CHAPTER THREE

RESEARCH METHODOLOGY

3.1 A THEORETICAL BASIS FOR THE STUDY

The rationale for undertaking a study into the principal's role in integration rests on the belief that it is the principal's responsibility to see that, wherever possible, students with special needs (such as disability, learning difficulty or extreme giftedness) can access an "appropriate" educational program at their local public school.

It is acknowledged that, for a small proportion of students, segregated schooling may provide for some or all of their school years the most "appropriate" educational setting - the "least restrictive environment". However, for ***most*** students, regular school remains the optimum place for the student's preparation for life.

As it was pointed out in Chapter One, the work of Wolfensberger (1972) and Gold (1975) has been credited with much of the policy change in education regarding integration of students with disabilities into regular classrooms in the U.S.A. and Canada. In Australia students with disabilities have since the eighties had some redress through the anti-discrimination laws and the Education Reform Act, 1991.

The result of this legislation has been that principals in N.S.W. D.S.E. schools have become the individuals charged with the task of maximising every student's opportunities to be educated in the regular school.

The previous chapter has described several examples of the plethoric literature on "best practice" for principals. The local work emanating from U.N.E., Armidale and U.N.S.W., Kensington provide more than adequate evidence of what makes the principal effective. Simpkins et al.'s, *Principal and Change* (1987) is just one example of the case-based texts which have emerged to guide principals' actions towards effective management of their multi-faceted roles.

What the research undertaken here would aspire to achieve is a preliminary description of principal qualities and practices which are perceived by stakeholders to be the most important in making integration effective - an amalgam of theories regarding what constitutes "good" principalship and those describing successful integration; in short, to open dialogue about principals and integration in the N.S.W. context.

Specifically, this study set out to examine six questions:

1. What criteria specific to the appointment of principals need to be added to the current "generic" criteria to ensure the success of integration programs in N.S.W. public schools?

2. To what extent should principals of schools offering integration programs be special educators themselves?

3. To what extent does the role of principal vary between schools offering integration programs and those not offering such programs?

4. What contributions do principals make to integration programs in regular schools?

5. How do the actions of principals regarding integration programs compare with the expectations of stakeholders, including principals themselves?

6. What proportion of the principal's time should be devoted to the management of integration programs?

3.2 A RATIONALE FOR THE METHODOLOGIES SELECTED

The setting, subjects and content of this study were influential in the researcher's selection of a methodology. Whilst the outcome sought in the research was, on the surface, a list of "generic" qualities of principals which could be contrasted with that which is in current use by the N.S.W. Department of School Education, the researcher considered that the study had more potential for enlightenment than this. It was hoped that, by using a variety of research techniques, the amount and type of

data gathered would be more comprehensive, more informative and more interesting than that which a "standardised", statistically-oriented methodology alone might offer.

Nevertheless, notwithstanding the importance of utilising varied ethnographic techniques, such as interviews and diaries (qualitative methods), it was also considered to be relevant to gather some data in quantitative form because this might add information which was relevant to the research questions. By combining a number of techniques for data gathering it was proposed that a more comprehensive description of the role of the principal in integration might be achieveable, thus enabling the emergence of "grounded theory" (Geertz, 1973 in Miles and Huberman, 1984:54; Strauss and Corbin, 1990).

"Grounded theory" is, put simply, that which is derived from the study of a particular phenomenon in this case, the principal's role in integration. Strauss and Corbin (1990:23) explain it as follows:

> ... data collection, analysis, and theory stand in reciprocal relationship with each other. One does not begin with a theory, then prove it. Rather, one begins with an area of study and what is relevant to that area is allowed to emerge.

Because knowledge regarding principals and integration in N.S.W. public schools was, prior to this study, inchoate, no earlier theory existed to be proven or refuted. The researcher considered that, by using multiple methods, "grounded theory" would be more likely to emerge. This is not to suggest that using a combination of qualitative and quantitative research techniques is unusual nowadays. Jick (1979: 602) notes that "qualitative and quantitative methods should be viewed as complementary rather than as rival camps." In other words, if each method used singly is a powerful means of describing a phenomenon, there is strong potential for a combination of methods to yield even more powerful description. The use of a combination of methodologies is referred to as ***triangulation***.

To expand, triangulation is an approach applied by a researcher in an attempt to reconcile the apparent "polarities" represented by the qualitative and quantitative schools of research. As Hamersley and Atkinson (1983:199) explain, 'What is involved in triangulation is not the combination of different kinds of data per se, but rather an attempt to relate different sorts of data in such a way as to counteract various possible threats to the validity of our analysis". Fielding and Fielding (1986:24) define it as, simply, "an attempt to confirm validity".

The emphasis stressed by Fielding and Fielding in relation to triangulation is that it is the researcher him- or herself who is best served by this method:

> When pressed about validity and reliability, qualitative researchers ultimately resort to their own estimation of the strength of the cited data ... Triangulation puts a researcher in a frame of mind to regard his or her own material critically... to increase the researcher's level of confidence so that findings may be better imparted to the audience and to lessen recourse to the assertion of privileged insight. (1986:25)

In his discussion of triangulation, Leedy (1993: 143) indicates that certain rules and guidelines apply in order to claim the use of triangulation in one's methodology. The guidelines for triangulation according to Duffy (in Leedy:143) are:

1. There are several frames of reference.
2. Data are gathered through a variety of techniques.
3. Multiple observers are used.
4. Several collection techniques are used within a single study.

The principles of triangulation (Mitchell in Leedy:143) are:

1. Research questions are clearly focused.
2. Strengths and weaknesses must complement each other.
3. Methods are selected according to the nature of the phenomenon being studied.
4. Continual evaluation of the methodological approach should occur during the course of the research to make sure that the first three principles are being met.

Jick (1979: 603) suggests that triangulation can provide a more "holistic and contextual portrayal" of the phenomenon under study, claiming that triangulation is "... largely a vehicle for cross validation when two or more distinct methods are found to be congruent and yield comparable data" (p602), and that it may be useful "... not only to examine the same phenomenon from multiple perspectives but also to enrich our understanding by allowing for new or deeper dimensions to emerge" (pp 603-604).

It was, therefore, in an attempt to provide cross validation, and to enable "deeper dimensions" in this study, that questionnaires,

interviews, surveys and principal diaries were included. The research design for this study can be described as "person triangulation" (Fielding and Fielding, 1984:25), which included a "within-method" triangulation, using several methods, as well as several people, to provide a view of the integration program in each school. Furthermore, by applying these techniques to a variety of key informants, it was intended that a broader cross-section of opinion could be canvassed, meeting Duffy's guideline indicating the need for "multiple frames of reference".

The techniques of data gathering and their application to the sample are represented in Table 1. The details of each of these tools will be described in detail later in this Chapter.

PARTICIPANTS	QUESTIONNAIRE	SURVEY	DIARY	INTERVIEW
Principal	•		•	•
Support Teacher	•	•		
Mainstream Teacher	•	•		
Parent	•	•		•
District Superintendent	•	•		

Table 1. Triangulation method applied to Sample.

