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Running head: CLASSROOM ARRANGEMENT AND STUDENT BEHAVIOUR

Thesis

Classroom physical arrangement and student behaviour

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Faculty of Education

By: John Alexander Warman

July 2nd, 1999.

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Classroom Arrangement and Student Behaviour 3
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ABSTRACT

The following study examines how the physical arrangement of classrooms affects student behaviour, as measured by student off-task 'inappropriate' and 'disruptive' behaviour, defined as all types of behaviours that are contrary to stated or implied classroom rules or procedures (Emmer et. al., 1981a). This study was conducted using primary classrooms, from Grade 1 to Grade 3, so as to view as many forms of physical classroom arrangement as possible. The study was conducted within a specified board in Ontario in 7 schools which opted to partake in the study. The study is qualitative in design using two main Case Study formats: Situational Analysis and Multisite study, using structured observations of classrooms and informal interviews with classroom teachers. Observation and interview questions were constructed using measurement tools from Emmer et. al. (1981a) Classroom Management Improvement Study, (CMIS). The accumulated data from each of the 7 primary observations, secondary observations and teacher interview questionnaires were analyzed and added to the findings and results section of this study.

The case studies showed a definite relationship between classroom physical arrangement and student off-task behaviours. If learning and teaching materials are easily accessible by students independently, the teacher can see and hear all students, the traffic flows smoothly, and there are areas for high and low activity then the counts of off-task behaviour decreased.

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INTRODUCTION

Classroom Arrangement and Off-Task Behaviour

Several studies have explored the experiences of teachers related to classroom management (Hoy 1993, and Evertson 1983). However, little has been written concerning experiences that elementary school teachers' have related to physically arranging the learning environment (Emmer 1981a, Evertson 1983). Emmer et. al. (1981a) briefly examined this aspect of classroom management in their Classroom Management Improvement Study (hereafter referred to as CMIS) and took the position that the physical arrangement of the learning environment is an important consideration for teachers to take into account when student off-task behaviour is a concern. Gordon (1974) stated that "teachers can prevent many unacceptable behaviours of students with relative ease just by modifying the classroom environment" (p.156). This involves organizing classrooms so as to accommodate the dynamics of the students. Martin and Sugarman (1993) argued that, if teachers can learn effective ways of "organizing the classroom", "classroom behaviour problems will be greatly reduced" (p. 52).

Many experiences exist within the classroom related to the physical arrangement. These experiences help to distinguish specifically the role of teachers as effective managers of student behaviour. Emmer et. al. (1981a) argued that "effective classroom management can be conceptualized as that set of teacher behaviours and activities that bring about student cooperation and involvement", in effect preventing disruption (p.3): "When classroom management is operationalized, it will be done with measures of student cooperation and involvement; namely, by rates of on-task or engaged behaviour and by minimization of disruptive and other inappropriate behaviour" (p. 3-4).

Emmer et. al. (1981a) contended that research literature supports the "inference that classroom management effectiveness and student learning are

linked" (p. 4). Lortie (1975) supported this notion:

the teacher is expected to elicit work from students. Students in all subjects and activities must engage in directed activities which are believed to produce learning. Their behaviour, in short, should be purposeful, normatively controlled, and studied; concern with discipline and control, in fact, largely revolves around the need to get work done by immature, changeful, and divergent persons who are confined to a small space. (Lortie 1975, p. 151)

Similar view points were expressed by Jackson (1968):

certainly no educational goals are more immediate than those that concern the establishment and maintenance of the student's absorption in the task at hand. Almost all other objectives are dependent for their accomplishment upon the attainment of this basic condition. (Jackson 1968, p. 85)

Emmer et. al. (1981a) argued that, given the above ideas regarding teacher roles in establishing and maintaining a well managed classroom, "a central teaching function is to use activities and behaviours which allow the teachers and students to work together on learning tasks for long periods of time in a manner conducive to student involvement in the tasks" (p.3). Teachers must ensure that the learning environment contains the materials required to fulfill aims and objectives, and that the physical arrangement must be designed to incorporate large group, small group, and individual activities while, at the same time, offering easy traffic flow for transitions and optimum observability for the teacher (Emmer et. al. 1981a).

Doyle (1979) provided a similar view point:

teachers encounter classrooms as units of time to be filled with activities that can be justified educationally and as groups of students who vary widely in aptitudes and propensities for such activities. At a proximal level then, the teachers' task as defined by these situational demands is to gain and maintain cooperation in classroom activities. (Doyle 1979, p. 47)

Perhaps one the most influential theory of teacher effectiveness was developed by Kounin (1977). Kounin (1977, pp. 73-124) conceptualized teacher effectiveness as the ability for teachers to acquire skills that aid in promoting on-task behaviour on the part of students. The role that the physical arrangement plays in the process of managing a classroom effectively is an important consideration to take into account, (Gordon 1974, pp. 169-175). For example, present day classrooms tend to be physically arranged so that traffic patterns flow easily throughout the classroom and all desks are placed in such a fashion as to deter off-task behaviour that might hinder the learning process. Teachers must do all that they can do to ensure that management problems in their classrooms are minimal, (Slavin 1990, Zia 1994, Whitford, 1993, Emmer et. al. 1981a, Evertson et. al., 1989).

