the learner sees the effect on the assets and the owner's equity and a reason is given for the effect (Bisschoff 1992:164).

At the same time, a cumulative summary is shown after each transaction, giving rise to the balance sheet method (Voight and Stander 1989:56) and is illustrated in table 2.4:

Table 2.4: Balance sheet after each transaction

No	Assets		Owner's equity	
1.	Cash	R80 000	Capital	R80 000

Table 2.4 serves as indication that Assets = Owner's equity.

As transactions increase, the effect on the accounting equation and the balance sheet after each transaction is explained to learners. The problem experienced by this method is that information is not systematically organised (Bisschoff 1992:171).

(c) The journal approach

Bisschoff (1992:175) contends that this method has the logic of teaching all phases of the accounting cycle in the order in which they are practised. Learners firstly learn how to record business transactions in the book of first entry, which is a particular journal.

This approach has many disadvantages, which accounts for the fact that this is not a popular approach when teaching accounting.

(d) Cash transactions approach

During previous years, the Cash Book was used as a starting point of teaching accounting. Currently the Cash Book is replaced by the Cash Receipts and Cash Payments journal. In both these procedures, all cash received is entered either in the receipts journal or on the receipts section of the cash book. All cash paid out is entered in the payments journal or on the payment section of the cash book.

Data is posted to the ledger from both sections or journals to the ledger at the end of the month and in this instance, learners

have not been introduced to the ledger, therefore this concept should be explained to them via the ledger method.

This method is relatively easy to explain, but it has the disadvantage that the approach is parrot-like and the learner does not learn to reason in order to find a solution (Bisschoff et al 1995:176 -178).

Researcher considered it imperative that a study into accounting would be necessary before commencing formal research in order to reach a more reliable conclusion.

2.7 PRIOR RESEARCH

Four research projects were launched, each with a different aim in mind.

2.7.1 Research in schools

A qualitative study was conducted over a period of six months (Smith 1998) to specifically determine whether problems were experienced in the field of accounting teaching. The following was disclosed:

* grade eight learners found it extremely difficult to understand the subject accounting. This was revealed in test results. Only nine learners out of fifty-five managed to obtain an average of more than one-third of the total

amount of marks. This represented a pass rate of 16,31%;

* it was extremely difficult to maintain learner's interest as a period of forty-five minutes progressed, because the learners who failed, showed no interest in the subject and this in turn, presented disciplinary problems; and

* learners approached by researcher, revealed that they were not interested in the subject, would never be able to grasp the intricacies contained in the subject content and only attended classes because they were compelled to.

2.7.2 Interviews

In support of above, a professor in accounting and several teachers were interviewed (Smith 1998:133). The purpose of the interviews was to obtain information about accounting in school context.

The interviews revealed that:

* the reason why learners do not take the subject accounting, is that the opinion exists that this subject involves maths; and

* some teachers do not have an in depth understanding of accounting, because they have no experience in the business field, making them unsuitable to present the subject in an

acceptable form. This opinion is shared by Bisschoff and Paxton (Smith 1998:6).

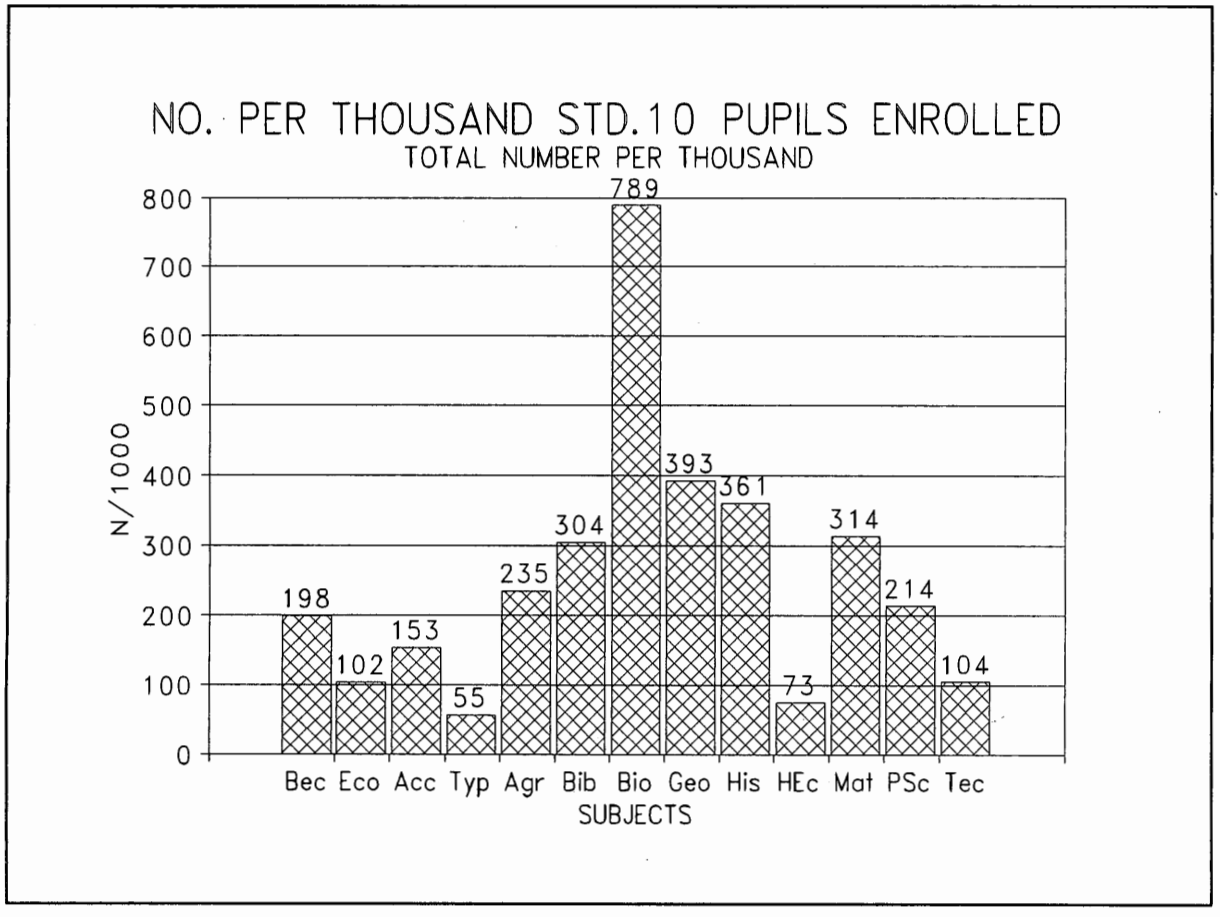
These results portrayed the discouraging picture of both learners and teachers confronted with subject content they cannot understand or utilise. This finding is also reflected in the figures illustrating the percentage of South African learners taking various subjects at matric level in 1991. Figures for consecutive years were not available at this point in time.

2.7.3 Enquiry into matric enrolments

The aim of this enquiry was to compare the number of learners taking accounting with the total enrolments of standard ten or grade twelve in South Africa.

The number per thousand standard ten learners in 1991, (more recent data had not been officially published during research) offering various subjects for matriculation is represented by figure 2.4 on the next page.

Figure 2.4: Total enrolment per subject of standard ten learners in South Africa for 1991



(H.S.R.C. 1993:51)

Figure 2.4 illustrates that the total enrolment of standard ten learners in South Africa offering accounting, comprises 4,64%, meaning, 152 888 enrolments out of the total enrolment of 3 295 000, which means that only a few learners take accounting as a subject.

The summary of the percentage of learners taking the thirteen subjects depicted in figure 2.4 is represented in table 2.5.

Table 2.5: Summary of percentage of learners taking various subjects in standard ten for 1991

SUBJECT	PERCENTAGE
Business Economics	6,10
Economics	3,10
Accountancy	4,64
Typing	1,67
Agricultural subjects	7,13
Biblical studies	9,23
Biology	23,95
Geography	11,93
History	10,96
Home Economics	2,22
Mathematics	9,53
Physical science	6,49
Technical subjects	3,16

(H.S.R.C. 1993:47-53)

Table 2.5 indicates that 4,64% of standard ten learners in the country take accountancy.

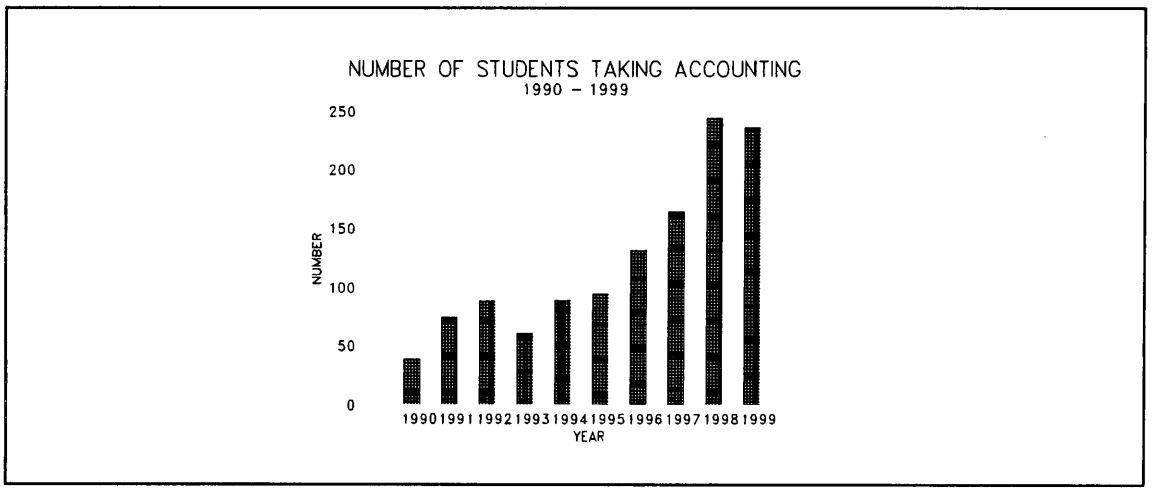
2.7.4 Enquiry about university students

Information was obtained about students taking accounting at the Welkom Campus of Vista University, compared to students taking methodology of accounting at first year university level for the

years 1990 to 1999. The number of students taking accounting methodology, ensuing from the total number of students are also listed. This should serve as indication about the number of future accounting teachers.

Figure 2.5 depicts the number of students taking accounting at first year level at Vista University, Welkom Campus.

Figure 2.5: Number of students taking first year accounting at Vista University Welkom Campus

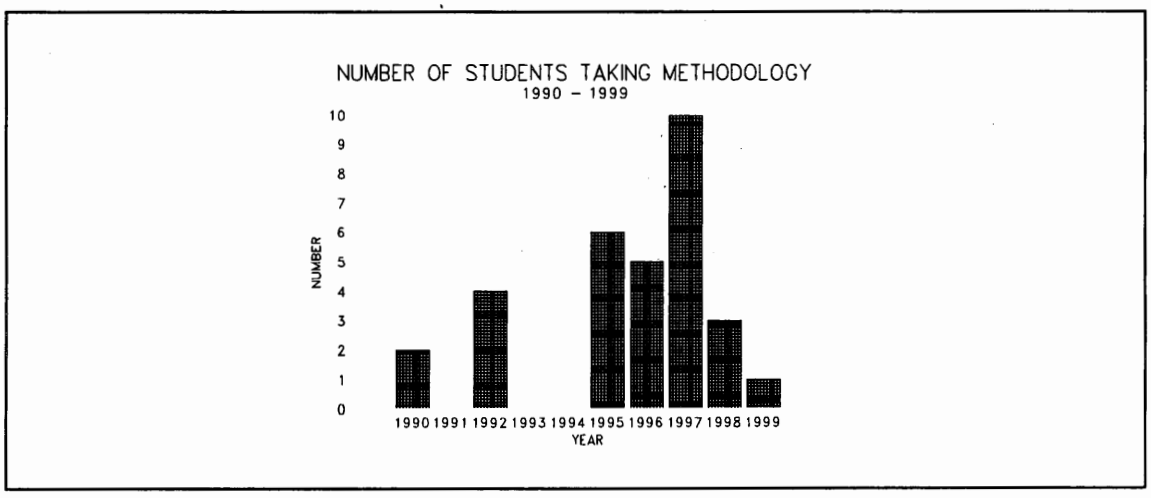


(Vista University 1999)

Figure 2.5 indicates that the number of students taking accounting at the Welkom campus, has increased every year, indicating that the subject has escalated in popularity.

Figure 2.6 depicts the number of students taking accounting methodology at the Welkom campus (prospective teachers).

Figure 2.6: Number of students taking accounting methodology



(Vista University 1999)

Figure 2.6 indicates that the number of prospective teachers presents a grim image of accounting and the question can be raised: "Where will accounting teachers of the future emanate from?"

In order to present a clearer image of this occurrence, table 2.6 on the next page, displays a combination of numbers of students taking accounting and numbers of students taking accounting methodology at the Welkom campus.

Table 2.6: Number of students offering accounting and number of students taking the teaching methodology course in accounting

YEAR	ACC 1ST YEAR	ACC METHODOLOGY
1990	39	2
1991	75	-
1992	89	4
1993	61	-
1994	90	-
1995	95	6
1996	132	5
1997	165	10
1998	244	3
1999	236	1

(Vista University 1999)

Table 2.6 illustrates that since 1990, numbers of students taking accounting have risen with 605%, but the numbers of prospective accounting teachers have declined.

Table 2.7 on the next page, indicates the percentages of students who take accounting and those who take methodology of accounting.

Table 2.7: Number of students taking accounting, compared to the percentage of students taking accounting methodology

YEAR	NUMBER TAKING ACCOUNTING	PERCENTAGE TAKING METHODOLOGY
1990	39	5,3%
1991	75	0,0%
1992	89	4,5%
1993	61	0,0%
1994	90	0,0%
1995	95	6,3%
1996	132	3,8%
1997	165	6,1%
1998	244	1,3%
1999	236	0,4%

(Vista University 1999)

Table 2.7 indicates that, in no single year, did the percentage of students taking accounting methodology exceed ten percent of total number of enrolments for the subject accounting.

2.8 INITIAL ANALYSIS

Literature relevant to the compilation of the Innovative Accounting teaching strategy and subject didactics was studied in chapter two. Applicable terminology and concepts pertaining to this research were clarified in order to indicate the content of the proposed innovative didactical strategy.

It was ascertained that Accounting should initially be taught according to the Inductive as well as the Deductive method of teaching, owing to the rules and laws involved in the subject content of Accounting.

Prior research (see 2.7) also indicated that:

- accounting presented a problematic constituent, especially to grade 8 learners;
- teachers also experience a demanding or problematic element in the presentation of the subject accounting;
- very few learners actually take accounting to matric level; and
- very few university students opt for teaching, but prefer to take accounting for application in the private sector.

2.9 CONCLUSION

Supported by above literature study, participatory action research is described in chapter three to establish what perceptions various role players (see 1.7) have of accounting and the teaching of accounting to determine relevant content and improving the intended strategy to teach innovate accounting.

Chapter three comprises the collection of data to verify the essence of accounting teaching. Action research forms the nucleus of present study which includes implementation of suggested teaching strategy, workshops and interviews.

Qualitative research is employed to question all aspects of accounting in schools, but the study contains a quantitative element as well for the interpretation of statistical information.

CHAPTER THREE

IMPLEMENTATION OF ACTION RESEARCH AS METHOD OF DATA COLLECTION

3.1 INTRODUCTION

A study of literature on the concept accounting indicated that the accounting process assists in keeping track of money and monetary transactions. The users of accounting information and principles of accounting also received attention.

A study of didactics indicated that teaching is always a practical activity, but it is evident that teaching and learning should comply with certain conditions.

Chapter two further reflected upon the different approaches in the teaching of accounting.

Chapter three involves implementation of action research as component of qualitative research, to determine the reason why learners do not take accounting and to also obtain the opinion of teachers and other role players on improving the teaching of accounting.

Data collection also involves a quantitative research component. The rationale for the selection of mentioned methods of research

is also explained. Techniques of data collection for this study is also discussed.

The purpose for including specific questions in the questionnaire are also accounted for. Technical details, such as the time allocated for completion, the coding of data and the reliability and validity of the research method are also considered in chapter three.

Data collection is considered an integral part of all research studies. Primary as well as secondary data are needed to complete any study. The primary data comprises the responses from questionnaires, interviews and the observations. The secondary data is to be obtained from published and unpublished sources. An instrument is needed for the process of data collection and a researcher selects the most appropriate type of instrument to complement his study (Gay 1987:126).

3.2 RESEARCH METHODS IMPLEMENTED IN DATA COLLECTION

This research is educational in essence. It should assist teachers to create meaning of their normal everyday practice. Carr and Kemmis (Walker 1990:158) argue that all educational science and consequently contemporary educational research must attain these requirements in order that it can be regarded as adequate and coherent. These requirements are:

* a methodology that rejects the concept of rationality, objectivity and truth;
* an acceptance of both qualitative and quantitative interpretations by teachers and participants; and
* the ability to differentiate between ideas and interpretations that are misrepresented from those that are not.

The critical starting point of research is to determine what is to be achieved. After which, the most appropriate methodology is selected to continue with the research project (Denzin and Lincoln 1994:210).

The research questions to be addressed in this chapter (see 1.3) are the following:

* why do learners avoid offering the subject accounting?
* is accounting regarded as a problematic subject in schools?
* do learners experience problems with assimilating the content of the subject?
* what obstacles hinder successful teaching of the subject?
* in what way can learners be motivated to study accounting?
* can an innovative teaching strategy be designed which would successfully address the problem?

Mouton (1988:36-40) believes that methodological paradigms - for instance, qualitative, quantitative and participatory action research - are not merely collections of research methods and

techniques. Methodological paradigms include certain assumptions and values regarding their use under specific circumstances.

When the qualitative approach is employed, it does not indicate that the quantitative approach would be ignored, because it should be used to process, analyse and interpret the collected data. Said research approaches can furthermore be complemented by participatory action research.

Participatory action research as part of the qualitative research approach is applied (see 1.6.2 and 1.6.3) to study the research questions. The study is also descriptive in nature, accurate description being an essential part of all methods of research, and appropriate to answer the research questions indicated in this chapter.

The method of research to complement the qualitative research in order to realize the main aim of this study (see 1.4) being, to develop a didactical strategy which could assist teachers to implement the subject to better avail. Research also includes a quantitative component which is supported by a thorough study of relevant literature in chapter two.

This research primarily utilizes the qualitative method of research because qualitative methods enable the study of selected issues in depth and in detail, producing detailed information about a much smaller number of people and cases (Patton 1990:14).

3.2.1 The Qualitative Research method

The word qualitative signifies that emphasis is placed on processes and meanings, not accurately scrutinising or measuring in terms of quantity, amount, magnitude or frequency. The socially assembled nature of reality is stressed, answers are sought about questions and subsequently given meaning (Denzin and Lincoln 1994:4).

Qualitative research is generally classified as primarily interactive field research or non-interactive document research. It is a naturalistic inquiry (Schofield 1990:201-232; McNiff, Lomax & Whitehead 1996:15, 75, 83, 140). It describes and analyses people's individual and collective social actions, beliefs, thoughts and perceptions (McMillan & Schumacher 1993:371-400; Scott & Usher 1996:56-64, 81-84, 91-99).

Qualitative inquiry gives rise to new questions, expands the frame of reference of the individual and enables the examination of evidence in a productive manner. Qualitative researchers also concentrate on natural settings, they are interested to discover new insights. Nothing is taken for granted, and they want those who are studied, to speak for themselves (Sherman and Webb 1988:5-45).

In present research, teachers and learners are the respondents to questionnaires. Each question is accompanied by an open-ended section where the opinion of the respondent is invited, because

when people speak for themselves, new insights are discovered.

Qualitative research also places emphasis on comprehension by paying attention to the words used by people and the intention of such research is to discover patterns emerging from thoughtful analysis of the research topic. Contextual findings and not extensive generalizations are the discoveries made through qualitative research (Maykut and Morehouse 1994:17-21).

Finally, qualitative investigation broadens the understanding of educational research by extending the researcher's framework of reference. It provides a means of counteracting rationalization of researchers and assists researchers to search for universal and infinite generalisations (Sherman and Webb 1988:170). In present study the qualitative method of investigation should provide consistent truths pertaining to the subject accounting.

This chapter focuses on action research, because educational research and teaching are intrinsic to an action research process (Elliot 1992:49).

3.2.1.1 Action Research

Action research is defined as *the study of a social situation with a view to improving the quality of action within it.* In action research theories are not validated independently and then applied to practice. They are validated through practice (Elliot 1992:69).

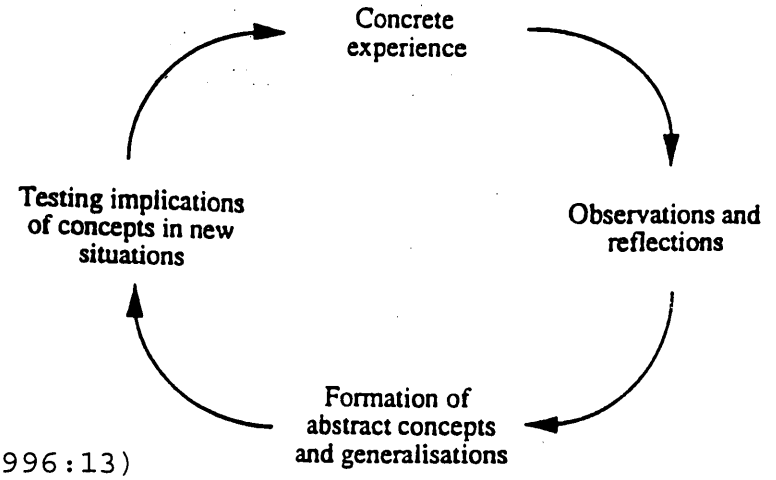
Action research represents a progressive movement in educational research. It is seen as an alternative to the more traditional approaches to educational research and serves to *bridge the gap between theory and practice of education* (McNiff 1997:1).

Participatory action research aims at understanding and solving problems. It does not, however, fit into one recognizable form. Rather it gives expression to a variety of perspectives on how reform and innovation relate to educational research. In other words, approaches to educational research involve different theories of educational change which underpin them (Kemmis in Keevees 1988; Popkewitz 1984:31-58).

Action research designs comprises three general intentions, which are: staff development, improved school practice and the advancement of teaching and learning theories. The value of action research lies in the manner in which it leads to improved practice (Oja and Smulyan 1989:1 and 4).

The basic assumption underlying action research, is that it constitutes a spiral of action, consisting of four principal components, which are illustrated in figure 3.1 on the next page.

Figure 3.1: The traditional spiral of action research cycles



Zuber-Skerrit 1996:13)

Figure 3.1 illustrates that knowledge can be created in the following way:

- it is based on concrete experience
- the concrete experience is observed and reflected upon;
- abstract concepts and generalisations and then formed; and
- implications of these concepts are tested in new situations, which then leads to new concrete experience and commences a new cycle (Zuber-Skerritt 1996:12).

Elliot (1992:72-77), on the other hand, identifies the basic sequence of activities involved in action research, which are to:

* identify and elucidate the general idea, which is a statement linking the idea to action;
* reconnaissance, which is sub-divided into description of the facts of the situation and explaining the facts of the situation;

* construction of the general plan;
* develop the ensuing steps of action, where it is decided exactly which of the courses of action is going to be implemented subsequently; and
* implement the next action steps.

The nature of existing conditions are reproduced through the descriptive method.

3.2.2 The Descriptive Research Method

Descriptive research appraises the character of conditions as they represent themselves. The purpose is that such essentialities are identified as they occur, no manipulation of treatments takes place, research is intent on measuring things as representation of reality (McMillan and Schumacher 1993:34-37).

Description could be qualitative as well as quantitative (Anderson 1990:120). Qualitative methods enable the researcher to study selected matters in depth and detail, while quantitative methods compel standardized measures to be used in order that the perspectives and experiences of people could be placed into categories which are predetermined and to which numbers are allocated (Patton 1990:13-14).

Dey (1993:10) explains that quantitative data deals principally with numbers while qualitative data deals with meanings. These

meanings are expressed through language and action (Carspecken 1996:93-98). Like meanings, numbers are important at all levels of measurements in research. Numbers must be based on meaningful conceptualizations. Quantitative and qualitative methods complement each other for meaningful research (Dey 1993:17 & 28).

3.2.3 The Quantitative Research Method

One of the most important requisites in contemporary social science is that scientific information should be quantitative, because it represents an endeavour to detect laws, relationships and explanations of various occurrences. Results obtained in such a way is always transcribed in a statistical manner. The extent into which observations are translated into numbers, serves as an indication of the maturity of science (Kvale 1996:67).

Quantitative research measures the reaction of many people to a limited set of questions, thus facilitating comparison and statistical aggregation of the data, which gives a broad, generalisable set of findings (Patton 1990:14).

The ultimate aim of this research is to develop a didactical strategy which could assist teachers to implement the subject accounting to better avail. Accordingly, consideration is directed to measuring the reaction of teachers and learners to a limited set of questions contained in mentioned questionnaires. The quantitative research method will thus facilitate comparison

of data to supply generalisable findings.

In order to procure credible data, any research instrument has to comply with certain requirements.

3.3 CHARACTERISTICS OF A RESEARCH INSTRUMENT

An essential attribute of research instruments is the existence of reliability and validity, the latter being the most important characteristic (Fraenkel and Wallen 1993:138). Validity involves what is intended to be evaluated and for whom it is relevant, whereas reliability includes the consistency with which the instrument appraises whatever should be measured (Gay 1987:127-128).

3.3.1 Validity

The relevancy, meaningfulness and usefulness of conclusions made by researchers, can be defined as the validity thereof (Fraenkel and Wallen 1993:139).

A more appropriate definition of the concept **validity** is provided by Goetz and LeComte (Elliot and Peshkin 1990:125):

> *Validity is concerned with the accuracy of scientific findings. Establishing validity requires:*
> *(1) determining the extent to which conclusions effectively represent empirical reality, and*
> *(2) assessing whether constructs devised by researchers represent or measure the categories of human experience that occur.*

One secondary aim of present research is to identify problem areas presented by accounting and, subsequently, develop a didactical strategy which could assist teachers to implement the subject to better avail.

Reality is represented in the questionnaires (see appendices 3.1 to 3.4) used in this study by posing questions which are relevant to the concepts of accounting and is supported by the fact that it is relevant to human experience as well, therefore only teachers and learners taking accounting, were requested to complete related questionnaires.

Accurate interpretation of results can only be made if the group to be studied precisely conforms to specified standards in all aspects (Gay 1987:129).

The questions posed in the questionnaires are of such a nature that ambiguity should not occur in responses, and by posing similar questions to both the teachers and learners, patterns should develop that can be compared, thus ensuring the validity of the data. This data was further validated by the follow-up free attitude interviews.

Reliability, dealing with the consistency with which an instrument evaluates, is closely linked to the concept of validity.

3.3.2 Reliability

Reliability, in ordinary terms, means dependability or credibility (Gay 1987:135). With respect to measurement, the meaning is similar. The ratio to which a test constantly measures what it is intended to measure, is referred to as the reliability thereof. If a reliable test were to be re-administered, the scores obtained would essentially reveal similar scores the second time (Gay 1987:135).

Reliability directly points to the consistency of the scores acquired. If scores are inconsistent they provide no useful information and cannot be declared valid. If reliability of a test improves, the validity improves as well (Fraenkel and Wallen 1993:146).

The questions contained in the questionnaire are aimed at concepts relevant to accounting which safeguards that only relevant responses will be given. If respondents are given another questionnaire to complete, they are not likely to change their opinions on this matter, consequently their scores would be similar, which indicates the reliability of the items.

Validity has been verified in this study by the fact that another measure of the same variable was supplied by administering a questionnaire relating to characteristics of accounting to all the stakeholders involved. Reliability has been verified by the fact that the same questionnaire has been administered to all

respondents involved.

After the research problem had been defined and related literature was reviewed, careful thought should be given to sample selection and data collection (Gay 1987:190).

3.4 POPULATION AND SAMPLE SELECTION

Sample selection is the primary technique used to collect data and the manner in which cases rich in information, present themselves. The reasoning behind sampling is associated with the purpose of the study, the research problem studied (McMillan and Schumacher 1993:382).

Cohen and Manion (1994:173) state that, when an educational design is in the planning stage, the researcher should take the population to which the results should be generalized, into account. Such intention should involve decisions over sample sizes and sampling methods.

Non-probability sampling, or sample of convenience is the most commonly used method in many educational studies. This type of sampling involves that whatever subjects are available, are made use of by the researcher. Such subjects may include a class of students or a group of people gathered for a meeting (McMillan and Schumacher 1993:160).

In the case of this study, accessible subjects available were teachers actually involved in the teaching of accounting, experts in the field of education, university students and learners taking the subject accounting. These subjects were chosen at random by researcher, owing to their availability at the time.

3.5 DATA COLLECTION

There are essentially six methods used for collection of qualitative data, namely, observations, questionnaires, interviews, documents, tests and unobtrusive assessments. All researchers use one or more of these versions, depending on the effectiveness and restrictions of each of these considerations (McMillan and Schumacher 1993:40).

Action research presents additional methods for collection of data, which are, the keeping of a diary containing personal accounts of observations, keeping profiles of a situation over a period of time, document analysis which provides relevant information, photographic information, tape or video recordings and transcripts and making use of an outside observer (Elliot 1992:77-83), which makes it ideally appropriate to further the aims of this research study.

The principle aim, being, to identify the general idea or area researched, which should link the idea to action.

An outline of ideas used in this Action research plan, linked to ensuing action, is represented in table 3.1.

Table 3.1: Outline of Research Ideas linked to the Action it represents

RESEARCH IDEAS	ACTION IT REPRESENTS
Identification of general research idea	Using questionnaires 1 Requesting information from teachers 2 Survey of student opinion 3 Survey of learner opinion 4 Information about the Accounting equation
Reconnaissance	Interviews to: 1 obtain expert opinion 2 determine problematic areas 3 determine shortcomings in Accounting knowledge of students
Construction of general plan	Workshops
	1 Ascertain the most problematic area in Accounting 2 The first Accounting Lesson and Media involved 3 Teaching of the Accounting Equation
Ensuing steps of action	1 Visits to schools 2 Free attitude interviews 3 Compilation of initial Teaching strategy 4 Field work
Changes to teaching strategy	1 Focus group interview to ascertain all problematic areas in Accounting 2 Compilation of comprehensive Innovative Teaching Strategy

Table 3.1 indicated the main outline of research ideas, linking it to Action research.

Research ideas and the action it represents are now comprehensively dealt with in the following sections.

3.5.1 Identification of general research idea

Initial data collection in this study was implemented by making use of various questionnaires each with a different aim in mind.

3.5.1.1 Questionnaires

The questionnaire is the most broadly used technique for acquiring information. It is relatively economical, contains structured or unstructured questions, ensures that the respondent remains anonymous and the questions can be asked with specific purposes in mind (McMillan and Schumacher 1993:238). The questions included in the initial questionnaire for this study were set with the purpose to obtain perceptions that teachers and learners have about the subject accounting.

Questionnaires are employed to resolve opinions, attitudes, preferences and perceptions whereas studies that deal with sensitive topics that invoke deeper responses cannot be measured by questionnaires and thus the need to employ interviews (Borg, et al 1993:219) which also serve as a test for reliability if the same subjects become interviewees.

Complex responses are not required where the concept or notion of accounting is indicated in this study. Research in this case revolves around opinions, attitudes, preferences and perceptions as mentioned above. The above mentioned method of obtaining information about accounting is regarded appropriate for present research.

Certain practical considerations require attention to ensure the functionality of questionnaires.

3.5.1.2 Practical considerations re questionnaires

As an instrument of qualitative research in present study, four questionnaires based on the design of Oppenheim (1983:207-220) were used.

(a) Questionnaire requesting information from teachers

(see Appendix 3.1)

The first questionnaire was to be completed by teachers involved in the teaching of accounting to gather extensive information about the subject accounting. This questionnaire was presented at three formal workshops held by researcher at the Welkom campus of Vista University. It was personally handed to individual teachers. All respondents were informed that the information would be used for research purposes only and that their identity would not be revealed.

The first part of the questionnaire contains general information about the teacher's qualifications and the grades he/she is responsible for. The next part concentrated upon learner numbers and enquires whether they have increased or decreased, with possible reasons. The last part focuses on problems experienced in the area of accounting teaching.

The questionnaire ends expressing appreciation for the contribution of the respondent.

Respondents were allowed to complete the questionnaires before the workshops commenced.

(b) Questionnaire intended as survey of student opinion

(see Appendix 3.2)

The purpose of this questionnaire was to gather information about the subject accounting and presumably discover the reason for students not taking accounting subject methodology.

This questionnaire was personally handed to individual students during the course of an accounting lesson at Vista University. All respondents were informed that the information would be used for research purposes only and that their identity would not be revealed.

This questionnaire also comprises three parts. The first part contains general information, such as if the student took

accounting at school and the gender of the respondent. The second section comprises questions requiring a yes or a no answer. The last section contains **comment on** questions, requesting the opinion of the respondents.

(c) Questionnaire intended as survey of learner opinion

(see Appendix 3.3)

The purpose of this questionnaire was to acquire opinions of learners taking the subject accounting at school.

This questionnaire was personally handed to individual learners during the course of an accounting lesson at local schools, all within easy reach of researcher. All respondents were informed that the information would be used for research purposes only and that their identity would not be revealed.

This questionnaire comprises three parts. The first part contains general information, such as the school grade and the gender of the respondent. The second section comprises questions requiring a yes or a no answer. The last section contains **comment on** questions, requesting the opinion of the respondents.

The questionnaire ends expressing appreciation for the contribution of the respondent.

(d) Questionnaire eliciting opinion re the accounting equation

(see appendix 3.4)

The purpose of this questionnaire was to determine how much knowledge teachers have about teaching of the accounting equation.

This questionnaire firstly requires teachers to state the grade they are teaching. Further on, there are questions to which a yes or a no only is required, but each question also requests personal opinions.

The questionnaire also has an open-ended section where the personal opinion of the teacher is required re the advantages or disadvantages of teaching the accounting equation.