3.3 A DESCRIPTION OF THE SAMPLE

Twenty primary, secondary and central school principals across the New South Wales D.S.E. were asked to participate in this research. The request was extended, via each principal, to each school community, who would provide key informants - the "stakeholders" - to respond to the Survey/Questionnaire. As a result of responses to these requests, 14 school communities were included in the study, that is, all schools indicating that they were willing to participate in the study.

Each school community comprised:

1. The Principal.
2. A parent of an integrated child (that is, a child identified by the school or the D.S.E. as having special needs).
3. A mainstream (regular education) teacher who had some responsibility for the child/ren outside pastoral duties (playground duty, for example).
4. A support teacher who had direct responsibility for the education of at least one child with special needs (defined as for 2. above).
5. In addition, the Superintendents of D.S.E. Districts where schools were located were asked to participate; all of the four Superintendents approached agreed to respond to a survey.

It should be noted that students were not included in this study. There were several reasons for their exclusion:

1. Many of the students for whom integration programs are designed did not have the literacy skills to complete a survey. Many are dependent on augmentative or alternative communication systems.

2. Whilst some schools provided integration programs for students who were intellectually or developmentally capable of reflecting on the role of his or her principal in the integration program, this was not generally the case.

3. The nature of the information sought, that is, the suitability of selection criteria for principals was such that the researcher considered that the inclusion of students' opinions would not necessarily add to the value of adult informants.

The schools were selected by the researcher because they provided examples of a range of sizes (in terms of student enrolments), ages of students, and geographical areas. The models of integration also varied across these schools from individually negotiated, single-student provision, to a formalised program catering for a larger number of

students with a variety of special needs. Furthermore, the integration programs in place at these schools were funded differentially, from those supported by Integration Grants through either Commonwealth or State government sources; those supported by staffing from local SSPs; to those programs taking place in the absence of funding support of any kind.

The schools in the sample were not selected randomly. The researcher chose schools within two geographic areas of N.S.W., one rural and one metropolitan. These areas were formerly designated as two D.S.E. Regions - Riverina (from approximately 350kms South West of Sydney to the South Australian border) and Metropolitan North (from North Sydney to Tuggerah Lakes). The schools included in the study are now (in 1996) located in four of the State's 40 Districts. The selection of schools was based on the presence of integrated students, and, while the students themselves are no doubt distributed randomly across the State, schools accepting them for integration are ***not***. The researcher approached primary and secondary schools around a radius in each Region who had students on Integration Grants, and those with Support Units or single Support Classes (as defined in Chapter 1.). The "radius" was determined as being at a distance to and from which the researcher could travel in a day - one of the "operational inconveniences" to which

Tremblay (1986:102) refers.

Notwithstanding Leedy's caut on that "the results of a survey are no more trustworthy than the quality of the population or the representativeness of the sample" (1993:198), the researcher has already alluded to one limitation in sample selection - that of the availability of schools offering integration programs. Another difficulty in ensuring that the sample was truly representative was the ethical consideration regarding the inclusion of students with particular special needs, such as physical disability or sensory impairment. If these students were not accessing any particular level of integration support, but were managing as well as possible with whatever their local school had to offer, they and their parents may not consider that integration, as such, was taking place. As Figure 13 indicates, these children may not be considered "special" enough by the school or the principal to be identified as "integrated".

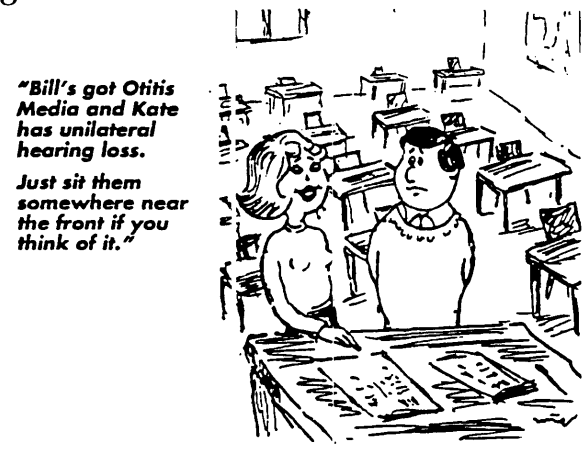

Figure 13. Special Ed. Support - Catch as Catch Can!

Furthermore, it is often the case that parents, as part of the "normalisation" process through which they support their disabled child, do not wish to have their child labelled or specially provided for. To encourage their participation in a study such as this could be considered by these parents a denial of their children's rights.

Another relevant factor in selecting schools was to include only those which were able to provide a stakeholder from each section of the school community, as it was considered important that a balanced view be sought *from each school.* This was crucial to ensuring that Duffy's guidelines for triangulation were met, thus avoiding a strong bias in favour of one set of stakeholders in a school community.

To summarise, the sample was clearly non-random. Whilst it may represent a "convenience" sample, as Leedy (1993:200) or Borg and Gall (1989:465) would describe it, nevertheless, it approaches a quota sample - that is, a sample including informants representing small, large, secondary, central and special schools in a similar ratio to their occurrence elsewhere in the D.S.E. system. Given that the population of schools offering integration programs is not homogenous in the first instance, the inclusion of such a wide variety of schools, in fact, every school type barring one-teacher schools, provided one foil against bias.

Tremblay reasons (1986:98) that when researchers use any key informant technique, they are clearly not after the sort of information a random sample might give them:

> When we use key informants we are not random sampling from the universe of characteristics under study. Rather we are selectively sampling specialised knowledge of of the characteristics.

The information required for this study demanded that the stakeholders know something of the issues to be explored. Perhaps this was the most powerful reason for including any of the schools with integrated students who were willing to participate.

There is, clearly, always the danger when a researcher includes any and all willing participants that, in a study such as this, those willing participants will have "a barrow to push". The disability advocacy movement is indeed an emotive human rights area and there are certainly many lobby groups. Nevertheless, the researcher considered that in a "beacon" study such as this, all opinion should be explored. As it happened, it did not appear that any specific political or social issue stood out, but rather that folk mostly focussed on the issues "at hand".

The final sample included the following types of schools:

CLASSIFICATION OF SCHOOL	STUDENT ENROLMENT	NUMBER OF SCHOOLS
High 1	1000	1
High 2	800	1
Central 3	400	1
Primary 1	750	1
Primary 2	550	2
Primary 3	400	3
Primary 4	270	3
Special (SSP) 4	30	1
Primary 5	50	1
Total		14

Table 2. Frequency of school types and enrolments in sample.

3.4 A DESCRIPTION OF THE D.S.E. REGIONS AND THEIR SCHOOLS

Metropolitan North Region included schools from North Sydney to the southern end of Tuggerah Lakes on the Central Coast. As it is a metropolitan region, most schools in this area are close to services, and to each other. The Regional Office at Hornsby, 21kms from Sydney, provided support services to schools in the area, while more local Education Resource Centres were located at Ryde, Dee Why and Gosford.

There are also several large public hospitals and clinics in this area, as well as the full range of therapy and pediatric services, community support groups and disability support and parent organisations, such as The Spastic Centre of N.S.W. and The Sunnyfield Association.