The definition of effective classroom management used in the CMIS conducted by Emmer et al. (1981a) is not only supported by the role definitions of teaching, seen above, but also by numerous results in research on classroom learning (Good 1979, Hoy 1993, Bloom 1976, pp. 108-112, and Jackson 1968, pp. 39-89, 113-156).

According to the CMIS there are three major phases to the process of establishing and maintaining a well managed classroom, the first of which deals directly and the other two which deal indirectly, with the physical arrangement of the classroom:

Pre-active phase. This phase of classroom management occurs prior to

the arrival of students and consists of preparing the physical setting, planning beginning of the year activities, and identifying expectations for student behaviour and for work requirements.

Beginning the year. The second phase in classroom management occurs when the students arrive. During this phase the teacher communicates the expectations to students, establishes norms for behaviour and work, and establishes routines and procedures for conducting activities.

Depending upon the age and grade level of students, this phase may take anywhere from a few days to several weeks to complete.

Remainder of year. In the third phase of classroom management, the emphasis is on maintaining norms for behaviour and work. During this stage the emphasis in management shifts from socialization of students into the classroom setting to designating and conducting activities in ways that keep students actively engaged. Provisions for student success and adapting instruction to meet individual student needs (especially lower-achieving students) are critical in this stage. (Emmer et. al. 1984, p. 137-138)

Although teachers perform several standard management related roles within their classrooms, the role of physically arranging the classroom as emphasized in the pre-active phase, is probably the most important. Emmer et. al. (1981a) showed definite correlations between the major components found in the pre-active phase description and student on-task behaviour. If students are exposed to a learning environment that is arranged in such a manner that activities are easily carried out independently and all areas of the classroom are completely observable, students are less likely to be off-task (Slavin 1990, p. 362-399).

Findings from the CMIS showed that in there was a "strong correlation between teacher behaviours and student on-task behaviour" when examining

several "management related areas, including Materials and Room Preparation, Monitoring, Consequences, and Organizing Instruction" (Emmer et. al. 1981a, p. 78). Emmer et. al. (1981a) examined teacher effectiveness in managing classrooms across a broad range of prescriptions. One of these prescriptions looked directly at impact that the physical environment has on student behaviour, but only to a minimal extent.

The purpose of this study was to examine the relationship between the physical arrangement of a classroom and student behaviour. This was measured by student off-task 'inappropriate' and 'disruptive' behaviour. This study examined the impact of classroom physical arrangement on student behaviour by focusing on this aspect rather than dealing with all 11 prescriptions discussed in the CMIS (Emmer et. al. 1981a). Compiled information from each of 7 primary observations, secondary observations and interviews were examined and analyzed using measurement tools created from Emmer et. al.'s (1981a) CMIS.

Literature Review

Teaching, as a profession, is a job consisting of many diverse roles to be performed by the teacher within the realm of the classroom, many which relate directly or indirectly to classroom management (Whitford 1993, Kaplan 1990, pp. 6-9, and Woolfolk 1990a, pp. 5-8). Teaching is one of the toughest professions because teachers must assume and carry out many management related roles well:

a teacher must be a leader, an effective speaker, a quick diagnostician, a tactful diplomat, and a firm but fair disciplinarian. Teachers must know their subject and, even more importantly, know their craft. Teachers have

to be 'on' all the time and they do not leave their jobs behind when they go home at the end of the day. (Slavin 1990, p.18)

In essence, the management of a classroom takes creativity, keen observational skills and the ability to continually evaluate and re-evaluate the program for its effectiveness. This means designing the classroom to effectively motivate, monitor and assess student behaviours. In effect, the teachers ultimate role is to encourage on-task student behaviour and deter off-task behaviour.

Kounin (1977, pp. 73-124), an early pioneer of this type of study examining teacher effectiveness, concurred with Slavin's concept of the effective teacher and listed four variables that can be used to determine the effectiveness of teachers in their ability to promote on-task and deter off-task behaviour on the part of students: Withitness, smoothness of transitions, group alerting, and learner accountability.

He coined the term 'withitness', or teachers ability to keep track of what goes on in the classroom. Kounin defined 'withitness' as the teachers ability to communicate to the students by his/her actual behaviour that he/she knows what the students are doing at any given time. Borg (1975) identified four teacher skills that Kounin (1977) believed demonstrated 'withitness' in the classroom: "Desist, suggest alternative behaviour, concurrent praise, and description of desirable behaviour" (p. 53). Teachers must assure that they can see, and be seen by, the students at all times so as to deter off-task behaviour from occurring. To attain this, classroom features must be arranged so that students are easily visible.