The next step in action research involves reconnaissance or making a survey of ideas, which comprises description of the facts and explanation of subsequent facts of the state of affairs involved in accounting teaching. This is effected by making use of interviews.

3.5.2 Reconnaissance

In order to obtain a more in depth view of accounting during the reconnaissance period, interviews were conducted to obtain expert opinion as part of the survey linked to action research. The interviews were conducted, each with a different aim in mind.

3.5.2.1 Interviews

The research interview is a specific form of conversation (Kvale 1996:19), which involves different patterns of interaction and stages of reflection - depending on the content of the conversation. An interview could represent a conversation about topics concerning daily life, it could be a philosophical discourse where partners are on equal level, or it could be a professional interview, where the professional is in charge of the questioning (Kvale 1996:19-20).

Interviews were conducted in this research because interviews are vocal questionnaires in essence, but other than the questionnaire, the interview involves direct interaction between individuals, and this interaction has definite advantages. Nonverbal as well as verbal behaviour can be noted when facing the respondent and researcher uses this opportunity to motivate respondent. Interviews also result in higher response rates than questionnaires, although when only factual information is required, a questionnaire could suffice as instrument (McMillan and Schumacher 1993:250).

Questioning serves the purpose of this study excellently because it is a process used to invoke responses from respondents. This process consists of a one-to-one exchange, permitting the interviewer to ask questions and if necessary, follow up relevant answers to obtain clearer responses, which method yielded useful information about accounting (Charles 1995:106).

Use was made of direct verbal interaction between the interviewer or researcher and the subject during an interview. The interviews included both structured and unstructured questions. (McMillan and Schumacher 1993:42).

Researcher mostly made use of focus group interviews which usually take place when a group of people focus on a particular topic and afterwards fully discuss it with the leader (Anderson 1990:225).

Use was also made of personal interviews in the form of extended conversations to obtain information from experts about problems experienced during the teaching of accounting and suggestions by teachers.

Interviewees were encouraged to speak freely and were encouraged to ask questions about uncertainties. Each interview was conducted in four phases, consisting of an outline of the project where the facts of the situation were described and explained, general questions, compilation of a list of important issues and a feedback session.

The process was initiated with interviews before the onset of the first workshop, each with a different aim in mind.

3.5.2.1 First Interview

The first interview was intended to obtain expert opinion before

commencement of any formal workshop to ascertain the feasibility of a series of workshops and the situation surrounding accounting in schools in the Free State.

The interviewee, Mr J M Mehla is a Learning Facilitator of Accounting for the Free State.

Mr Mehla mentioned that the Free State was divided into twelve districts and that he and another colleague had to oversee not only accounting, but also economics and business economics in all 12 districts. This state of affairs constituted a tremendous workload and he gave researcher permission to do whatever research was required in schools in order to alleviate his chores.

The interview revealed the following about accounting in schools:

* accounting teaching starts at grade eight at most schools;
* learners are wary to fall in with unfamiliar subjects, they rather take known subjects at the beginning of the high school stream;
* teachers are not properly qualified to teach accounting;
* when teaching accounting, teachers go through the examples in the textbook and the rest is left to the learner;
* the most important part of accounting, the accounting equation, is omitted when teaching and teachers usually rush to go on with the journals;

* the approach followed in the textbooks is too complicated for teachers and learners to follow; and
* textbooks confront learners with strange and foreign words and concepts.

After this interview, researcher started organising workshops. A formal invitation was sent to schools, requesting accounting teachers to attend the workshop (see appendix 3.5).

Another interview was conducted to obtain views about teaching accounting in schools.

3.5.2.2 The Second Interview

This focus group interview was informally conducted with teachers from various schools in the Goldfields region who attended the first workshop. The purpose was to determine problematic areas in the teaching of accounting

The interview revealed the following about teaching accounting:

* teachers were forced to teach accounting without having proper qualifications because sufficient teachers are not available;
* teachers were apt to leave out certain sections of the syllabus because they were not sure of the content themselves;

* the learning facilitator was not available to offer assistance in such circumstances;
* teachers were left to themselves to set tests and exam papers, virtually no assistance was offered in any way at school and they felt at a loss in such circumstances; and
* textbooks were virtually non-existent which additionally complicated their task of successful teaching.

This interview revealed in broad terms, that teachers were not satisfied about the state of affairs of accounting teaching. This finding gave rise to the next interview to obtain more information about accounting teaching.

3.5.2.3 The Third Interview

The third interview was conducted with a focus group of students taking the subject Accounting Methodology at Vista University, Welkom Campus. The purpose of this interview was to obtain the opinion of students re the teaching of accounting at schools.

The interview revealed the following about teaching of the subject in the schools they attended;

* teachers usually skip the accounting equation and continue with the rest of each chapter, instead of starting at the beginning;
* teachers usually enter a classroom, read out the example, give an exercise and leave the room again, which leaves

learners on their own; and

* during the ensuing lesson, teachers enter the classroom, read out the answers to the previous lesson, give another exercise as class work and leave the room again.

Students gave researcher the assurance that they did not have the vaguest idea of how to teach accounting and researcher decided to conduct an informal workshop to test the cognizance of accounting in these specific students.

3.5.2.4 Fourth interview

The fourth interview was conducted with a colleague who is responsible for the methodology of accounting teaching at Vista University. The purpose was to determine what the shortcomings were in the accounting knowledge of students.

The interview revealed the following:

* students had very little knowledge of the accounting equation and had no idea of how to teach this concept;
* students have memorised virtually all the standard procedures contained in accounting and were effecting transactions in a parrot-like fashion;
* new or complicated procedures were completely misunderstood and proved beyond the understanding of students; and
* student assessment proved results of a very low standard.

This interview proved to researcher that an improvement in teacher assistance was indeed imperative.

Next on the agenda was a series of workshops to serve as construction of the general plan, which is, the compilation of a workbook on accounting teaching.

3.5.3 Construction of the general plan

The purpose of the workshops was to gain practical information about knowledge of accounting in schools.

3.5.3.1 Workshops

Three workshops were organised and teachers from various schools in the Goldfields region of the Free State were invited to attend. Each workshop was intended to serve a different purpose.

(a) The first workshop

An invitation was sent to the accounting teacher of each school via the principal (see appendix 3.5). The purpose of the workshop was explained and a nominal fee was charged to cover expenses. A certificate of attendance was issued at the end of the proceedings.

The purpose of this workshop was to elicit information about the most problematic area in the teaching of accounting as well as

to supply guidelines about the setting and marking of exam and test papers.

Researcher opened the proceedings by welcoming all participants and explained the purpose of the workshop.

A general discussion about accounting in general ensued and teachers admitted that they needed assistance with the setting of test and exam papers. Some of the participants submitted much needed information and the researcher also added details obtained from years of accounting teaching.

Areas that needed more emphasis in the teaching were identified, such as the very first accounting lesson and the accounting equation. It was decided that two ensuing workshops would be held to discuss these issues.

At the end of the workshop, each teacher completed a form to evaluate the success of the workshop (see appendix 3.8). Tea was served and all teachers were issued with a certificate of attendance.

(b) The second workshop

Again, researcher sent an invitation (see appendix 3.6) to all accounting teachers via the principals of the local schools.

Eleven teachers attended this workshop and each person completed a questionnaire (see appendix 3.1) before proceedings began. All teachers were welcomed and the purpose of the workshop, which was to ascertain how the very first accounting lesson was presented, was explained.

Proceedings commenced with feedback from the previous workshop, which proved that knowledge gained had been utilized beneficially.

Each teacher was awarded the opportunity of providing his/her opinion about the content of the first accounting lesson. In most cases the importance and interesting aspects of accounting was neglected. Many different ideas were presented, such as the importance of money and making a profit.

Researcher emphasised the importance of learning through discovery and the fact that interest should be generated through teaching methods. Inductive and deductive reasoning (see 2.6) should be followed in order to stimulate critical thinking.

Examples on the framework of reference should be supplied, whereby learners should be given practical examples from immediate surroundings and then the lesson should be built around this principle.

The principle of structuring a lesson which commences with the known and procedes to the unknown should also be administered.

The most practical example, which is that of the school tuckshop should be used as a starting point and then the concepts pertaining to businesses should flow from this. At the end of the proceedings, the profit of such undertaking should also be calculated.

Different media, such as posters, newspaper clippings and audio-visual material that should accompany a lesson were also discussed. Ways of presenting such lessons were also provided.

At the end of the workshop tea was served and each participant issued with a certificate of attendance. A form of evaluation of the workshop was also completed (see appendix 3.8).

(c) The third workshop

Another invitation (see appendix 3.6) was posted to all accounting teachers via the principals of the local schools.

Ten teachers attended this workshop and each person completed two questionnaires (see appendices 3.1 and 3.4) before proceedings began. All teachers were welcomed and the purpose of the workshop was explained, which was the implementation of the accounting equation.

Proceedings commenced with feedback from the previous workshop, and each teacher was awarded the opportunity of providing his/her opinion about how the accounting equation should be taught.

Teachers also agreed that the textbooks, especially where the accounting equation was concerned, contained examples and terms which were not easily understood by learners. Teachers had to make use of their own examples to explain this concept and could not rely on the textbook for assistance.

At the end of the session, researcher demonstrated her personal strategy for teaching the accounting equation which is dealt with in depth in the recommendation to this study. This demonstration was welcomed by all and it was agreed that this method would be understood by learners. Teachers undertook to use this method in their lessons in future.

At the end of the workshop tea was served and each participant issued with a certificate of attendance. A form of evaluation of the workshop was also completed (see appendix 3.8).

The next step in the action research process was to develop ensuing steps of action where it is decided exactly which course of action is going to be implemented.

3.5.4 Ensuing steps in flow of action

Researcher decided to personally visit various schools in the Free State Goldfields area, each with a definite purpose in mind. These visits could direct researcher into taking a definite course of action.

3.5.4.1 Personal visits to schools

Researcher deemed it necessary to visit schools personally, which served two purposes, which were to:

* elicit opinions from teachers in their teaching capacities through free attitude interviews; and
* request teachers to each implement the proposed teaching strategy about the accounting equation and make recommendations after implementation.

Three schools in the area were visited, mainly because they were within the immediate surroundings.

3.5.4.2 Free attitude interviews

The following information was gained from these visits:

* teachers mainly complained that the lack of textbooks complicating their task;
* the lack of expert guidance troubled teachers, because the accounting learning facilitator had not been around to inform them of recent developments in the subject field;
* lack of discipline in schools also contributed to their predicament, which made effective teaching almost impossible; and
* the unprofessional way in which matric and common exam papers were compiled and assembled created extreme

confusion among learners and contributes to a great deal of stress during the actual writing of examinations.

This completed the construction of the general plan of compiling the didactical strategy for innovative accounting teaching.

3.6 GUIDELINES FOR COMPILATION OF TEACHING STRATEGY CONTAINING THE ACCOUNTING EQUATION (see appendix 5.1)

Drawing up of the actual teaching strategy comprises the next step in the action research of this study.

Guidelines and technological considerations firstly should be taken into account.

3.6.1 Purpose of strategy

The main purpose of proposed teaching strategy is to assist teachers to implement the accounting equation in comprehensible terms.

3.6.2 Aims and objectives of proposed teaching strategy

Intended strategy should particularly inform teachers about:

- the effect of cash transactions on assets and owner's equity;
- the cumulative summary after each cash transaction; and

- indicate the relationship between the effect of cash transactions on assets and owner's equity and entries in ledger accounts.

3.6.3 Technical format of teaching strategy

The teaching strategy of the accounting equation is presented in A4-format, this larger format makes provision for clearer illustrations. Copies are bound into books and issued to teachers.

3.6.4 Medium of instruction

The teaching strategy is written in English, being an international language. Researcher also intends to have this teaching strategy translated into Xhosa, Southern Sotho and Afrikaans, in order to reach a larger section of the population and because it would be easier to acquire required skills through a vernacular.

3.6.5 Educational range of teaching strategy

Envisaged teaching strategy is intended for secondary school teachers, but will also be accessible to a large range of people in the following areas of education and training:

- learners in secondary schools who experience problems with the interpretation of accounting could use it as a self-

study guide;

- individuals following an Adult Training course and intend to offer accounting; and
- individuals offering accounting at any tertiary institution who have not had accounting at school level, could use it to broaden their knowledge of accounting.

3.6.6 Method of imparting content

The teacher will basically make use of a text book when explaining the accounting equation. This strategy could then be used to further and clarify explanations.

3.7 COMPILATION OF TEACHING STRATEGY ON ACCOUNTING EQUATION

Information obtained through a study of literature on the accounting equation served as basis to compile the teaching strategy (see chapter 2).

The teaching strategy comprised a series of explanations of the effect of cash transactions on assets and owner's equity, the cumulative summary after each transaction and the relationship between effect of cash transactions on assets and owner's equity and entries in ledger accounts (see appendix 5.1).

The next step was to implement the strategy in order to measure the impact it has on learners understanding of accounting. Teachers were appointed as field workers for this purpose.

3.8 IMPLEMENTATION OF THE ACCOUNTING TEACHING STRATEGY

Field work by teachers constituted the next step of the participatory action research of this study.

3.8.1 Field work

One teacher from each of three schools were appointed as field worker to implement the teaching strategy of the accounting equation and to observe, reflect and make recommendations for adjustments after implementation (see 4.4).

Each teacher/field worker, was supplied with a copy of the teaching strategy and researcher explained the purpose of the study and how the strategy was to be implemented. Teachers were requested to make use of the strategy to explain the accounting equation to grade 8 and grade 10 learners.

Before implementing the strategy, a test to determine learners' pre-knowledge, had to be compiled on that specific area of accounting knowledge. The raw scores of this testing were given to researcher.

The next step was to implement the teaching strategy as directed and teach the specific area exactly as was indicated in the strategy. After implementation, another test, similar to the first one, but not identical, was written by the learners. Marks were submitted to researcher. This was compared with the first

set of marks to see if there was any improvement of knowledge.

Teachers had to indicate and write down all recommendations directly on the manual provided to each teacher. The recommendations were discussed and changes were effected to the teaching strategy (see 3.9).

The third cycle of the action research was to bring about suggested changes by teachers to the teaching strategy.

3.9 SUGGESTED CHANGES TO THE TEACHING STRATEGY

The third cycle once more commenced with another workshop for teachers to acquire individual opinions for changes to be made to the teaching strategy about the accounting equation.

A focus group interview was conducted with those teachers who attended the workshop. This was done to record suggestions and recommendations for change. This interview also served to highlight other problem areas in accounting teaching.

3.9.1 First Focus group Interview

This focus group interview was informally conducted with the teachers from various schools in the Goldfields region who attended the workshop. The purpose was to determine other problematic areas than the accounting equation in the teaching of accounting and specifically identify problematic areas

encountered with the grade eight to ten syllabus.

The interview revealed the following re problematic areas:

* GRADE 8
    * presentation of the first accounting lesson;
    * explanation of the accounting equation;
    * different source documents and their use;
    * drawing up of the bank account;
    * balancing of the bank account; and
    * posting to the ledger from the cash journals.

* GRADE 9
    * recording of credit transactions;
    * posting to the debtor's and creditor's ledger;
    * recording payment and receipt of money for a credit transaction; and
    * the closing of accounts for preparation of financial statements.

* GRADE 10
    * bank reconciliation statements;
    * year-end adjustments;
    * correction of errors;
    * posting to debtors and creditors control accounts from the relevant journals; and
    * journalisation of Year-end adjustments.

This information provided researcher with a foundation on which to compile a comprehensive accounting teaching strategy which covers all the problematic areas identified by teachers.

The next step in this cycle was to hand the completed innovative accounting teaching strategy to the field workers for implementation and general comments.

3.9.2 Second Focus Group Interview

This focus group interview was informally conducted with the teachers who had been appointed as field workers. The purpose was to determine whether implementation of the teaching strategy was successful in any way and for general comments.

The interview revealed the following:

- teachers were very enthusiastic about this new approach to the teaching of accounting;
- teachers found it much easier to explain problematic areas contained in accounting;
- learners grasped the logic of the accounting equation without repeated explanations;
- learner achievement in the final examinations at the end of the year improved after implementation of the

teaching strategy; and

- teachers recommended the use of this teaching strategy in schools as widely as possible.

This step concluded the participatory action research and collected data could be analysed, but before data analysis could be presented, certain procedures had to be followed.

3.10 PROCEDURES PRIOR TO DATA ANALYSIS

After administering research instruments, the collected data is scored and processed to facilitate analysis (Fraenkel and Wallen 1993:131, Gay 1987:335).

3.10.1 Coding of data

To avoid inaccurate or misleading conclusions being drawn from accumulated data, it was scored accurately and consistently. Scoring plans were carefully prepared before the actual administration of the instrument. A scoring manual listed the steps to be followed (Fraenkel and Wallen 1993:131).

A code book (see Appendix 3.9) was prepared to serve as the primary guide for preparing questionnaire responses for analysis and to also serve as the guide for locating data during analysis. All responses were assigned letters of the alphabet which were machine readable by the researcher. After scoring the data, the

results were transferred to summary data sheets where the data was tabulated in appropriate columns relating to general information, external and internal context as well as ultimate outcomes (see 4.2.1).

3.11 DATA PROCESSING

When data had been obtained, the following relationships had to be established:

* What characteristics are *typical* of each of the groups;
* *Diversity* within the groups;
* *Relative standings* of individuals;
* *Differences between* groups; and
* *Relationships between variables* within the groups (Charles 1988:154).

Data was employed to impart the following:

* Describe what has been discovered;
* Make conclusions about the accuracy and significance of the findings obtained (Charles 1988:154).

Collected data is not immediately available to be analysed and it firstly had to be processed. Processing comprises three coinciding flows of activity: data reduction, data display and conclusion deriving (Miles and Huberman 1994:9-11).

Subsequently the elements integral to data analysis should be resolved.

3.12 CONCLUSION

Chapter three consists of the collection of data. Participatory action research as complemented by the qualitative and quantitative methods of research were discussed in detail, mainly to explain the process of data collection.

Instruments for data collection were questionnaires, interviews and formal workshops. All particulars inherent to these methods were explained.

The characteristics of a research instrument were discussed and so were the methods to ascertain the validity and reliability of the test, discussed.

Procedures prior to data analysis were explained, as antecedent to chapter four, which contains analysis of data.

CHAPTER FOUR

DATA ANALYSIS

4.1 INTRODUCTION

In chapter three data was accumulated through participatory action research and focus group interviews.

Analysis of data is not a separate stage of research, but clarifies a complete inquiry. Analysis comprises a way in which the meaning of data can be established through subsequent interpretation thereof. Interpretation consists of the noting of patterns, making contrasts or comparisons, thus *building a logical chain of evidence and making conceptual or theoretical coherence* (Kvale 1996:205).

4.2 COMPONENTS OF DATA ANALYSIS

If collected data is not scored precisely and unfailingly, conclusions drawn from the data may be inaccurate and misleading. When use is made of questionnaires, each individual questionnaire should be scored following exactly the same procedures and criteria. Researchers should formulate their scoring plans in writing before attempting to analyse data (Fraenkel and Wallen 1990:119).

No rigid guidelines exist and researcher has to develop a scoring procedure, identify problems and rectify such problems before the procedure of scoring can be completed (Gay 1987:336).

The scoring procedure followed in present research is as follows:

- the initial section of the questionnaires requesting general information, such as the grade taught or number of learners in each grade, were numbered 8, 9, 10, 11 and 12;

- corresponding qualifications were grouped together;

- teaching experience was grouped from 0 - 2 years, in groups of three years, up to 12 - 15 years;

- positive answers were ticked and negative answers were indicated by a cross;

- open-ended questions were numbered in the following way:

    * typical and additional attributes as well as discoveries, were numbered from one to the last attribute and corresponding attributes were allotted the number with which it correlated;

- Questions requesting a choice of three attributes, were allotted a number one for the first choice, a number 2 for the second choice and a number three for the third choice.

After information had been assembled, difficulties, such as problems relating to the multiplicity of data sources and forms, occur. To be able to condense and analyse mentioned material, would take a few years unless certain measures are taken to reduce data (Miles and Huberman 1994:55).

4.2.1 Data reduction and coding of data

Data reduction comprises coding of data and tabulating the results.

Recording of the scores in a methodical manner assists examination of data as well as data analysis. If intricate or multiple analysis are to be performed, or if a large number of subjects are involved, as in this research project, calculations are usually done by computers (Gay 1987:337).

Coding is analysing. Codes are tags or labels, usually attached to words or phrases. This section of analysis comprises differentiation and combination of the data gained and the opinions formed about said information (Miles and Huberman 1994:57).

Classifying data into parts through a classification system is called coding. A classification system should be developed by making use of one of three designs:

* separating the data into units of meaning called topics;

* commencing with sections and breaking each section into subsections; and

* connecting approaches and discovering new categories (Schumacher and McMillan 1993:486).

In this research topics are grouped and displayed in tables according to correlativity. Each questionnaire consists of three sections, an initial section requesting general information, the middle, structured section requesting a YES or a NO answer and ends with an open-ended section requesting the opinion of the respondent.

Primarily, each subject should be given an ID number. For example, 50 subjects should be numbered from 01 to 50. The next step will be to code non-numerical data as well as categorical data where a choice was indicated in the response. Different statistics are relevant for different scales of measurement (Gay 1987:338-340).

Coding for this specific research (see appendix 3.9) is done in the following way:

* **External context**

Coding in this instance, merely consisted of assigning an ID

number to each questionnaire in the upper right hand corner. Documents were numbered from 01 to the last item.

The ID numbers assigned to each questionnaire, are as follows:

* the first questionnaire was designated as STAFF01 to STAFF35;
* the second questionnaire was designated STUDENT01 to STUDENT64;
* the third questionnaire was numbered LEARN01 to LEARN240;
* the fourth questionnaire was numbered ACCEQ01 to ACCEQ10; and
* the evaluation of the workshop was designated WORKEV01 to WORKEV10.

* **Internal context**

Apart from above mentioned codes, internal contexts are coded in the following manner:

CHAR - Characteristics
TYP - What is typical for each group
ADD - Considered as an additional characteristic
REL - Relationships between variables within the groups

The five questionnaires were coded in the following manner:

CHAR - each characteristic was numbered according to the section to which it belongs;

TYP - characteristics typical to the section was added to the numbers allotted to the section; and

ADD - additional characteristics were indicated to be numbers over and above the indicated numbers in each section.

* **Ultimate outcomes**

OUT - Ultimate outcomes
DIS - What has been discovered about specific topics.

After concluding the coding procedure, the data had to be arranged in such a way that it could be analysed.

4.2.2 Tabulating, or processing of data

Data was transposed directly from each questionnaire form into tabular form, each question constituting a separate table, the rows representing either a yes or a no response or whatever response was required.

After completing all questionnaires of a section, all responses were simply added. This manner facilitated calculations.

On completion of calculations, the data was presented in graph or tabular form. This, essentially is classified as descriptive statistics where a set of numbers is transformed into indices that describe or characterize the data. Descriptive data can

thus be used to summarize, organize and reduce large numbers of observations (McMillan and Schumacher 1993:192).

4.3 DATA DISPLAY OF QUESTIONNAIRES

Qualitative and quantitative data is not displayed in the same manner; qualitative data is mostly displayed as a narrative presentation, because the participants' language is the data. Quantitative research uses statistics as a method of organizing data, facilitating the organization and interpretation of numbers obtained from measuring a characteristic or a variable. The meaning of statistics originates from the research design and it is considered an international language to manipulate numbers. (McMillan and Schumacher 1993:191 and 506).

In this qualitative research design, each of the five questionnaires commenced with a section requesting general information. The middle part of the questionnaires contains a number of questions requesting a YES or a NO answer, which are displayed in tabular form. The open-ended questions which request opinions are displayed as statements in separate paragraphs.

4.3.1 Data display of Survey of Staff Information

(see appendix 3.1)

This questionnaire was completed by thirty-five teachers, which comprised the total attendance of all three workshops. The

following schools were represented, which are Thotagauta Secondary, Lenyora Intermediate, Unitas Secondary, Hlolohelo, Embonisweni Primary (accounting introduced from grade 7), Goudveld Hoërskool, Bahole Secondary, Riebeeckstad Hoërskool, Reathehile Secondary, Eldoret Secondary and Nanabolela Secondary School

The first question assumed that each teacher is responsible for teaching a combination of grades and is indicated in table 4.1.

Table 4.1: Grade taught by teachers

GRADE	NUMBER
8	25
9	16
10	14
11	8
12	6

Table 4.1 serves as an indication that the workshops were mostly attended by teachers teaching grades eight to ten. These figures serve as evidence that teachers responsible for grades eleven and twelve probably are seasoned teachers who have overcome difficult issues presented by accounting through experience.

Table 4.2, indicating teacher qualifications in accounting, features on the next page.

Table 4.2: Teacher Qualifications in accounting (if any)

QUALIFICATIONS	NUMBER
S.T.D.- ACC I	3
S.T.D. - ACC II	2
S.T.D. - ACC III	8
S.T.D (NO ACCOUNTING)	10
B.COMM.	2
B.COMM.Ed.	2
MATRIC ACCOUNTING	2
H.D.E	1
NO QUALIFICATIONS	5
TOTAL	35

Table 4.2 indicates that 16 out of 35 teachers are expected to teach accounting without having had formal education in the subject. This presents a percentage of 45,7% of teachers without accounting qualifications presently teaching the subject in Welkom township schools.

Response to the next question is illustrated in table 4.3.

Table 4.3: Years teaching experience in accounting

YEARS	NUMBER
0 - 2 years	10
3 - 5 years	7
6 - 8 years	11
9 - 11 years	4
12 - 15 years	3
TOTAL	35

Table 4.3 illustrates that ten out of thirty-five teachers are virtually inexperienced in the field of accounting teaching. This means that 28,6% inexperienced teachers are teaching accounting are teaching accounting in the townships of the greater Goldfields area.

The next question requested the number of learners in each grade taking the subject accounting and is illustrated in table 4.4.

Table 4.4: Number of learners taking accounting in each grade

GRADE	NUMBER OF LEARNERS
8	1 642
9	1 538
10	962
11	545
12	464
TOTAL	5 151

Table 4.4 indicates that thirty-five teachers are responsible for teaching accounting to five thousand, one hundred and fifty-one learners. When compared to table 4.2, these figures present a shocking picture that 45,7% unqualified teachers are teaching so many receptive learners and are influencing their lives. These figures should also be compared with the number of learners who have high hopes of accounting influencing their lives in such a way that they would be able to become accountants when finishing

school (see table 4.24).

The next question: Would you maintain that learner numbers have increased or decreased during the last five years? revealed the following information:

* twenty-one teachers indicated that learner numbers have increased; and
* fourteen indicated that numbers have decreased over the last five years.

The motivation for the above increase or decrease, is indicated in table 4.5.

Table 4.5: Motivation for an increase or a decrease in learner numbers over the last five years

MOTIVATION	NUMBER
No Motivation	7
Learners realise they need accounting for a career	6
Transport problems, cannot attend classes	1
Because of subject combination	13
Lack of facilities	3
Practical subject	1
Learners want to become accountants	2
Learner numbers increased in schools	1
Learners find it a difficult subject	1

Table 4.5 shows that the greater number of teachers indicated that the number of learners taking accounting have increased due to subject combinations, which can account for the great number of learners taking accounting in grades eight and nine (see table 4.4). This could mean that in these grades, accounting is a compulsory subject. Only eight teachers indicated that learners took accounting because they chose to do so.

The following four questions endeavoured to establish whether teachers received proper support and results are illustrated in table 4.6.

Table 4.6: Indication of support teachers receive

QUESTION	YES	NO
Does the H.O.D. render assistance to teachers?	28	7
Do you compile exam papers on your own?	33	2
Are tests scrutinised by another person as well?	32	3
Do you have links with other schools re exam papers?	4	31
Do you have in-service training?	10	25

Table 4.6 serves as indication that the Head of Department does render assistance to teachers, but that teachers mostly are left on their own to compile exam papers, although the papers are examined before handing it out to learners to write. It is also noted that schools do not liaise with respect to the exchanging of test and exam papers. In-service training, which is extremely

important to impart new modifications concerning accounting practice, is virtually non-existent.

Problematic areas in accounting are indicated in table 4.7.

Table 4.7: Problematic areas in accounting

PROBLEM AREA INDICATED	NUMBER
Learners are just not interested in accounting	2
Posting to the ledger	12
The accounting equation	19
The cumulative summary (accounting equation)	2

Table 4.7 displays that the accounting equation is considered as the most problematic area in accounting, followed by posting to the ledger.

The next question requested the teacher to identify an area in which teachers would prefer to gain expert opinion, or an area which needs clarification. The following answers arose, which are tabulated on the next page.

Table 4.8: Areas identified in which teachers prefer clarification

NUMBER OF TEACHERS	AREA NEEDING CLARIFICATION
2	How to get learners to show interest in accounting
29	the best way to teach the accounting equation
4	how to teach accounting in the outcome-based style
35	

Table 4.8 indicates that the majority of teachers are very uncertain about the teaching approach needed for the accounting equation and that this area is the most problematic in accounting.

The response to the last question which required the teacher to indicate if accounting should be phased out in schools and should only be offered at university level, is illustrated in table 4.9.

Table 4.9: Proposition that accounting be phased out in schools and only offered at university level

RESPONSE	NUMBER
Not phased out, but introduced at an early stage in schools	26
One who starts accounting at university level is a genius	1
Accounting gives a better chance of self-employment	4
Very useful to learners	3
Learners need it for background	5

Table 4.9 shows that twenty-six teachers want accounting introduced at an early school level. This serves as an indication that teachers are aware of the fact that students struggle with the subject at university level and need the background provided at school.

This concludes the section on staff opinion,

4.3.2 Data display on Survey of Student Opinion

(see appendix 3.2)

This questionnaire was completed by sixty-four university students who take the subject accounting. The first part of the questionnaire requested YES or NO answers and the last part consisted of open-ended questions which required the opinion of

the respondent.

The response to above questions are displayed in the following tables:

Table 4.10: Students taking/not taking Accounting at school

Question 1	YES	NO	TOTAL
	36	28	64
	56,25 %	43,75 %	100 %

Table 4.10 indicates that approximately half of the class of 64 students taking accounting at University level, did not take accounting at school. This proves that there is no accounting background knowledge which to rely upon for 43,75% of the students.

Table 4.11: Rating performance in Accounting as Poor/Average/Good

Q 2	POOR	AVERAGE	GOOD	TOTAL
	13	28	23	64
	20,31 %	43,75 %	35,94 %	100 %

Table 4.11, indicates a good spread of the performance in accounting in the specific class, with more good than poor performances.

Table 4.12 depicts how performance and experience in accounting correlates.

Table 4.12: Correlation between present performance and having taken accounting at school

RESPONSE	PERFORMANCE	NUMBER	PERCENTAGE
No	Poor	10	15,63 %
No	Average	6	9,38 %
No	Good	2	3,13 %
Yes	Poor	3	4,69 %
Yes	Average	17	26,56 %
Yes	Good	26	40,63 %
Total		64	100,00 %

Table 4.12 indicates that the greater number of students who did not take accounting at school level, performed poorly. Only a small number obtained good marks (3,13%). When comparing the figures of students who have not taken accounting at school with those having taken the subject at school, it should be noticed that a small percentage (4,69%) performed badly, while the majority of students (40%) performed well at accounting because they had taken the subject at school. This serves as an indication that, in order to perform well in accounting at university level, a foundation should be provided at school level.

Table 4.13, on the next page, strives to discover if a relationship between accounting and mathematics exists.

Table 4.13: Accounting as a subject involves/does not involve mathematics

Question 3	YES	NO	TOTAL
	48	16	64
	75 %	25 %	100 %

Data in Table 4.13 indicates that three-quarters of the class consider accounting to consist of mathematical concepts, which supports the views of the professor in accounting in the interview conducted (see 2.7.2).

Table 4.14: Accounting taken/not taken by the more practically minded person

Question 4	YES	NO	TOTAL
	50	14	64
	78,13 %	21,87 %	100 %

Data in Table 4.14 displays that approximately 80 % of the class considers Accounting a subject taken by practical people. This answer serves as indication that these students consider themselves as individuals who possess practical abilities.

Answers to the open-ended questions are illustrated in tables 4.15 to 4.18 on the next pages.

Table 4.15: Most enjoyable aspect of Accounting

ENJOYABLE ASPECT	NUMBER	PERCENTAGE
Financial statements	21	32,80 %
Every aspect	20	31,25 %
Close Corporation	8	12,50 %
When it is explained	7	10,94 %
Partnerships	6	9,38 %
Accounting equation	2	3,13 %
Total	64	100 %

Table 4.15 shows that about one-third of the class enjoy all aspects of accounting education and only 3,13 % enjoy the accounting equation which forms the foundation of accounting. Something to be noted is that 10,94 % of students only enjoy accounting when it is explained which serves as indication that clarification of accounting is essential.

Table 4.16: Weak points, according to personal opinion, contained in the subject Accounting

WEAK ASPECTS	NUMBER	PERCENTAGE
No weak points	20	31,25 %
It needs much practice	15	23,44 %
I don't understand	10	15,63 %
Classwork not like exams	9	14,06 %
Don't understand terms	6	9,38 %
Not enough time in exams	4	6,25 %
Total	64	100 %

Table 4.16 indicates that approximately one-third of the class have no problems with accounting, whereas two-thirds of the class

experience some or other problem with accounting.

The last three points indicated in table 4.16, were also encountered in prior research (see 2.7) when researcher questioned learners whose performance was not up to standard. Learners explicitly stated that:

* class work did not always resemble exam papers closely, indicating a foreign element in exams;
* terminology was not always understood which made it difficult to answer exam questions; and
* time to finish exams was insufficient.

Table 4.17: Reason for choosing to take the subject Accounting at University

REASON	NUMBER	PERCENTAGE
Aspire to be an C A	17	26,56 %
Compulsory B Comm subject	13	20,31 %
Important to future career	13	20,31 %
Loved it at school	9	14,06 %
Subject sought by business	6	9,38 %
Enjoy working with figures	3	4,69 %
Intend to teach subject	3	4,69 %
Total	64	100 %

Table 4.17 shows that approximately 20 % of the class was forced to take accounting and do not really intend to do something constructive with gained knowledge. Another point worth noting is that only 14,06 % loved the subject at school and a further

4,69 % enjoy working with figures. These details indicate that only approximately 20 % of students found accounting interesting or stimulating. Only 4,69 % of students intend to teach the subject, indicating that virtually nobody is interested in the subsistence of accounting in future.