Riverina Region was one of the largest regions in the State, covering a vast area of N.S.W. from west of the A.C.T. to the South Australian border. The Region included some of the most isolated schools in N.S.W., contrasted with a large concentration of population around Wagga Wagga (pop. 55,000), the largest inland city in the State. Support services were located in both Wagga Wagga and Albury; nevertheless, it was often difficult to fill therapy, medical and social worker vacancies in these centres, and many of the personnel were in their first years of practice.

Schools, apart from those in Wagga Wagga and Albury, were at some distance from each other and from larger centres. Schools for Specific Purposes (SSPs) and Support Units were few and, whilst they were relatively centrally located, many students still had to travel up to 60 kms each way to attend these facilities. Where access or appropriate programs were not available at local schools, parents had little choice.

Some children boarded in hostels in larger towns from Monday to Friday to enable them to attend schools where their learning needs could best be met. Children aged from 16 upwards were able to move into Department of Community Services housing.

3.5 DATA GATHERING TOOLS

3.5.1 The Survey Forms

(See Appendices 3.1, 3.2, 3.3 and 3.4 for different stakeholder versions of the Questionnaire/Survey, pp 345 - 357.)

Surveys were designed to provide data on non-principal stakeholders' backgrounds, experiences, and perceptions regarding the integration process in their schools. Survey Forms were divided into 3 sections. The first section dealt with biographical inquiries relevant to stakeholder groups. The second section, from Questions 1 to 9, dealt with current arrangements regarding integration. The third section, Questions10 to 12, focused on the selection of principals' qualities, skills and knowledge in relation to integration, with the provision of space for additional comments.

Questions in the first and second sections were constructed in an open-ended fashion to broaden the Form's potential to gather a variety of

information which could be useful for research at a later time.

Tremblay (1986:101) suggests that questions should be formulated to meet the following criteria:

1. Consistency

Consistency can be checked during the process of data collection and afterwards in the analysis phase. The researcher hypothesised that there would be considerable variation regarding consistency in responses due to the variations in knowledge levels among the informants, from those who knew little about the integration process through to teachers and parents who had had a wide experience of the field. This was, the researcher believed, allowable in that this study was the first of its kind in the N.S.W public school context.

2. Productivity

This implies, once again, that there would be informants who knew a great deal more than others about the issues. The provision for gathering demographic detail would assist in providing an explanation of such variance in the analysis phase.

3. Reliability

Tremblay (1986:101) suggests that cross-comparison should be used

during the process of surveying to indicate where there were discrepancies in the reliability of responses which might indicate that the questions were poorly structured or unclear.

There were 12 questions in each Survey Form. The Form varied slightly, depending on the stakeholder type. Details are provided later in this Chapter. The rationale for making these variations to the wording was:

1. to extract appropriate information from stakeholders of different types for demographic analysis;
2. to ensure that the questions created an appropriate context or frame for the respondents to identify with; and
3. to present questions in the lexicon of the respondents; that is, to ask questions of respondents in a form which neither insulted nor confused, but rather invited honest opinion (Borg and Gall, 1989:427).

In fact, as previously indicated, variations to the body of the Form (that is, outside biographical items) were only minor, without loss of the main focus of the question.

The questions contained in the Survey covered the following aspects of the study:

- The Principal's current role in the integration program in each school.
- The roles of non-principal personnel and students in integration.
- The amount of the principal's time which should be spent on integration matters.
- The personal qualities, skills and knowledge needed by a principal to manage an effective integration program.

The latter were presented as a checklist from which stakeholders were asked to select the three to five most important items . The researcher used this approach to investigate the frequency with which each quality or skill was selected to enable a comparison to be made with the generic selection criteria. To achieve this aim, the generic criteria were embedded in the checklist itself. Frequent selection of a generic criterion would indicate that it was perceived by stakeholders to be appropriate for use in selecting a principal to manage a school with an integration program. Low or non-frequency selection would indicate that a criterion was not as relevant as others in the judgement of these stakeholders.

While this statement might hint at descriptive statistics, indicating that the Survey/Questionnaire was designed as a quantitative tool, this is not so for several reasons.

Firstly, several questions contained in the Survey section of the form were open-ended, allowing for a range of responses (Borg and Gall, 1989: 428). While the questions were structured, the purpose of the structure was to support the respondents and to make clear the type of information sought. The researcher hoped to avoid the "limitless plasticity" to which Tremblay (1986) refers in his discussion of survey design.

Secondly, the nature of some questions required an opinion about, or a perception of what was happening in the integration program in each school. In the final analysis, statistical reasoning would not be the aim of the survey, but rather a range of opinion and perception which could be reported and compared across stakeholders without the loss of any single issue. This approach is akin to Tremblay's "focused use of key informants" (1986:99), described as follows:

> ...key informants are selected and interviewed within a restricted framework of questions with highly focused objectives. If we were to take as our research setting a relatively unexplored culture, our procedure might be as follows: the use of ethnographic key informant techniques as the first stage...: the use of the focused key informant techniques at the second stage of the inquiry to be followed, at the third stage, by sample surveys. A focused use of key informants is, thus, intermediate in nature. It assumes broad general knowledge of the area, but precedes the ability to choose relevant alternatives incorporated in a well-designed sample survey.

The researcher considered that this area of investigation was "unexplored culture", certainly in the N.S.W. context, thus justifying the style of survey employed here

The Questionnaire section of the form sought different information from different stakeholders:

1. District Superintendents were not asked for any additional biographical information apart from the Survey.

2. Support Teachers were asked for information about their service experience in teaching and in special education. They were asked to list the staff who made various decisions about the integration in their school, whether they perceived integration to be beneficial, and to whom. They were asked how much support they and their students received from their principal. Finally, they were provided with space to add any information they wished to include.

3. Mainstream Teachers were asked for biographical information similar to that of their colleagues. They were then asked about the nature of their involvement with the integrated students in their school, how this involvement impacted on their time and what benefits they perceived integration had for all parties. These staff were also provided with space for their own additions.

4. Parents were asked about their children, not only in terms of their history, but also in regard to what they perceived as being the benefits of the integration program. They were given a simple table to complete (See Appendix 3.3, p. 353) showing who had been involved in their child's education to date in relation to the child's placement, program, progress and reporting. Parents were asked an additional question, specifically related to their perceptions of what special skills or qualities a principal should have to manage an integration program in a regular school. This question was added to compensate for the better knowledge of the school setting which it was assumed school staff would have.

5. The Principal's Questionnaire sought demographic and biographical information. It was hoped that gathering these data would assist in making comparisons with the literature discussed in Chapter 2 (for example, Dolbel's (1992) sample in Western Australia, where shorter principalship experience equated with greater acceptance of integration). The questions also set out to discover how prevalent special education qualifications were among serving principals in the two Regions and whether there were urban/rural, large school/small school, or primary/secondary differences in training levels among this sample.

3.5.2 The Principal Interview
(Appendix 4, p.359 lists the twelve questions asked in the Interview.)

Principals were asked 12 questions, ten of which focused directly on the issues of integration. There was, at the end of the interview, a question regarding the aspects of the position the principal most enjoyed and the final question gave the opportunity for the principal to add any issues he or she felt were not covered by the questions.

The ten questions sought information from principals about how they saw their roles in integration, focusing on what they actually did and whether they perceived their role as different from principals' roles in schools where there was no integration.