Another of Kounin's variables is the 'smoothness of transitions'. Kounin (1977, pp. 93-108) found that the ability of a teacher to deal with classroom disruptions in ways that did not interfere with ongoing classroom activities, and that led to smooth transitions between different activities, correlated with student on-task work habits and freedom from student misbehaviour. Borg (1975) identified three

teaching skills that Kounin (1977) believed contributed to the smoothness of transitions: "Delayed response, timely interjection, and smooth transition" (p. 53). Teachers must ensure that the room is organized in such a fashion so as to the increase efficiency of transitions, and deter the probability of distraction. To accomplish this, classroom features must be organized so that traffic flows easily throughout the room.

'Group alerting' is Kounin's (1977, pp. 117-124) third important attribute of the effective teacher. This is the teachers ability to keep students alert so that they will be encouraged to stay on-task and be deterred from off-task, deviant behaviours. Borg (1975) identified three teaching skills that Kounin (1977) believed contributed to group alerting: "Positive questioning technique, positive recitation strategy, and alerting cues" (p. 53). Teachers must ensure that students can see the them at all times so that they are aware that the teacher requires their attention. This includes the establishment of group areas in which the teacher or speaker is in front of all students and the students are facing the teacher or speaker. To achieve this, classroom features must be arranged so that students can see all that is going on in the classroom.

A final teaching variable that Kounin (1977, pp. 119-124) believed to be a determining factor of effective teaching is 'learner accountability'. The basic premise of this variable is that when a teacher incorporates specific strategies to hold students accountable for their classroom activities, these management strategies increase student on-task behaviour and reduce the frequency of student off-task, disruptive behaviour. Borg (1975) identified three specific skills that Kounin (1977) believed demonstrated learner accountability: "Goal directed prompts, work showing, and peer involvement", (p. 53). Related to the physical arrangement of the classroom, teachers must ensure that efficient means of work collection are in place. This might include mailboxes, in and out trays, portfolios, etc. To accomplish this, classroom features must be arranged so that group learning and active 'hands-on' learning can occur.

This theory directly examines what teachers need to do to assure that the management of their classroom is ultimately in their hands. It focuses on the learned behavioural strategies that are present in effectively managed classrooms rather than distinguishing the physical features that are witnessed. However, without these learned teacher behaviours, Kounin believed that classroom management was next to impossible. Other theorists have very different beliefs about teachers' management ability.

For example, another perspective comes from Carl Rogers who believed that teachers are endowed with the ability to establish an effectively managed classroom. Unlike Kounin's ideas regarding teacher skill development, Carl Rogers (1969, pp. 103-128, 151-168) believed that effective teaching resulted directly from the essential personality of the teacher and the many subtle ways in which this personality manifested empathy, congruence and unconditional positive regard in the classroom. "No skill or technical strategy can replace or override the pervasive effect of the teachers personality or character", (Martin and Sugarman 1993, p. 22). Teachers must use their creativity and innovativeness in establishing the physical arrangement so as to meet the expectations they desire. The physical arrangement of the learning environment must be established in such a manner so as to incorporate learning through actively doing and so that group and peer learning are a focus. In essence, if this is the case, Rogers (1969, pp. 151-156) contended that on-task behaviour will be greatly encouraged and off-task behaviour will diminish.

Evertson et. al. (1983) and Emmer et. al. (1981a), two prominent researchers who have investigated the contributions that physical classroom arrangements can make to effectively managing classrooms, support this notion. Evertson et. al. (1983, pp. 176-188) argued that teachers should arrange classrooms so that disruptions are minimized and all students can see, and be seen, by the teacher.

Much of the research that Evertson, Emmer and their colleagues have

conducted examined the management of classrooms in both lower and upper elementary classrooms and secondary school classrooms. One study in particular, the Classroom Management Improvement Study (CMIS) assisted in identifying several key features of effective and ineffective physical classroom arrangements, (Emmer et. al., 1981a). Reviews conducted by Emmer et. al., (1981a), of research, as well as the descriptive study of classroom management conducted prior to the CMIS, suggested that "effective classroom management consists of a number of interrelated dimensions", (p. 19). The CMIS identified 11 prescriptions that need to be taken into account when establishing whether or not a classroom is effectively managed. Emmer et. al., (1981a) listed and explained these as:

1. Readying the Classroom. Being certain your classroom space and materials are ready for the beginning of the year.
2. Planning Rules and Procedures. Thinking about what procedures students must follow to function effectively in the classroom and in the school environment. Deciding what behaviours are acceptable or unacceptable. Developing a list of procedures and rules.
3. Consequences. Deciding ahead of time consequences for appropriate and inappropriate behaviour in the classroom, and communicating them to students. Following through consistently.
4. Teaching Rules and Procedures. Teaching students rules and procedures systematically. Including in lesson plans for the beginning of the school year sequences for teaching rules and procedures, when and how they will be taught, and when practice and review will occur.
5. Planning First Week of School Activities. Developing activities for the first few days of school that will involve students readily and maintain a whole group focus.
6. Strategies for Potential Problems. Planning strategies to deal with potential

problems that could upset your classroom organization and management.