Table 4.18 required the reason for not taking accounting as a teaching career.

Table 4.18: Why Accounting was not chosen as a teaching career

ATTRIBUTES	NUMBER	PERCENTAGE
Don't know the subject well	16	26,23 %
Subject difficult to explain	14	22,85 %
Want to be an accountant	12	19,67 %
Don't like teaching	9	14,75 %
Unsure future of teachers	4	6,56 %
Rather run a business	3	4,92 %
Teachers badly compensated	3	4,92 %
Total	61	100 %

Table 4.18 indicates that approximately a quarter of the students did not choose accounting as a teaching career because they do not know the subject well enough to teach it and a further 22,85% find the subject too difficult to explain. Contrary to popular belief, only about 5 % of students believed that remuneration of teachers is too low to consider accounting as a teaching career.

Table 4.19: Relationship between students taking Accounting at school level and choosing Accounting as a teaching career

RESPONSE	PERFORMANCE	NUMBER	PERCENTAGE
Yes	Good	3	100 %

Table 4.19 shows that all three students choosing accounting as a career, took accounting as school subject which implies that the background provided at school level provided a foundation upon which accounting skills could be cultivated.

This question ends the survey of student opinion. The third questionnaire requested the opinion of learners and is displayed as follows.

4.3.3 Data display of survey of Learner Opinion

(see appendix 3.3)

One-hundred and sixty-one learners completed the questionnaire, which was divided between grade eight and grade ten learners. The purpose was to elicit more extensive responses, involving more than one school grade. This questionnaire comprised questions requesting general information, then a section which requests a YES or a NO answer and lastly, an open-ended section requesting the opinion of the learner.

Response from grade eight learners follow on the next page.

4.3.3.1 Response from grade eights

Sixty-one grade eight learners completed this questionnaire. The first question requested respondents to indicate their school grade, which is indicated as grade eight.

The next question requested the grade in which accounting was taken and it was indicated that in grade eight, accounting was taken at the ordinary grade, no distinction was made between higher grade and standard grade.

Responses to the next question requesting learners to indicate the aspect of accounting that proved enjoyable, is illustrated in table 4.20.

Table 4.20: Most enjoyable aspect of Accounting

ASPECT OF ACCOUNTING	NUMBER	%
Trial Balance	48	80,00
Cash Payments Journal	5	6,70
General Ledger	5	6,70
All aspects	3	6,60

Table 4.20 shows that the aspect most enjoyed by the grade eight learners is the Trial Balance which is an absolute replication of accounts and represents no challenge to an accounting learner. The Cash Payments Journal also portrays a very elementary part of accounting requiring no reflection on the part of the learner.

The next section represented structured questions requesting a YES or a NO answer. The answers to these questions are portrayed in table 4.21 below.

Table 4.21: Responses to questions requesting YES or No answers

QUESTIONS	YES	NO
Were you forced to take Accounting due to subject choice?	26,7%	73,3%
Prefer to take another subject instead of Accounting?	43,8%	56,2%
Does Accounting involve Maths?	87,5%	12,5%
Is Accounting taken by practically minded people?	92,9%	7,1%

Table 4.21 indicates that 26,7% of respondents had no other choice than to take accounting. Very near to half of respondents would prefer to take another subject instead of accounting, which shows that they do not enjoy or understand the subject. It is agreed that accounting involves maths and that people with a certain mind-set take accounting.

Performance in accounting as indicated by respondents, is illustrated in table 4.22 on the next page. This table does not portray actual performance.

Table 4.22: Performance in Accounting

QUESTION	POOR	AVERAGE	GOOD
Performance in Accounting	6,3%	13,7%	80%

Table 4.22 indicates that the overall performance in accounting is seen by respondents as very much above average, although 6,3% of respondents did admit that they performed poorly.

The next section of the questionnaire consisted of open-ended questions, inviting the opinion of the respondent.

The first question requested respondents to indicate in what way they receive assistance with accounting homework after school.

Answers are indicated in table 4.23.

Table 4.23: Source from which assistance with Accounting homework is obtained

SOURCE OF ASSISTANCE	NUMBER	PERCENTAGE
Parents	12	20,00%
Friends	16	26,6%
Brother or Sister	20	33,3%
Extra classes	4	6,6%
No-one	9	13,3%

Table 4.23 indicates that the greatest source of homework assistance comes from brothers or sisters, indicating an immediate source of assistance. It is also indicated that 13,3% of respondents had no-one to assist them and only 6,6% obtained help by attending extra classes.

The last question required positive attributes contained in the subject accounting and is displayed in table 4.24.

Table 4.24: Positive attributes re Accounting

ATTRIBUTES	NUMBER	PERCENTAGE
Helps to work in a bank	8	13,3%
Helps to become an accountant	46	75,00%
Helps to be able to work in a shop	4	6,7%
Teaches how to work with money	3	5,00%

According to table 4.24, it seems as if grade eight learners all aspire to become accountants!

An interesting anecdote omitted from table 4.24 is the following:

> *"I enjoy all aspects of accounting, but I do not think it is of any use to me, because I want to become an actress!"*

4.3.3.2 Response from grade tens

One hundred grade ten learners completed an identical

questionnaire to that of the grade eight learners. The reason for posing exactly identical questions to both groups, was to determine if the higher level of cognitive development changed perceptions about accounting as a subject.

The first question requested respondents to indicate their school grade, which is indicated as grade ten.

The next question requested the grade in which accounting was taken and it was indicated that in grade ten, accounting was taken at the higher grade, which, after informal communication with teachers involved, is considered as an accepted policy in several schools.

The next question asked learners to indicate the aspect of accounting that proved enjoyable and is addressed in table 4.25

Table 4.25: Most enjoyable aspect of Accounting

ASPECT OF ACCOUNTING	NUMBER	%
Final statements	13	13,3%
The general journal	8	8,3%
Bank reconciliation	20	20,0%
Debtors and creditors	10	10,0%
Cash journals	24	23,4%
Everything	25	25,0%
TOTAL	100	100,0%

Table 4.25 shows that about a quarter (25%) of grade ten respondents do enjoy accounting and 23,4% enjoy cash journals, which foundation was already laid during the previous two years.

The next section represented structured questions requesting a YES or a NO answer. The answers to these questions are portrayed in table 4.26 below.

Table 4.26: Responses to questions requesting YES or No answers

QUESTIONS	YES	NO
Were you forced to take Accounting due to subject choice?	33,3%	66,7%
Prefer to take another subject instead of Accounting?	41,7%	58,3%
Does Accounting involve Maths?	85,0%	15,0%
Is Accounting taken by practically minded people?	78,3%	22,7%

Table 4.26 indicates as was the case with the grade eights (see table 4.21), that one-third (33%) of respondents had no choice but to take accounting at school. This represents an even greater percentage than in grade eight, which was 26% of respondents. Similar to grade eights, (see table 4.21), over 40% of respondents would prefer to take another subject instead of accounting. This serves as an indication that learners are discontented about the content of accounting.

Performance in Accounting, as seen by respondents, is illustrated in table 4.27.

Table 4.27: Performance in Accounting

QUESTION	POOR	AVERAGE	GOOD
Performance in Accounting	-	20%	80%

Table 4.27 indicates that respondents rate overall performance in accounting as `good', which is totally unrealistic. When reaching university status, respondents are more reliable and approximately 20% admitted that they performed poorly.

The next section of the questionnaire consisted of open-ended questions, inviting the opinion of the respondent.

The first question requested respondents to indicate in what way they were able to receive assistance with accounting homework after school. Answers are indicated in table 4.28.

Table 4.28: Source from which assistance with Accounting homework is obtained

SOURCE OF ASSISTANCE	NUMBER	PERCENTAGE
No-one	46	45,9%
Friends, parents	49	49,2%
Teacher	5	4,9%
TOTAL	100	100,0%

Table 4.28 indicates that the greatest source of homework assistance comes from friends and parents. A large number of respondents either do not require assistance or do not want assistance. When compared to grade eights (see table 4.23), the parallel can be drawn that assistance is necessary when respondents have to do homework and about half of both grade eights and grade tens cannot master accounting on their own.

The next question inquired about certain components of the subject accounting which presents problematic areas. The response is indicated in table 4.29.

Table 4.29: Problematic areas contained in Accounting

ATTRIBUTES	PERCENTAGE
No problems	67,2%
Bank reconciliation	4,9%
General journal	6,6%
General ledger	8,2%
The accounting equation	13,0%
TOTAL	100,0%

Table 4.29 shows that 67,2% of respondents have been taking the subject for three consecutive years and indicate that they experience no problems in accounting. Respondents do indicate several aspects of accounting as problematic areas, though.

The last question required positive aspects contained in the subject accounting and is displayed in table 4.30.

Table 4.30: Positive aspects re Accounting

ATTRIBUTES	PERCENTAGE
Helps to work in a bank	15,9%
Helps to become an accountant	73,9%
Helps to run a business	10,2%

Table 4.30 indicates that grade ten respondents have the same expectations as grade eights as to where the subject accounting may lead them in future. 73,9% of respondents also aspire to become accountants, but when compared to university students, only 23,7% of student respondents (see table 4.18), aspire to become accountants. This finding indicates an adult, realistic perception.

The next questionnaire was presented at the third workshop (see 3.5.3, c) which requested the opinion of teachers involved in teaching accounting. Questions concentrated on the challenge contained in the teaching of the accounting equation.

4.3.4 Staff opinion re the accounting equation

(see appendix 3.4)

A questionnaire to establish what staff opinion about the accounting equation is, was completed at the third workshop. Section A contains general information. Section B comprised questions requesting a YES or a NO answer and section C, questions requested the opinion of the respondent about the accounting equation.

Question 1 revealed that six of the ten teachers were responsible for teaching grade eight learners and four teachers taught grade tens.

Question 2 requested teachers to indicate whether they felt comfortable when teaching the accounting equation, if not, to supply a reason for not feeling so.

Three teachers commented that they are comfortable with teaching the accounting equation.

Seven teachers indicated that they are not comfortable when teaching the accounting equation, because of the following reasons:

* learners cannot grasp the logic of the accounting equation; and
* learners find the procedures contained in the accounting equation difficult to effect.

The next question: Do learners fully grasp your explanation initially, or do you have to explain it a few times before the concept is fully understood? Responses elicited the following:

* no-one indicated that learners initially understood the accounting equation; and

* all ten teachers indicated that the concepts had to be explained in detail before learners understood what was expected of them.

The next questions all required a YES or a NO response and the response to the question is indicated in table 4.31.

Table 4.31: Response from the YES or NO questions about the accounting equation

QUESTIONS	YES	NO
Do you start each section with the accounting equation?	5	5
Do you skip the equation?	0	10
Do you avoid the equation in exams and tests?	0	10
Do grade eights find this section difficult?	8	2
Do you have a special way of explaining this concept?	4	6

Table 4.31 indicates that teachers are aware of the fact that the accounting equation should form an extensive part of accounting, but also indicates that learners struggle to understand this concept (see also table 4.7 where it is indicated that the accounting equation forms the most problematic area in accounting teaching).

The next question inquired whether this concept should be omitted from school accounting and the following responses were offered:

* no, it should not be omitted because the effect on all accounts are contained in this concept;
* yes, it should be omitted, because it confuses grade eights;
* no, it should not be omitted, because it is the starting-point of accounting; and
* no, accounting is based on the equation.

The next question inquired whether teaching of the accounting equation benefits accounting teaching in any way. The following responses were obtained:

* it benefits teaching, because it indicates the difference between assets, owner's equity and liabilities;
* it gives learners an indication of the ledger accounts involved in a transaction;
* it helps learners to analyse transactions; and
* it helps learners to transfer entries to subsidiary books.

This concludes the questionnaire on opinions about the accounting equation.

The next section contains general evaluation of the workshops.

4.4 FEEDBACK FROM WORKSHOPS

The procedure followed at each of the three workshops as well as feedback from discussions have already been discussed (see

3.5.3).

After each workshop a questionnaire was completed (see appendix 3.8) which requested a general evaluation of the workshop.

This questionnaire comprised three open-ended questions, each requesting the opinion of the respondent.

Table 4.32 illustrates the weak points of the workshops.

Table 4.32: Weak points of the workshops

COMMENTS	NUMBER
Not enough time to deal with all problems	8
No weak points	11
Questionnaires do not address problems	3
Held after exam papers were set	2
No chalkboard examples	3
Late-comers spoiled atmosphere	8

Table 4.32 serves as indication that teachers actually do experience problems with teaching accounting and desperately need help. This is illustrated by the responses that more time is needed and they wanted problems to be addressed, explained thoroughly and solved.

Table 4.33 represents the response to the question: What have you gained from this workshop?

Table 4.33: Gains derived from Workshop

COMMENTS	NUMBER
How to introduce the subject in simple terms	5
I now know how to start a lesson in accounting	7
The presenter made the subject interesting	5
The setting of exam papers	9
How to give practical examples in class	6
I gained confidence	3

Table 4.33 serves as indication of positive feedback from the workshop, which indicates that the most respondents feel that the setting of exam papers was the most positive attribute. This also serves as indicator that this area should receive much more attention in future efforts to instruct teachers about the rudiments of accounting.

The last question requested recommendations for further workshops.

Table 4.34: Recommendations for further workshops

COMMENT	NUMBER
Regular workshops recommended	6
Workshops should be held on Saturdays	5
Workshops held earlier in the year	4
Held more frequently	8
Workshops for all grades	3
Exchange exam papers at workshops	6
Next workshop on Outcome-based Education	3

Table 4.34 illustrates that teachers are in need of assistance and they want to go one step further by recommending that they want to spend Saturdays in workshops in order to have more time to learn. Recommendations also prove that teachers need extra input in the form of exam papers compiled by another person in order to obtain more experience in the setting of exam papers.

This section concludes data display of questionnaires. The next section concentrates on the outcomes of Field work (see 3.8.1).

4.5 FIELD WORK OUTCOMES

Selected teachers who acted as field workers, compiled a test for Grade eight and also Grade ten learners on the Accounting Equation before implementing the initial Innovative Teaching Strategy.

Sixty-one learners wrote the Grade eight test and one hundred learners wrote the Grade ten test. After implementation of the Teaching Strategy, another, similar test was compiled. The raw scores for Grade eight revealed the following:

Table 4.35: Outcomes of Field Work for Grade 8

TESTS	AVERAGE SCORES OUT OF 15	PERCENTAGE
First test	5,4	36,0%
Second test	11,3	75,5%

Data from table 4.35 indicates an improvement in knowledge of the Accounting Equation of more than 200% after implementation of the Teaching Strategy in Grade eight.

Table 4.36 illustrates the scores for Grade ten.

Table 4.36: Outcomes of Field work for Grade ten

TESTS	AVERAGE SCORES OUT OF 50	PERCENTAGE
First test	17,0	34,0%
Second test	30,6	61,2%

Table 4.36 indicates an improvement in learner knowledge about the Accounting Equation of 179%.

Data from both table 4.35 as well as table 4.36 bears witness to the fact that the Innovative Accounting Teaching Strategy indeed is essential to Accounting teachers.

4.5.1 Comments from Field Workers

All teachers who acted as Field Workers were overwhelmed by the splendid results achieved by learners after implementation of the Teaching Strategy. Teachers also agreed that the manner in which the Teaching Strategy was compiled, lent itself to effective teaching and learner comprehension.

4.6 CONCLUSION

Chapter four accounts for coding of the data through a scoring procedure. Analysis of data represented by five questionnaires as well as a general feedback of opinions concerning the three workshops held, is also contained in chapter four. The outcomes of data obtained by field work was also tabulated.

Data was displayed in the form of tables as well as description verified through open-ended questions which requested the opinions of respondents.

Chapter five constitutes a general conclusion, which addresses the research questions of the study and the manner in which it has been dealt with. The findings of the study as well as limitations of the study are also addressed in chapter five.

Suggestions for further research include a guidebook on Innovative Accounting Teaching compiled by researcher.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

Businesses are fundamentally engaged in monetary interchange processes. These actions present a continuous circular flow of money and this process has to be communicated by making use of words and numbers through the principles and procedures of accounting (see 1.1)

It is concluded that accounting was developed specifically to deal with the need of presenting accurate and comprehensive financial information. Accounting, therefore, involves standard methods of keeping methodical and systematic records of all financial occurrences affecting a business concern (see 1.2).

Prior research revealed that a developing country such as South Africa is in dire need of more accounting expertise. In spite of this need, the education system produces fewer accounting qualifieds every year (see 2.7).

The following principal questions arose when above mentioned arguments were considered:

* considering the economic needs and the high unemployment rate in South Africa, can learners be motivated to take accounting through a dynamic, innovative accounting teaching strategy?

The following (see 1.3) were posed as research questions:

* why do learners avoid offering the subject accounting in grade 12?
* is the subject accounting regarded as a problem subject in schools?
* do learners experience problems with assimilating the content of the subject?
* what obstacles hinder successful teaching of the subject?
* in what way can learners be motivated to study accounting?
* can an innovative teaching strategy be designed which would successfully address problematic areas in the teaching of accounting?

The aims of this research (see 1.4) were to concentrate upon the following:

* to identify problems that have to be overcome by teachers and learners in the study of accounting; and
* to develop a didactical strategy which could assist teachers to implement the subject to better avail.

5.2 SHORT OVERVIEW OF STUDY

* chapter two comprised the rationale for developing an innovative accounting didactical strategy, which includes concepts integral to accounting (see 2.3). Didactics and accounting didactics, which contains the element of the actual teaching of accounting, also received attention (see 2.4). The four different approaches applied in the teaching of accounting were discussed in detail (see 2.6).

* in chapter three data on perceptions about accounting was collected mainly through focus group interviews at formal workshops. Qualitative data was collected through the use of three questionnaires (see 3.5.1.1). The content of the questionnaires was also fully explained.

* chapters two and three formed the basis on which the didactical strategy, which serves as recommendation to this study was compiled.

* chapter four contains analysis of data obtained was explained in chapter three. Data was comprehensively displayed by means of tables, figures and graphs making use of the quantitative research technique of displaying data.

5.3 FINDINGS OF THE STUDY

Literature study answered the following questions:

* the question of who needs to keep accounts, pointed to entrepreneurship and the entity concept;
* the investigation of why accounts should be kept, established the purpose and the nature of accounting;
* the answer to what the concept accounting entails, revealed that accounting comprises the concepts bookkeeping and actual accounting; and
* the investigation into the user groups of accounting information, displayed that internal users, such as management and external users, mainly requiring scorekeeping information, were interested in financial data of undertakings.

The literature study also highlighted the theory of accounting teaching, which comprises the description and explanation of accounting principles in educational context.

Four different approaches used to teach accounting in school context, were also studied in detail.

The following list of findings materialised from interviews during prior research (see 2.7.2 and 3.5.2.1):

* learners perceive accounting as a subject involving maths which is observed as a problematic and difficult learning area;
* teachers do not always have an in-depth understanding of accounting. This hampers the teaching of the subject;
* learners shy away from strange, new subjects and tend to offer subjects which they are familiar with;
* some teachers were forced to teach accounting without appropriate qualifications;
* assistance and support from the Free State Department of Education to teachers is virtually non-existent in the teaching system;
* schools experience a serious shortage of textbooks; and
* the accounting equation presents the most problematic area in accounting teaching.

The following findings were disclosed through qualitative research:

- the survey of staff opinion revealed the following:

    * some teachers were expected to teach accounting without proper qualifications;
    * subject combination compels learners to take accounting and very few learners take accounting because they choose to do so;
    * teachers receive virtually no support from various departmental structures and have to struggle on their

own;

* the most problematic study area of accounting is teaching the accounting equation;
* teachers desire assistance on how to stimulate learner interest in accounting; and
* teachers need assistance in implementing the new Outcome-based mode of education.

□ the survey of university student opinion revealed the following:

* more than 40% of students who performed well at university, probably did so because they took accounting at school;
* it was ascertained that accounting reasoning requires higher-order thinking skills;
* two-thirds of the students experience some or other problem with accounting;
* only 3% of the students possess adequate knowledge of aspects associated with the accounting equation;
* accounting terminology presents a problem to students;
* only about 20% of the students enjoyed studying accounting; and
* only 4,69% of the students intend to teach accounting.

- the survey of learner opinion revealed the following:

  - grade eights reported the following:

    - approximately half of the learners would prefer to take another subject instead of accounting, which indicates a disapproval of accounting as subject;
    - learners required assistance in doing accounting homework; and
    - learners mostly take accounting because they hope to become accountants in future.

  - after two years of taking accounting, grade tens reported the following:

    - learners begin to enjoy doing accounting due to better understanding of most of the problematic aspects;
    - a great number of learners, given the choice, would still prefer to take another subject instead of accounting;
    - about half of the learners claim that they need no assistance when doing homework; and
    - learners also believe that the subject accounting would open doors for them to become accountants in future.

- the opinion of teachers about the accounting equation was as follows:

  * learners cannot grasp the logic of the accounting equation;
  * learners do not grasp the accounting equation before it has been explained repeatedly; and
  * this problematic area forms the basis of accounting and that it should not be omitted from the accounting content taught at school.

- feedback from workshops revealed the following findings:

  * teachers needed accounting workshops;
  * teachers needed assistance with the setting of tests and examination papers; and
  * teachers are prepared to attend workshops during weekends.

- feedback from field workers revealed the following:

  • learner achievement improved about twofold after implementation of the Teaching Strategy;
  • teachers found the Teaching Strategy easy-to-implement and learners easily understood it; and
  • the Teaching Strategy really yields positive results.

5.4 FINDINGS DIRECTLY RELATED TO RESEARCH PROBLEMS

When the problems this present research intended to investigate (see 1.3), was considered, the following findings emerged:

- learners avoid offering the subject accounting, because they are not interested in taking accounting and some learners are compelled to take accounting due to subject choice;

- accounting is regarded as a problem subject in schools because it is expected of unqualified and inexperienced teachers to teach a subject which requires a certain mind-set which only certain individuals can manage;

- learners experience problems to assimilate the contents of the subject due to the fact that the vital element of accounting, the accounting equation cannot be taught in an understandable way and this fact presents problems of comprehension from the onset of the course;

* successful teaching of accounting is hindered by the following facts:

  - learners are not interested in the subject, which creates disciplinary problems, complicating the

work of the teacher to a great extent; and

- inexperienced and unqualified teachers forced to teach accounting are not able to show enthusiasm and professionalism in the subject;

- learners can be motivated to study accounting through the use of this recommended didactical strategy (see appendix 5.1), which could assist teachers to deliver the subject to learners in a more comprehensive and learner-friendly manner.

5.5 LIMITATIONS OF STUDY

An extensive information search from the Vista University Library service about accounting and teaching of accounting was conducted. The databases consulted were: ERUDITE, LCDB (Books), ISAP (Articles), ERIC (CD-Rom), SACD (Books), BOOK DATA, KOVSIDEX (Articles) and S.A. STUDIES (CD-ROM). This search revealed that very limited literature exists which addresses the methodology of teaching accounting in educational context. The most rewarding sources were Bisschoff (1992) and Voight and Stander (1989), which were extensively used by researcher as guideline for the compilation of the didactical strategy on innovative accounting teaching.

It can be concluded that data on the methodology of accounting teaching is almost non-existent in literature and data therefore has to be collected through participatory action research, making

use of formal workshops where teachers could openly express their views through focus group interviews.

Teachers did not attend the workshops in large numbers, due to their abnormal work load. This restricted flow of information. Unfortunately the same teachers did not attend the series of workshops, which impaired continuous flow of information.

5.6 RECOMMENDATIONS

It is recommended that the Innovative Accounting teaching strategy (see appendix 5.1) be used by students taking Accounting methodology, novice teachers teaching Accounting, as well as teachers who experience problems with the presentation of Accounting.

The teaching strategy addresses areas where problems are experienced in the presentation of Accounting and addresses mentioned problems in a manner which should be adopted by teachers who wish to achieve excellent results in Accounting examinations.

5.7 CONCLUSION

The opinions, other than those contained in the literature of various authors used to facilitate this research and those of respondents in interviews and at workshops, are those of the researcher and not that of any other person.

It was established directly through personal interviews that accounting presented a problematic area in interpretation as well as transmitting of knowledge to learners (see 3.5.2). This statement was proved to be true during each workshop (see 3.5.3) and also confirmed by Bisschoff (1992) and Voight and Stander (1989) in the literature study (see 1.2).

5.8 SUGGESTIONS FOR FURTHER RESEARCH

The field of study is wide open for research in order to supply teaching and learning media to facilitate implementation of the proposed didactical strategy on innovative accounting.

Guidebooks on various ways to teach accounting is needed.

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Appendix 3.1 **SURVEY OF STAFF INFORMATION**

The purpose of this questionnaire is to gather extensive information from teachers about the subject Accounting in Secondary and High Schools

Consider this exercise as an effort to improve school life as a whole. Please answer all questions as explicitly as possible.

GRADE YOU ARE TEACHING.....

QUALIFICATIONS IN ACCOUNTING (if any).....

YEARS TEACHING EXPERIENCE IN ACCOUNTING.....

NUMBER OF LEARNERS TAKING ACCOUNTING IN EACH GRADE

GRADE 8..... GRADE 9 .....

GRADE 10..... GRADE 11.....

GRADE 12 (SG)..... GRADE 12 (HG).....

WOULD YOU MAINTAIN THAT PUPIL NUMBERS HAVE INCREASED OR DECREASED OVER THE LAST 5 YEARS?.....

COULD YOU SUPPLY A MOTIVATION FOR THE INCREASE OR DECREASE INDICATED ABOVE?

.....

DO YOU HAVE A HEAD OF DEPARTMENT, OR ANY PERSON WHO ASSISTS INDIVIDUALS TEACHING

ACCOUNTING IN YOUR SCHOOL?.....

ARE YOU YOURSELF RESPONSIBLE FOR COMPILATION OF TESTS AND EXAMINATION PAPERS?

.....

ARE YOUR TESTS SCRUTINISED BY ANOTHER PERSON BEFORE IT IS HANDED OUT TO PUPILS

TO COMPLETE?.....

DO YOU HAVE LINKS WITH OTHER SCHOOLS, SUCH AS EXCHANGE OF TEST AND EXAM PAPERS?

.....

DOES YOUR SCHOOL PROVIDE FACILITIES FOR IN-SERVICE TRAINING?.....

COULD YOU IDENTIFY A SPECIFIC PROBLEM AREA IN THE ACCOUNTING SYLLABUS? BRIEFLY DESCRIBE THE PROBLEM OR NAME THE SPECIFIC AREA

.....

COULD YOU IDENTIFY AN AREA IN WHICH YOU AS TEACHER WOULD PREFER TO GAIN EXPERT OPINION ON OR WHICH NEEDS TO BE CLARIFIED?

.....

WOULD YOU SUGGEST THAT ACCOUNTING BE PHASED OUT IN SCHOOLS AND ONLY OFFERED AT UNIVERSITY LEVEL? PLEASE MOTIVATE YOUR ANSWER

.....

.....

THANK YOU VERY MUCH FOR ATTENDING THIS WORKSHOP AND FOR COMPLETING THIS QUESTIONNAIRE

Appendix 3.2 SURVEY OF STUDENT OPINION

The purpose of this questionnaire is to gather information about the subject accounting. Your contribution is very valuable and will form part of a publication about the teaching of accounting.

Please answer all questions as comprehensively as possible.

Did you take Accounting at school? Yes/No

Would you rate your performance in Accounting as Poor/Average/Good?

Do you think Accounting is a subject involving maths? Yes/No

Do you think Accounting is taken by the more practically minded person? Yes/No

What aspect of the subject Accounting do you enjoy most?

.....

.....

Indicate the weak points, according to your opinion, contained in the subject Accounting

.....

.....

.....

Why did you choose to take the subject Accounting at University?

.....

.....

Why did you not choose Accounting as a teaching career? Please be very explicit.

.....

.....

.....

THANK YOU FOR YOUR CONTRIBUTION

Appendix 3.3 SURVEY OF LEARNER OPINION

The purpose of this questionnaire is to gather the opinions of pupils of all grades, taking the subject Accounting as a school subject. The emphasis of this questionnaire is to improve the prospects involving Accounting in schools.

Your contribution is very valuable and will form part of a publication about the teaching of Accounting.
Please answer all questions as comprehensively as possible.

Indicate your school grade.....

Do you take Accounting on SG or HG?.....

What aspect of the subject Accounting are you enjoying?

.....

.....

Were you forced to take Accounting due to subject choice? Yes/No

Would you prefer to take another subject in the place of Accounting? Yes/No

Do you think Accounting is a subject involving maths? Yes/No

Do you think Accounting is taken by the more practically minded pupil? Yes/No

Would you indicate your performance in Accounting as Poor/Average/Good?

Indicate in what way you are able to receive help with your Accounting homework after school hours, such as your parents, extra classes, friends, etc

.....

Indicate problematic areas, according to your own opinion contained in the subject Accounting

.....

.....

Indicate anything positive about the subject Accounting

.....

.....

.....

THANK YOU FOR YOUR CONTRIBUTION

Appendix 3.4

SURVEY OF STAFF OPINION RE ACCOUNTING EQUATION

The purpose of this questionnaire is to gather information about teaching of the Accounting Equation.
Answer all questions as thoroughly as possible.

SECTION A

GRADE YOU ARE TEACHING .....

DO YOU FEEL COMFORTABLE WHEN TEACHING THE ACCOUNTING EQUATION? Yes/No ..... If not, please supply your reason.

.....

DO LEARNERS FULLY GRASP YOUR EXPLANATION INITIALLY, OR DO YOU HAVE TO EXPLAIN IT A FEW TIMES BEFORE THE CONCEPT IS FULLY UNDERSTOOD?

.....

SECTION B

DO YOU START EACH NEW SECTION WITH THE ACCOUNTING EQUATION? Yes/No

DO YOU SKIP THE EQUATION BECAUSE YOU YOURSELF CANNOT FULLY CONVEY THIS CONCEPT TO THE LEARNERS? Yes/No

WHEN SETTING EXAM PAPERS, DO YOU AVOID QUESTIONS ON THE EQUATION? Yes/No

DO GRADE 8'S FIND IT DIFFICULT TO UNDERSTAND THIS CONCEPT? Yes/No

HAVE YOU DEVELOPED A SPECIAL WAY OF EXPLAINING THE EQUATION? Yes/No

SECTION C

DO YOU THINK THAT THE EQUATION SHOULD BE OMITTED FROM ACCOUNTING? Please supply your reasons

.....

.....

ACCORDING TO YOUR OPINION, DOES TEACHING OF THE EQUATION ENHANCE OR BENEFIT ACCOUNTING TEACHING IN ANY WAY? Please give your own opinion

.....

.....

THANK YOU FOR ATTENDING THIS WORKSHOP AND FOR COMPLETING THIS QUESTIONNAIRE

Appendix 3.5 **INTENDED WORKSHOP**

FOR

ACCOUNTANCY TEACHERS

INVITATION

All teachers involved in teaching the subject Accounting, from Grade 8 (std. 6) to Grade 10 (std. 8), are herewith cordially invited to attend a workshop on the Methodology of Accounting teaching.

VENUE	MEDIA-LAB, FACULTY OF EDUCATION BLOCK J, VISTA UNIVERSITY
DATE	20 April 1999
TIME	14h30
FEES	R20 per person (to cover expenses)

PURPOSE

The purpose of this workshop is to gather teachers' opinions on aspects concerning the teaching of the subject Accounting.

This workshop is part of an effort to improve presentation of Accounting and also to find out what teachers believe to be the strengths and weaknesses involved in this subject. This workshop could disclose strengths that can be built upon or weaknesses that need to be improved.

The outcomes of this workshop will be culminated in a teaching programme on the Methodology of Innovative Accounting teaching, so we need the opinions of each and every teacher involved in this subject. This could also serve as a valued legacy to the teachers of tomorrow.

Without your valued contribution, no verifiable conclusion can be reached.

A CERTIFICATE OF ATTENDANCE WILL BE ISSUED

REFRESHMENTS WILL BE SERVED

Please fax your reply to:
Dr W Smith
Education
057 - 3963331

Cheques made out to:
The Media Lab Fund
Vista University

Appendix 3.6

INTENDED WORKSHOP

FOR

GRADE 8 (STD 6) ACCOUNTANCY TEACHERS

BY POPULAR DEMAND

INVITATION

All teachers involved in teaching the subject Accounting to Grade 8 (std. 6) learners, are herewith cordially invited to attend a workshop at Vista University.

VENUE	FACULTY OF EDUCATION VISTA UNIVERSITY BLOCK L
DATE	27 May 1999 (Thursday)
TIME	14h30
FEES	R20 per person (to cover expenses)

Cheques to be made out to VISTA MEDIA LAB FUND

Teachers who attended the workshop on the methodology of Accounting on 20 April, requested a workshop to be held before the June examinations. Another request was to assist those teachers encountering the subject Accounting in Grade 8 for the first time, with the implementation of the subject.

The purpose of this workshop is to:

* assist teachers in compiling examination papers;

* explain the very first Accounting lesson; and

* explain the accounting equation in an understandable way.

These workshops are the starting point of an effort to improve presentation of Accounting and also to find out what teachers believe to be the strengths and weaknesses involved in this subject. This workshop could disclose strengths that can be built on or weaknesses that need to be improved.

REFRESHMENTS WILL BE SERVED
A CERTIFICATE OF ATTENDANCE WILL BE ISSUED

Contact person: Dr W. Smith (Education, Block J, Room 2)
OR Mrs H. Gildenhuys, Education Building
Tel. 057-3964112 ext. 257

Appendix 3.7 **INTENDED WORKSHOP**

FOR

ACCOUNTANCY TEACHERS

INVITATION

All teachers involved in teaching the subject Accounting, from Grade 8 (std. 6) to Grade 10 (std. 8), are herewith cordially invited to attend a workshop. The ACCOUNTING EQUATION as well as preparation for the year-end exams will be dealt with.