In his analysis of the processes of interviewing, Whyte (1986) provides the following guidelines (summarised):

1. Allow the informant the first part of the interview to "have a go". Whyte suggests that many informants have issues they'd like to get "off the chest". By being non-directive in the initial stage of the interview, these issues can be dealt with quickly; therefore, even if the researcher intends to be directive, this intention should be held over briefly.
2. Rephrase and reflect back. This promotes clarification.
3. Accept responses non-judgementally. Particularly in the emotive area

under investigation here, this objectivity is crucial to preserving both the dignity of the informant and the credibility of the interviewer.

4. Interrupt gracefully. Whyte points out that some informants will often revisit an issue repeatedly, without the addition of significant information. However, the researcher believes that this is a difficult balance to strike, given the varying confidence levels of key informants and the nature of the issues in this study. As Whyte himself suggests:

> In research we want the informant to talk about things of vital interest to him, but we also need his co-operation in covering matters of importance to the researcher, though possibly of little interest to the informant... (p112)

Whyte also discusses a scale used by Dohrenwend and Richardson (1956) which assists the researcher in maintaining a balance between open and directed questionning by highlighting the use of respondents' behaviour as a guide to adjusting questioning techniques.

The questions put to principals were, in the main, open-ended. It was intended to avoid completely closed questions; however, having asked principals what they considered to be the major issues in integration, the most natural "flow-on" question was, "Do you feel you could handle

these issues yourself?" The question simply had to be included, with the addition afterwards of "Why do you feel this way?". The questions were constructed to complement the survey content in which non-principal stakeholders were asked about their perceptions of the principal's role in the integration program. There were additional questions, such as the question cited previously regarding major issues in integration. These were asked to ensure that all the aspects of the role covered in the Survey had also the opportunity to emerge in the Interview. The questions were framed so as to allow responses to be evaluative (with emotive or opinion content) or descriptive (simple facts, perhaps illustrated with examples from the informant's own experience). This was deliberate in that the researcher hoped to gather both types of information whenever possible. This was because, as suggested in Chapter 1, the *perceptions* of the stakeholders, whether evaluative or descriptive, were seen to be crucial to making comments about principal selection. It has, after all, been the perceptions of the parties to integration, those of selection panels, and those of Departmental policy-makers which have guided principal selection thus far in N.S.W. public education.

The point of the exercise was to establish how well aligned these perceptions were with each other and with the actualities of the role of

principal as it is practised. Whyte (1986:113) suggests:

> Regarding the mix among descriptive, evaluative and non- specific questions, there is no single correct proportion. If the interviewer asks a high proportion of evaluative questions, he needs to ask himself whether he is really learning about what is going on. With descriptive questions the disadvantage is not quite so clear, because few people can report events without at the same time referring to their feelings about them. However, the interviewer who asks few evaluative questions should ask himself whether the informant is also providing evaluative material - provided that he wishes both types of data.

Leedy (1993:187) also cautions researchers regarding the content of questions, and although he was discussing questionnaires in general, the advice is equally relevant regardless of the mode of delivery, suggesting that questions should be field tested several times to ensure that they exemplify "precision of expression, objectivity, relevance, suitability to the problem situation, probability of a favourable response, and return". He reminds researchers that answering questions is time consuming and often mentally debilitating for informants (1993:189). Hence, he advises the following "etiquette" in relation to data gathering in general:

1. Be courteous.
2. Simplify.

3. Think of the other person.

4. Concentrate on the universal

5. Make it brief.

6. Check for consistency.

7. Send return postage (if surveying).

8. Offer results to informants.

9. Think ahead.

Whyte further advises that researchers can minimise problems by carefully structuring the interview setting, avoiding distractions through the thoughtful arrangement of time and place for the interview. He suggests (1986:115) that by stating the researcher's own position as being an observer without influence, the outcomes of the interview will be less likely to threaten the respondent's confidence. He advises that "informants should be cultivated with care and understanding... ask questions in many different ways, so that complex configuration of sentiments can be better understood..." , highlighting the importance of de-emphasising the "ulterior motives" which could be held by either protagonist in the interview. Douglas (1985) refers to the "dominance and submission games" that he claims, are unavoidable in most interview scenarios. This factor is particularly relevant in relation to interviewing principals of schools, in that they may hold suspicions

regarding any underlying agenda attached to the study, or, equally, may have the intention of introducing issues or opinions of their own to the discussion regardless of their relevance to the central focus. Whyte reminds the researcher that he or she is "constantly relating sentiments expressed to the behaviour he (she) observes - or would expect to observe - in the situation under discussion." (p115). This was one reason that the researcher sought respondent's permission to tape interviews, so that the essential elements of responses could be analysed after the interview had taken place, "in the cold light of day", as it were. This strategy was considered essential to a more objective appraisal of responses. Several other reasons were also considered to be important. Coined by Borg and Gall (1989:454), these were (summarised) that taping interviews:

1. reduces the tendency to be selective, therefore biased, in what is recorded;
2. allows responses to be studied more closely;
3. enables re-analysis to reveal hypotheses not set up in the original study;
4. speeds up the interview process; and
5. provides the opportunity for other parties to assist in the analysis of data or to confirm the findings of the researcher, thus increasing the reliability of the data.

Of course the disadvantages of taping are not to be overlooked, in that the overt behaviour to which Whyte (1986:115) refers is missed, and the introduction of the machine into what is, ostensibly, a conversation between two people can impinge upon the atmosphere to an extent. In the case of this study, the researcher decided that, in the first instance, the nature of the questions was such that the information needed could be conveyed adequately through voice alone; in the second, it was hoped that, by giving respondents access to the questions some days before the interview, "stage fright" could be avoided. It was also thought that the questions themselves, thoroughly tested in brainstorming and pilot studies, were considered by other people (parents, other principals and teachers) to be innocuous and impersonal enough not to "rattle" respondents unduly.

3.5.3 The Principal Diary

(See Appendix 5.1 for directions in completing the Diary and Appendix 5.2 for the Diary Form, pp361-362.)

In order to confirm the information gathered in the interview, and to create a basis for comparison with stakeholders responding to the Survey, principals in the study were asked to keep a Principal Diary for two weeks, recording only those episodes which had a relationship with the integration program in their schools. The Principal Diary was heralded to principals during the first approaches about the study, and

was given directly to the principal on the day of the researcher's first visit to the school. It was proposed that all principals would use the Principal Diary over the same two week period (Weeks 7 and 8, Term 4, 1995).

The Principal Diary was set out as a proforma which could be checked in columns marked by a series of codes. The codes represented the type of issue being dealt with (student oriented, staff oriented, parent oriented, and so on) and the person/s with whom the interaction occurred (staff, parents, student, and so on). There was provision for a comment about the episode, although it was stressed to participants, both orally and in the instructions text, that the use of this space was optional.

In addition, principals were asked to record the time each episode began and ended, so that the researcher could collect data related to Research Question 6 regarding the amount of time spent on integration. This would enable a comparison to be made with the perceptions of stakeholders about the amount of time principals are engaged in integration-related tasks on a "normal day".