7. Monitoring. Monitoring students behaviour closely.
8. Stopping inappropriate behaviour. Handling inappropriate and disruptive behaviour promptly.
9. Organizing instruction. Organizing instruction to provide learning activities at suitable levels for all students in the class.
10. Student Accountability. Developing procedures that keep the students responsible for their work.
11. Instructional Clarity. Being clear when presenting information and giving directions to the students. (Emmer et. al. 1981a, p. 20 and 31-32)

Each of these 11 prescriptions help to develop an understanding of the effectiveness of the teacher in deterring or promoting off-task, inappropriate and disruptive student behaviour. Although this study focuses on prescription 1, 6, and 7 which deal directly with the teachers ability to structure the physical classroom space, certain sections of other prescriptions are used as well. The sections used in this study can be found in Appendix D. The 11 prescriptions listed in the CMIS were operationalized in terms of observable student behaviour: Higher rates of student engagement in classroom activities, lower amounts of off-task unsanctioned, disruptive, and inappropriate student behaviour, (Emmer et. al. 1981a, p. 31-32).

For the purpose of this study, the effectiveness of the physical arrangement of the classroom in deterring off-task inappropriate and disruptive student behaviour was the focus. Emmer et. al. (1981a) defined inappropriate student behaviour as "all types of nondisruptive behaviour that are contrary to stated or implied classroom rules or procedures" (Appendices). They identified several common types of inappropriate, but non-disruptive, behaviour including talking out-of-turn (call outs), whispering to neighbor, passing notes, being out of one's seat, reading or working on an inappropriate task, tardy entry to class, failure to

complete work, not following established procedures, gum chewing, or goofing off. Emmer et. al. (1981a) defined disruptive student behaviour as "any student that interferes with instructional, attentional, or work activities of the teacher or two or more other students" (Appendices). If the behaviour elicited the attention, although not necessarily the involvement, of numerous other students, then it would be considered disruptive behaviour. Both of these groups of off-task student behaviours were rated on a 5 point scale. A rating of 5 would be obtained if such behaviour occurred with a high degree of frequency. Using a 5 would note a situation which is habitual and is a constant problem for the teacher and other students (6 or more). A 4 would indicate frequent occurrences for such behaviour (4 to 6). A mid-range rating would be obtained if such behaviours occurred with moderate frequency (3 to 4), such as several on the average per observation, occasionally moderately or severely disruptive. A rating of 2 would indicate one or two instances during the observation. A rating of 1 would indicate the complete absence of any such instances.

Through Evertson's et. al. (1983) and Emmer's et. al. (1981a) research, 4 distinct principles of classroom arrangement for minimizing disturbances and disruptions in the physical structure of the classroom were identified. They listed these as:

- 1) Keeping high-traffic areas free from congestion: For example, do not put the pencil sharpener where students using it will block traffic routes or disturb other students. Another example can be seen in the arrangement of desks within the classroom. Student desks should be kept away from doorways, bookshelves, and supply areas to which the class needs frequent access.
- 2) Being sure that students can be easily seen by the teacher: Students desks should be arranged so that all students can be seen from the teachers desk, chalkboard areas, activity centres, and other instructional areas within the classroom.
- 3) Keeping frequently used teaching materials and student supplies readily

accessible: Frequently used supplies, such as books, pencils, and paper, should be easily available in a clearly marked area so that students can find them without the teachers assistance.

4) **Being certain students can see instructional presentations and displays**:

Students should be able to see clearly the presentation and displays for lessons and activities. This includes presentations on the chalkboard, overhead projector, and displays in instructional activities. (Evertson et al. 1989, p. 4-13, and Emmer et al. 1981a, p. 229).

Gordon (1974, pp. 156-158) contended that there were many inadequacies in present day classrooms, that make the task of assuring these principles are met very difficult. Probably the most detrimental of these is the large group size in a relatively small space. Gordon stated that, "For teachers to be effective in modifying the classroom environment they need the ability to think creatively about possible changes, using a systematic model for classifying various types of environmental modification", (p.158). He listed several ideas as to how teachers can enrich, impoverish, restrict, enlarge, rearrange, simplify, systematize, and plan ahead for the learning environment we call the classroom. These can be observed in the Tables section entitled, "Table 2: How to Modify the Classroom Environment".