VENUE	MEDIA-LAB, FACULTY OF EDUCATION BLOCK J, VISTA UNIVERSITY
DATE	19 October 1999
TIME	14h30
FEES	R20 per person (to cover expenses)

PURPOSE

The purpose of this workshop is to gather teachers' opinions on aspects concerning the teaching of the Accounting Equation, which was indicated as a problematic area at previous workshops.

This workshop is part of an effort to improve presentation of Accounting and also to find out what teachers believe to be the strengths and weaknesses involved in this subject.

Come and attend the workshop, you might just learn something that could be of assistance to improve the understanding of your learners!

I am looking forward to seeing all the 'regulars' as well as some new faces!

A CERTIFICATE OF ATTENDANCE WILL BE ISSUED

REFRESHMENTS WILL BE SERVED

Please fax your reply to:
Dr W Smith
Education
057 - 3963331

Cheques made out to:
The Media Lab Fund
Vista University

Cheques should be made out to: The Media Lab. Fund,
Vista University

Appendix 3.8

EVALUATION OF WORKSHOP

I would appreciate your comments on this workshop. THIS IS THE ONLY WAY IN WHICH WE WILL BE ABLE TO FIND OUT WHAT YOU AS TEACHER EXPERIENCE IN THE FIELD OF TEACHING.

WEAK POINTS OF THIS WORKSHOP

.....

.....

.....

WHAT HAVE YOU GAINED FROM THIS WORKSHOP?

.....

.....

.....

RECOMMENDATIONS FOR FURTHER WORKSHOPS

.....

.....

.....

THANK YOU FOR ATTENDING THIS WORKSHOP AND FOR YOUR CONTRIBUTION TOWARD IMPROVING ACCOUNTING EDUCATION

Appendix 3.9 **CODE BOOK**

QUESTIONS STAFF.01

TYP GRADE YOU ARE TEACHING GRADES 8 9 10 11 12

TYP QUALIFICATIONS IN ACCOUNTING (if any) .....

TYP YEARS TEACHING EXPERIENCE IN ACCOUNTING .....

TYP NUMBER OF LEARNERS TAKING ACCOUNTING IN EACH GRADE

GRADE 8.....
GRADE 9 .....
GRADE 10.....
GRADE 11.....
GRADE 12 (SG).....
GRADE 12 (HG).....

DIS WOULD YOU MAINTAIN THAT PUPIL NUMBERS HAVE INCREASED OR DECREASED OVER THE LAST 5 YEARS?.....

DIS COULD YOU SUPPLY A MOTIVATION FOR THE INCREASE OR DECREASE INDICATED ABOVE? .....

ADD DO YOU HAVE A HEAD OF DEPARTMENT, OR ANY PERSON WHO ASSISTS INDIVIDUALS TEACHING ACCOUNTING IN YOUR SCHOOL?.....

ADD ARE YOU YOURSELF RESPONSIBLE FOR COMPILATION OF TESTS AND EXAMINATION PAPERS?.....

ADD ARE YOUR TESTS SCRUTINISED BY ANOTHER PERSON BEFORE IT IS HANDED OUT TO LEARNERS TO COMPLETE?.....

ADD DO YOU HAVE LINKS WITH OTHER SCHOOLS, SUCH AS EXCHANGE OF TEST AND EXAM PAPERS? .....

ADD DOES YOUR SCHOOL PROVIDE FACILITIES FOR IN-SERVICE TRAINING?.....

DIS COULD YOU IDENTIFY A SPECIFIC PROBLEM AREA IN THE ACCOUNTING SYLLABUS? BRIEFLY DESCRIBE THE PROBLEM OR NAME THE SPECIFIC AREA

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DIS COULD YOU IDENTIFY AN AREA IN WHICH YOU AS TEACHER WOULD PREFER TO GAIN EXPERT OPINION ON OR WHICH NEEDS TO BE CLARIFIED?

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TYP Did you take Accounting at school? Yes/No

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DIS Do you think Accounting is a subject involving maths? Yes/No

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DIS What aspect of the subject Accounting do you enjoy most?

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DIS Why did you choose to take the subject Accounting at University?

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.....

.....

ADD Indicate anything positive about the subject Accounting

.....

.....

.....

SECTION A

TYP GRADE YOU ARE TEACHING .....

DIS DO YOU FEEL COMFORTABLE WHEN TEACHING THE ACCOUNTING EQUATION? Yes/No

DIS If not, please supply your reason.

.....

DIS DO LEARNERS FULLY GRASP YOUR EXPLANATION INITIALLY, OR DO YOU HAVE TO EXPLAIN IT A FEW TIMES BEFORE THE CONCEPT IS FULLY UNDERSTOOD?

.....

SECTION B

ADD DO YOU START EACH NEW SECTION WITH THE ACCOUNTING EQUATION? Yes/No

ADD DO YOU SKIP THE EQUATION BECAUSE YOU YOURSELF CANNOT FULLY CONVEY THIS CONCEPT TO THE LEARNERS? Yes/No

ADD WHEN SETTING EXAM PAPERS, DO YOU AVOID QUESTIONS ON THE EQUATION? Yes/No

ADD DO GRADE 8'S FIND IT DIFFICULT TO UNDERSTAND THIS CONCEPT? Yes/No

ADD HAVE YOU DEVELOPED A SPECIAL WAY OF EXPLAINING THE EQUATION? Yes/No

SECTION C

DIS DO YOU THINK THAT THE EQUATION SHOULD BE OMITTED FROM ACCOUNTING? Yes/No

DIS REASONS

.....

.....

CHAR ACCORDING TO YOUR OPINION, DOES TEACHING OF THE EQUATION ENHANCE OR BENEFIT ACCOUNTING TEACHING IN ANY WAY?

.....

.....

DIS WEAK POINTS OF THIS WORKSHOP

.....

.....

.....

DIS WHAT HAVE YOU GAINED FROM THIS WORKSHOP?

.....

.....

.....

OUT RECOMMENDATIONS FOR FURTHER WORKSHOPS

.....

.....

.....

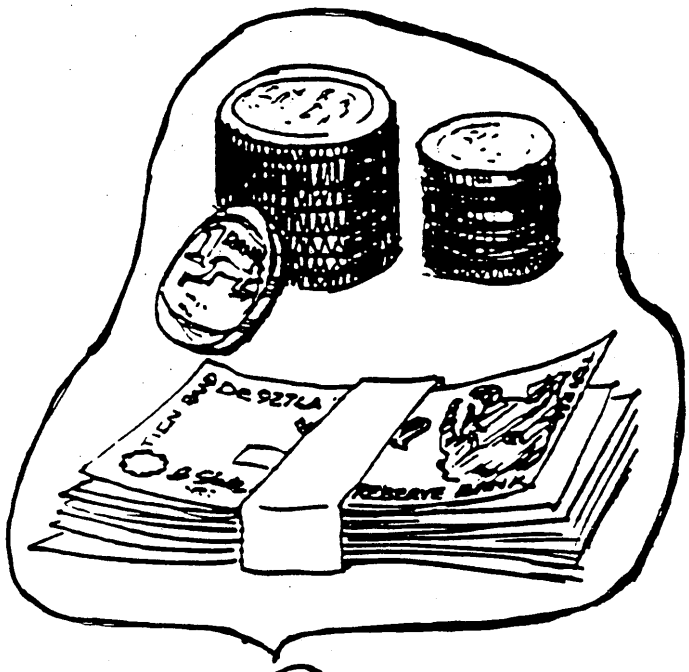
Appendix 5.1 **(See also 5.5)**

Appendix 5.1 comprises the recommendations to this research, which is

INNOVATIVE ACCOUNTING TEACHING

Due to technical difficulties, appendix 5.1 constitutes a separate unit.

INNOVATIVE ACCOUNTING TEACHING





Income		Expenses	
Sales	R9 600	Wages	R4 000
		Fuel	1 000
		Electricity	500
		Interest paid	1 200
		Net Profit	2 900
Total	R9 600	Total	R9 600

Illustrations: Dot Long

INNOVATIVE ACCOUNTING TEACHING FOR GRADES 8 TO 10

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INNOVATIVE ACCOUNTING TEACHING FOR GRADES 8 TO 10

PREFACE

Accounting is to a large extent a practical subject. The knowledge acquired from its study can be applied to everyday life. Accountancy teachers will therefore not only benefit from learning how to teach this subject at school, but perspectives of various aspects of the business world will expand.

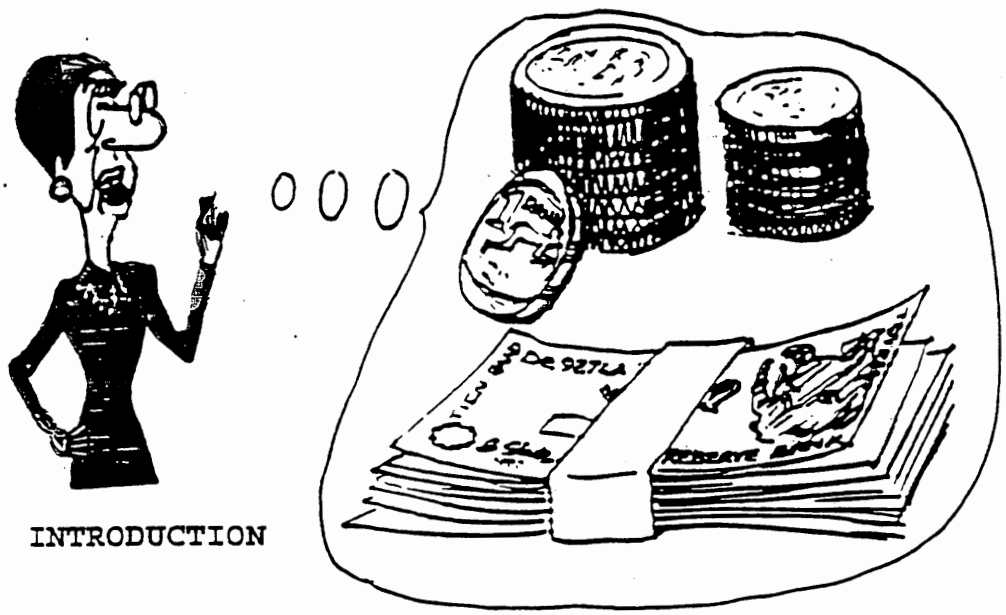
In this strategy, use is made of an approach considered as unconventional, others may consider it as outdated and may shun it as a method that has never worked. For this reason, this approach is referred to as an innovative or nontraditional way of teaching accounting.

Rest assured that this method has been used by the author over a period of twenty years of a very successful teaching career and has produced many distinctions in the subject, both on Standard Grade as well as on Higher Grade in Accounting.

This guidebook forms part of a research project and centres around the most problematic areas experienced in the teaching of Accounting. The recommended methods are worth implementing and are assured to provide positive results.

CHAPTER ONE

DIDACTIC ELEMENTS IN THE TEACHING OF ACCOUNTING



1.1 INTRODUCTION

Sharing ideas with your friends, writing letters to loved ones, sending a telegram, watching your favourite television show, sending a fax about business matters and reading the newspaper, all are forms of **communication** with the outside world.

Accounting is a way of **communicating financial information** about business activities to those requiring this type of information.

Businesses have the following **outlay of money**:

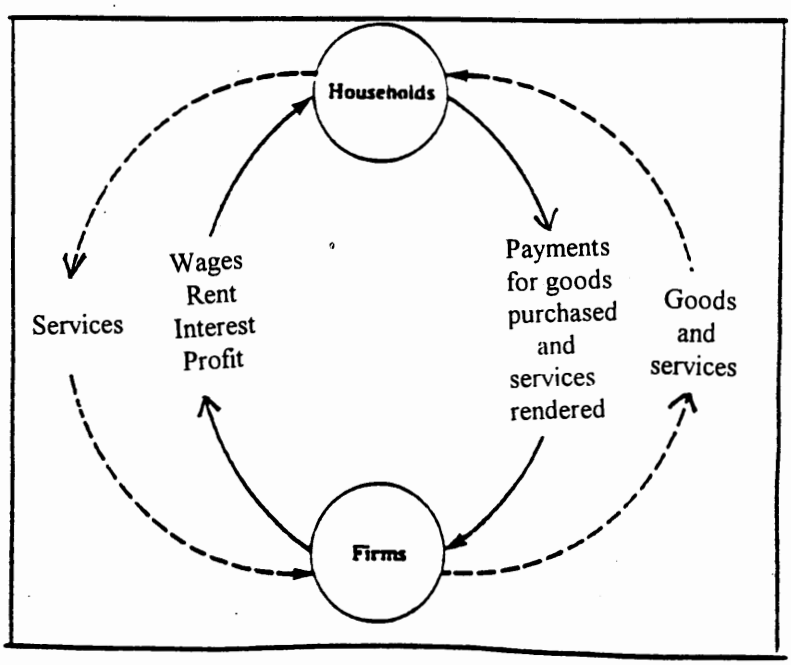
* Employees are paid wages;
* they pay rent for premises;
* other expenses, such as water and lights and the telephone occur; and
* they buy goods or raw materials to manufacture or sell.

On the other hand, businesses **receive money** from:

* selling whatever they have produced; or
* have on their shelves to sell.

These undertakings produce a **circular flow of money**, which has to be communicated to certain people through the use of words and numbers. The circular flow of money is illustrated as follows:

Figure 1.1: The circular flow of money



Accounts have been recorded for thousands of years because this process makes it possible to **keep track of money**, by indicating where it came from and in what way it has been spent. This forms

the **essence of accounting**.

1.2 THE GENERAL AIMS OF ACCOUNTING

Accounting strives to develop the following **skills** in learners:

* **logical thought processes** of learners which enables them to apply the basic principles of Accounting in practice;
* the **analytic ability** of learners;
* a **systematic approach** to the solution of problems; and
* contribute to the **formative education** of learners by developing characteristics such as neatness, orderliness, thoroughness, accuracy and sound judgement.

1.3 THE TEACHER'S APPROACH WHEN TEACHING ACCOUNTING

The teacher should bear the following in mind during the actual teaching situation:

* the teacher's approach should be that of **logical reasoning** and not the application of rules;
* new concepts should be fully explained;
* the use of **educational aids** is recommended;
* where possible, the relationship between accounting and other related subjects, such as business economics and economics should be indicated;
* an understanding of the value and importance of Accounting for personal use should be encouraged;

* applications should be reconcilable with **practical business** situations; and
* applications should keep pace with development in the field of Accounting, therefore it is advised that teachers should regularly attend seminars on developments in Accounting and receive inservice training.

1.4 THE RELATIONSHIP BETWEEN ACCOUNTING, BUSINESS ECONOMICS AND ECONOMICS

All school subjects have a conventional educative aim, which is, to expand knowledge and to cultivate certain qualities in learners. Subjects resorting within the learning area of Economic and Management Sciences cannot be taught separately from the rest of the subjects contained in the school curriculum.

Each subject should be perceived as **part of a total unit**, each having its own particular content, terminology, concepts and principles, which constitutes its own field of study.

The general envisaged outcomes of teaching the three mentioned subjects, are:

* cultivate insight into South African commercial practice;
* establish South African commercial practice in a world perspective, which enables learners to interpret the international economic situation;
* stimulate interest in the capacity of the commercial world;

* enable learners to read commercial accounts with insight and understanding; and
* develop entrepreneurial potential in learners.

1.5 ACCOUNTING TEACHERS AS EDUCATORS

Teachers should always bear in mind that the **teacher** himself/herself is one of the **principal motivating factors** in educational situation. What is achieved in classrooms, depends to a large extent upon the actions of the teacher.

Teaching should therefore be performed with required insight and should be as **practical** as possible. By making use of logical examples which are within the field of experience of the learner, abstract theories and concepts can be simplified.

Formal, generally applied teaching methods are not dealt with in this publication, because these methods were already imparted during formal teacher training.

It should be accentuated that a **thorough academic knowledge** of Accounting is absolutely essential in order to impart the knowledge in a professional manner. A sound knowledge of and contact with the business world is necessary in order to integrate theory with practice in the classroom.

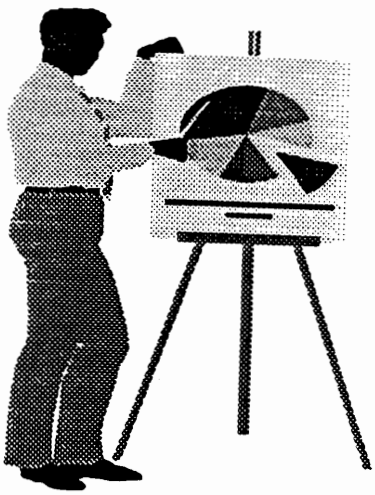
1.6 TEACHER'S ASSOCIATION BEYOND SCHOOL PREMISES

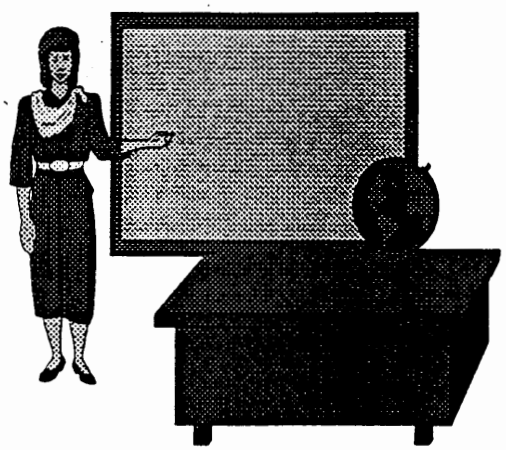
Teachers involved in teaching commercial subjects could play an important role in business by offering their knowledge and experience to interested role-players.

No teacher can work effectively in isolation and teachers should communicate with colleagues, to broaden their own field of knowledge and expertise. Teaching methods and methods of assessment could be exchanged with the intention of enrichment.

CHAPTER TWO

MEDIA USED FOR TEACHING OF ACCOUNTING





2.1 MAKING USE OF THE TEXTBOOK

The use of the textbook in the classroom can generally not be considered as a reliable teaching method. In Accounting, though, the **textbook forms an invaluable teaching aid.** The contents of the textbook should form the essence of the subject matter and all lessons should revolve around whatever is indicated in the textbook. This, however does not imply rote learning or passive acceptance of the textbook as the only source of information.

It should be kept in mind that the textbook was compiled by specialists in the field of Accounting after years of study and experience in the subject and should therefore be applied to enhance the teaching of Accounting by enriching student experience with applied learning experience.

Textbooks can be used as basis for **self-study assignments** for learners especially in the higher grades. Learners taking Accounting on the Higher grade have the opportunity to make good use of extra exercises provided in the textbook. Some modern textbooks even include various extras, such as well-devised questions and illustrations which could prove a reliable source for revision purposes.

It should be borne in mind that the Accounting textbook is richly illustrated with examples presented in a skilful and thorough way. At the back of each book a number of **revision exercises** appear, as representation of each section of knowledge.

2.2 MAKING USE OF SOURCE DOCUMENTS

Source documents provide the **basic source of Accounting practice**. From the onset of the course on Accounting, source documents have to be brought into account.

When the owner deposits his capital contribution into the bank account of the business, he receives a **receipt** from the business, which acts as source document for the very first recording of transactions in the books.

It should be brought to mind that each and every transaction is accompanied by a relevant source document.

2.3 MAKING USE OF THE OVERHEAD PROJECTOR

Transparencies with **answers to exercises** or tests could be prepared beforehand and learners mark their own work. This method is used to save time, especially to allow the teacher to mark workbooks in class.

Another way of using transparencies is to **prepare the lines of certain journals** before the lesson and then fill in the entries while explaining the logical sequence of transactions.

When adequate chalkboards are not supplied, transparencies are used to explain posting from the journals to the ledger, because learners need to be presented with a complete picture of all relevant journals while posting.

2.4 MAKING USE OF THE COMPUTER

Presently it is expected of learners to be **computer literate** when they leave school, though, not all schools offer computer science as subject.

Computerised Accounting is also gaining popularity in businesses. Several Accounting **software packages** are available which contain relevant accounts and learners should be informed that books are not only compiled by hand, but by computer as well.

To introduce computerised Accounting, learners should firstly be instructed how to use pocket calculators efficiently. It is amazing how few learners use calculators correctly.

It could serve a very good purpose if Accounting learners launch a money-making project in order to purchase an Accounting software package. This package could be used for many years and learners could receive a background tuition on the basic computer processes required.

2.5 MAKING USE OF EXAMINATION PAPERS OF PREVIOUS YEARS

A certain **grammatical tense** is used in the compilation of all Accounting transactions, which not all teachers are able to effect. This presents problems for the compiling of tests and examination papers. Learners may misinterpret papers not set in the correct tense.

Examination papers of previous years, especially **matric papers**, could then be used as background for the setting of new tests. The memorandums which accompanies such papers could also serve as indication of the correctness of entries.

2.6 PLANNING OF EACH LESSON

Teachers should always be **prepared** before teaching any lesson. All **teaching media** should be designed, which includes media used to facilitate explanation as well as **worksheets** for assessment.

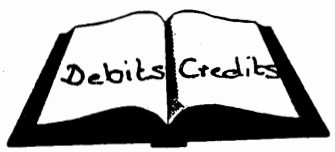
Teacher as well as learner **activities** should be carefully planned to maintain interest in the topic. Premeditated lessons could prevent disciplinary problems.

Teachers should also attempt to be creative in lesson preparation and attempt to involve all learners in his/her teaching approach.

CHAPTER THREE

FOUR TRADITIONAL TEACHING METHODS USED FOR THE TEACHING OF ACCOUNTING

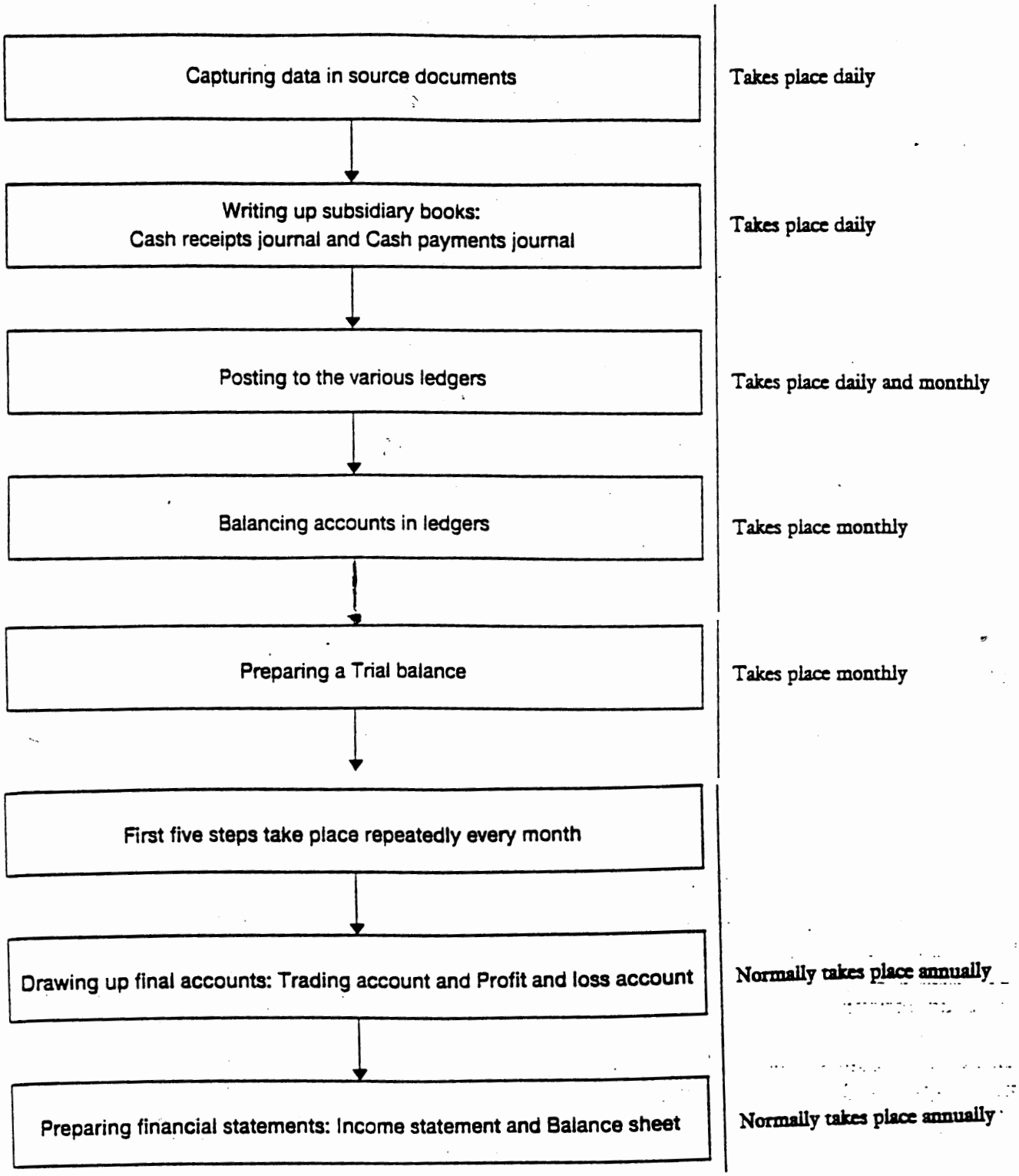




The main purpose of teaching accounting is to familiarize the learner with the logical succession of business events. A certain **routine** is to be followed when entering transactions. Transactions are **initially entered** into various **journals** and then transferred to the **ledger**. The accuracy of this procedure is verified by drafting a **trial balance**. The **final accounts** and **balance sheet** are drafted at the end of the financial period. This procedure is repeated for the next accounting cycle.

An illustration of the accounting routine or cycle appears on the next page.

Figure 3.1 The accounting routine or cycle



The approach used to introduce the study of bookkeeping, which is the initial stage of accounting, will have a significant influence on the sequence by which other subsequent topics are

presented. The initial approach and the order of presentation have a bearing on each other, depending on the phase in the circular flow which is addressed.

The accounting teacher has a choice of certain methods of presentation. There are four methods in use, which are:

* the **ledger** method;
* the **balance sheet** or accounting equation method;
* the **journal** method; and
* the **cash book** method.

3.1 THE LEDGER METHOD

This particular method is most widely used in teaching of Accounting. It is maintained that the **ledger** is the **most important book** in the Accounting system and subsequently this teaching method is self-explanatory.

This method is explained in the following way:

* the ruling of the ledger, comprising a debit and a credit side is explained;
* various columns, their headings and functions are explained;
* separate accounts for each type of transaction is indicated; and

* the principles of double entry whereby the receiving account is debited and the account which gives is credited, is illustrated.

The main advantage of this approach is that it is a mechanical method allowing learners to get to know and understand Accounting rules.

3.2 THE ACCOUNTING EQUATION METHOD

This method is of **mathematical nature** and is introduced with resources as were originally contributed by the owner at the onset of business. The teacher should accentuate that **both sides** of the accounting **equation** should always be **equal**, as in the example:

If an owner contributes R80 000 in cash to start a business, the accounting equation will be:

Figure 3.1: Effect on the accounting equation

Assets = Owner's equity				
No.	Effect	Reason	Effect	Reason
1.	+80 000	Cash increases	+80 000	Owner's contri-bution

In figure 3.1 the learner sees the effect on the assets and the owner's equity and a reason is given for the effect.

At the same time, a cumulative summary is shown after each transaction, giving rise to the balance sheet method and is illustrated in figure 3.2:

Figure 3.2: Balance sheet after each transaction

No	Assets		Owner's equity	
1.	Cash	R80 000	Capital	R80 000

Figure 3.2 serves as indication that **Assets = Owner's equity**.

As transactions increase, the effect on the accounting equation and the balance sheet after each transaction is explained to learners. The problem experienced by this method is that information is not systematically organised.

3.3 THE JOURNAL APPROACH

This method has the logic of teaching **all phases** of the **accounting cycle** in the order in which they are practised. Learners are taught how to record business transactions in the book of first entry, which is a particular journal. From journals posting is done to the ledger, a trial balance is designed, which leads to the final accounts and Balance Sheet.

Recording takes place in the following journals:

* cash receipts and cash payments journals;
* debtors and creditors journals;
* debtors and creditors allowances journals;

* petty cash journal; and
* the general journal.

Recording in journals is effected in a straightforward way which encourages rote learning, is monotonous and presents no challenge of practising skills of logic deduction to learners. These disadvantages of the journal approach accounts for the fact that this is not a popular approach when teaching accounting.

3.4 CASH TRANSACTIONS APPROACH

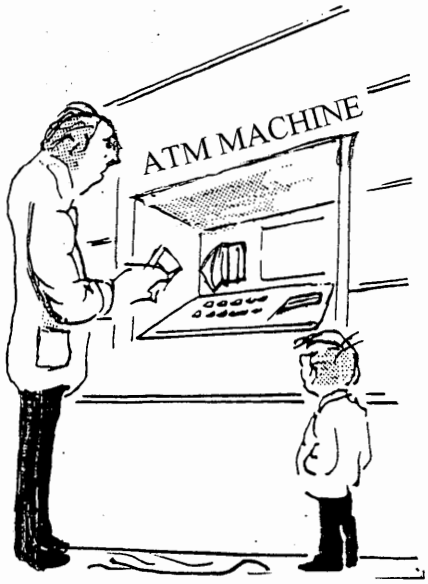
During previous years, the Cash Book was used as a starting point of teaching accounting. Currently the **Cash Book** is replaced by the **Cash Receipts and Cash Payments journal**. In both these procedures, all cash received is entered either in the receipts journal or on the receipts section of the cash book. All cash paid out is entered in the payments journal or on the payment section of the cash book.

Data is posted from both sections or journals to the ledger at the end of the month. In this instance, learners have not been introduced to the ledger, therefore this method wwill have to be supplemented by the ledger method.

This method is relatively easy to explain, but it has the disadvantage that the approach is parrot-like, the learner does not learn to reason in order to find a solution, but is exposed by rote-learning.

CHAPTER FOUR

AN INNOVATIVE APPROACH



'I told you money does not grow on trees!'

This section is based on research and concentrates on the problematic areas experienced by teachers of accounting.

INTRODUCTION

It should be borne in mind that **individuals learn through discovery**. This is the primary aspect upon which this approach is based. No teacher should try to convince the learner that Accounting is a very interesting subject. The lesson should be planned to such an extent that **the learner discovers the interesting aspects of the subject for him/herself**.

The second principle to be taken into consideration is the fact that teaching should **commence with the known** and then **proceed to the unknown**. The learner should not be bombarded with strange facts about a strange subject. During the course of the lesson, links should be provided with aspects with which the learner can **relate in his/her life-world** and then Accounting characteristics and terminology should be tied up with this pre-knowledge.

PART ONE

PROBLEM AREAS EXPERIENCED IN GRADE 8



'Your books will never balance,
because two debits don't make a credit!'

The following issues are established as problem areas:

* the **first** accounting **lesson**;
* the **accounting equation**;
* **source documents** and their use;
* the **bank** account;
* **balancing** of the bank account; and
* **posting** to the ledger from the cash journals.

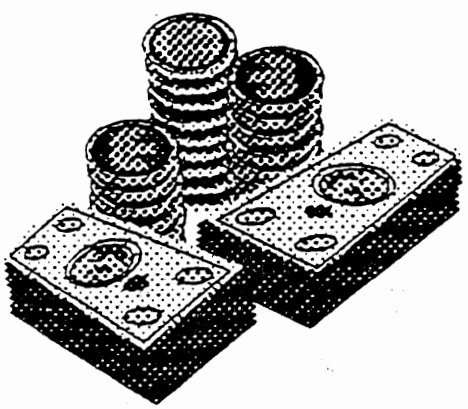
These areas are introduced through a series of lessons.

LESSON 1

THE FIRST ACCOUNTING LESSON

It should be borne in mind that in most schools Accounting is a compulsory subject and not all learners will enter the classroom fully motivated. Thorough preparation of the very first lesson should supply that motivation, create interest in the subject and cultivate the opportunity to build upon initial interest.
This lesson need not be completed in one period. All aspects should be thoroughly prepared by the teacher and necessary teaching media should be well designed and brought to class. Accounting terms should not be used initially, but only after comprehension of the process has been acquired.

ALL ABOUT MONEY



ACCOUNTING IS ALL ABOUT MAKING MONEY. Ask the following question: Do all of you want to make money?

Let the learners supply examples in which ways they could try to make money and list all their suggestions on the chalkboard.

Take one of the most practical ways of making money, as illustration. The instance of **selling sweets at the tuck-shop** at school usually serves as a good example.

The next question is then raised: From where do you get the sweets that you want to sell?

Answer: It has to be bought.

Question: Bought from whom?



When considering the illustrations, the difference between **retailers and wholesalers** have to be explained, without using any Accounting terminology. Names of different local businesses should be supplied by the learners and everything should be jotted down on the chalkboard.

ACTIVITY 1

Then follows the activity of separating retailers from wholesalers and the reasoning could be based on the following questions:

Which of these shops sell their wares to the public? and
Which of these shops only sell to other shops?

Indicate this information in tabular form on the chalkboard, indicating RETAILERS in one column and WHOLESALERS in the next column. In this way, accounting terminology has been introduced.

Pose the next question: When you buy sweets at the wholesaler, what steps do you take?
Answer: Take it from the shelf, an amount is entered into the cash register, item by item, totalled and then you pay, for example R100. The document to verify the transaction, is called an INVOICE. This invoice is not discarded, but is kept in a specific place and eventually used to RECORD your business activities.

You actually bought the sweets and this is called PURCHASING in accounting terms.

ACTIVITY 2

Prepare **blank invoices** and supply an imaginary name for the business. Now indicate all particulars which should be entered on the invoice and totalled. Each learner now has a SOURCE DOCUMENT in his possession.

INVOICE No. 78219

P.O. BOX 5576
Tel. (0223)3467

Two Rivers
CERES
6835

.....

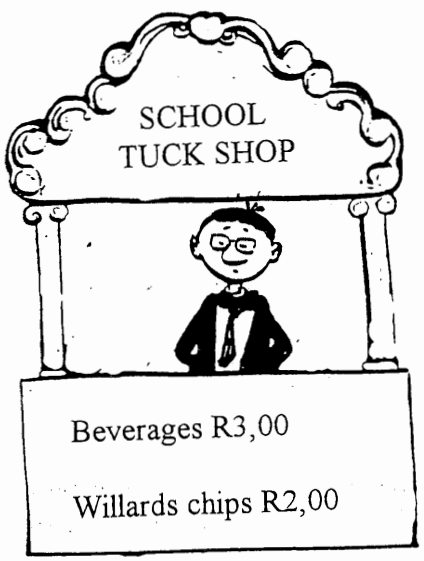
To .....
.....
.....
.....