At the time that the Principal Diary was given to the principal, the researcher indicated that it might be the case that an interaction would

take place incidentally, say in a corridor or during lunch. In these situations, principals were asked to record these later, giving an estimate of time taken. It was considered that this request would encourage principals to record the episodes they might otherwise overlook, while simultaneously allowing them to filter those episodes whose links to integration were somewhat tenuous (for example, greeting an integrated child in passing).

3.6 THE PILOT STUDY

A Pilot Study was conducted to refine the quality of the content in the proposed research materials and to establish where problems might occur in interviewing or other data gathering.

The first step in the Pilot study involved the researcher convening a meeting of principal and teacher colleagues, including special and regular educators and parents of integrated and non-integrated children. All of these people knew the researcher, and each other, well. A "brainstorming" session was conducted, during which issues were raised regarding:

- the issues and problems of integration;
- the principal's role in integration;

- principal's knowledge about disability;
- principal training and preparation for working with disability and integration;
- what parents hoped integration would achieve for their children;
- the costs of integration in terms of time, human and material resources.

Based on note taking from this lengthy, free-flowing and highly informative discussion, the researcher developed the first draft of a series of questions considered appropriate to ask parents, teachers and principals. A smaller network of professional colleagues, including some of the original "brainstorm" group, commented on these and proposed adjustments.

The researcher developed the second draft of the Survey Forms, with adjustments in biographical data requests and minor adjustments to the language in the questions for different stakeholders based on this feedback. The second draft was used in the Pilot Study, undertaken in a rural D.S.E. Region at some distance from both of the Regions being included in the proposed study.

A District Superintendent and a principal were approached by the

researcher in this pilot Region. Once again, both respondents were known to the researcher, who sent each a copy of the Research Proposal, along with a set of research materials to consider. A pilot interview was conducted with the principal by phone, and audio-taped with the respondent's permission. When the Pilot respondents had returned their forms, including the completed forms and comments from other members of the Pilot school community, final adjustments were made. The changes were relatively small, including the wording of some of the Principal Interview Questions, adjustment of the response boxes in the Survey Forms (to allow more space for writing), and the provision of an opportunity for additional/general comments.

The materials were produced in their final form in a different colour for each stakeholder for ease of distribution and because it was suggested in the Pilot Study that they might look more attractive!

The researcher sent copies of the updated forms to her supportive "brainstorm" colleagues, along with a note of thanks for their participation.

3.7 DISTRIBUTION AND RETURN OF RESEARCH MATERIALS

(See Appendix 6, p. 365 for an Item Contents Checklist provided for principals.)

Principals were provided with a complete set of research materials on

the researcher's first visit to the school, along with a Contents Checklist. The materials were examined by the principal and researcher together, including the cover letters destined for each stakeholder. At this time the researcher offered to explain the nature of the research to the whole staff and to the parents who would participate, introducing all the materials and answering any questions. If the principals indicated that this was appropriate, a time was set to meet with the school community. If the principal declined the offer, the researcher accepted this preference, asking that the materials be distributed by the principal at his or her convenience. The researcher provided separate pre-paid envelopes for each respondent. There was no necessity for the Survey Form to be completed by a particular date, as was the case with the Principal Diary, and this was explained to the participants in the meeting or to the principal if no meeting occurred. The provision of the envelopes would enable stakeholders to take the Surveys with them and return them when convenient. At this time the researcher highlighted the potential of full participation to yield valuable and balanced information.

Principals were provided with a separate pre-paid envelope for the return of the Principal Diary, along with a cover note indicating, politely and respectfully, the preferred time period for recording and a preferred return date for the materials.

3.8 TIMELINE

The following timeline was observed for the conduct of the research:

April, 1995

A letter requesting permission to conduct research in each Departmental Region was sent to the Assistant Director-General's Regional Research Committee. The letter was accompanied by a copy of the Research Proposal and a suggested time frame for the conduct of the research.

May, 1995

"Brainstorming" session conducted.
First Draft of Survey Forms.
Second Draft of Survey Forms.

June, 1995

1.Permission received from Metropolitan North Region to conduct research (Appendix 8.1, p. 371). Oral permission from Riverina Region (Appendix 8.2, p. 372).
2.Schools selected on the basis of the presence of integrated students and within a suitable radius for researcher access.
3.Initial letters to Principals in both Regions (Appendix 7.1, p367).
4. Visits to schools interested in participating in the research.
5. Presentations to staff if invited, or to principals.

August, 1995

1. Pilot Study conducted.
2. Forms re-drafted with adjustments.
3. Telephone calls to principals and superintendents.

4. Copies of Research Proposal and research materials posted to superintendents with a request for their participation. Return envelopes included.

September, 1995

1. Revised research materials posted to four newly established District Offices for completion by the Superintendent.
2. Permission sought from District Superintendents to conduct research in their schools.
3. Written permission received covering Riverina Region's two Districts.
4. Interviews conducted. Research materials distributed to these principals; staffs addressed as invited.
5. Telephone calls of thanks to principal participants.

October - November, 1995

1.Interviews conducted in Metropolitan North region.
2.Interviews conducted in Riverina Region.
3.First Survey Form returns.
4.Telephone calls of thanks to participants.

November, 1995

1.Principals in 14 schools completing Principal Diaries.
2.Non-principal Survey Form returns.
3. Telephone calls to all principals offering support, encouragement and thanks regarding their diary-keeping efforts.

December, 1995

1. Principal Diary forms returned (not all).
2. Survey Forms returned (not all).

January, 1996

Letters of thanks to principals and superintendents.
(serving as a reminder to principals whose Diaries had not been returned).

February, 1996

Telephone calls to principals whose Diaries had not been returned.

3.9 THE CONDUCT OF INTERVIEWS WITH PRINCIPALS

Leedy's advice (1993:192) regarding the planning of the interviews was followed as closely as possible in this study. He suggests the following steps:

1. Set up the interview in advance.

Interviews were arranged to give maximum notice. All interviews preceded the distribution of Principal Diaries, with one exception (the principal was on leave and his Assistant Principal was interviewed and took possession of the materials).

2. Send the questions to the respondent.

Questions were faxed to principals as soon as the interview date and time were arranged.

3. Ask for permission to record on audio cassette.

All principals were asked if their responses could be taped when the interview date was set.

4. Confirm the date in writing.

Principals were faxed a day before the interview when possible, or telephoned when the researcher was travelling in country areas.

5. Send a reminder with another agenda.

Once again, the fax was used, particularly when principals were contacted early in the research period.

6. Be prompt.

The researcher was at the interview site at least ten minutes before each interview time, often telephoning from the school where she had finished interviewing to let the next school know she was on her way. This was particularly so in country areas, when several interviews were conducted in a single day.

7. Following the interview, provide a transcript.

All principals were made aware that they could access the transcript of their interview at any time. Transcripts were usually typed up within a week of the interview.

8. Send a report and seek permission to use the results of the interview in the research.

All principals were given the option of having a visit from the researcher after the study, to discuss findings with them and with their school communities. This offer was also mentioned in the cover letter to principals (Appendix 7, page 357). However, permission to use the data was not sought from principals, since they were not approached to participate in the research until permission had been received in writing from each of the D.S.E. Regional Research Committees. Letters and copies of the Research Proposal were also posted to each of the two Regional Directors-General. The researcher showed the original Letter of Approval to each principal at the time of the first visit to the school, providing a copy for school records. (Appendices 8.1 and 8.2, pp371-2).