Many researchers feel that the topic of classroom management is one that requires a great deal more investigation. This is due to the many facets that are involved in determining what effective classroom management is, and how effective management can be achieved within the classroom. The ideas relayed by Gordon (1974, pp. 156-178) on how to modify the environment provide great insight into the massiveness of the term that we call 'classroom management'. It was for this reason that this study focused specifically on the topic of physical classroom arrangement and its relationship to student behaviour. This was done in an attempt to develop a better understanding of

the relationship that exists between the physical arrangement of classrooms and student behavioural trends in the process of effectively managing classrooms on the part of teachers.

METHODOLOGY

This study was conducted using primary observations, secondary observations and interviews. The original intention was to involve 10 classrooms. However 3 schools declined due to time constraints. Therefore, qualitative data was accumulated for a case study of each of 7 classrooms, using two classroom observations and one informal questionnaire based interview with the classroom teacher. The schools were randomly chosen by a computer from all schools in a specified board and teachers were approached by the principals and asked if they would like to participate. The teachers then consented to the observations and interviews by signing a consent form.

INSTRUMENTS

Primary Observations

The primary observations were approximately 15 to 20 minutes in length. They were used to document the physical layout, and features of the 7 classrooms. They took place during the first two weeks of April and last two weeks of May so that the teachers had an opportunity to establish groupings and get organized after the March break. The characteristics of each of the 7 classrooms were documented on the interviewing tool, question 14.

Secondary Observations

The secondary observations were between 30 and 90 minutes in length. They were used to document positive and negative student behaviour, traffic flow patterns during transitions and activity periods, teachers ability to see and hear what was going on within the classroom, distractions created by the physical classroom arrangement, accessibility and availability of classroom resources and materials, the use of storage facilities, the use of activity centres, and the ability of the physical environment to deter off-task student behaviour. These observations took place during the last 2 weeks of April and first 2 weeks of May. Each of the 10 areas mentioned above were documented through anecdotal

observation. The tool used during this observation can be seen in Appendix B. The completed responses are recorded in Appendix E.

Interview Questionnaire

The original intention was to meet with each participant for approximately 30 to 60 minutes to complete the interview questionnaire. This, however, proved to be impossible due to the time constraints placed on the teachers involved. For this reason, an amendment was made to this section of my methodology. Instead of using the teachers valuable time I discussed the interview questionnaire with each participant for approximately 15 minutes and left it with them to complete on their own time. They were informed to contact me if any questions arose. This worked out much better than the originally intended plan because the teachers were able to formulate logical responses to the questions on the questionnaire.

The questions attempted to gain insight into the experiences that teachers have related to classroom physical arrangement. They focused on the role that classroom physical arrangement plays in deterring or encouraging off-task student behaviour. The interview questionnaire discussions were conducted during the same period as the primary observations and were approximately 15 minutes in length. They occurred at the schools before school, during recesses or planning periods, and after school. Tape recordings were not used because participants expressed discomfort with using a recording device.

This study was conducted using an interview questionnaire and an anecdotal check sheet.

Questionnaire for Primary Observations and Interviews. This questionnaire consisting of 14 questions was used to gain more data from the 7 teachers than could be accumulated from the Secondary Observations alone (Appendix B). Teachers were also given the opportunity to refer to the completed layout drawing, that was completed during the primary observation, to answer questions on the questionnaire. The questions on the questionnaire attempted

to shed light on the individual experiences that teachers had in their classrooms. For example, each of the participants were asked how they motivated student independence by arranging physical classroom. They were also asked how use the physical classroom to deal with off-task behaviours. As well, they were asked if they were satisfied with the physical learning space and what they would do to better deal with the off-task behaviours using the physical arrangement of the classroom. All questions reflected the individuality of the participants, and were expressed in such a manner that the teacher had to give full anecdotal responses, as opposed to providing a yes/no answer. This assisted in gaining a better understanding of the classroom experiences that teachers had related to classroom physical arrangement and student behaviour. All seven completed questionnaires have been included in Appendix D.

Anecdotal Check Sheet for Secondary Observations. A tool consisting of 10 specific areas of investigation was created for the secondary observations of this study. This instrument was designed with the aide of tools from the CMIS and modified to meet the demands of this study. This tool was the foundation for developing each of the Case Studies of this paper. Supporting data was included using the primary observations and interview questionnaires. The anecdotal check sheet can be viewed in Appendix B. All completed anecdotal check sheets are located in Appendix E.

PRESENTATION

Case Study #1: School AC, Grade 1/2

The school was located in a community of about 15,000 people. The teacher had a bubbly personality and was laid back. The class consisted of 20 students, 11 boys and 9 girls. I was informed that the small class size was due to the large number of students in the class who were identified as behaviourally or academically challenged. The philosophy of the teacher was a mix of teacher directed and children directed activity. Free-choice, child directed activity time was earned by students who completed teacher directed activities in the morning. This acted as an incentive for students to try to stay focused and get assigned tasks completed in the morning.