Bought of: F.W. PETERS

Terms: 30 days less 5%

Quantity	Description	Unit price	Price
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

Next, the sweets have to be sold from a venue. This venue will be supplied by the school, which usually is called a tuck-shop.



This venue will have to be paid for. The amount paid for the use of the tuck-shop venue, say R10, usually is paid monthly and is termed RENT in accounting terms. This is one of the EXPENSES of your business and you will receive a RECEIPT from the school for the amount you have paid. This is the next SOURCE DOCUMENT.

ACTIVITY 3

Prepare **blank receipts** and let the learners use the name of the school as well as the name of the tuck-shop and complete the document for the months of June and July 1999.

RECEIPT

No. 46 .....19..

J.F. PETERS

Two Rivers
P.O. Box 5576
CERES
6835

R c

Received from .....
.....
.....

The sum of .....
..... Rand
..... cents

Signed .....
J.F. Peters

Now we reach the actual selling stage and you yourself will be responsible for selling the sweets. You will not sell the sweets at the same price that you paid for them and you have to decide upon a SELLING PRICE. In accounting terms, this will be your SALES. To simplify your calculations, double your **purchase price**. If you paid 10c a sweet, sell it for 20c in order to make a profit.

When selling goods, the money is put into a money box, because the tuckshop is not a large business possessing a cash register. In this way you will sell your goods, which in accounting terms is called your STOCK OR YOUR ASSETS, until you have sold all your sweets, say, for R200, which is the R100 purchase price times two.

In a real business you will not sell all your **stock** before purchasing new stock, but in this case, it is only an example.

Raise the next question: After selling all the sweets, will you take the money and buy something for yourself, or would you like to know what you made out of the transaction?

This activity will serve as calculation of your PROFIT.

Question: How will you calculate your profit?

Illustrate your activities on the chalkboard in the following way:

1. Make use of your source documents;
2. Add all the money in your money box; and
3. Record your TRANSACTIONS in the following way:

The example of the Cash Book appears on the following page.

CASH BOOK OF MY TUCK-SHOP FOR JUNE AND JULY 1999

RECEIPTS		PAYMENTS	
Total sales	R200	Purchases	R100
		Rent (2 months)	R20
		Profit	R80

Explain that the payments have been added and subtracted from the receipts to calculate the profit.

LESSON OUTCOMES

At the end of the lesson, learners should be able to:

1. interpret new Accounting terminology, such as purchases, sales, stock, assets and profit;
2. actually complete source documents;
3. record transactions in a cash book; and
4. calculate profit.

ASSESSMENT ACTIVITIES

1. A worksheet should be compiled, containing accounting terminology;
2. a source document could be completed from given information;
3. transactions could be supplied and recorded in a cash book; and
4. profit could be calculated from given information.

LESSON 2

THE ACCOUNTING EQUATION

In the course of this lesson the **accounting equation** should be introduced. It is recommended that the teacher makes blank posters with 'stick-on' labels which can be changed as transactions change. This will save a great amount of effort and time.

Raise the following question: How can you **investigate** if none of your sweets were **stolen or lost**?

Jot all ideas on the chalkboard and suggest an explanation in the following way:

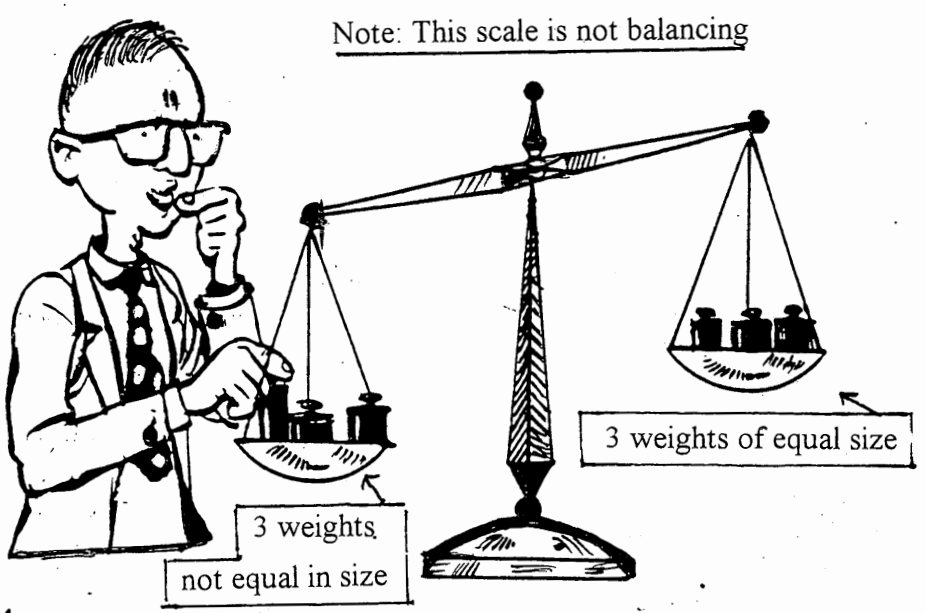
CASH RECEIVED = R200			CASH CONTRIBUTED =	R100
		Plus	EXPENSES =	R20
		Plus	PROFIT =	R80
TOTAL	R200		TOTAL	R200

From above example it is disclosed that nothing has been found missing or lost, because the **totals of both sides are equal**. If some of the sweets were missing, the cash received would not have been R200 and both sides would not be equal. The word **equal** means that both sides have the **same total** or contain the same amount.

This concept is called the ACCOUNTING EQUATION, meaning both sides are equal. This can be illustrated by making use of a scale, which indicates that if both amounts were not the same, the **scale** would not balance and one side would be heavier than the other.

The formal accounting equation cannot be introduced at this stage, seeing this example contains expenses as well.

Figure 5.1 depicts the accounting equation, which should always balance.



ACTIVITY 4

Supply an example and request the learners to total both sides to ascertain that the scale should balance.

At this stage the concepts of the accounting equation can be introduced.

Raise the following question: If you buy the sweets yourself and you yourself are responsible for selling the sweets, what, in accounting terms, will you be called?

Answer: The OWNER

The R100 you supplied when you bought the sweets, will be your contribution to the business and will be called the OWNER'S CONTRIBUTION in accounting terms.

At this stage it should be explained that the owner probably saved money, say R300 over a period of time and that he/she took R100 of what he/she saved and CONTRIBUTED IT TO THE BUSINESS.

That contribution is no longer part of the owner's savings, but belongs to the business, because it was contributed to the business and now forms part of the CAPITAL of the business.

Here a drawing on the chalkboard could simplify matters.

SAVINGS ACCOUNT		BUSINESS ACCOUNT	
Savings for January	R60		
Savings for February	R60		
Savings for March	R60		
Savings for April	R60		
Savings for May	R60		
Total savings	R300	Contributed to business	R100
Remaining savings	R200		

At this stage it could be explained that the savings account and the business account are separated from one another and in accounting terms, are representing two independent ENTITIES. What the owner does with his personal money does not affect the business. The business is a unique unit or entity and has to operate as such.

ACTIVITY 5

Supply information about a business and request the class to calculate the owner's capital contribution.

LESSON OUTCOMES

At the end of the lesson, learners should be able to:

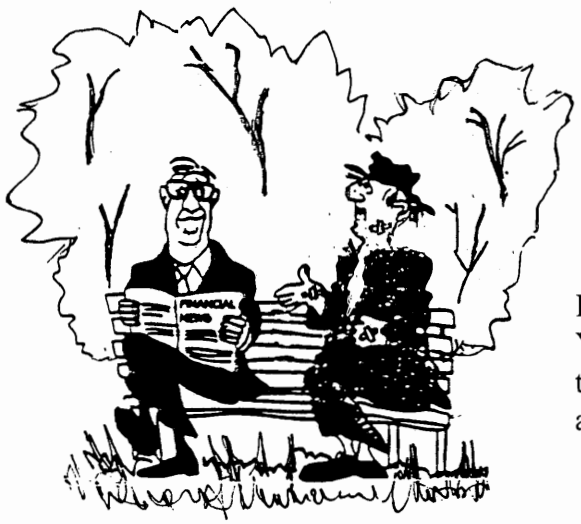
1. interpret new Accounting terminology, such as the accounting equation, the owner's capital contribution and the entity concept;
2. balance the accounting equation; and
3. calculate the capital contribution.

ASSESSMENT ACTIVITIES

1. Compile a worksheet which requires learners to fill in accounting terminology;
2. supply information which requires balancing of the accounting equation; and
3. supply information which requires calculation of the owner's capital contribution.

LESSON 3

BUSINESS ACTIVITIES AND THE ACCOUNTING EQUATION



I cannot believe it!
You actually can tell that I am the type of person to SPEND first and SAVE what is left!

At this stage **formal business activities** can be introduced. Learners already know what the owner's capital contribution entails, which facilitates the introduction to this lesson.

EVERYTHING ABOUT BUSINESS

Pose the following question to the class: Supply the **name** of a **local business** owned by a single person.

Next question: In what way, do you think, was the business started?

Answer: By a capital contribution in cash by the owner which the owner deposits into the bank account of the business.

A further explanation might be necessary, accompanied by a sketch on the chalkboard, which is:

Explanation: The owner (give him/her a name), takes the cash from his savings account (give the bank a name) and pays it into the bank account of the business (give the name of another bank).

Sketch:

SAVINGS ACCOUNT OF (owner's name)
R250 000
R100 000
R150 000 (remains)

CHEQUE ACCOUNT OF BUSINESS
R100 000

Now the **accounting equation** should be introduced.

The **cash** paid into the firm's bank account = ASSETS

The **capital** contribution by the owner = OWNER'S EQUITY

In accounting terms this represents the following:

ASSETS	=	**OWNER'S EQUITY**
meaning cash in bank account	=	owner's contribution
R100 000	=	R100 000

The owner pays R100 000 cash into the bank account of the firm in order for the firm to use it to its best avail. The owner will not supply any more cash for the running of the business, it is expected that it should operate with these funds initially contributed by the owner.

Pose the next question: Can a business start operating when the capital is deposited?

Answer: No, not without something to **sell**.

Next question: From where will it be sold?

Answer: From a **building, shop or stand.**

Now it should be explained that it could be necessary to purchase a building of R30 000 (the explanation is better understood if the building is bought and there are no expenses at this stage). Expenses could confuse learners.

This implies that the R100 000 cash in the bank decrease with R30 000, leaving R70 000 in the bank account.

The accounting equation can now be illustrated as follows:

ASSETS		=	**OWNER'S EQUITY**
Cash in bank	R70 000		
Building	R30 000		
Total	R100 000	=	R100 000

The next question: Will you be able to run a business when you have cash in the bank plus a building, or are there more requirements before the owner can start selling?

Answer: No, you need **shelves** to display your goods on.

In this instance you need to purchase shelves, which is called EQUIPMENT in accounting terms. You buy shelves for R15 000 and pay for it in cash, which will reduce your cash from R70 000 to R55 000 (R100 000 - R15 000).

The accounting equation can now be illustrated as follows:

ASSETS		=	OWNER'S EQUITY
Cash in bank	R55 000		
Building	R30 000		
Equipment	R15 000		
Total	R100 000	=	R100 000

The owner's capital contribution will remain R100 000 which equals the initial amount that has been contributed. **Only cash decreases as assets are bought.** If the total of the accounting equation is not equal, something from the business has been lost.

Next question: Will the owner at this stage be able to sell anything?

Answer: No, he has not bought anything to sell.

At this stage the owner should buy all **goods** he intends to **sell** from wholesalers and he pays cash whenever he buys any article.

You will find an example on the next page.

EXAMPLE

Suppose the owner buys goods for R25 000, then his cash will again decrease and the accounting equation will then be:

ASSETS		=	OWNER'S EQUITY
Cash in bank	R30 000		
Building	R30 000		
Equipment	R15 000		
Stock	R25 000		
Total	R100 000	=	R100 000

ACTIVITY 6

Devise a story about a person **starting a business** and buying different articles for cash as indicated above and request learners to draft the accounting equation.

LESSON OUTCOMES

At the end of the lesson, learners should be able to:

1. describe new Accounting terminology, such as assets, owner's equity and equipment;
2. identify different types of assets;
3. classify the elements of the accounting equation; and
4. calculate elements concerning the accounting equation.

ASSESSMENT ACTIVITIES

1. Compile a worksheet containing new accounting terminology, as well as the different types of assets; and
2. Compile an exercise which requests compilation of the accounting equation.

LESSON 4

T-ACCOUNTS

Before introducing expenses to the accounting equation, **T-accounts** should be brought to the attention of learners.

1. RECORDING OF BUSINESS ACTIVITIES

Up to this stage no real accounting or recording has been done, only an underlying principle of accounting was practised. The real **recording** of data should now receive attention.

As the word accounting suggests, accounting is the **keeping of accounts** and the first account encountered should be the **bank** account. This concept is more readily understood by learners, because it represents a logical course of events.

Up to this point, all calculations about the amount of cash remaining in the bank was done by calculator, but no real indication or proof of that money spent was recorded in any way. All transactions should be entirely recorded on paper for reference purposes.

To introduce recording, consider the transactions of the previous lessons again which appear on the next page.

TRANSACTIONS

1. The original amount paid into the bank account by the owner was R100 000. This should be recorded as an asset in the bank account and it should be indicated that the bank receives the money from the owner and should be **debited**. Money received from the owner is recorded in Accounting terms as **Capital**.

The bank account should resemble the following:

Dr	**Bank account**		Cr
Capital	R100 000		

To complete the **double entry**, the Capital account has also to be shown. The capital account paid out the funds to the bank account of the business, which is the reason for the credit entry.

Dr	**Capital account**		Cr
		Bank	R100 000

Here it should be repeated that the bank account received funds from the capital account, explaining the credit entry in the capital account. Here it should also be indicated, that although this amount is the possession of the owner, the business will always owe this amount to the owner, thus the credit entry.

The bank account is not the only account found in accounting, which means that each asset purchase should also be recorded in a different account.

2. After the **building** of R30 000 is purchased for cash, the bank account now changes to:

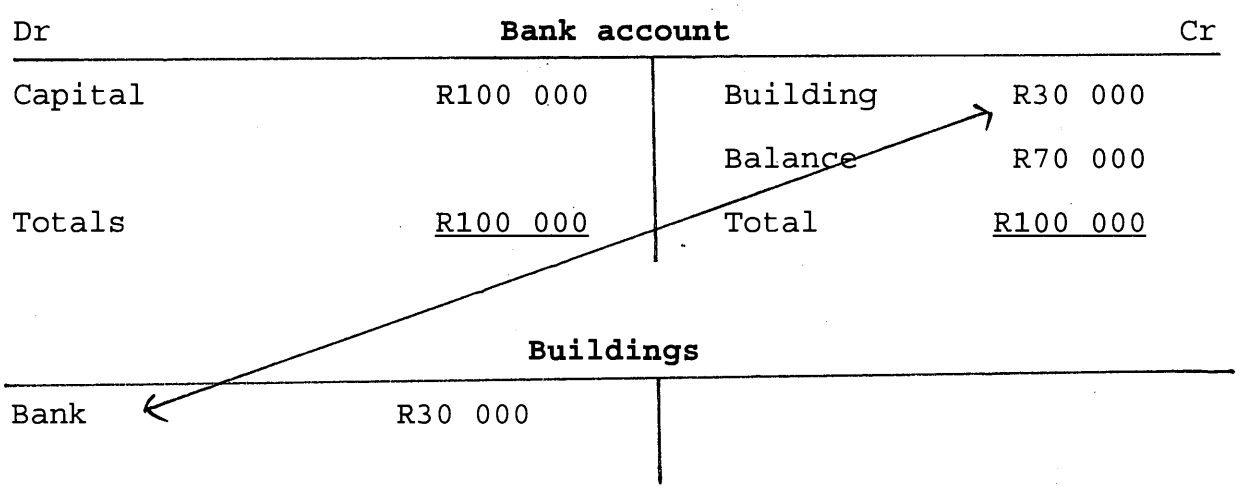
Dr	**Bank account**		Cr
Capital	R100 000	Building	R30 000
		Balance	R70 000
Totals	R100 000	Total	R100 000

The bank account is **credited** with the money it **paid out** to purchase a **building**.

The BALANCE of the bank account is calculated by subtracting the amount paid out for the building from the capital amount. This is the amount which can be used for more purchases. This balance is indicated at the beginning of the next month.

The OTHER account implicated here is an account to record the building that has been purchased. Both accounts should now be as follows and are indicated on the next page.

ACCOUNTS



When comparing the Bank account and the account for Buildings it will be noted that the building purchased appears on the right side of the account, also called the CREDIT SIDE.

When the Buildings account is considered, it will be noted that the building purchased appears on the left side of the account, also called the DEBIT SIDE.

Now go back to lesson 2, where it was indicated that the right side is used for all cash received and the left side is for all cash paid out. Turn back to the bank and buildings account and note that the bank then PAID the money for a building and only R70 000 was left, which is indicated by the balance. The buildings account then RECEIVED a building.

This is called a DOUBLE ENTRY, which serves as indication that for every amount paid out, an asset should be received. This type of account is called a LEDGER ACCOUNT. This is also an indication that the ACCOUNTING EQUATION should always balance.

3. Now **shelves** are bought for R15 000 and paid for in cash.

The bank account, which only has R70 000 left as balance after purchase of the building, should now change to this:

Bank account

Balance	R70 000	Equipment	R15 000
		Balance	R55 000
Totals	R70 000	Total	R70 000

The balance of the bank account changes to R55 000, indicating the amount left over after the purchase of the shelves.

The **Equipment** account should look like this:

Equipment

Bank	R15 000

The equipment account received shelves for the amount of R15 000 from the bank (because it was paid for), which means it should be debited.

4. Now the owner buys goods for R25 000 and pays for it in cash.

The bank account, pictured on the next page, starts with the amount left over after the recent purchases.

Bank account

Balance	R55 000	Stock	R25 000
		Balance	R30 000
Totals	R55 000	Total	R55 000

The **stock** account should look like this:

Stock

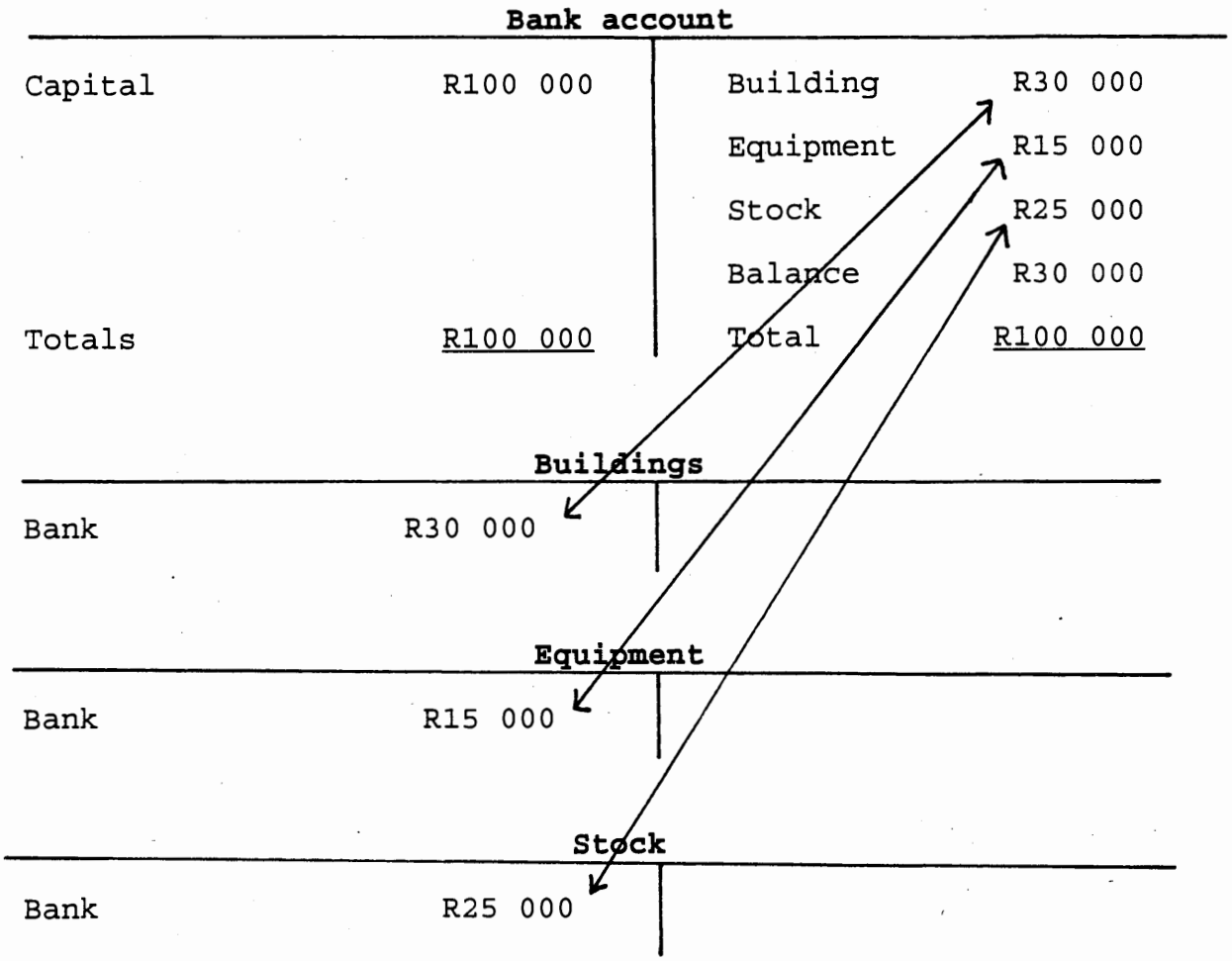
Bank	R25 000

Draw attention to the fact that the balance of the bank account has further decreased with the amount of stock purchases.
It should also be noted that the **wording of each transaction**, reflects the name of the **CONTRA ACCOUNT**, thus the account where the transaction came from. If **bank** is credited with **Stock**, it indicates that the Bank account has paid money out to purchase stock. If the **Stock** account has been debited with **bank**, it means that the Stock account now has a certain amount of Stock as an asset and it has been paid for in cash, which is indicated by the word **Bank**.

2. SUMMARY OF ACCOUNTS

As summary, all the accounts which the owner of the business has now entered into, will bé recorded in his books as follows:

The bank account, which will be the first account, should look like this:



Take note that the final balance of the bank account is similar to the balance indicated after the purchase of stock, which is R30 000.

From these accounts, the accounting equation can again be compiled.

ASSETS				=	OWNER'S EQUITY
Cash	+ Building +	Equipment +	Stock	=	Owner's equity
30 000	+ 30 000 +	15 000 +	25 000	=	R100 000

PLEASE TAKE NOTE:

THIS LESSON IS AN INVALUABLE TOOL FOR THE ACCOUNTING TEACHER, BECAUSE IT PROVIDES THE FOUNDATION FOR ALL FURTHER ACCOUNTING TRANSACTIONS.

LESSON OUTCOMES

At the end of the lesson, learners would be able to:

1. outline new Accounting terminology, such as balancing of accounts, debit side, credit side and double entry;
2. record transactions in ledger accounts;
3. balance accounts; and
4. effect the double entry system.

ASSESSMENT ACTIVITIES

1. A worksheet containing all accounting terminology encountered up to this lesson can be compiled;
2. a simple bank account could be compiled from relevant information and balanced;
3. contra accounts can be drafted; and
4. from above information, the accounting equation can be compiled.

LESSON 5

THE USE OF SOURCE DOCUMENTS

The Montagu Chutney Company

Debit Note

Debit:

Sunny SA Distributors

P O Box 593

Paarl

7620



214 Main Road Montagu
6720

QUANTITY	DESCRIPTION	PRICE	AMOUNT
12	Bottles of wine vinegar	R1 83	R21 96
	returned (damaged)		
	Invoice 438		

Date 22 - 9 - 92

At this stage learners have an idea of the recording of initial business transactions, but they have not made contact with **documents** that accompany each transactions.

Now thorough **lesson planning** is necessary. Prepare documents for each transaction encountered from lesson three and four. Use the names already chosen for identification purposes. Documents could either form part of a poster or groups of learners could be issued with documents.

Role-play could serve a good purpose at this stage. Some learners could act as sellers of specific articles (the building, stock and equipment) and after the sale hand an invoice to the buyer, which is the owner of this particular shop.

The owner now takes all his documents to his own shop and places it in a basket, market IN. This means all the incoming post should be placed in this basket.

At the end of the day, a learner (the bookkeeper) now takes the source documents from the tray or basket and noting its contents, enters it into the specific account. This action could be repeated by all learners in the class, which means that the documents should be available. The same accounts should be drafted on the chalkboard as well.

Start with the owner's original cash contribution of R100 000, then, instead of purchasing the building, rather pay rent of R1 000 and pay R500 for a trading licence. Then buy shelves for R15 000 and stock for R25 000.

The relevant **documents** are the following:

1. A **receipt** is issued to the owner for his capital contribution of R100 000.
2. A **cheque** is made out for the rent of the building of R1 000 and the cheque counterfoil is the relevant source document. A **receipt** may also be used.
3. Follow the same procedure for the amount of R500 for the trading licence.
4. When purchasing the shelves, an **invoice** may be used as source document, but in the instance of paying cash, the **cheque counterfoil** should be used.

5. The same procedure should be followed for the purchase of the stock.

Here follows examples of mentioned documents:

1. THE RECEIPT

RECEIPT

No. 46 .....19..

J.F. PETERS

Two Rivers
P.O. Box 5576
CERES
6835

	R	c
Received from		
.....		
.....		
The sum of		
..... Rand		
..... cents		

Signed .....
J.F. Peters

2. THE INVOICE

INVOICE

No. 78219

P.O. BOX 5576
Tel. (0233)3467

Two Rivers
CERES
6835

.....

To .....

.....

.....

.....

Bought of: F.W. PETERS

Terms: 30 days less 5%

Quantity	Description	Unit price	Price
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

3. THE CHEQUE

19

AAN
TO

VIR
FOR

SALDO
BAL. R

INBET.
DEP. R

TOTAAL
TOTAL R

TJEK
CHQ. R

SALDO
BAL. R

DIE
THE

BANK VAN AFRIKA BPK. OF AFRICA LTD.

STEYNING: JOHANNESBURG

12-34-58-71

19

PAY/BETAAL

002 002 "000001 ":123456": 01123000214" 01

LESSON OUTCOMES

After completion of this section, learners should be able to:

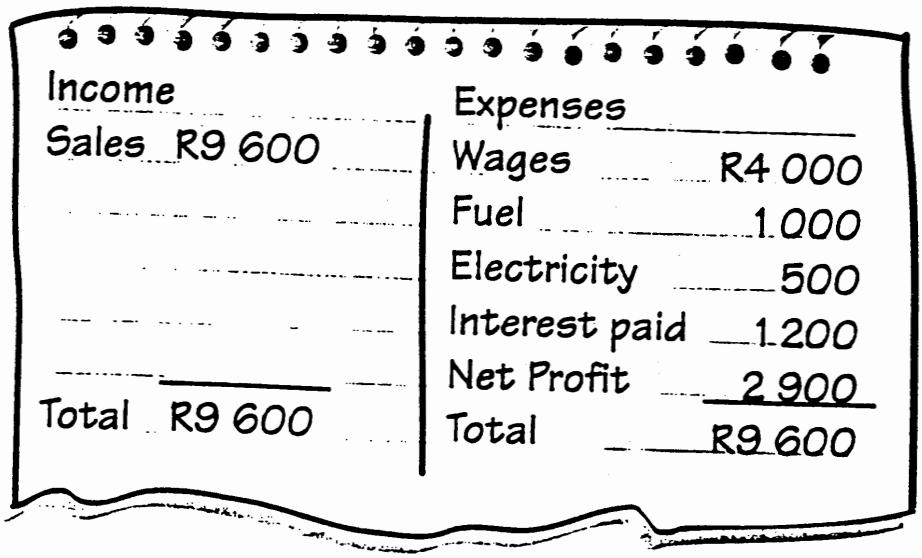
1. record transactions directly from source documents; and
2. identify the correct source documents relevant to certain transactions.

ASSESSMENT ACTIVITIES

1. Prepare blank source documents and supply information from which the documents should be completed; and
2. supply completed source documents with no extra information. Request ledger accounts to be compiled from relevant documents.

LESSON 6

INCOME AND EXPENSES



Expenses can now be introduced and **reasoning should change slightly to accommodate this new concept.** Explanations should start with the accounting equation, a concept which should always be the point of departure when explaining any new concept.

1. EXPENSES

Before compiling the accounting equation, a different **logical or analytical approach** should be taught to the learners in a specific way, of which the following example may be used:

You earn a salary of say, R1 200 a month. From this you have to pay certain things, such as your telephone account of R250, your water and electricity of R300 and the rent of your flat, which is R400.

Question: Where would you get the money from?

Answer: You will use part of your salary/earnings.

Do calculations to determine how much spending money you have left, which is done as follows:

Salary, or income	=	R 1 200
Less: Telephone	=	250
Less: Water and lights	=	300
Less: Rent of flat	=	400
Spending money	=	R350

It has to be borne in mind that all **expenses have been subtracted from your income** in order to calculate the amount of **spending money**. Thus, expenses are subtracted from the amount which you are able to put into your pocket each month (This is the most important part of your reasoning).

Now continue with an example from the viewpoint of a business.

EXAMPLE

Start with the owner's original cash contribution of R100 000, then, instead of purchasing the building, rather pay rent of R1 000 and pay R500 for a trading licence. Then buy shelves for R15 000 and stock for R25 000. These transactions should now be recorded in the form of the accounting equation.

Teach learners to firstly compile the bank account in order to determine its balance.

Bank account

Capital	R100 000	Rent	R1 000
		Trading licence	R500
		Equipment	R15 000
		Stock	R25 000
		Balance	R58 500
Total	R100 000	Total	R100 000

Now the accounting equation can be completed in the following way:

ASSETS		=	OWNER'S EQUITY
Cash in bank	R58 500		Owner's contribution called capital R100 000
			Rent, which is an expense and decreases owner's equity because the amount is taken from the owner's pocket and is represented by the capital contribution
			Less R1 000
			Trading licence is an expense and decreases owner's equity Less R500
Equipment	R15 000		
Stock	R25 000		
Total	R98 500	=	R98 500

You will note that the owner's equity has decreased with R1 500, which is the total of expenses.

ACTIVITY 7

Compile an exercise which includes expenses and allow learners to calculate the accounting equation.

LESSON OUTCOMES

After this lesson, learners should be able to:

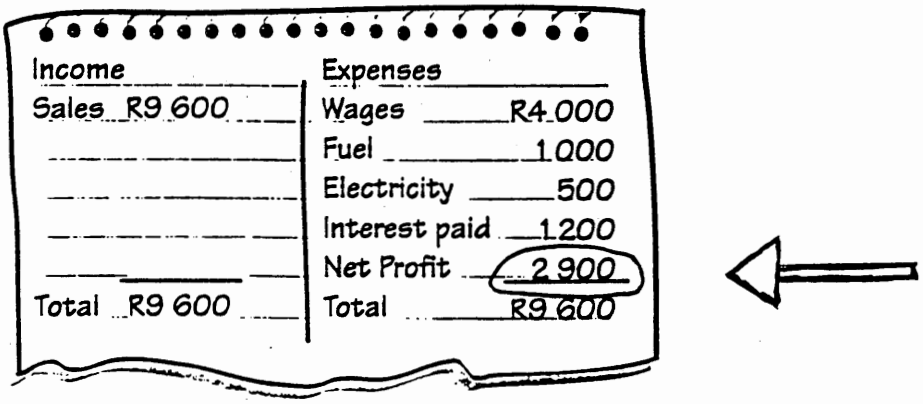
1. outline the main features of expenses;
2. design a bank account; and
3. compile the accounting equation which includes expenses.

ASSESSMENT ACTIVITIES

1. Calculate spending money from given information;
2. supply relevant information, requesting the drafting of ledger accounts which include expenses; and
3. calculate the accounting equation which includes expenses. Make use of the appropriate steps, using given information.

LESSON 7

CALCULATING THE PROFIT



The main objective of running a business is to make a **profit**. In order to make a profit, the stock bought have to be sold at a higher price than the purchase price. This new price has to be calculated.

1. PROFIT

In a real business you will not sell all your stock before purchasing new stock, but in this case, use is made of an example to be able to calculate your profit.

Refer to the example of the previous lesson and explain in the following way:

* Start with the owner's original cash contribution of R100 000, then pay rent for part of a building, of R1 000 and pay R500 for a trading licence. Then buy shelves for R15 000 and stock for R25 000. These particulars serve as

introduction and should be written on the chalkboard for reference;

* now introduce a new concept. Sell all the stock (stress that it does not happen in real life - new stock has to be purchased before all stock has been sold) for R40 000 which is paid for in cash. Bear in mind that no stock exists, everything has been sold. These transactions should now be recorded in the form of the accounting equation;

* Now calculate which amount the owner has made as profit after selling all his stock. This calculation is done in this way (refer again to the lesson on selling the sweets)

The money received for all the stock sold	=	R40 000
Less the money paid for all the stock purchased	=	R25 000
Total profit	=	R15 000

Stress that this is the amount that the owner is allowed to put into his own pocket, because profit is the payment he/she receives for the trouble he/she went to, to run the business (in other words, it is his/her salary) and can now be added to the capital of the business.

The capital of the business will now be changed from the original R100 000, which was the capital contribution, to:

Capital contribution	R100 000
Plus profit	R15 000
Total **amount of capital**	R115 000

This profit is called the INCOME of the business in accounting terms. (Bear in mind that this profit is not paid into his/her private bank account, because it is the profit of the business and should remain in the bank account of the business).

In order to ascertain what amount of money now remains in the bank account, all particulars from the example at the beginning of the lesson have to be taken into consideration.