NOTE: The researcher opened each interview session by explaining the purpose and structure of the interview, emphasising the confidentiality of responses and the anonymity of transcripts. She reiterated the intention to include only edited transcripts in the final thesis. She reminded principals that the interviews would be audio-taped, and that access to these tapes or the transcripts, either verbatim or edited, would be limited to themselves alone.

3.10 DATA ANALYSIS

3.10.1 Survey Forms - Section One

The data gathered from the first section of the Survey Form were used to construct a complete description of each school community, including the number of children involved in the integration program in each school.

3.10.2 Survey Forms - Section Two

Questions 1 to 9 were analysed using a coding system, as suggested by Miles and Huberman (1984) and Strauss and Corbin (1990). Responses were assigned from this section of the Survey to principal task groupings or task "bins" (Miles and Huberman, 1984: 29). These task bins were also used as the generic labels for the episodes recorded in Principal Diaries and the responses to Principal Interview questions, which will be discussed later in this Chapter. The bins were an attempt at data reduction without the loss of descriptive detail (Miles and Huberman, 1984:56). That is, while this framework was utilised to streamline analysis, it was not envisaged to work as a "blinder" or "straightjacket" (Miles and Huberman, 1984:29), but to enable initial investigation of responses to take place in the context of Research Questions 2 and 3 which were:

Question 2.

To what extent does the role of principal vary between schools offering integration programs and those not offering such programs? and

Question 3.

What contributions do principals make to integration programs in regular schools?

The isolation of tasks was hypothesised to be focal in making a comparison between two types of principalship.

The structure of the questions in the second section of the Survey Form lent itself to a preliminary set of bin labels, simply extrapolated from the task list "brainstormed" for the Pilot Study, which was contained in all Surveys as, for example, Question 3 on the Parent Survey. From this larger set of bins, the researcher could reduce data categorisation further to task bins related, or unrelated, to both the seven generic criteria used by the D.S.E., and to the proposed additional roles for the integrating principal which might emerge from the Survey data themselves.

The final set of task bins for the second section of the Survey emerged as described in Table 3 on page 134.

These bins also served for the coding of the Principal Diary and Principal Interview data. Because the creation of bins underwent several versions, it followed the pattern suggested by Miles and Huberman (1989) of continuing analysis. With each return the researcher revisited the bins, making small adjustments to their description, or re-aligning tasks according to new "insights" emerging with a fresh look at previously coded data.

De Vaus (1986:191) supported the maintenance of a systematic record of how decisions are made during coding - a codebook - to facilitate consistency, and to assist with decision-making about new items. Although his design applied to computerised spreadsheets, the action of using a codebook efficiently guided the process in this case.

What the Bins Describe

It should be noted that the task bins describe the principal's performance of activities *only inasmuch as they relate to integration*, not in regard to the general education operations of the school. While it was clear that there would be commonality with regular education tasks, the researcher wished to establish which tasks, over and above the usual operations of the school, needed to be performed by the principal to support integration programs.

CODE	Describes	Includes
CL	Curriculum Leadership and Special Education Pedagogy	Developing Inclusive Curriculum Teaching integrated students Student Assessment & Reporting Arranging and attending Reviews.
PMS	Professional Mentorship and Support	Staff Training and Development Support/Regular Staff Welfare Conflict resolution/negotiation Assisting injured staff Counselling staff Supervising teaching practice Arranging staff release/relief Completing rosters and duty schedules.
SN	Management - Integrated Students' needs	Giving prescribed medication Assisting with Work Experience IEP development Assisting with student' post-school options Notifying concerns eg abuse Counselling students Managing students' behaviour/discipline Recognising student achievements Managing health and safety of students; completing accident reports Completing special education and integration submissions; writing evaluation reports.
CDM	Collaborative In-School Decision-Making	Timetabling Arranging/chairing integration committee meetings Arranging and chairing integration planning meetings.
RM	Resource Management	Distributing resources Chairing integration budget committees Arranging teacher's aide alloctions
PC	Collaborating and Liaising with Parents and Community	Arranging parent/teacher meetings Arranging inter-agency meetings Meeting with therapy staff Supervising therapy programs Meeting with/counselling parents Reporting to parents Meeting community support and special interest groups.
PR	Integration Promotion	Promoting inclusive ethos Promoting students'achievements Arranging publicity Liaison with DSE re the integration Promoting community awareness
ML	Managing Logistics	Arranging access Enrolling integrated students Submissions for capital works Establishment of classes/staffing Managing Disabled Transportation Arranging the loan of wheelchairs special prostheses or technology Locating/relocating classrooms

Table 3: Bins for Coding Survey and Interview Data.

A full description of the integration tasks completed by principals, compared with an analysis of the added "Should Do" columns in each Survey Form would provide partial answers to the following research question:

Question 4.

How do the actions of principals regarding integration programs compare with the expectations of stakeholders?

3.10.3 Survey Forms: Section Three

The third section of the Survey dealt with the personal qualities, skills and knowledge of the principal. Respondents were asked to select three items from the "personal qualities" and "areas of knowledge" lists and five items from the "skills" list. The reason for requesting more items from the "skills" list was that six of the seven generic criteria for principals were there embedded. In other words, the researcher provided a better-than-average opportunity for the generic criteria to be selected.

The penultimate question asked respondents if there were any additional qualities or skills which should be considered necessary for the principal of a school offering an integration program.

The data were analysed according to the frequency of their selection, not statistically, but with the view to comparing frequencies across stakeholder groups and discovering whether the most frequently selected items were, in fact, the generic criteria currently in use by the N.S.W. D.S.E. for filling principal positions. The intention was to discover how well the generic criteria met stakeholders' expectations, thus partially answering:

Question 1.

What criteria specific to the appointment of principals need to be added to the current generic criteria to ensure the success of integration programs?

and

Question 2.

To what extent should principals of schools offering integration programs be special educators themselves?

3.10.4 Principal Interview

Responses from the Principal Interview Questions 2, 4, and 6 were coded using the same task bins as were used for the Survey Forms. Similarly, frequencies for the selection of personal qualities, skills and knowledge were calculated for responses to Questions 1, 3, and 5.

Separate bins were created for categorising responses to Question 8. which focused on major issues in integration. They are presented in Table 4.

CODE	DESCRIBES	INCLUDES
RES	Resourcing	Funding, sites, equipment
EDU	Educational	Programs, curriculum issues
SOC	Social	Human Rights Issues
PER	Human Resources	Staffing
POL	Political	Lobby groups, interest groups

Table 4. Bins for responses to Interview questions.

Questions 11 and 12 were specifically about the role of principal, the first question focusing on the impacts on the role if special schools were closed down, and the second asking principals to list the aspects of their roles that they most enjoyed. The researcher declined to reduce these data, because, verbatim, they represented a fascinating insight into the personal and professional motivations of these principals, and demanded, as such, to be reported faithfully. They were "reserved" therefore as "garnish" for the Results pages.

Any additional comments added in response to Question 12 were recorded in either the task bins or criterion categories as appropriate.