The desks were arranged in small groupings of 4 and due to the small number of students this made for a lot of space between groupings. For desk assignment, the teacher moves from one grouping to the next and students are randomly selected by drawing their names from a bucket. The teacher had a large group area where most of the lessons and instructions for activities were taught. There were also several centre oriented areas around the perimeter of the room. These included centres for large and small blocks, drama (home), sand, and painting.

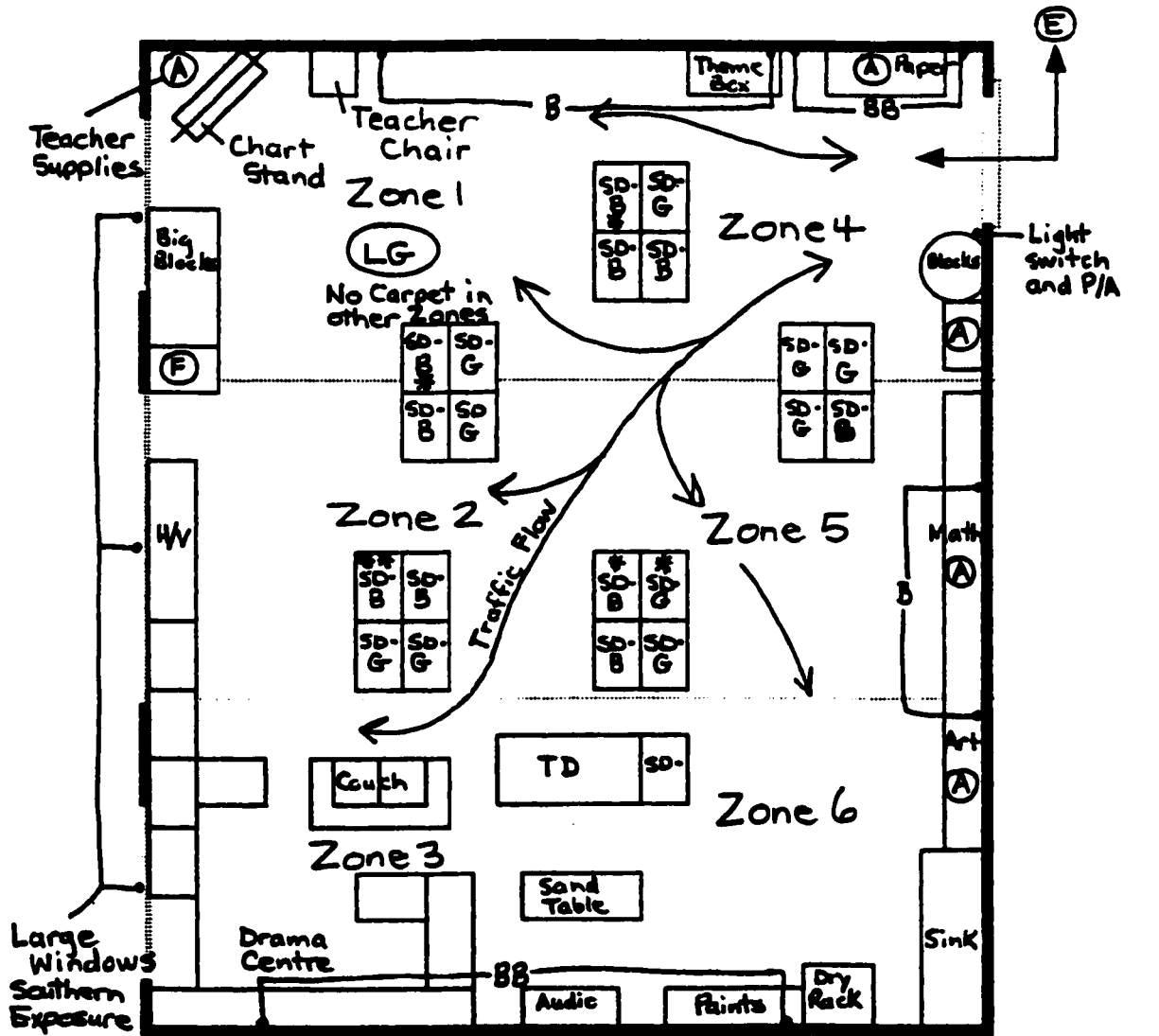
Due to the age of the building the classroom had big windows, a heating/ventilation system that was not working properly and no air conditioning. The teacher informed me that the windows to the classroom were covered with drapes much of the time to control the heat of the classroom. The teacher mentioned that winter months were cold, and spring and summer months were very hot. For this reason students were required to bring a water bottle.