* Now, in order to do the next calculation, the bank account is compiled to determine its balance.

Bank account

Capital	R100 000	Rent	R1 000
Stock sold	R40 000	Trading licence	R500
		Equipment	R15 000
		Stock bought	R25 000
		Balance	R98 500
Total	R140 000	Total	R140 000

The bank account indicates that the amount of R40 000 was received from stock sold. This amount should be added to the R10 000 of capital. From this total, rent, trading licence, equipment and stock bought should be subtracted. The difference

between these two amounts is the final balance, or the amount which remains in the bank after all the transactions took place. The final balance is R98 500, which is the remaining amount for use during the next month.

At this stage, (after taking above transactions into consideration), the accounting equation will be as follows:

ASSETS		=	OWNER'S EQUITY
Cash in bank	**R98 500**		Capital of owner **R100 000**
			Rent (expense, decreases owner's equity) Less **R1 000**
			Trading licence (expense) Less **R500**
Equipment	**R15 000**		Profit from Stock sold (increases owner's equity) Plus **15 000**
Total	R113 500	=	R113 500

You will note that the new owner's equity has decreased with R1 500, which is the total of expenses, but it has also increased with R15 000, which is the profit made out of all stock sold.

Note that the accounting equation has increased to R113 500 and the owner now has more capital in the business.

* Owner's equity can be calculated in the following way:

Original capital contribution		= R100 000
Less Rent expense	R1 000	
Less Water and Electricity	R500	- R1 500
Total		R98 500
Plus Profit made from stock sold		R15 000
New owner's equity		R113 500

LESSON OUTCOMES

After completion of the lesson, learners should be able to:

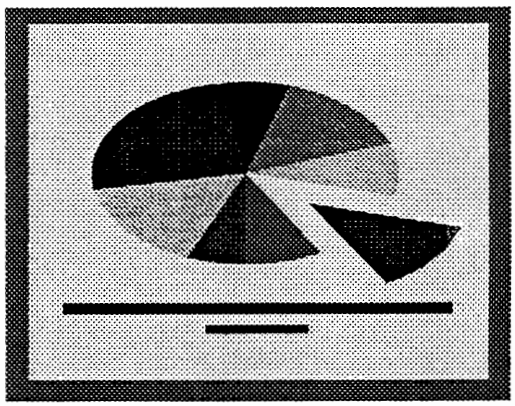
1. interpret the new Accounting concepts, which are profit and the calculation thereof;
2. compile the accounting equation which includes profit; and
3. perform calculations which includes expenses and income.

ASSESSMENT ACTIVITIES

1. Request calculations of profit from given information;
2. supply relevant information and request compiling the accounting equation; and
3. request calculation of the new owner's equity from relevant information.

LESSON 8

CALCULATING FINANCIAL RESULTS



Consider the previous lesson carefully and let learners take note of the fact that the profit made from selling the stock was R15 000. Now look very carefully and note that the capital contribution of the owner only increased with R13 000.

Question: Should it not increase with R15 000 when the profit was R15 000? Ask the class to supply possible reasons for this discrepancy.

Answer: It was only profit made from selling the stock, but the other expenses was not taken into account.

By now it should be clear that the profit of the business is calculated by subtracting EXPENSES from INCOME.

The calculation appears on the next page.

The following calculation should be done:

PROFIT made from selling the stock	= R15 000
Less expenses incurred	= R1 500
INCOME of business	R13 500

Compare the income of the business with the increase in the owner's equity in the previous lesson and you will note that the increase in owner's equity was R13 500.

Also take note of the accounting terminology used in above calculation - the word PROFIT is used, which applies to the selling of the stock. The word INCOME is used, indicating the total income of the business after the **expenses** have been deducted.

The INCOME of a business is calculated by using a specific account, called the INCOME STATEMENT. This statement is the accounting way of calculating the income of a business.

Here is an example of an INCOME STATEMENT.

INCOME STATEMENT

EXPENSES		INCOME	
Rent	R1 000	Profit	R15 000
Water	R500		
Income	R13 000		
Totals	R15 000	Totals	R15 000

Here it should be noted that the INCOME is the balance of the Income account, meaning that the **expenses** are added and **subtracted** from the **profit**.

The INCOME of a business is also called its FINANCIAL RESULT, indicating the result of all trading activities for a period. This concept signifies the amount the owner receives for his attempt to run a business, which serves as RESULT of all his efforts.

LESSON OUTCOMES

At the end of this lesson, learners should be able to:

1. differentiate between profit and income;
2. identify new accounting terminology, such as income and the financial result;
3. calculate income; and
4. compile the income statement.

ASSESSMENT ACTIVITIES

1. Compile a worksheet requesting explanation of accounting terms;
2. request calculation of income from given information; and
3. request compilation of the income statement from relevant information.

LESSON 9

CALCULATING THE FINANCIAL POSITION



'Anybody there?
Computer records first,
then women and children!'

In lesson eight, the financial results of the business has been calculated. It was indicated that the financial result is the difference between the income and expenditure of the business. This income also increases the owner's equity.

1. THE FINANCIAL POSITION

The word '**position**' means '**state of affairs**'.
Up to this point, the owner of the business knows his financial result, which is his income, but he does not know the state of affairs of his business. This means that he does not know what he owns in the business, meaning his possessions.

Question: Give examples of all your possessions.
Answer: Clothes, books, perhaps a bicycle, etc.

All these examples are personal possessions. The owner of a business should also know which **possessions** his business owns. These possessions are also indicated by means of a statement called the **Balance sheet.**

The Balance sheet consists of all the ASSETS (possessions) and all LIABILITIES (what is owed by the business). Also refer to the accounts in lesson four, but keep in mind that all the stock is sold, therefore there is no more stock in the account.

Refer to the accounting equation in lesson seven.

ASSETS		=	OWNER'S EQUITY
Cash in bank	R98 500		Capital of owner R100 000
			Rent (expense) Less R1 000
			Trading licence (expense) Less R500
Equipment	R15 000		Profit from Stock sold Plus 15 000
Total	R113 500	=	R113 500

The balance sheet, on the following page, as indication of all assets (possessions) and liabilities, will now resemble the following:

BALANCE SHEET

ASSETS		LIABILITIES	
Cash in bank	R98 500	Capital of owner	R113 500
Equipment	R15 000		
Total	R113 500		R113 500

Note that the Balance sheet does not contain income and expenses, because those items are reflected in the Income Statement, which calculates the FINANCIAL RESULT of the business.

The Balance Sheet calculates the FINANCIAL POSITION of the business, only containing Assets and Liabilities.

Now you will wonder why capital of the owner is listed as a liability of the business. The reason is that the capital contribution of the owners always stays his/her personal money. When the business closes, that amount has to be repaid to the owner. The amount of owner's equity will change each year when expenses are deducted and income is added.

LESSON OUTCOMES

After completion of this lesson, learners should be able to:

1. identify new accounting terminology, such as the financial position and liabilities; and
2. draft a balance sheet.

ASSESSMENT ACTIVITIES

1. Supply relevant information and request learners to complete a worksheet containing new accounting terminology; and
2. request learners to draft a balance sheet from given information.

LESSON 10

POSTING TO THE LEDGER FROM THE CASH JOURNALS



'Sometimes I wish you had followed some other profession than accountancy'

Apart from the accounting equation, this is the **most problematic area in the recording of transactions**. Learners are uncertain to **which side** transactions should be posted. This is an indication that the fundamentals of accounting is not understood.

Here follows a simple, straightforward way of explaining posting. Some teachers may not agree with the type of reasoning, but it really works. Try it!

Illustrate a **Cash Receipts Journal** and a **Cash Payments Journal** on the chalkboard. Total both journals and leave enough space between the two journals for insertion of folio numbers.

Here follows an example of a cash receipts journal:

CASH RECEIPTS JOURNAL OF THEMBA TRADERS - MAY 1996

Day	Details	Fol.	Analysis of receipts	Bank	Sales	Cost of sales	Sundry accounts		
							Amount	Fol.	Det
1	A L Themba		98 000 -	98 000 -			98 000 -	B1	Capital
11	Sales		520 -	520 -	520 -	400 -			
12	Sales		660 -	660 -	660 -	510 -			
13	Sales		450 -	450 -	450 -	340 -			
15	Sales		910 -	910 -	910 -	710 -			
				100 540 -	2 540 -	1 960 -	98 000 -		
				B2	N1	N2/B4			

(All cash received)

Here follows an example of a cash payments journal:

CASH PAYMENTS JOURNAL OF THEMBA TRADERS - MAY 1996

CPJ1

Doc. No.	Day	Name of payee	Fol.	Bank	Trading stock	Sundry accounts		
						Amount	Fol.	Details
001	8	BB Ltd		46 000 -		46 000 -	B3	Buildings
002	9	XY Manufacturers		18 000 -	18 000 -			
003	10	Venter Wholesalers		6 500 -	6 500 -			
004	15	Els & Co.		3 700 -	3 700 -			
				74 200 -	28 200 -	46 000 -		
				B2	B4			

(All cash paid out)

Now, pose the following questions:

* Examine the cash receipts journal and indicate **what type of entries** are contained in this journal.

Answer: All cash received.

* Now examine the cash payments journal and indicate what **type of entries** are contained in this journal.

Answer: All cash paid out.

The next step is to draw a bank account in T form.

Bank Account

All cash receipts	All cash payments

Consider the cash receipts journal again:
If all **cash recorded** in this journal has been **received**, then all entries in this journal had to **pay** the money to the business, in order to receive it and to have to record it in the receipts journal.

The next step is to consider the payments journal. If all the **cash** recorded in this journal has been **paid out**, then all entries in this journal had to **receive** the money from our business.

Above reasoning forms the basis of posting to the ledger from both cash journals.

Illustrate this on the chalkboard, making use of the next diagram:

Post from a **receiving** journal = contra account is **credited**
Post from a **paying** journal = contra account is **debited**

The next step is to open the accounts. Now it is important to

keep the following reasoning in mind:

* The first account in the ledger is always the capital account, because it belongs to the owner and he/she comes first; and
* **all other accounts follow a certain order**, according to the following rule, which is called the **order of liquidity**.

For greater clarity, compare the concept of liquidity with water, because liquidity indicates flow of money, which is indicated in the following way:

* things that are the **hardest to sell**, come first, because they cannot be converted into cash very easily;
* then follow accounts that are sold more easily and converted into cash; and
* lastly comes the cash.

The **order of ledger** accounts are:

* Capital - the owner's possession	= B1
* Buildings - could take years to sell	= B2
* Vehicles - could take months to sell	= B3
* Equipment - could take less than a month to sell	= B4
* Stock - sold every day	= B5
* Bank - money on hand	= B6

Now open the accounts on the chalkboard. It is very important to bear in mind that the accounting classroom should have as many

chalkboards as possible. It is imperative for learners to see the **complete picture** as events follow one upon the other. If the chalkboards are inadequate in your venue, request the school's janitor to install portable chalkboards, or you could consider to borrow an extra board when necessary from another classroom.

NEXT, REMEMBER THE FOLLOWING GOLDEN RULE:

* If posting from a **receiving journal**, all **contra accounts are credited**, because they have to pay money in order for you to receive it; and * If posting from a **payments journal**, all **contra accounts are debited**, because you as a business are paying them and they have to receive the money.

The two cash journals are repeated for the sake of continuity. Each journal contains its own folio number. Ledger accounts, each with its own folio number, follow in **correct order**, posted from the two journals.

Another **GOLDEN RULE** that should be kept in mind at this stage is the application of **folio numbers**. A folio number serves as indication that a transaction has been posted to the ledger. Thus, a folio number in a journal is an indication that a transaction has been posted TO the ledger. A **folio number** in a ledger account serves as indication that a transaction has been posted **FROM a journal**. This is a point that should be stressed with the posting of each transaction.

Posting should be done in the following way:

* the **folio numbers** should be inserted at the bottom of the total columns of each journal account and the following words should be used as explanation:
  "Where are we posting to? and the B or N number of the ledger account should be inserted, indicating where the posting is GOING TO";

* Next, the indicated **ledger account** should be found and the word BANK should be indicated in the appropriate column and the following words should be used:

  "This article has been paid for by the bank, thus the contra word used, should be bank. This posting is done from the journal, that is why the appropriate journal should be indicated as folio number, such as CRJ or CPJ, indicating where the posting CAME FROM".

Here follows an example of journals:

CASH RECEIPTS JOURNAL OF THEMBA TRADERS - MAY 2001 CR

Day	Details	Fol.	Analysis of receipts	Bank	Sales	Cost of sales	Sundry accounts		
							Amount	Fol.	Details
1	A L Themba		125 000 -	125 000 -			125 000 -	B1	Capital
8	Sales		480 -	480 -	480 -	300 -			
9	Sales		2 560 -	2 560 -	2 560 -	1 600 -			
17	Sales		2 880 -	2 880 -	2 880 -	1 800 -			
				130 920	5 920 -	3 700 -	125 000 -		
				B4	N1	N2/B3			

go to B4

CASH PAYMENTS JOURNAL OF THEMBA TRADERS - MAY 2001

Doc. No.	Day	Name of payee	Fol.	Bank	Stationery	Wages	Trading stock	Sundry accounts: Amount	Fol.	Details
001	2	ABC Builders		100 000 -				100 000 -	B2	Buildings
002		Municipality		280 -				280 -	N5	Trading licence
003		Shopfitters		1 700 -				1 700 -	N6	Rent expense
004		Pretoria Wholesalers		20 000 -			20 000 -			
005		Equip Ltd		1 240 -	1 240 -					
006	5	Cash		420 -		420 -				
007	12	Cash		420 -		420 -				
008	16	SS Ltd		1 500 -			1 500 -			
009	19	Cash		420 -		420 -				
010	23	The Reporter		320 -				320 -	N7	Advertisements
011	26	Municipality		195 -				195 -	N8	Water and electri
012		Cash		420 -		420 -				
013	29	C. Charles		3 500 -				3 500 -	N9	Salaries
				130 415 -	1 240 -	1 680 -	21 500 -	105 995 -		
				B4	N3	N4	B3			

go to B4

Here follows an example of posting to the ledger from relevant journals:

GENERAL LEDGER OF THEMBA TRADERS

CAPITAL — B1

Dr.							Cr.				
								19.1 May	1	Bank	CRJ1	125 000 -

BUILDINGS — B2

19.1												
May	2	Bank	CPJ1	100 000 -								

Sundry posted

TRADING STOCK — B3

19.1					19.1				
May	31	Bank	CPJ1	21 500 -	May	31	Cost of sales	CRJ1	3 700 -

Total posted

BANK — B4

19.1					19.1				
May	31	Total receipts	CRJ1	130 920 -	May	31	Total payments	CPJ1	130 415 -

From CRJ

From CPJ

SALES N1

					19.1 May	31	Bank	CRJ1	5 920	-

COST OF SALES N2

19.1 May	31	Trading stock	CRJ1	3 700	-					

STATIONERY N3

19.1 May	31	Bank	CPJ1	1 240	-					

WAGES N4

19.1 May	31	Bank → Total posted	CPJ1	1 680	-					

TRADING LICENCE N5

19.1 May	2	Bank → Sunday posted	CPJ1	280	-					

RENT EXPENSE N6

19.1 May	2	Bank	CPJ1	1 700	-					

ADVERTISEMENTS N7

19.1 May	23	Bank	CPJ1	320	-					

WATER AND ELECTRICITY N8

19.1 May	26	Bank	CPJ1	195	-					

SALARIES N9

19.1 May	29	Bank	CPJ1	3 500	-					

LESSON OUTCOMES

After completion of the lesson, learners should be able to:

1. identify new accounting terminology, such as folio numbers and liquidity;
2. post from the cash receipts and cash payments journals to the general ledger;
3. insert folio numbers both in the journals and in the ledger; and
4. outline the order of ledger accounts.

ASSESSMENT ACTIVITIES

1. Supply a photostat copy of the two journals and request posting to the ledger;
2. request learners to insert folio numbers connected with the posting on the photostat copy as well as on the posted ledger; and
3. supply ledger accounts and request them to be placed in the correct order.

TRIAL BALANCE OF THEMBA DRY CLEANERS ON 31 MARCH 2001

	Fol.	Debit		Credit	
Balance sheet accounts section					
Capital	B1			90 000	-
Bank	B2	37 164	-		
Equipment	B3	12 000	-		
Vehicles	B4	45 000	-		
Nominal accounts section					
Current income	N1			9 270	-
Stationery	N2	412	-		
Wages	N3	620	-		
Material costs	N4	734	-		
Trading licence	N5	340	-		
Rent expense	N6	1 500	-		
Salaries	N7	1 500	-		
		99 270	-	99 270	-

At the **end of a month**, the **accuracy** of the books are tested, which ensures that double entries for all transactions were made. This statement tests the **arithmetical accuracy** of accounts, meaning that, the same as the equation, the trial balance has to balance, or both sides have to be **equal**.

The name of the statement explains it all. **Trial balance** - a **list** of all the **balances**. Take your previous example of ledger accounts and use the balances to compile Trial balance.

Now dates have to be supplied. Indicate that this ledger is for October and show that all balances have to be brought down for use during the next month. Stress the fact that the balances appear on the same side as indicated by the ledger accounts.

The ledger appears on the next page.

Ledger for October

Capital

		Bank	R100 000

Buildings

Bank	R30 000		

Equipment

Bank	R15 000		

Stock

Bank	R25 000		

Bank account

Capital	R100 000	Building	R30 000
		Equipment	R15 000
		Stock	R25 000
		Balance	**R30 000**
Totals	R100 000	Total	R100 000

Balance brought down for November = R30 000

Now the Trial Balance is drafted, making use of all balances on whatever side it appears. The Trial Balance is found on the next page.

TRIAL BALANCE ON 30 OCTOBER

	Debit balances	Credit balances
BUILDINGS	R30 000	
EQUIPMENT	R15 000	
STOCK	R25 000	
BANK	R30 000	
CAPITAL		R100 000
TOTALS	R100 000	R100 000

This trial balance serves as an indication that no money had been lost during the month of October, which is also proved by the accounting equation.

LESSON OUTCOMES

1. New accounting terminology, such as a trial balance
2. Bringing down of balances for use in the following month
3. Compilation of a trial balance

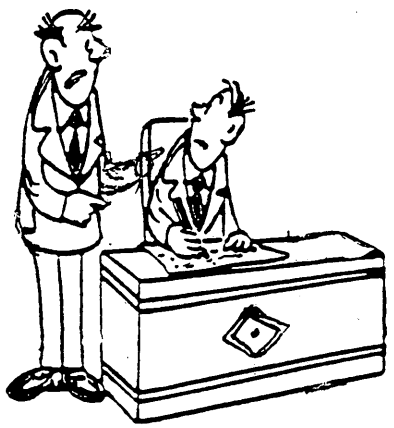
ASSESSMENT ACTIVITIES

1. Supply the original ledger accounts. In this case supply space for dates and request insertion of dates
2. Request bringing down of indicated balances for use in the following month
3. Request a trial balance to be compiled from given accounts

PART TWO

GRADE 9 ACCOUNTING TEACHING

'Your problem seems to be that you don't know that two debits don't make a credit!'



Grade 9 accounting proves a very problematic area for learners and usually discourages learners from taking accounting as choice subject in grade 10.

> Teaching should NOT commence with the relationship between the effect of transactions on assets, owner's equity and liabilities as reflected in the general ledger, although this factor is indicated in most textbooks at an early stage.

Accounts, as systematic method of recording financial information, should be dealt with as indicated in this teaching strategy, because it is difficult to grasp at this stage.

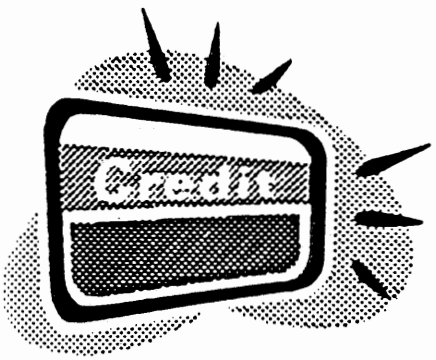
Liabilities and credit transactions should firstly be dealt with to provide a better understanding of, for example, asset accounts increasing with debit entries and decreasing with credit entries.

Other problematic areas for grade nine were identified as:

* **credit transactions**, which include credit sales and credit purchases (not the recording in the journals);
* **posting** to the debtor's and creditor's ledger;
* **paying and receiving money** for a credit transaction; and
* the **closing of accounts** (final accounts) for preparation of financial statements.

LESSON 1

CREDIT TRANSACTIONS



Credit transactions comprise credit purchases as well as selling on **credit**. Only the problematic areas concerning credit will be dealt with here.

CREDIT PURCHASES

It often happens that a business has to **buy items on credit**, which indicates that its cash supplies have been depleted or kept for another purpose. In this case, the items purchased are obtained immediately, but payment takes place at a later stage.

This means that the **money is owed to the supplier** and such person is called a **creditor**. Money owed by a business is a **liability** to the business, which introduces the **third element of the accounting equation**. This completes the equation, which now can be written in this form:

ASSETS = OWNER'S EQUITY + LIABILITIES

EXAMPLE

Use the original equation which started the explanation of the equation, which is:

ASSETS		=	**OWNER'S EQUITY**
Cash in bank	R30 000		
Building	R30 000		
Equipment	R15 000		
Stock	R25 000		
Total	R100 000	=	R100 000

Continue the original narrative, by indicating that the owner, at this stage, wants to purchase stock for R40 000, but he only possesses R30 000. The alternative is to buy the stock on account. He will receive the goods immediately, but pays at a later stage, which means that he owes the R40 000. The original equation will now change to the following:

ASSETS		=	**OWNER'S EQUITY**	+	**LIABILITIES**
Cash in bank	R30 000				
Building	R30 000				
Equipment	R15 000				
Stock	R65 000				
					Creditor R40 000
Totals	R140 000	=	R100 000	+	R40 000
Totals	R140 000	=	R140 000		

Indicate that the **stock has increased** with R40 000 because of the fact that the goods were received immediately, and explain that a creditor indicates a liability. Also indicate that the totals have increased with R40 000 and explain that in such a way the owner is assisted to make use of more money than which he/she originally invested into the business.

ACTIVITY 1

A good way of explaining such credit transaction is to indicate that an invoice is used as source document. Supply blank invoices and write transactions containing buying of different items on one account on the board and let each group of learners complete different invoices. Clearly indicate that this invoice is used when transactions are entered into the books of a business.

Now transfer this information to **T-accounts** in the following way, making use of invoices. The example is shown on the next page.

EXAMPLE

Buildings

Bank	R30 000

Equipment

Bank	R15 000

Stock

Bank	R25 000
Creditor	R40 000
Total	R60 000

Bank account

Capital	R100 000	Building	R30 000
		Equipment	R15 000
		Stock	R25 000
		Balance	R30 000
Totals	R100 000	Total	R100 000

Creditor

		Stock	R40 000

Indicate the **double entry** of the stock purchased on account and indicate that ledger accounts clearly show whether things were paid for or bought on account. This fact is clearly shown by the wording of the Stock account (Stock is supplied by a creditor and the creditor sent out stock, indicating a credit entry).

LESSON OUTCOMES

At the end of the lesson, learners should be able to:

1. identify new accounting terminology, such as credit and liabilities;
2. effect credit transactions;
3. indicate which extra element is added to the accounting equation;
4. identify relevant source documents; and
5. post credit transactions to the ledger.

ASSESSMENT ACTIVITIES

1. Supply information which includes creditors and request the accounting equation to be drawn up;
2. supply blank source documents and relevant transactions and request documents to be completed; and
3. request the same information to be posted to the ledger.

LESSON 2

PAYING OF CREDITOR'S ACCOUNTS



Once again use the same example of buying stock for R40 000. The owner of the business is able to pay his creditor R20 000 at the end of that month. Draw up the accounting equation as follows:

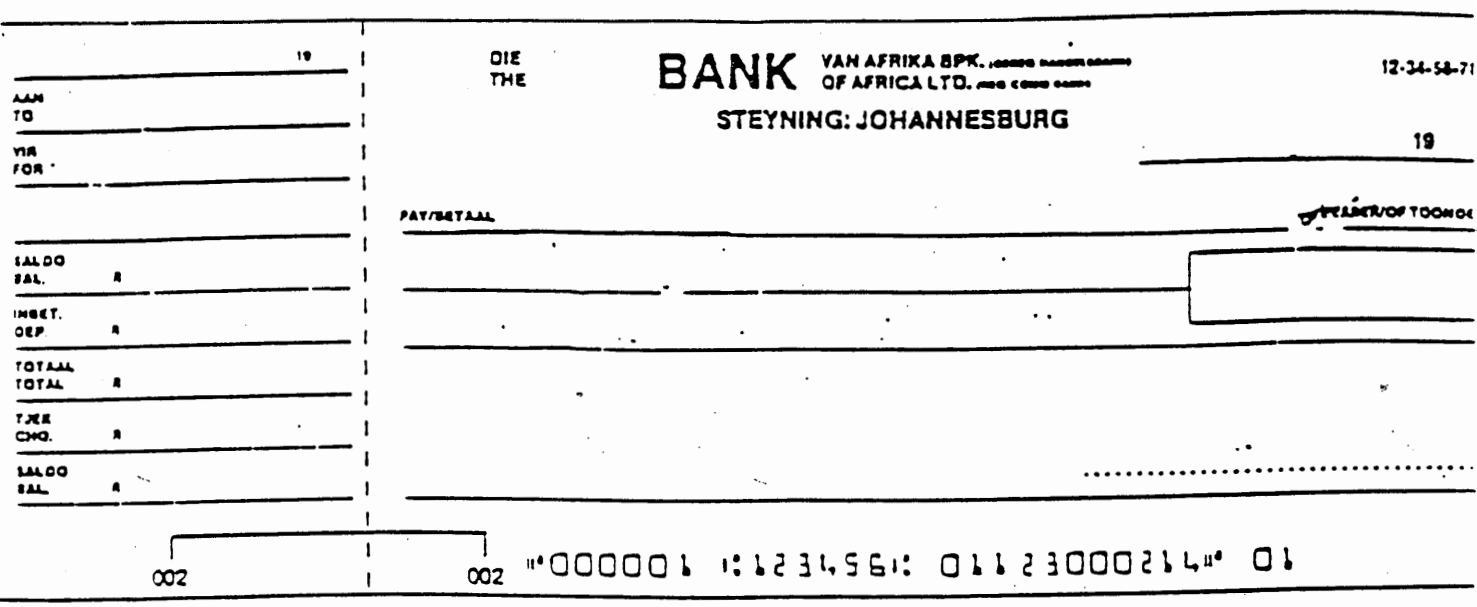
ASSETS		= **OWNER'S EQUITY**	+ **LIABILITIES**
Cash in bank	R10 000		
Building	R30 000		
Equipment	R15 000		
Stock	R65 000		
			Creditor R20 000
Totals	R120 000	= R100 000	+ R20 000
Totals	R120 000	= R120 000	

Indicate clearly that the cash in the bank decreases with R20 000 as does the creditor, because he/she has been paid in cash. Here the **source document** should be indicated, which is a **cheque counterfoil.**

ACTIVITY 2

A blank cheque should be supplied, together with relevant information and learners should be requested to complete the cheque and counterfoil.

Here follows an example of a cheque plus its counterfoil:



Afterwards the **difference in the ledger** accounts should be indicated as follows on the next page.

EXAMPLE

Buildings

Bank	R30 000

Equipment

Bank	R15 000

Stock

Bank	R25 000
Creditor	R40 000
Total	R60 000

Bank account

Capital	R100 000	Building	R30 000
		Equipment	R15 000
		Stock	R25 000
		Payment to Creditor	**R20 000**
		Balance	**R10 000**
Totals	R100 000	Total	R100 000

Creditor

Bank	**R20 000**	Stock	R40 000
Balance	**R20 000**		
Total	R40 000	Total	R40 000

Indicate that the **bank balance** has **decreased** with R20 000 because the **creditor** has been **paid** and also indicate that the creditor

now has a balance of R20 000 as indication that a part of the debt has been paid and the creditor is owed less.

LESSON OUTCOMES

After completion of this lesson, learners should be able to:

1. account for the paying of accounts;
2. identify the change in accounting equation;
3. interpret the change in ledger account balances; and
4. identify the source document relevant to paying in cash.

ASSESSMENT ACTIVITIES

1. Use an example of part of a debt being paid and request the accounting equation to be completed;
2. also request the ledger accounts to be changed;
3. the same type of exercise can be compiled, making use of source documents; and
4. request completion of blank source documents.

LESSON 3

CREDIT SALES OF GOODS



Sunday Times
28 May 1996

A credit sale transaction takes place when **goods are sold to a customer** and the **money** is **received** by the business at a **later date**. Such a person owing money to the business is called a **debtor**.

This transaction implies a **stock decrease** because **goods have been sold**, but no money has been received. The money is received at a later stage, therefore a debtor is then also treated as an asset.

The problematic area involved, is to explain that a sale transaction always involves **profit**. As valuable teaching method, keep in mind that the known has always to be linked to the unknown for better comprehension. Relate the same story as at the onset of the accounting course.

Use the **Tuck shop** as your example and stress that nobody will go to the trouble of selling something without getting something extra from the deal.

The cash book of the tuck shop is illustrated below.

CASH BOOK OF MY TUCK-SHOP FOR JUNE AND JULY 1999

RECEIPTS		PAYMENTS	
Total sales	R200	Purchases	R100
		Rent (2 months)	R20
		Profit	R80
Total	R200	Total	R200

This cash transaction was used as an example, but to illustrate the problem, a **credit transaction** is required. Indicate that goods are sold to a customer who is **well known** to the business (here the risk of selling on credit and the steps that should be taken to ensure that the customer is credit worthy should be accentuated).

> Do not start with the accounting equation as in previous lessons. In this case the basics should first be grasped.

ACTIVITY 4

Start with the **source document** involved, which is an **invoice**. Supply information about a sale transaction and require the

completion of a credit sale invoice.

After the credit sale invoice has been completed, the next procedure should be followed:

* A very important question should be raised in class: Do you think these items cost the same price at which they are sold?

* Decide upon a **price** at which those items were bought and request learners to **calculate the profit.**

* Explain that the **cost price** of goods is called the **cost of sales** - link these two concepts in such a way that it is easily understood.

* Compile t-accounts in the following way:

* Write your transaction on the board -
  * goods were bought for R200; and
  * sold for R250.

* Compile ledger accounts in the following way

ALWAYS START WITH THE TRADING STOCK ACCOUNT

* keep accounts in the specific order as illustrated on the next page.

ORDER OF ACCOUNTS

Trading Stock

1. Bank	R200	2.**Cost of Sales**	R200
		(because it was sold)	

Cost of Sales

3. Trading Stock	R200		

Debtors Control

(explain that it is called the control account, because ALL the debtors are recorded in the same account)

4. Sales	R250		

Sales

		5. Debtors	R250

* INDICATE THAT IF, THE AMOUNT WHICH **SALES COST**, IS SUBTRACTED FROM THE ACTUAL AMOUNT AT WHICH **GOODS WERE SOLD**, **PROFIT** IS INDICATED.

SALES - COST OF SALES = PROFIT

* Raise the next question in class: What does the owner of a business do with the profit? Give it away?

The answer should be that he should pocket the amount, because in reality it resembles the salary he has worked for.

* Next question: Which part of the accounting equation constitutes his pocket?

Answer: Owner's equity

* Compile the accounting equation as follows:

ASSETS	=	**OWNER'S EQUITY + LIABILITIES**
+ R250 (debtors increase)	=	+ R50 (profit increases owner's equity)
- R200 (stock decreases)		

* The next step is the recording of this transaction in the debtor's journal which is seldomly misunderstood by learners.

LESSON OUTCOMES

At the end of the lesson, learners should be able to:

1. identify new accounting terminology, such as cost of sales;
2. calculate profit derived from sales and cost of sales;
3. compile a credit invoice from relevant information;
4. record credit sales in the correct way; and
5. reflect credit sales in the accounting equation.

ASSESSMENT ACTIVITIES

1. Supply relevant information and request the following:

   profit to be calculated

   a credit invoice to be compiled

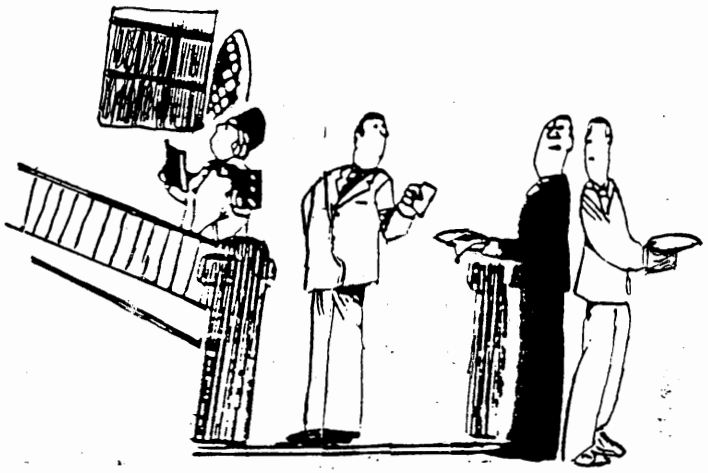
   credit sales to be recorded in t-accounts

   the compilation of the accounting equation

LESSON 4

COLLECTION OF DEBTS FROM DEBTORS

'I don't know what to do'. This man says his accountant told him to always get a receipt.'



This part does not present a problem to learners, but the **effect** it has on the **accounting equation** does create problems.

At the **onset** of the lesson, the **source document** could be dealt with, which is a **receipt**. The receipt is illustrated below.

RECEIPT

No. 46 .....19..

J.F. PETERS

Two Rivers
P.O. Box 5576
CERES
6835

R c

Received from .....

The sum of .....

..... Rand

..... cents

Signed .....
J.F. Peters

ACTIVITY 5

Supply transactional detail and request a receipt to be completed by learners.

When explaining the effect of debtor's payments on the accounting equation, start with t-accounts and **ALWAYS START WITH THE PURCHASES OF THE DEBTOR.**

Debtor's Control

1. Sales	R250	2. Bank	R250

(This is an indication that goods have been received by the debtor)

Now the debtor is going to pay his debt of R250, which amount is going to be paid into the bank account of the business.