3.10.5 The Principal Diary

The introductory page to the Principal Diary enabled respondents to record personal details which could be added to the Sample Descriptions mentioned before. They were also able to be used regarding the qualifications and experiences of principals in integrating schools, since they allowed comparison with the samples in several of the studies discussed in Chapter 3 in which principal qualifications and experience were found to influence attitudes towards integration (Bain and Dolbel, 1991; Cline, 1981).

The Principal Diary pad contained pre-coded items. Each task bin was described with inclusions on the Principal Diary Directions Sheet (Appendix 5.1, page 361). These same task bins were used in the data analysis. The reason for asking the principal to record with whom the episode had occurred was to assist in the coding process, so that it was clearly codable as a student-, staff- or parent/community- related task. These bins are represented in Table 5 on the following page. It can be seen that these bins are similar to those used for the Survey which allowed for comparative analysis to be made among stakeholders. At the same time it was intended that they should make clear distinctions between special and general education management tasks.

CODE	DESCRIBES	INCLUDES
E	Educational	Student evaluation and assessment Programming, curriculum advice Pedagogy, trends, direct teaching Policy, IEPs
ST	Student related	Medication, behaviour, counselling Reward or acknowledgement, therapy Reviews, timetables
L	Logistical	Transport, equipment, placement Site management
SF	Staff related	Rosters, duties, professional support Training and Development, welfare Workers Compensation, conflict and negotiation
P	Parent related	Interviews, counselling, complaints Mainstream parent inservicing, P&C Association
C	Community related	Liaison with agencies and services Trainees, cadet special education practica Sponsorship, community support Residential placement meetings

Table 5. Bins for Principal Diary data

3.11 RESEARCH VARIABLES

The following variables were evident in this study:

Location

The selection of schools in two areas of N.S.W. was made to explore whether geographical factors had an impact on the principal's role in integration. It was hypothesised by the researcher that geographical distance from support services and special schools might have influence in determining what alternatives principals had in terms of accessing additional services and funding. In turn, this access might more clearly demarcate the principal's role from the roles of other personnel supporting integration. That is, in areas where there were alternatives

for the placement of students, or for part-time enrolment in integration classes, principals might be expected to be less involved in the process of integrating students than they might be expected to be in areas where services and support were distant or non-existent.

School Size

Large and small schools were included to establish what differences, if any, existed in the principal's role when schools were large enough to hold executive positions such as Deputy Principal, Assistant Principal and Executive Teacher (Support). The researcher hypothesised that both the *nature* and *extent* of the principal's role might change when there were opportunities for the delegation of integration-related tasks. There might also be an impact on the amount of time principals spent on integration-related tasks.

School Classification

It was hypothesised by the researcher that the principal's role in primary, secondary, central and special schools would vary, due to the organisation of curriculum, the timetable and the nature of the student population. There might also be differences in the relationships between the principal and other stakeholders in schools of different classification and these differences, in turn, might influence stakeholders' expectations for the role.

Age of Students

The full range of ages of students in the N.S.W. public education system was included to establish whether the nature of integration-related tasks performed by the principal might be expected to change over the school career of an integrated student. The researcher also intended to explore whether the nature of relationships between the principal and other stakeholders differed when students of different ages were being integrated; finally, it was of concern to the researcher to establish whether the nature of decisions made by the principal on behalf of integrated students would change over time.

Principal Qualifications, Knowledge and Experience

Although variables were not a "thoroughly intentional" inclusion in the study, the researcher speculated that there would be wide variation in the career experiences, training and length of service of the principals in the sample. Whether, and to what extent, these variables impacted on effectiveness of the integration programs in the sample schools was not known at the outset.

However, the research discussed in Chapter Two led the researcher to

hypothesise that qualifications knowledge and experience did affect the success of integration programs elsewhere; thus, the inclusion of these variables, while not determining the selection of schools in the sample, was deemed useful in the discussion of findings.

3.12 VALIDITY

It must be noted at the outset that the validity of the research methodology selected for this study rests on the assumption that the selection criteria used to fill principal positions in N.S.W. public schools are, themselves, valid.

The content of the Survey, the Principal's Diary and the Interview questions were all based on the generic criteria. Stakeholders were asked to comment on those criteria in terms of their own contexts. In this way, the validity of the generic criteria could themselves be tested against stakeholders' perceptions and expectations. In this regard, the content of the research materials comprises "a test whose content is similar to that used in the treatment" (Borg and Gall, 1989:252). However, the clear caution here is that, with a small sample of participants, the researcher should not claim that any findings

regarding additional criteria for the principalship are necessarily valid. Nevertheless, should specific principal characteristics outside the generic criteria feature repeatedly among the responses of the stakeholders, it would seem that these should warrant further exploration.

Regarding the development of a role description in terms of integration, an attempt was made by the researcher to increase the concurrent validity of the research tools by requesting that all principal participants collect their data during the same period of the school year. It was intended that this condition would make the assay of tasks more likely to "typify" the principal's role in integration.

The content validity of the tools used also poses problems. Although questions were developed as the result of a "brainstorming session" involving special and regular educators, there was always the possibility that other aspects might have been overlooked. The addition of an "Anything you'd like to add?" section in every tool assists in providing for additional possible factors, but also creates coding and analysis problems. Variations to the original list of principal duties needed to be incorporated throughout the analysis.

3.13 RELIABILITY

Although the use of triangulation has already been discussed as a feature of this study, a final comment regarding the reliability of the research tools needs to be made.

This research was intended as an initial investigation into the principal's role in integration. Its design and conduct have had the primary aim of addressing the question of whether the principal of a school offering an integration program actually has a role in that program. The researcher, having assumed that the principal does, and should, have a role, and supported in part by relevant literature, set about establishing whether this assumption held true among various stakeholders in integration.

The limitations of small sample size notwithstanding, a generalised perception among stakeholders that there is a role for the principal in integration, with some suggestions as to what the role might be, would enable the researcher to conclude that her hypothesis was correct. It was hoped that embedding the investigation on the context of current principal selection methods might highlight and legitimise the specifics of the role of principal in relation to integration, providing a framework for closer study.

In other words, the intention was, as it is no doubt in most research, to raise awareness of an issue, not to precipitate immediate change. The researcher would not claim that the findings of this research could readily be applied to all settings, but, rather, that they might enable the System and the stakeholders in integration to reflect on how they might be further explored to inform future practice.

3.14 ETHICAL SAFEGUARDS

Stakeholders were assured of the confidentiality of their responses. To effect anonymity, the researcher code numbered schools in the sample. These codes were useful in checking off returns as they came in, and matching stakeholders to school locations. This was important in the analysis in that it enabled the researcher to compare the perceptions of the principal's role within each school community. Survey Forms were destroyed after coding and one re-check analysis.

Principal returns had the same school code numbers as other stakeholders from their communities. In addition, the principals were assigned code names. Audio-tape transcripts were used in an edited form, removing any specific identifying details in terms of the response style of the respondent or any other reference which may identify a principal. Once edited, the original verbatim transcipts were destroyed.

Schools were re-named, although their classifications - as high schools, primary schools, and so on - were maintained, because these might have bearing on role differences.