Specific notes regarding the physical arrangement include the following: Desks were grouped in small groupings of 4; routines were established and students knew fairly well what their expectations were; a variety of centres were located around the perimeter of the classroom; there was a large group area

intended for gathering students to teach lessons and give instructions; there were shelves low enough for students to use that house paper supplies, manipulatives for math, and toys; in/out bins were not used for student work which was completed, instead work was marked when completed and placed right back into their personal desks; cubbies were not used for storing students' personal materials brought from home; instead these materials were left in the hall on the coat rack or placed in the personal desks of each student; all workbooks and writing supplies were stored in the personal desks of each student; there were 3 cupboards intended for supplying paper, art supplies, and teacher resources; there was no carpeting in this classroom; there were many bulletin boards around the classroom displaying the students work and learning materials; there was 1 large black board which was used for writing notes and students placing names when they were finished work; the teachers desk sat about 10 feet from the back wall of the classroom dividing the learning environment from the play area. The classroom layout can be seen on the following page.

Classroom Layout - School AC Gr. 1/2

Special Notes: Due to large windows, southern exposure, and the fact that the heating/ventilation system does not work properly because of the buildings age, students needed to have water bottles present at desks. High ceilings made noise level very high.



Legend

- | | |
|--|-------------------------------|
| SD Student Desk
B-Boy
G-Girl | B Blackboard |
| * students who were consistently off-task | LG Large Group Area |
| (A) Supply Shelf | HW Heating/Ventilation |
| TD Teacher Desk | (F) Files |
| BB Bulletin Board | (E) Entry/Exit |

Case Study #2: School B, Grade 3

The school was located in a community of approximately 15,000 people. The teacher had a bubbly personality and it was obvious that structure was an important component of the teachers philosophy of learning. The class consisted of 27 students, 11 boys and 16 girls. The philosophy of the teacher was mostly teacher direction in which students were gathered for the lesson and sent back to their seats to do the work. There was very little movement in the class and this contributed to less off-task behaviour during my observation.

The desks were arranged in rows of students beside each other in 2, 3, and 4. The desks face the two blackboards that are located between two bay windows. The students were separated by sex in essence meaning that no two boys or girls were next to each other. This really seemed to cut down on the socializing that goes on between same sex peers. Due to the large number of students the room was quite crowded and space was a luxury. However, the room did have two large box like structures that were identified by the teacher as the students cubbies for storing things that they brought from home. There was a large group area where students met to discuss lessons and get instructions from the teacher. As well, the perimeter of the room was home to several solitude areas where students went if they need to work alone. Storage bins were located around the perimeter of the room for supplies and materials that the students use on a daily basis. These include bins with math manipulatives and language materials. A large cupboard was housed at the end of the room where art supplies were kept. The teachers desk was at the rear of the room facing backwards to the students.