Bank

3. Debtor	R250		

Clearly indicate that the moment the debtor pays, the debtor's control is credited and the bank debited because the money is received by the bank.

Thus, the **effect on the accounting equation** is: (keep in mind that the known should be linked to the unknown)

THE ACCOUNTING EQUATION

ASSETS = **OWNER'S EQUITY**

+ R250 **Debtors increase** (previous transaction)

NOW - do the following:

- R250 **Debtors decrease** (debtor has paid and owes nothing more)

+ R250 **Bank increases**, because money has been received AND MONEY IS ALSO AN ASSET

Indicate clearly that this transaction only affects **assets**, because a debtor as well as bank is an asset.

LESSON OUTCOMES

At the end of the lesson, learners should be able to:

1. identify the receipt as source document;
2. reflect on debtors in the accounting equation; and
2. indicate payments by debtors in the correct way.

ASSESSMENT ACTIVITIES

1. Supply blank receipts together with relevant information and request completion thereof; and
2. request completion of the accounting equation after relevant information about collection of debts from debtors has been supplied.

LESSON 5

POSTING FROM DEBTOR'S AND CREDITOR'S JOURNALS TO RELEVANT LEDGER ACCOUNTS

The recording of credit transactions in the relevant journals never pose any problems, because it is done in a straightforward way. **The problems arise when information has to be posted to the ledger.**

Firstly, the **Statement of Account** with its three columns have to be explained as follows:

* The **first** column represents all **goods received** by debtors,
* the **second** column represents all **money paid** by debtors, and
* the **third** column represents the outstanding **balance**.

ACTIVITY 6

Supply relevant transactional information and request completion of a blank Statement of Account.

The Statement of Account appears on the next page.

STATEMENT OF ACCOUNT

STATEMENT OF ACCOUNT

Themba Traders
16 Church Street
5201 East London

Tel. 3-9393

Dr. to: J. F. PETERS & SON
Beach Road
5201 East London

Date	Code	Details/Document No.	Fol.	Debit	Credit	Balance
19..						
Sept. 1		Account rendered				244 -
3	02	667			230 -	
	03	667			14 -	- -
10	01	148		188 -		188 -
12	05	27			8 -	180 -
20	01	296		204 -		384 -

The next part of the lesson should be devoted to explanation of the reason for debtor's and creditor's accounts.

EXPLANATION

Debtor's and creditor's accounts **DO NOT** form part of the main accounting system of a business, therefore these ledgers are called SUBSIDIARY ledgers.

The part contained in the **ledger** is the **control accounts** of debtors as well as creditors. These accounts contain information of **ALL debtors** as well as of **ALL creditors**, representing combined information, which the business requires. The business wants to know the TOTAL of what is owing to him (all debtors) and the TOTAL of what is owed (all creditors) by him/her.

Each debtor or creditor has to receive an account of what is owed by him/her, which is not reflected by the control accounts. This state of affairs has to be **recorded in a different account**, resembling the Statement of Account.

Because these **ledgers do not form part of the general ledger**, the name of the CONTRA-ACCOUNT is not mentioned in subsidiary ledgers. Debtors and Creditors want to keep record of their purchases (sales) and payments and compare it with source documents in their possession. Thus, the wording in the subsidiary ledgers is that of the source documents, such as **invoice** in the case of a purchase or a sale and **receipt** in the instance of a payment.

Also explain that certain **codes** are made use of in these ledgers, which are the following:

* 01 represents a purchase or a sale;
* 02 represents a payment; and
* 03 represents a discount.

Afterwards, the reasoning of lesson 10 should be followed.

POSTING TO THE DEBTOR'S LEDGER

Firstly, supply an example of a **debtor's journal**, which appears on the next page.

DEBTORS JOURNAL OF THEMBA TRADERS - JULY 1996

DJ4

Doc. No.	Day	Debtor	Fol.	Sales		Cost of sales	
001	5	J. Jonker	D1	1 220	00	705	00
002	16	J. Rossouw	D2	860	00	570	00
003		D. Daniels	D3	1 330	00	770	00
004	27	J. Jonker	D1	1 375	00	1 100	00
005		J. Rossouw	D2	995	00	796	00
				5 780	00	3 941	00
				B4/N1		B3/N2	

Now ask the following question: When goods are sold to a debtor, does he/she receive the goods or not?

Answer: the goods are RECEIVED by the debtor.

Teacher's comment: Thus the debtor's journal is a receiving journal, exactly the same as the Cash Receipts Journal.

Thus, all items bought by the debtor, have to be credited, because those items LEFT the shop. This fact means that all contra accounts have to be credited, EXCEPT for the total of the journal. The total of the journal represents DEBTOR'S CONTROL, which has to be debited, because the debtors RECEIVED the goods.

Thus, the following deduction is arrived at:

* all items in the **debit column** represent **receipts**,
* all items in the **credit column** represent **payments**; and
* the **balance column** represents what is **still owing**.

Now indicate through the use of **folio numbers** how it should be posted. Remember to use the following words:

> * numbers written in the journal indicates WHERE it is posted TO; and
> * numbers written in die ledger indicates WHERE it is posted FROM.

Here follows an example of a debtor's ledger:

Debtors ledger of Themba Traders

J F PETERS D11

Date		Code	Details/Document No.	Fol.	Debit		Credit		Balance	
					Goods received		Amounts paid			
19.. Oct.	1		Account rendered						472	80
	5	01	Invoice 723	DJ6	117	30			+ 590	10
	12	02	Receipt 206	CRJ4			472	80	− 117	30
	17	01	Invoice 802	DJ6	165	10			+ 282	40
	29	02	Receipt 301	CRJ4			150	00	− 132	40

PINE SUPPLIERS D12

Date		Code	Details/Document No.	Fol.	Debit		Credit		Balance	
19.. Oct.	1		Account rendered						147	60
	4	02	Receipt 190	CRJ4			147	60	-	
	7	01	Invoice 761	DJ6	96	20			96	20
	18	01	Invoice 812	DJ6	60	10			156	30

Carefully note the following: (Explain separate parts of this account, one at a time, to learners)

* the amount of **Account Rendered** (this was the amount owed by the debtor from the previous month);
* an **invoice** (in the debit column, meaning he/she received the goods) **increases the balance** because more has been purchased and **more is owed**;

* a **receipt** (in the credit column, meaning money has been paid) **decreases the balance** because when money has been paid, **he owes less**;
* an invoice is posted from the Debtor's Journal, therefore the folio number DJ;
* a receipt has been posted from the Cash Receipts Journal, indicating the payment of money;
* the final balance represents the amount which is payable the following month; and
* this amount of each debtor's account is added to represent the total of the debtor's control account in the general ledger.

ACTIVITY 7

Supply a few debtor's accounts together with a debtor's control account in the general ledger and allow learners to add the final balances of debtors to comprise the balance of the control account.

POSTING TO THE CREDITOR'S LEDGER

Firstly, supply an example of a creditor's journal as follows:

CREDITORS JOURNAL OF THEMBA TRADERS - JULY 1996

CJ4

Doc. No.	Day	Creditor	Fol.	Creditors control		Trading stock		Stationery		Sundry accounts			
										Amount		Fol.	Details
001	2	CZ Printers	C1	310	00			310	00				
002	3	Rep & Son	C2	6 620	00	6 620	00						
003	12	Pine Suppliers	C3	86	00			86	00				
004		Rep & Son	C2	2 146	00	2 146	00						
005	23	Hall & Son	C4	3 216	50	2 745	50			471	00	N4	Packing material
				12 378	50	11 511	50	396	00	471	00		
				B6		B3		N3					

Use the same reasoning as for a debtor's ledger.

Now, request learners to imagine that they own a business. Ask the following question: 'Does a creditor receive anything if he sells to our business?

Answer: No, he/she sends the goods to our business, because we are buying it from him.

This serves as indication that the **Creditor's Journal** is a **giving journal**, meaning goods are given to us when we buy it.

Explain that ALL debit entries represent receipts, but in this case, because we are dealing with a creditor, they represent cash receipts. In this instance, **payments** we have made to the **creditor**, which he/she receives. ALL credit entries represent things that **have left THEIR business** and in this instance, things

or goods they have sent to our business, which are our purchases. Thus a credit entry would increase the balance, meaning that we now owe them more and a debit entry would mean that we have paid them and now owe them less.

Now post from the journal to the creditor's account in the creditors ledger, making use of codes and folio numbers:

Creditors ledger of Themba Traders

VENTER WHOLESALERS C4

Date		Code	Details/Document No.	Fol.	Debit		Credit		Balance	
19.8										
June	4	04	Invoice 211	CJ6			620	-	620	-
July	16	05	Cheque 415	CPJ4	620	-			-	

CZ PRINTERS C5

Date		Code	Details/Document No.	Fol.	Debit		Credit		Balance	
19.8										
June	8	04	Invoice 212	CJ6			1 225	-	1 225	-
July	2	05	Cheque 412	CPJ4	1 225	-			-	
	12	04	Invoice 214	CJ7	Amount paid		812	-	812	-
							Goods sold			

ACTIVITY 8

Supply a few creditor's accounts together with a creditor's control account in the general ledger and allow learners to add the final balances of creditors to comprise the balance of the control account.

LESSON OUTCOMES

At the end of the lesson, learners should be able to:

1. post from the debtor's and creditor's journal;
2. make the correct use of codes; and
3. make use of folio numbers when posting.

ASSESSMENT ACTIVITIES

1. Supply debtor's and creditor's journals and request learners to post to the relevant ledgers; and
2. supply debtor's and creditor's ledgers without codes or folio numbers and request these to be added.

LESSON 6

ACCOUNTS - THE RELATIONSHIP BETWEEN THE EFFECT OF TRANSACTIONS ON ASSETS, OWNER'S EQUITY AND LIABILITIES AND ENTRIES IN LEDGER ACCOUNTS

Here the golden rule of **linking the known with the unknown** should be rigorously followed. This is an area which requires thorough explanation, linking previous knowledge with new concepts.

An example used in a previous lesson should suffice:

* Investing capital into the business;
* Buying a building;
* Buying stock and equipment, paying cash for all transactions.

Capital

		Bank	R100 000

Buildings

Bank	R30 000		

Equipment

Bank	R15 000		

Stock

Bank	R25 000		

Bank account			
Capital	R100 000	Building	R30 000
		Equipment	R15 000
		Stock	R25 000
		Balance	**R30 000**
Total	R100 000	Total	R100 000
(Increases with debit entries)		(Decreases with credits)	

From this example, the following should be clear:

* if an **asset** is **bought** or if money is received (which is an asset as well), the **account is debited;**
* If **money is paid out** or an asset is sold, the **account is credited**.

Identify the asset accounts, which are buildings, equipment, stock and bank. All asset accounts should then look like this:

ASSET ACCOUNT	
Increases with debit entry	Decreases with credit entry

Go back to the capital account and indicate a very important aspect. The **owner's equity account** is just the **opposite** of an **asset account**, because this account stays the possession of the owner, which can be illustrated as follows:

* If the **owner deposits money** into the business, his/her **owner's equity increases;** and

* If the **owner draws money** from the business, the **owner's equity decreases.**

OWNER'S EQUITY ACCOUNT

Decreases with debit entry	Increases with credit entry

Liabilities are identical to owner's equity, because when goods are bought on credit, the creditor is credited, because he sent the goods off to our business. When we pay our account, the creditor receives the money and is thus debited. Here follows an example of an account concerning liabilities:

LIABILITIES ACCOUNT

Decreases with debit entry	Increases with credit entry
	(Or - amount owed to creditors)

> The other aspect concerning accounts is that of income and expenses. Always refer back to the known.

When an **expense is paid, bank is credited**, because the money is paid out and the particular **expense is debited.** Be careful to use the example in exactly this way, because the known should be linked with the unknown. Supply an example, which is:

Bank			
		Expense (wages)	R4 000

Wages (expense)			
Bank	R4 000		

Stress the double entry principle, always starting with the bank.

Thus **EXPENSE ACCOUNTS ARE DEBITED**, as in the next example

Expense account	
Debited	

When an **INCOME** is received, such as rent for a building or part of the building, the tenant pays the owner of the building an amount in cash. Thus the **bank account receives the money** and the **income account is credited**, as in the following example:

Bank account			
Rent received	R2 000		

Rent received (income account)			
		Bank	R2 000

Thus an **INCOME ACCOUNT** is always **CREDITED**, as

Income account	
	Credited

This argument should form the basis of all reasonings from this stage until grade 12. If learners grasp this rationality, all explanations can, with great success, be based on this relationship.

This lesson also forms the basis for the next lesson, which is the closing of accounts for preparation of financial statements. Use the same reasoning throughout.

LESSON OUTCOMES

At the end of the lesson, learners should be able to:

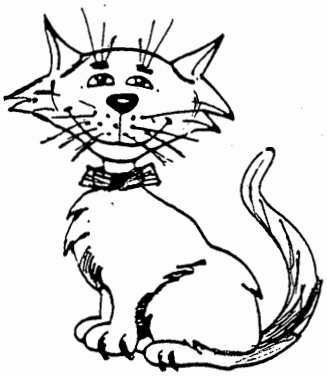
1. differentiate between new accounting terminology, which are, income and expenses; and
2. identify the relationship between the effect of transactions on assets, owner's equity and liabilities as illustrated in the ledger.

ASSESSMENT ACTIVITIES

1. Different transactions can be supplied, which then should be divided into the different categories as indicated in this lesson; and
2. the answer to no. 1 should then be indicated in ledger accounts.

LESSON 7

THE CLOSING OF ACCOUNTS (FINAL ACCOUNTS) FOR PREPARATION OF FINANCIAL STATEMENTS

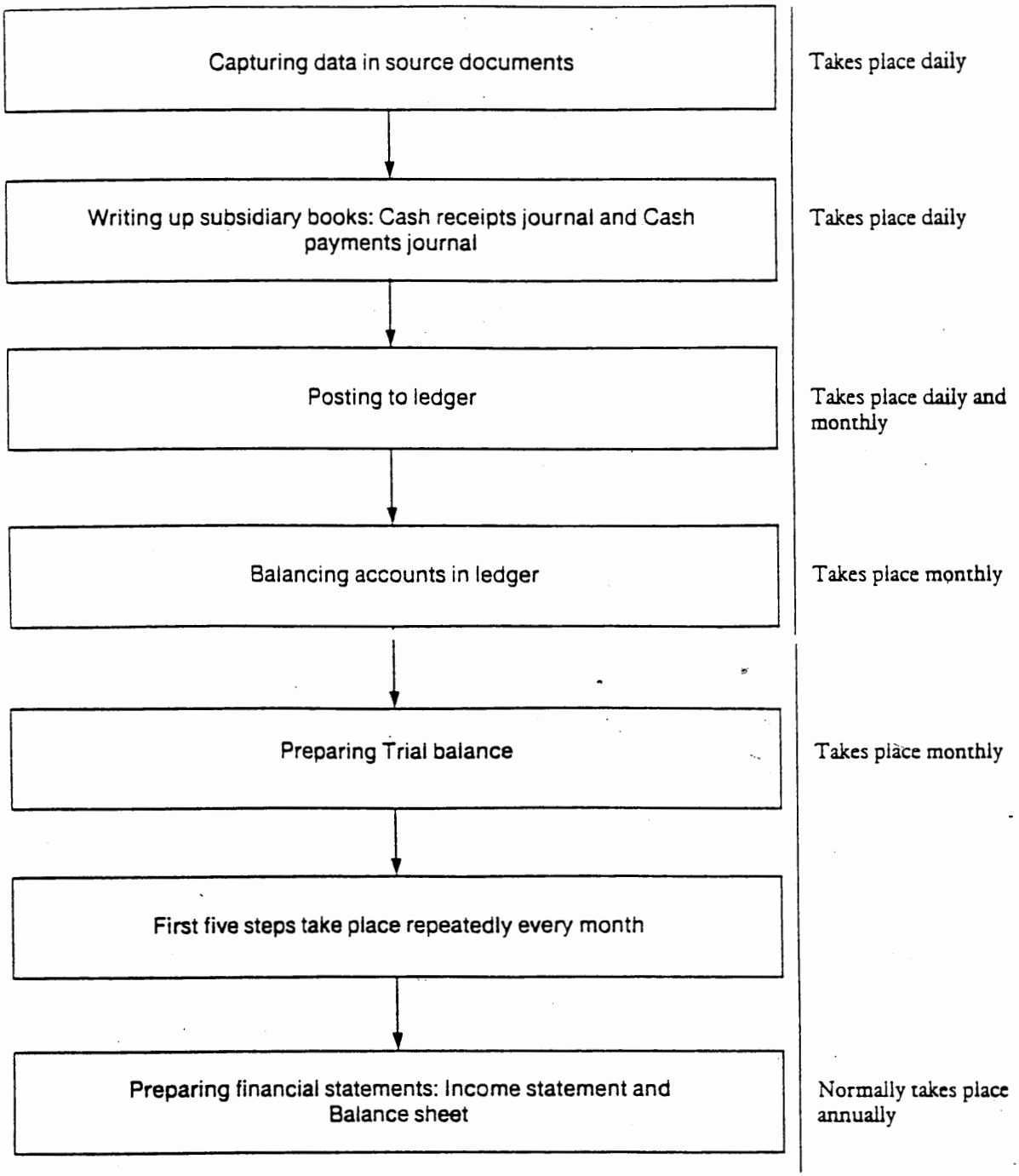


This is the office cat.
If you feed it, it's a fixed cost.
If no mice are around,
you'll have to feed it more.
Then it is also a variable cost.

A detailed description should now follow about **accounting procedure** which should be done according to the following steps:

* entries in **journals** are compiled at the **end of every day**;
* posting to the **ledger** is done at the **end of every month**;
* to determine the accuracy of books, the **trial balance** is compiled at the end of every month from ledger accounts;
* to determine the **financial results** of the business, meaning the profit, the last trial balance is used; and
* the last trial balance is also used to ascertain the **financial position** of the business, meaning a balance sheet.

The accounting procedure



Now explain that each **ledger account** comprises a **page on its own** in real life because information for 12 months is contained within it. Take, for example the wages account. All wages paid

out for the year are recorded in one account. Illustrate the wages account on the board and indicate total wages for each month for 12 months. Also indicate the extent of the financial year, usually from 1 March of the year to 28 February of the next year (explain in detail that this serves an income tax purpose). Businesses have to pay income tax on their profit and the tax year ends on 28 February. You may even take a tax return form to school as illustration.

		Wages
1998	March	R1 000
	April	R1 000
	May	R1 000
	June	R1 000
	July	R1 000
	August	R1 000
	September	R1 000
	October	R1 000
	November	R1 000
	December	R1 000
1999	January	R1 000
	February	R1 000
Total wages for the year		R12 000

ACTIVITY 9

Require the compilation of a trial balance from relevant information for the month of February, the last month of the financial year. Use actual ledger accounts and not only the account names and amounts.

Use this trial balance as basis for your explanation.
An example of an exercise indicating a trial balance follows on the next page.

EXERCISE

Instructions:

On 31 May 1996 the following balances/totals appeared in the General ledger of Themba Traders: Capital R125 000, Buildings R100 000, Trading Stock R17 800, Bank (Dr.) R505, Sales R5 920. Cost of sales R3 700, Wages R1 680, Stationery R1 240, Trading Licence R280, Rent expense R1 700, Advertisements R320, Salaries R3 500 and Water and Electricity R195.

Prepare a Trial Balance on this date.

Solution

TRIAL BALANCE OF THEMBA TRADERS ON 31 MAY 1996

	Fol.	*Debit*		*Credit*	
Balance sheet accounts section					
Capital	B1			125 000	-
Buildings	B2	100 000	-		
Trading stock	B3	17 800	-		
Bank	B4	505	-		
Nominal accounts section					
Sales	N1			5 920	-
Cost of sales	N2	3 700	-		
Stationery	N3	1 240	-		
Wages	N4	1 680	-		
Trading licence	N5	280	-		
Rent expense	N6	1 700	-		
Advertisements	N7	320	-		
Water and electricity	N8	195	-		
Salaries	N9	3 500	-		
		130 920	-	130 920	-

Now, ask the following question: What information contained in the trial balance is used for the calculation of profit?

Answer: The nominal accounts section, because it contains all income and expenditure of the business. Expenses are subtracted from income to reflect profit.

Now make use of the following reasoning. In accounting, calculations may not be effected without reflection in books or accounts, thus the profit may not be calculated without indicating the calculations in books.

This means that amounts may not be transferred from the ledger without an entry in some or other book also. Special accounts have to be compiled in which the profit is calculated and they are called final accounts.

Now use your **ledger accounts** from which the trial balance was compiled in the activity. **START WITH T-ACCOUNTS** and not with journal entries as is expected. Firstly make use of **Sales** and **Cost of Sales** accounts as indicated below. Also stress the fact that nominal accounts, being income and expenses do not have balances, because only one side of the account is utilized.

Sales

		Total	R120 000

Cost of Sales

Total	R60 000		

These two accounts are used to calculate the **gross profit**, which means the profit without taking expenses into consideration. Again, calculations have to be effected in accounts and not as a tally on paper. The new account used for this purpose is called the TRADING ACCOUNT. Now stress that, in order for the

amounts to be reflected in this account, certain steps have to be taken and these are called CLOSING TRANSFERS. Always remember that double entries have to be made, each transaction involves a debit as well as a credit entry.

The next step is to CLOSE these two accounts into the Trading Account in the following way:

* open the Trading Account;
* write the word **Trading Account** in the open spaces of each account, indicating the contra account and indicating that these amounts are taken to the Trading Account; and
* **underline** each amount as indication that the account is closed.

Sales

3.	Trading Account	R120 000	1. Total	R120 000

Cost of Sales

2.	Total	R60 000	4. Trading account	R60 000

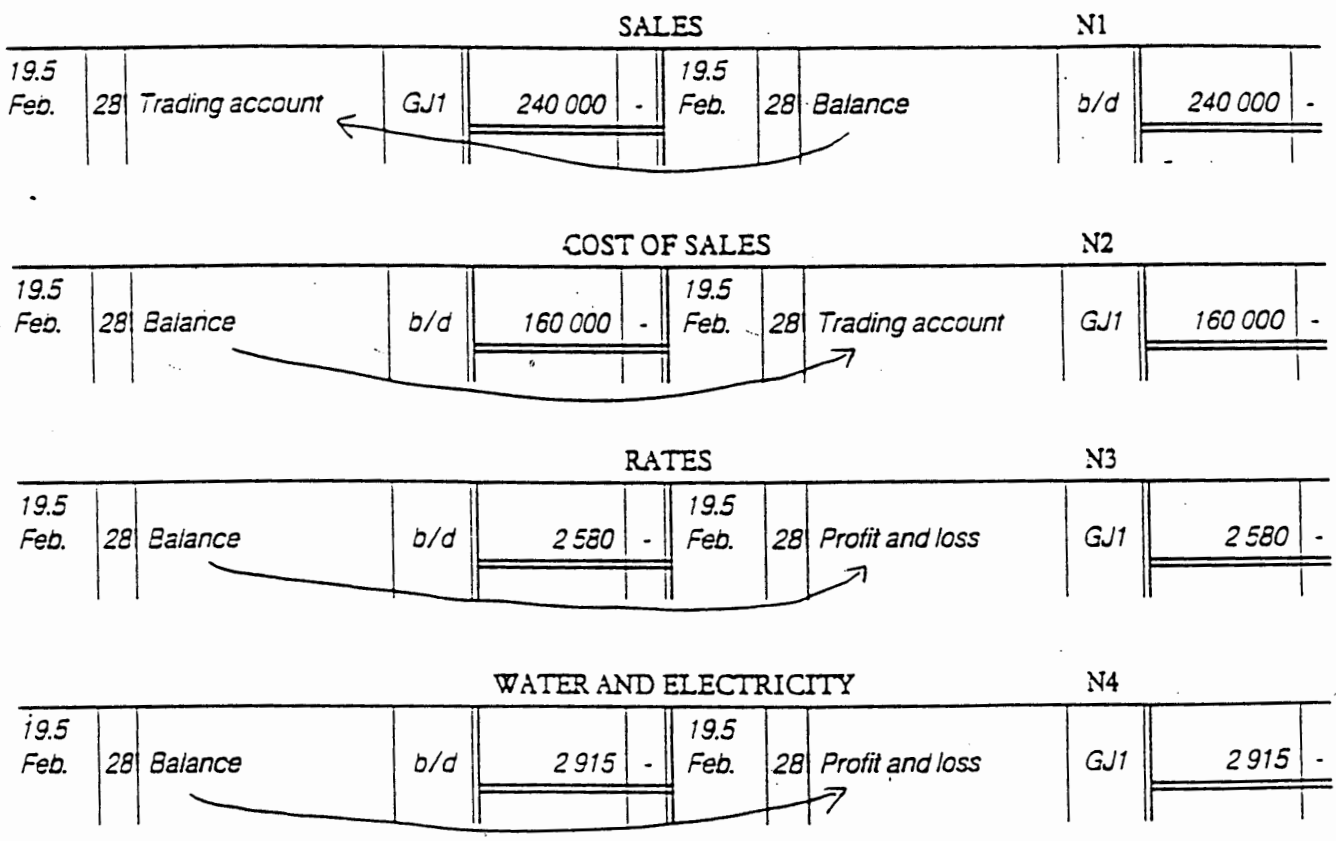
TRADING ACCOUNT

4.	Cost of Sales	R60 000	3. Sales	R120 000
	Profit and Loss	R60 000		
	Total	R120 000	Total	R120 000

Indicate that, when displaying the profit, the name of the **contra-account** is recorded, which is the **profit and loss account**.

This account lives up to its name, because this account is used to calculate the final profit or loss of the business. This final profit is called the net profit.

The next step is as follows:
Close all income and expense accounts off towards the profit and loss account by mentioning the contra accounts, which is depicted below.



TELEPHONE N5

19.5						19.5					
Feb.	28	Balance	b/d	1 888	-	Feb.	28	Profit and loss	GJ1	1 888	-

STATIONERY N6

19.5						19.5					
Feb.	28	Balance	b/d	3 074	-	Feb.	28	Profit and loss	GJ1	3 074	-

SALARIES N7

19.5						19.5					
Feb.	28	Balance	b/d	41 000	-	Feb.	28	Profit and loss	GJ1	41 000	-

RENT INCOME N8

19.5						19.5					
Feb.	28	Profit and loss	GJ1	6 000	-	Feb.	28	Balance	b/d	6 000	-

TRADING ACCOUNT N9

19.5						19.5					
Feb.	28	Cost of sales	GJ1	160 000	-	Feb.	28	Sales	GJ1	240 000	-
		Profit and loss	GJ1	80 000	-						
				240 000	-					240 000	-

PROFIT AND LOSS ACCOUNT N10

19.5						19.5					
Feb.	28	Rates	GJ1	2 580	-	Feb.	28	Trading account	GJ1	80 000	-
		Water and electricity	GJ1	2 915	-			Rent income	GJ1	6 000	-
		Telephone	GJ1	1 888	-						
		Stationery	GJ1	3 074	-						
		Salaries	GJ1	41 000	-						
		Capital	GJ1	34 543	-						
				86 000	-					86 000	-

Take note that the net profit is not indicated in the account, but the name of the **contra account** appears next to the amount. The word Capital is indicated, which means that the nett profit is added to the owner's capital as 'salary'.

Now it is very important to explain that entries made directly into the ledger is not permitted (this was only a way to induce better understanding, but it is the last step in the process, not the first as indicated in this explanation). Journals are books of first entry.

EACH AND EVERY ENTRY FIRSTLY HAS TO BE ENTERED INTO A JOURNAL, from there the name - **BOOKS OF FIRST ENTRY.** Now we are going to introduce a new type of journal: the general journal.

Also very important is to stress that each entry done in accounting is accompanied by a **source document.**

When **calculating the profit**, no source documents are implicated, thus all transactions containing NO SOURCE DOCUMENTS are entered in the **general journal.**

Now use the ledger accounts to compile the journal. This method is highly recommended because learners are apt to become confused when compiling the journal. When compiling the journal from a rough sketch of t-accounts, all journal entries will be correct. When an account is debited with a closing entry, the journal is also debited. Use the same ledger accounts and indicate whether

the account is debited or credited with the closing entry and subsequently do the journal entry.

Here the ledger accounts are repeated and the journal entries indicated. Also illustrate that all entries into the profit and loss account are treated as a single journal entry and not as a series of separate entries.

GENERAL JOURNAL

	Profit and loss	N10	51 457	-		
	Rates	N3			2 580	-
	Water and electricity	N4			2 915	-
	Telephone	N5			1 888	-
	Stationery	N6			3 074	-
	Salaries	N7			41 000	-
	Closing transfers					

The next step is to **compare** the **accounts closed** off towards the final accounts with the Trial balance. Tick off the accounts that have been closed and you will note that all nominal accounts have been closed off. **Only the balance sheet section remains.**

Now stress the fact that Balance Sheet accounts are not closed off, because a Balance Sheet is compiled from **balances** left over after closing off towards the final accounts.

Use the balance sheet section of the trial balance and compile the balance sheet. Divide the assets into fixed assets and current assets. Ensure that the nett profit is added to the original capital contribution before entering it as owner's equity in the balance sheet.

Here follows an example where profit is added to capital:

THEMBA DRY CLEANERS
BALANCE SHEET ON 30 JUNE 1996

Assets					*Owner's equity*		
Fixed assets			63 000	-	*Owner's equity*	103 700	-
Vehicles	45 000	-					
Equipment	18 000	-					
Current assets			40 700	-			
Bank	40 700	-					
			103 700	-		103 700	-

Notes

Owner's equity

Capital (as per Trial balance)	→ → → → → → → →		90 000 -
Plus Net income		+	26 300 -
			116 300 -
Less Drawings		−	12 600 -
			103 700 -

LESSON OUTCOMES

After completion of the lesson, learners should be able to:

1. recognise new accounting terminology, such as final accounts, gross profit and net profit;
2. compile final accounts from relevant information;
3. draft the balance sheet; and
4. compile closing journal entries.

ASSESSMENT ACTIVITIES

1. Request learners to compile the necessary accounts to calculate the gross profit from relevant information;
2. request learners to compile the relevant accounts to calculate the nett profit from relevant information;
3. supply relevant information and request learners to compile the necessary closing journal entries; and
4. request learners to compile the balance sheet.

PART THREE

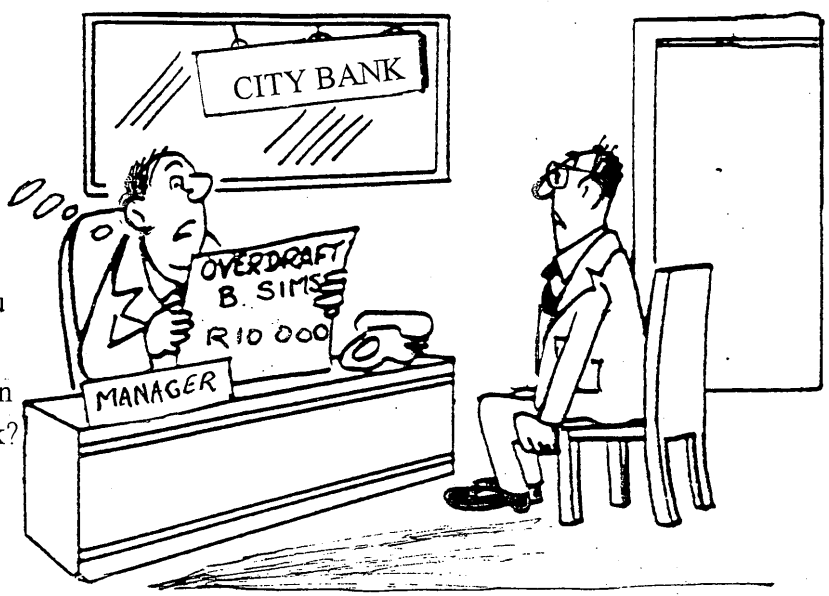
GRADE 10

When learners reach the stage of Grade 10 Accounting, those that are not interested in the subject have left the 'arena' and accounting teaching becomes more challenging.

Grade 10 also has problem areas which teachers find difficult to convey to learners and learners have difficulty to grasp. The most problematic areas are:

'I've got a problem, Sir.

Would it be possible for you to provide funds to bring about a reconciliation between you and the bank?



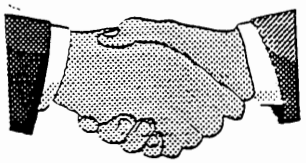
* the explanation of bank reconciliation statements by teachers;
* adjustments;
* correction of errors;
* posting to debtors and creditors control accounts from the relevant journals; and
* journalisation of Year-end-adjustments.

LESSON 1

BANK RECONCILIATION STATEMENTS

Teachers find it difficult to explain this concept in such a way that learners fully grasp the reasoning involved in reconciliation, which in turn has as result that interpretation and recording by learners is effected incorrectly.

At the onset of the lesson, ask the following question:
What does the word **reconciliation** mean?
Answer: In ordinary words, it means that two things that do not agree, are brought together through a certain process, which could be done by shaking hands.



Now use the following way of explaining:

* Any business makes use of the services of a **bank**. The bank keeps a record of the business' cash transactions in its own way and on the other hand, the **business** also keeps record of its cash transactions in the **cash journals**.

* At the **end of the month** the business has to post information from the journals to the ledger and the bank also records all transactions on a **bank statement**. This

bank statement is sent to the business as a procedure to ascertain that no money has been misplaced.

* When the **bank statement** arrives, its balance is **compared** with the **bank balance** and if the two balances do not correspond, this fact results into a reconciliation of the two accounts.

Question: What could cause the **difference in the balances** of the two accounts (bank statement and bank account)?

Answer: The **bank charges** money for the **issuing of cheque books** as well as the **keeping of accounts**, which is only recorded in the accounts of the bank. Only at the end of the month does it notify its customer of such charges. Another aspect is that a **business sends a cheque off by post** as payment on account and immediately the cheque is sent off, it is entered into the cash payments journal. Unfortunately, this **cheque may not have reached its destination** by the end of the month and has not been cleared by the bank or entered into the account of the customer, causing a difference in the bank balance.

Above circumstances result in **two different balances**, which have to be rectified in order for the books to balance and is done in the following way:

Picture **two sets of books** - one set completed by the bank and the other completed by the business.