3.15 LIMITATIONS OF THE METHODOLOGY

The first limitation in the methodology just described relates to the method of selection of schools. The fact that the schools were selected non-randomly could introduce bias. However, the rationale for the basis of selection has already been discussed in detail in this Chapter. The researcher accepts that the risk of bias increases when subjects in a sample are included mainly on the basis of their willingness to participate; however, as stated earlier, the inclusion of opinion from various "angles" was employed to offset bias.

The second limitation relates to the sample sizes available to the researcher when employing a largely qualitative approach. Most of the recent (1992 onwards) studies relating to integration and the principalship discussed in Chapter Two were included because the

researchers employed ethnographic techniques, using either case study or principal/ superintendent interviews (Mullinix, 1993; Williams, 1993; Raab, 1993; White, 1993). The researcher postulated that by using similar approaches in this study, a fuller *initial* picture could be constructed of the principal's role in integration in N.S.W. schools.

However, these approaches have limitations in that their sample sizes and the returns therefrom usually yeild less generaliseable results than would be afforded using quantitative studies.

For example, Center et al.'s (1985) study into principals' attitudes to integration was a wide-ranging quantitative survey; it involved nearly 3,000 principals across government and non-government systems. What the study yielded was valuable information about a large number of principals' attitudes towards integration; what it did *not* clarify was how they saw their attitudes contributing to the success of the integration.

Similarly, with large funding and human resources at their disposal, Burrello and his colleagues (1985; 1986a; 1986b) were able to conduct a national (U.S.) survey utilising a task rating scale for principals managing special education programs. As a national initiative, this

project was manageable and justifiable in large scale. Nevertheless, while the study prescribed a role for principals on the basis of findings, it did not determine how these roles might be altered by individual school characteristics, such as distance from services and adequacy of funding.

Hence, studies which focus on issues such as the principal's role can either be constructed quantitatively to yield a list of tasks derived through a multi-factorial analysis; or their design can more deeply explore the extensions to the "generalist" role that are perceived to make a difference using ethnographic tools. The latter option was chosen in this researcher's study with the understanding that a fuller investigation of the minutiae of findings from this study could be undertaken quantitatively in future.

What is understood when using a qualitative approach is that the generaliseability of findings will often be limited because the resources enabling broader sampling will be limited. Nevertheless, Glaser (1986) points out that the search for "cumulative knowledge" involves a progressive building up of levels of theory using many ethnographic studies to test logico-deductive hypotheses in order to generate formal theory. Replications of smaller qualitative studies also have considerable value in the testing and confirmation of hypotheses.

As Glaser postulates (in Burgess,1986:228):

> If we do not practise such modes of extending theories, we relegate them...mainly to the status of little islands of knowledge, separated from others - each visited from time to time by inveterate footnoters, by assemblers of readings and of periodic bibliographical reviews, and by graduate students assigned to read better literature. While the owners of these islands understandably are pleased to be visited, in due course of time they can look forward to falling out of fashion and to being bypassed. This is not how to build a cumulative body of theory.

It was hoped by the researcher that this study, though small in scale, would contribute to a cumulative theory of leadership in integration, without "bypassing" any potentially useful theorising being undertaken within school settings, that is, by principals themselves.

Furthermore, despite the small sample, the researcher believed that the inclusion of two regions in the study, one metropolitan and one rural, provided a broader view than might be expected from a more limited geographical range. Nevertheless, the danger of extrapolating from this sample to all possible school communities needs to be kept in mind in analysing results.

A possible limitation in the use of diary techniques has been described by Borg and Gall (1989:191). Tagged the "John Henry Effect", this can be described as one in which a participant in the research will maximise effort in a task or position in order to demonstrate that his or her contributions are significant While the effect is most often seen in situations in which workplace efficiencies or new technologies threaten peoples' jobs, there was, nonetheless, the potential in this study for principals to demonstrate a more proactive role in the integration programs in their schools during the data gathering phase than they might have demonstrated during other times.

Another limiting factor in qualitative research is researcher bias, in this case, the tendency to record that which confirms the researcher's own view, overlooking other information as being "non typical" (Smith and Robbins (1982) refer to "intrinsic adequacy" in this regard). The use of the Survey form, the pre-printed Principal's Diary, and set Principal's Interview questions were strategies employed by the researcher to reduce the possibilities of bias. However, since edited transcripts of audio tapes and a coding system for Survey data were considered a more efficient way of analysing findings, the limitation just listed is duly noted.

The subject of the study may, itself, be imbued with some "demand characteristics" (Borg and Gall 1989:193). Although the researcher made conscious efforts to define the purposes of the study as "initial exploration" and to describe it as uninfluential, there must be recognition of the fact that principals and stakeholders may have regarded the research as somewhat threatening and/or invasive.

The researcher's influence on the setting was designed to be reduced through the standardisation of letters, and the conscious intention of the researcher to keep "casual" conversation related to the research to a minimum. The researcher set down, and strictly adhered to, a telephone and staff meeting protocol which was designed to present the facts related to the purpose and possible outcomes of the study as neutrally as possible, while still providing for participants a reassurance that their contributions were valued and valuable for education.

Notwithstanding these attempts at safeguards, there remains the possibility that stakeholders would respond in ways they thought the researcher would wish them to (Douglas, 1976).

The researcher's own "status" as a practising school principal must be noted, since principals in the study would naturally consider her to be a

colleague, even though the researcher may not be known to them personally. Similarly, the staff and parents in participating schools were also made aware of the background of the researcher, so their responses may have been influenced to some extent by this knowledge. In terms of the influence of the researcher, the additional factor of concern is that principals may have, consciously or unconsciously, completed the diary pads by recording what they ***should*** have done in each circumstance, rather than describing what they actually ***did***. The researcher accepts that such possibilities arise when using ethnographic techniques.

Another limitation to the study is believed to be a possible artefact regardless of the method of analysis (qualitative or quantitative). This is the difficulty of avoiding "kneejerk" reactions among respondents. Whether these reactions are interpersonal, and relate to problems in relationships between principals and their school communities, or whether they are related to issues, such as access or System support, does not matter. Special Education in general, and integration in particular, can create such reactions simply because of the nature of the educational challenges and the clientele; it is an area of education which is especially prone to interest and lobby groups.

Finally, in recording time spent on various tasks, it must be noted that

time sampling does not provide "deep" findings, and cannot predict how a principal would prioritise tasks under pressure. Notwithstanding the possible, troubling assumption that "fitting the bill" in terms of spending "appropriate" amounts of time on integration means a principal is effective, the usefulness of these data should not be undervalued, as they do assist in the building of a profile for the role, and, hence, assuredly meet Jick's (1979) appraisal that triangulation allows measures to complement and augment.

Further to time records, it must be mentioned that much of the communication taking place in schools is informal and occurs almost incidentally in corridors, staffrooms and playgrounds. The comment that the principal might not have his or her diary handy is not intended to be facetious. Many of these communications are crucial, but the principal may not have registered that they were especially relevant, or may even have forgotten them by the time he or she returns to the office.

Despite these limitations, the researcher believes that findings from this study can be compared, albeit cautiously, with those of studies conducted overseas, to provide a focus for discussion about N.S.W. public school principals and their roles in integration in their schools.