Reconciliation is done in the following way:

* Matters the **bank knows of** and **the business not**, should be entered into the books of the business, which are the two **cash journals**.

* Matters the **business knows of**, but **the bank not**, are entered into the **Bank Reconciliation Statement**.

> It should also be kept in mind that, similar to the double entry principle, where one account is debited and the other credited, the relationship between the bank and the business should also be treated as a double entry.

When **money is deposited** into the bank in the business, the **bank account is debited**, but in the **bank** it is treated as a **credit entry** (double entry). Thus, the wording, '**in the credit**' in a bank means that a customer has **money in the bank**. It should thus be kept in mind, especially for the preparation of the Reconciliation Statement that transactions in the bank are the opposite of transactions recorded in the business.

After this explanation, the recording of actual transactions should then proceed without serious problems.

LESSON OUTCOMES

At the end of the lesson, learners should be able to:

1. explain new accounting concepts, such as bank statement, bank charges and bank reconciliation statement;
2. compare the bank statement with the cash journals; and
2. actually record bank reconciliation.

ASSESSMENT ACTIVITIES

1. Supply the two cash journals and a bank statement. Request comparison and ask for a list of items which do not appear in mentioned components.
2. request the bank account and reconciliation statement to be drawn up from relevant information.

LESSON 2

JOURNALISATION OF YEAR-END-ADJUSTMENTS

Follow the reasoning of lesson 6, Part two, throughout during your explanations. It is repeated below:

ASSET ACCOUNT

Increases with	Decreases with
debit entry	credit entry

OWNER'S EQUITY ACCOUNT

Decreases with	Increases with
debit entry	credit entry

LIABILITIES ACCOUNT

Decreases with	Increases with
debit entry	credit entry

EXPENSE ACCOUNT

Debited	

Use above t-account approach right through all explanations

Do not immediately start with the adjustment, start with the transaction that PRECEDES subsequent adjustment. The following should serve as an example:

1. **The adjustment for bad debts:**

Commence explanations with the fact that **debtors had been buying** goods from the business, but at the end of the year it is noticed that **some had not paid their accounts at all**. These amounts should be written off as **bad debts** and such an amount are a **loss** to the business (refer back to expenses always having debit entries). Draw the following t-accounts;

Debtors control

1. Sales	R10 000	2. Bad debts	R1 500

Bad debts

3. Debtors Control	R1 500		

Without any difficulty learners will then grasp that bad debts are debited. Explain at this stage that ledger accounts are not a first entry in books, but that the general journal is the book of first entry BECAUSE NO SOURCE DOCUMENT is involved. (Refer to lesson 7, part two).

> The t-accounts again should serve as guideline for the compilation of the journal.

From the t-account it is deduced that Bad debts is debited and Debtors control is credited, thus the journal entry should be as follows:

GENERAL JOURNAL OF THEMBA TRADERS - MARCH 1996

	Fol.	Debit	Credit	Debtors control		Creditors control	
				Debit	Credit	Debit	Credit
d debts	N9	426 -					
W. Weston	D30		426 -		426 -		
. Weston's *account written off*					Repetition		
irrecoverable							
					426 -		
					B10		

An important aspect to mention here is that the amount concerning debtors is repeated in the journal.

The reason is that **debtors and creditors** and recorded in two places in any books (once in the control account and once in their respective subsidiary ledger).

Thus, a **GOLDEN RULE** to remember is that, **whenever a name appears in the journal**, either a debtor or a creditor, then the **amount** has to be recorded in the **general ledger** as well as in the relevant **subsidiary ledger**.

The recording in the subsidiary ledger column has to be totalled at the end of the month, because it has to be posted to the relevant control account (see example, posting to B10).

After this reasoning, the **effect on the accounting equation** should receive attention. Again, **refer to the t-accounts** and the following should be obvious:

Assets decrease because the debt of debtors decrease; and **Owner's equity decreases** because bad debts is a loss.

2. Drawings of goods from stock by the owner

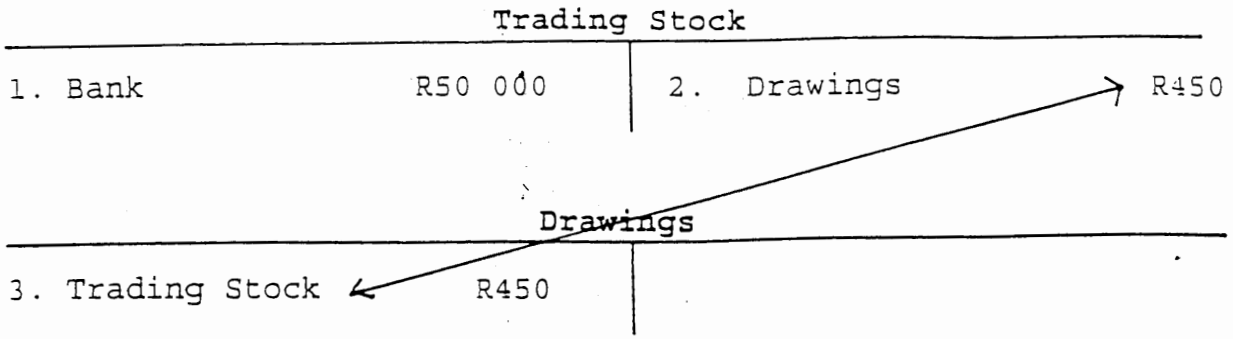
This concept also poses a problematic area and always has to be preceded by an **explanation** of what **happened before this transaction**.

Commence with the explanation that the owner of a business is not allowed to take any stock from the shelves for personal use without recording it. This is the case because his **personal affairs** is separate from the **affairs of the business**. The accounting equation should always balance as indication that nothing has gone missing from the business.

Thus, any personal requirements taken from the shop should be recorded in the following way:

Goods have been bought and thus entered into the Trading Stock account. When it is taken by the owner, it is taken at COST PRICE (it is not necessary for the owner to take things at SELLING PRICE which includes an extra amount of profit). The owner forfeits the profit when taking goods for personal use.

The accounts appear on the next page.



Again, draw attention to the fact that **entries may not be effected directly into the ledger, but use the t-accounts** as guide for the compilation of the journal. Also draw attention to the fact that Drawings precedes Trading Stock in the Ledger, but it is used in such a way to facilitate understanding.

Also indicate the effect on the accounting equation by making use of above t-accounts.

Assets decrease because of the decrease in trading stock Owner's equity decreases because of drawings (the owner in reality takes some of his capital for personal use).

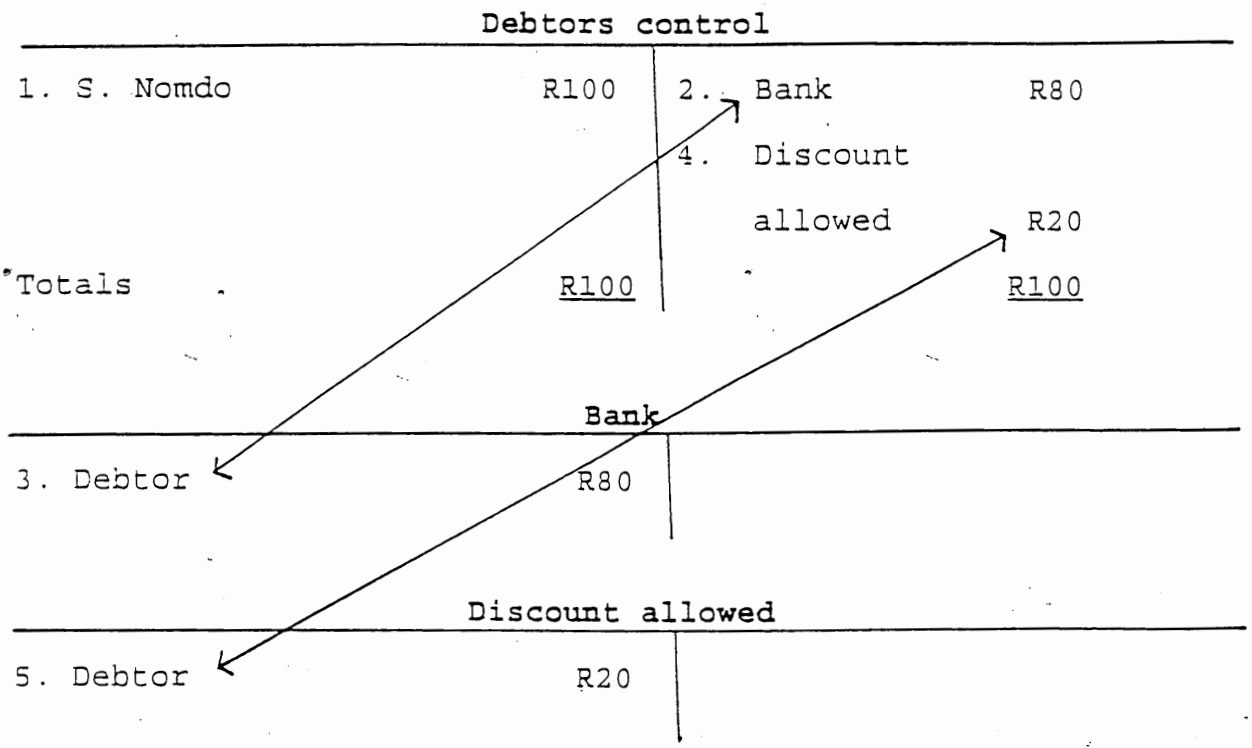
3. Dishonoured cheques and discount allowed

This concept is very difficult to grasp and requires detailed explanation.

Start at the beginning when **goods were bought**. **Payment** then was made, **discount was allowed** and entered into the books. Afterwards the bank notified the business that **no money was available**. This resulted in the fact that the cheque had to be

cancelled and the original debt rewritten on the debtor's account, including the amount allowed as discount. When explaining this concept, assume that the business only has one debtor.

The following **sequence** should be followed, it should be preceded by this story: A debtor, S. Nomdo buys for R100 from the business. When he pays, the business allows him to pay only R80 and subtracts R20 as discount.



After this transaction the debtor owes the business nothing. Now the cheque is dishonoured and the **original entries has to be re-instored.**

Bank

3. Debtor	R80	6. Debtor	R80

Debtors control

1. S. Nomdo	R100	2. Bank	R80
		4. Discount allowed	R20
Totals	R100		R100
7. Bank	R80		
9. Discount allowed	R20		

(Draw attention to the fact that only R80 now appears on the debtors account and that the extra R20 also has to appear here)

Discount allowed

5. Debtor	R20	8. Debtor	R20

Now use these accounts to compile the **journal entries** for the adjustment and draw attention to the **correct journals for all entries**.

Making use of above reasoning, no learner will have this adjustment incorrect in future.

4. Correction of errors

Learners are apt to confuse debit and credit entries in their reasoning. Making use of t-accounts serves the purpose that a

guideline is provided when compiling journal entries.

When **correcting errors**, it should be noted that the **incorrect** as well as the **correct** entry should be indicated in a **t-account** and the correct journal entry compiled after comparison.

Consider the following example:
During August stationery was bought for R44 by cheque, but the entry made in the Cash payments journal was in the analysis column for Trading Stock.

Firstly consider the **first part of the sentence**
Stationery was bought for R44 by cheque

The **original** entry should have been -

Stationery

Bank	R44

Bank

	Stationery ✓	R44

Now consider the **effect of the error**, which is -
the entry made in the Cash payments journal was in the analysis column for Trading Stock.

When posting was done, **trading stock**, instead of **stationery** was **debited**. It also indicates that the item in the bank account is correct, but no entry made in the Stationery account. You could

even place a tick (for correct) in the Bank account, and make a **circle** around the entry in the Stationery account.

Trading stock

Bank	✓	R44	Stationery (taking the amount to stationery)	(R44)	

Also make a **circle** around the amount in the Trading Stock account as indication that this is the amount to be corrected.

When correcting the error, the incorrect amount should be removed from the Trading Stock account and entered against Stationery instead. Another way could be by considering the circles, which give an indication of the correct journal entry.

Thus your journal entry would be to debit Stationery and credit Trading Stock.

Also consider this example:

During August a cheque for R45 was received from P. Khumalo, but it was credited to the account of T. Khumalo.

T-accounts, which appear on the next page, should be drafted as follows:

T-ACCOUNTS

Bank

P. Khumalo	✓	R45		

P. Khumalo

			Bank	(R45)

Place a circle around the entry that was omitted, which was the one in the account of P. Khumalo.

Now consider the incorrect entry, which is that the entry was credited to T. Khumalo.

T. Khumalo

			Bank	✗ R45

Now this incorrect entry has to be removed by making a contra-entry on the debit side of T. Khumalo's account, which should be the following and draw a circle around the entry:

T. Khumalo

P. Khumalo	(R45)		Bank	✗ R45

You will find the circles on the debit side of T. Khumalo's account and on the credit side of P. Khumalo's account, which then, is an indication of the correct entry which should then be journalised.

Be also very careful to indicate that when journalising entries which contain names of people, those entries have to be repeated in the control account columns of the journal. Thus, in this case where the names of two people have been indicated, repetition of both the amounts connected to the entries have to be effected.

5. Bad debts recovered

This concept poses a major problematic area for grade 10 learners. Start you explanation right at the beginning of the transaction and refer to the previous example of bad debts which is repeated below:

(Only make use of one debtor). Commence explanations with the fact that this debtor had been buying goods from the business, but at the end of the year it is noticed that he/she had not paid their account at all. This amount was written off as bad debts and this amount is a loss to the business (refer back to expenses always having debit entries). Draw the following t-accounts;

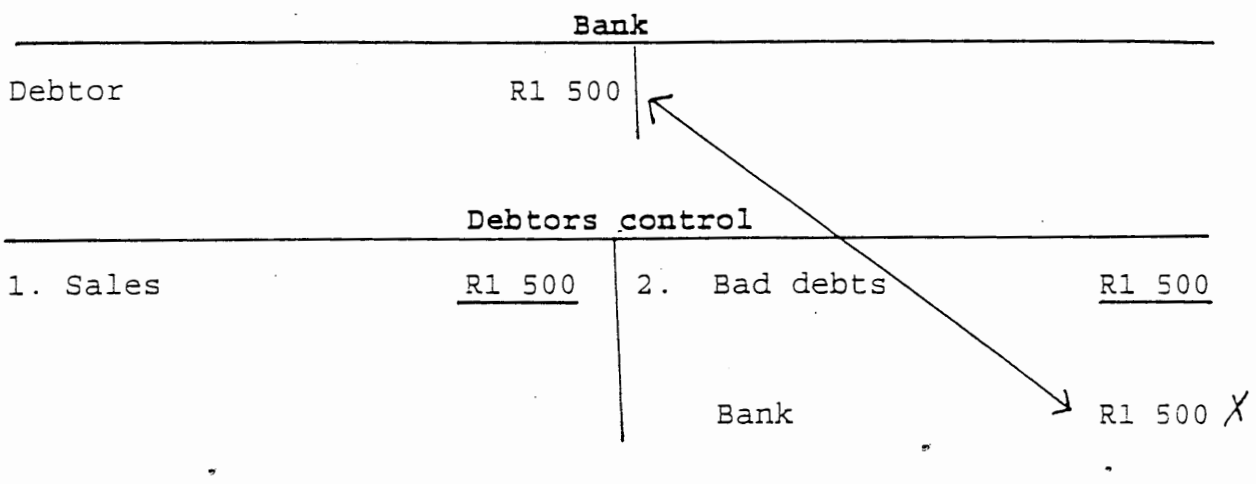
Debtors control

1. Sales	R1 500	2. Bad debts	R1 500

Bad debts

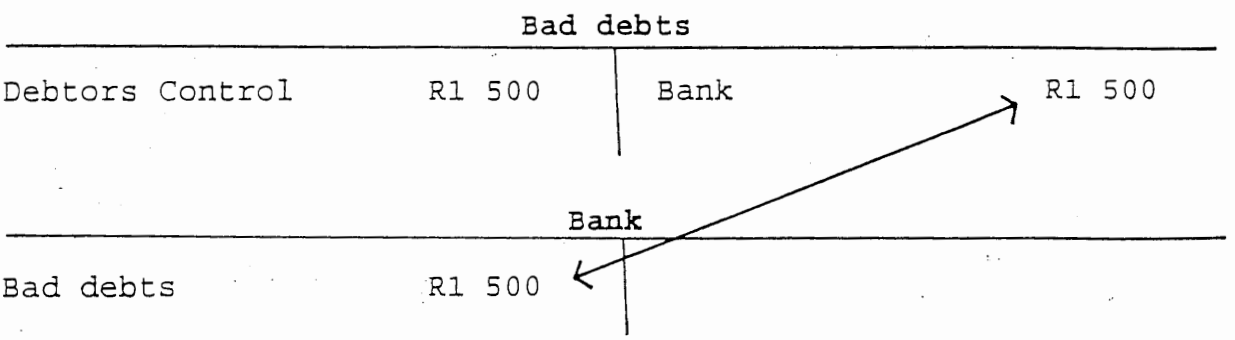
3. Debtors Control	R1 500

Continue by explaining that this person has recovered from his personal problems and decides after all, to pay his debt. In the books of the business, the account of this debtor has already been closed off and he/she owes nothing to the business. (Now, firstly draw an imaginary t-account showing the debtor now paying his account, which would resemble the following:



It is clearly indicated that this entry is incorrect, because the debtor's account is now credited, which makes him a creditor and not a debtor.

Now, draw attention to the fact that this amount had been transferred to bad debts and the correct procedure would be to cancell the entry in the bad debts account, as follows:



These t-accounts again serve as indication of the entries in the journal, which would be to debit bank and credit bad debts.

The effect on the accounting equation would then be:

Assets increase because cash is received; and
Owner's equity increases because a previous loss is cancelled.

LESSON OUTCOMES

At the end of the lesson, learners should be able to:

1. effect journalisation of adjustments;
2. identify new accounting terms, such as bad debts and dishonoured cheques; and
3. indicate the effect of these items on the accounting equation.

ASSESSMENT ACTIVITIES

1. Supply relevant information and request t-accounts to be made of adjustments;
2. supply t-accounts and request journalisation of adjustments; and
3. supply relevant information and request the effect of adjustments to be indicated on the accounting equation.

LESSON 3

PREPARATION OF DEBTORS AND CREDITORS CONTROL ACCOUNTS FROM RELEVANT JOURNALS

When explained in the following way, mentioned concept should never pose a problem and learners usually achieve full marks in subsequent test or exam questions.

Consider the following example of the debtors control account and the creditors control account in the general ledger:

Dr. DEBTORS CONTROL B7 **Cr.**

19.1						19.1					
Mar.	1	Balance	b/d	3 456	-	Mar.	31	Bank and discount	CRJ1	3 132	-
	31	Bank	CPJ1	150	-			Debtors allowances	DAJ1	480	-
		Sales	DJ1	6 400	-			Miscellaneous accounts (journal credits)	GJ1	66	-
		Miscellaneous accounts (journal debits)	GJ1	45	-			Balance	c/d	6 373	-
				10 051	-					10 051	-
Apr.	1	Balance	b/d	6 373	-			Amounts paid + returned			

Amounts received

CREDITORS CONTROL B8

19.1						19.1					
Mar.	31	Bank and discount	CPJ1	3 950	-	Mar.	1	Balance	b/d	4 125	-
		Creditors allowances*	CAJ1	354	-		31	Sundry purchases*	CJ1	6 494	-
		Balance	c/d	6 315	-						
				10 619	-					10 619	-
		Amounts received				Apr.	1	Balance	b/d	6 315	-

Amounts sent off

(Learners even have problems of placing the balance on the wrong sides). Because a **debtor's account is debited with his purchases** (because he bought the goods and thus received the goods) his/her account will always have a debit balance (the amount still

owing), or plainly, because he/she is called a debtor, that is why the account is debited with the balance.

A **creditor's account** is always **credited** with the balance, because his name gives the indication, or because of the fact that when **our business purchases goods** from him/her, he sends the goods out of his business and the account is subsequently credited.

Now consider all other entries in the light of WHAT IS HAPPENING TO THE DEBTOR OR THE CREDITOR at that moment. Also have examples of all relevant journals at hand to be referred to when explaining. This is a golden rule, which is illustrated as follows:

Information:
Prepare the Debtors Control account and Creditors Control account in the General ledger of Themba Traders. Balance the accounts and insert suitable folio references to indicate from which subsidiary book each posting was made.
On 1 March 1996 the total net amount owed by debtors was R3 456
and the total net amount owed to creditors was R4 125.
The following totals appeared in the subsidiary books on 31 March 1996:

Cash receipts journal
Bank R13 710
Sales R8 000
Cost of sales R6 000
Debtors control R3 132
Discount allowed R222
Sundry accounts R2 800

Debtors journal
Sales R6 400
Cost of sales R4 800

Debtors allowances journal
Debtors allowances R480
Cost of sales R360

General journal
Debtors control: debit R45
Debtors control: credit R66

Cash payments journal
Bank R13 190
Trading stock R5 500
Wages R2 106
Creditors R3 950
Discount received R244
Debtors R150
Sundry accounts R1 728

Creditors journal
Creditors control R6 494
Trading stock R4 200
Equipment R1 750
Stationery R244
Sundry accounts R300

Creditors allowances journal
Creditors control R354
Trading stock R250
Equipment R50
Stationery R14
Sundry accounts R40

General ledger of Themba Traders

Dr. DEBTORS CONTROL B7 **Cr.**

19.1						19.1					
Mar.	1	Balance	b/d	3 456	-	Mar.	31	Bank and discount	CRJ1	3 132	- (1)
	31	Bank	CPJ1	(5) 150	-			Debtors allowances	DAJ1	480	- (3)
		Sales	DJ1	(2) 6 400	-			Miscellaneous accounts (journal credits)	GJ1	66	-
		Miscellaneous accounts (journal debits)	GJ1	45	-			Balance	c/d	6 373	-
				10 051	-					10 051	-
Apr.	1	Balance	b/d	6 373	-						

CREDITORS CONTROL B8

19.1						19.1					
Mar.	31	Bank and discount	CPJ1	(4) 3 950	-	Mar.	1	Balance	b/d	4 125	-
		Creditors allowances*	CAJ1	354	-		31	Sundry purchases*	CJ1	(6) 6 494	-
		Balance	c/d	6 315	-						
				10 619	-					10 619	-
						Apr.	1	Balance	b/d	6 315	-

Consider entries in the **cash receipts journal** (remember the fact that our business receives this cash from the sources indicated). Debtors control (this means that debtors **paid** us the amount of (1) R3 132). This indicates that **debtors control** should be **credited** with this amount.

Now, consider any CRJ and note that the amount in debtors control account, is the amount paid by debtors PLUS the amount for discount allowed. Subsequently, debtors control will be credited with BANK AND DISCOUNT (see above example).

Next, consider entries in the **debtors journal**. The amount for Sales is the amount for goods sold to debtors, which means that the debtors had to receive the goods. This is an indication that debtors control should be debited with Sales of R6 400. (2)

Next, consider **debtors allowances journal**. The amount of R480 for debtors allowances represents **goods that debtors have returned** for some or other reason, which means it has left their premises and has to be credited to their account.

Next, consider the **General Journal**. This is an easy item to post, because it indicates where and what should be posted. If it says, Debtors control, debit, then exactly this should be done. The wording will be - miscellaneous accounts, or journal debits.

Next, consider the **Cash Payments journal**. This journal represents amounts paid out by the business to the instances indicated. The amount of R3 950 for Creditors indicates an (4) amount paid out to Creditors, which they should receive. Notice that this amount is **debited** to the Creditors control account, but ascertain that the wording is - Bank and discount received, because the total of Creditors in the CPJ, includes the amounts for discount received.

The entry Debtors in the CPJ is the column into which the **dishonoured cheques** are indicated. Thus, the amount for R150 for (5) Debtors indicates returned cheques. These are cheques that have to be returned to debtors for payment and should be **debited** to the control account. The word used is Bank, because it is posted from the CPJ. (Refer to the lesson on dishonoured cheques and use indicated t-accounts as explanation).

Next, consider entries in the **Creditors journal**. Keep in mind that entries made in the creditors journal are goods which our business purchased and thus, subsequently, **left their premises**. This means that their account should be credited with the amount (6) of R6 494 for creditors control. The wording in the ledger account is Sundry purchases, because it represents ALL the items purchases from them (sundry).

Lastly, consider the **Creditors allowances journal**. Keep in mind that the amounts indicated in this journal represents goods which our business has returned to Creditors because of some or other reason. This is an indication that the Creditors should receive the goods and thus, it should be debited to the control account.

LESSON OUTCOMES

After completion of this lesson, learners should be able to:

1. post from the relevant journals to the control accounts.

ASSESSMENT ACTIVITIES

1. Supply relevant balances of all journals and request posting to the control accounts;
2. supply relevant information and request posting to the control accounts; and
3. supply incorrect control accounts and request learners to rectify the errors.

LESSON 4

JOURNALISATION OF YEAR-END ADJUSTMENTS

Year-end adjustments is a new concept to learners and the following reasoning should be followed: (the content of lesson 6, part two, should be followed throughout).

At the **end of the year** the **profit** is calculated, which means, expenses are subtracted from income. It should also be indicated that there are certain things which have to be considered before the EXACT profit can be calculated (for tax purposes), which are:

1. Depreciation

Buildings and vehicles don't look the same as the day they were bought and DEPRECIATION should be calculated.

Now explain in the following way, making use of this example:

General ledger of Themba Traders

Dr. VEHICLES **B4** **Cr.**

19.1 Mar.	*1*	*Bank*	*CPJ1*	*38 000*	-						

ACCUMULATED DEPRECIATION ON VEHICLES **B5**

						19.2 Feb.	*28*	*Depreciation*	*GJ6*	*7 600*	-

DEPRECIATION **N9**

19.2 Feb.	*28*	*Accumulated depreciation on vehicles*	*GJ6*	*7 600*	-						

Depreciation represents a LOSS for the business and **losses are debited**. The depreciation account, because it is a loss and should be **subtracted from profit**, should be placed in the Nominal accounts section. The contra-account cannot be Vehicles, which means Vehicles cannot be credited, because a credit entry means the sale of a vehicles and nothing is sold. Thus, another account should be opened as contra-account, which is, Accumulated depreciation on vehicles. This account falls in the B section of the ledger, because, ultimately, in the balance sheet, this amount is subtracted from vehicles, because their value has decreased.

Show an abstract from the **balance sheet**, which indicates -

Vehicles	R38 000		
Less Accumulated depreciation		R7 600	R30 400

Explain that an entry firstly is required in the book of first entry, which is the general journal because no source document is relevant.

The t-accounts, again, is used as guideline to compile the journal entry. If the account is debited, it is also debited in the journal.

The effect on the accounting equation is the following:

Depreciation is a loss, thus, owner's equity is decreased Assets decrease as well, because the value of the vehicle decreases.

2. Prepaid expenses

Follow a completely different reasoning from the one indicated in textbooks and achieve best results. Reason as follows: Write an **expense account** on the board, such as **Insurance** which can be prepaid. Explain that sometimes Insurance is paid ahead of time, because it is easier to follow this avenue than go to the Insurance company every month to pay. The amount you pay each month is R100 and R1 200 for the year.

Now, pay the premium for one month ahead, which amounts to R1 300. When calculating the profit, you cannot include this extra payment, because an **incorrect** profit will then result. As a result, this extra payment has to be subtracted from the Insurance account at the end of the month and indicated in the next financial year. I usually tell my learners that we have to pretend certain things, when coming to prepaid and accrued expenses and income.

Insurance

Bank	R1 300	Prepaid expenses	R100
		Profit and loss	R1 200

Prepaid expenses

Insurance	R100

These entries clearly show that the **extra amount has been removed** from the Insurance account and a new account was created. This account falls in the Balance Sheet section, because of the following reason:

This amount prepaid for Insurance is really owed to me at the end of the year (I paid too much) and this amount is then going to be reflected in the balance sheet under Debtors (because it is owing to me at the time of calculating my profit).

Again it should be disclosed to learners that the ledger is not the book of first entry, but serves as indication of which account should be debited and which account should be credited in the case of journal entries. I can assure you that no adjustment will be incorrect when this reasoning is followed.

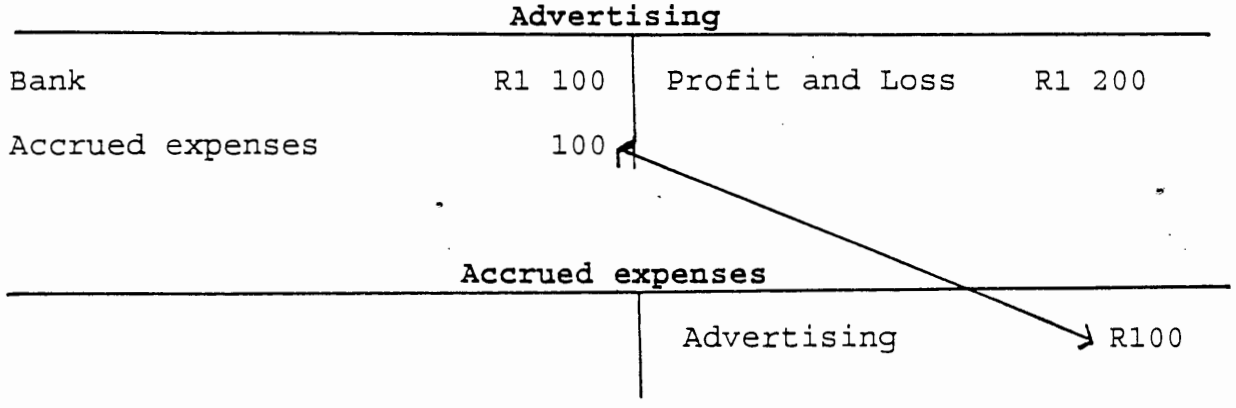
Use the ledger accounts again to ascertain the effect on the accounting equation, which is as follows:

Assets increase with prepaid expenses, because this amount is owed to you and it is added to debtors, an asset (the account prepaid expenses is debited).

Owner's equity decreases with the amount subtracted from insurance, because an expense has now decreased (insurance is credited)

3. Accrued expenses

Fistly explain what **accrued** means (it means that too little is paid for the year). Now start with your example. Tell the story that you pay R100 per month for advertising. You only paid your account for 11 months and the account for the 12th month has not arrived yet at the time of you calculating your profit. Now pretend you add an extra month's payment to your account, although you have not paid it, because it has to be included in your calculations of payments for the full year.



Explain that an **extra account was created**, which is a Balance sheet account, because at the end of the year, I am actually owing R100 for Advertising, which makes the amount of R100 my creditor (owing) and this amount is added to Creditors in the Balance Sheet.

Again, bear in mind that ledger entries are not made before journal entries, but that the t-account above should serve as guide for the compilation of the journal.

The effect on the accounting equation is as follows:

Liabilities increase, because you owe more, your creditors have increased (accrued expenses is credited).
Owner's equity has decreased, because of the extra amount of expenses that you have paid in an imaginary style (advertising is debited).

4. Income received in advance

People renting a part of my building have decided not only to pay me R100 per month for the year, but they paid me **one month's rent extra** because they went on vacation and could not personally pay me at that time. Thus my Rent income account would look like this: (keep in mind that rent income is credited, because it is an income) (refer to lesson 6, part two).

Rent Income

Income received in advance	100	Bank	R1 300
Profit and Loss	R1 200		

Income received in advance

		Rent Income	R100

Again, note that an **extra account** has been created. This account resorts under **creditors in the Balance Sheet**, because at the end of the year I really owe that amount to the people who paid me

rent (they paid me too much). Again, the journal entry should be made.

The effect on the accounting equation is as follows:

Liabilities increase, because this amount is really owing by you at the end of the year and creditors then increase (income received in advance is credited).
Owner's equity decreases, because this amount that is paid too much, is subtracted from my income to reflect my correct profit (rent income is debited).

5. Accrued income

People renting a part of my building for R100 per month, have **paid me for 11 months** because they went on vacation and could not personally pay me at that time. Thus my Rent income account would look like this: (keep in mind that rent income is credited, because it is an income) (refer to lesson 17)

Rent Income

Profit and Loss	R1 200	Bank	R1 100
		Accrued Income	100

Accrued Income

Rent Income	R100

Again, note that an extra account, Accrued Income, has been created. This account resorts under debtors in the Balance Sheet, because at the end of the year that amount is owed to me (they paid me too little). Again, the journal entry should be made.

The effect on the **accounting equation** is as follows:

> **Assets** increase, because this amount is owing to me (accrued income is debited)
>
> **Owner's equity** increases, because of the make-believe amount I have received (rent income is credited).

SUMMARY

The **BASIC REASONING** contained in these four sections are:

> If **too little** money is paid or received, **add** the extra money to the account.

> If **too much** money is paid or received, take it away, or **subtract** it from that account.

Considering all four adjustments, an extract from the Balance Sheet would contain Prepaid expenses, Accrued expenses, Income received in advance and Accrued income:

AN EXTRACT FROM THE BALANCE SHEET

BALANCE SHEET

DEBTORS

Plus prepaid expenses

Plus accrued income

CREDITORS

Plus Accrued expenses

Plus Income received in advance

LESSON OUTCOMES

At the end of the lesson, learners should be able to:

1. differentiate between new accounting terminology, such as, depreciation, prepaid expenses, accrued expenses, income received in advance and accrued income;
2. journalise year-end adjustments;
3. post year-end adjustments to the ledger; and
4. indicate adjustments in the balance sheet.

ASSESSMENT ACTIVITIES

1. Request calculation of depreciation according to the two relevant methods from relevant information;
2. request learners to compile journal entries from relevant information;
3. request posting of adjustments to the ledger from given journal entries; and
4. supply relevant information and request learners to compile an extract from the Balance Sheet.

CONCLUSION

No innovative methods are provided for grades 11 and 12, because basic reasoning should have been acquired in grades 8 to 10.

All reasoning should follow the lines of lesson 6, part two, which is:

Assets increase on the debit side

Assets decrease on the credit side

Liabilities increase on the credit side

Liabilities decrease on the credit side

Expenses are debited

Income is credited

When any type of new work is explained, firstly decide if it is an asset, liability, expense or income and reason accordingly.