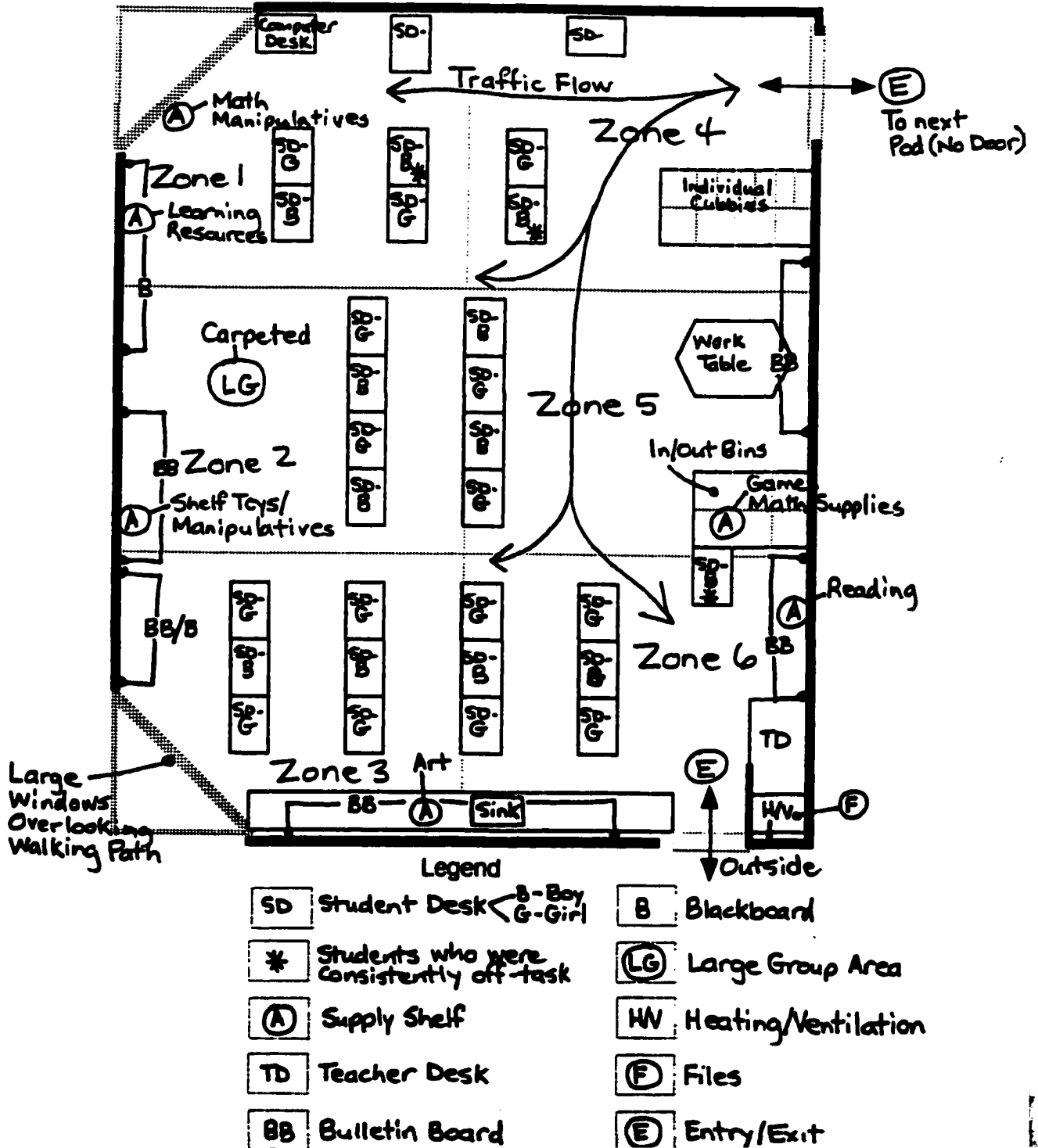
The building was originally designed to be open concept and therefore the classroom had thin walls and no door dividing it from the other classrooms in the pod. This contributed to a lot of external noise from other classes in the pod. The school had a modern heating/ventilation system that was working properly and pumped nice cool air throughout the school and classroom. Two large bay

windows, overlooking a pathway, were located on either side of the blackboard. The teacher informed me that the windows to the classroom were very distracting because the pathway was frequented by high school students going to and from the high school nearby. There were no drapes or blinds so the windows provided more heat to this classroom and good view of the outside all of the time. For this reason students were required to bring a water bottle and monitored closely for any off-task behaviour relating to distraction from the outside pathway.

Specific notes regarding the physical arrangement include the following: Desks were grouped in small rows of between 2 and 4 with same sex peers separated from sitting beside each other; routines were established and students knew fairly well what their expectations were; there was little evidence of the use of centres in the room; however quiet desks and learning materials were located around the perimeter of the classroom; there was a large group area intended for gathering students to teach lessons and give instructions; there were shelves low enough for students to use that house paper supplies, manipulatives for math, and reading materials; there were cupboards intended for supplying paper, art supplies, and teacher resources at the rear of the room adjacent to the teachers desk; there was carpeting throughout this classroom; there were in/out bins used for student work which was completed and that which was marked; cubbies were used for storing students personal materials brought from home; other supplies were stored in the personal desks of each student; there were many bulletin boards around the classroom displaying the students work and learning materials; there were 2 small black boards which is used for writing notes, which were located between two bay windows overlooking a pathway; the teachers desk sat about 3 feet from the back wall of the classroom and faced backwards to the students. The classroom layout can be seen on the following page.

Classroom Layout - School B Gr. 3

Special Notes: Due to the original open concept design of the school, there are no doors and only thin walls separate classrooms and hence external noise is always a concern. Windows look out directly onto a frequented pathway and can be distracting at times.



Case Study #3: School CC, Grade 1

The school was located in a small community of approximately 2,000 people. The teacher had was very organized and had a pleasant personality. It was obvious that child centred, activity based learning was an important component of the teacher's philosophy. The class consisted of 25 students, boys and girls. The philosophy of the teacher was activity directed in which students were gathered for the introductory lesson and sent off to a desk grouping for a structured activity. Upon completion of the structured activity the students were granted free-choice activities. All supplies for the structured activities were present at the centre at which they were in attendance. There was a lot of movement in the class during the structured activities. However this did not seem to contribute to off-task behaviour during my observation. The students were actively engaged in learning activities which gave them little opportunity to get off-task.

There were no assigned desks. The classroom consisted of 5 tables for groupings of 5 students and this made for a lot of space between groupings. The teacher had a large group area where most of the mini-lessons and instructions for activities were taught. There were also several centre oriented areas around the perimeter of the room. These included centres for large and small blocks, drama (home), sand, and painting. The large group area was also used for big building blocks and large toys during free-choice activities.

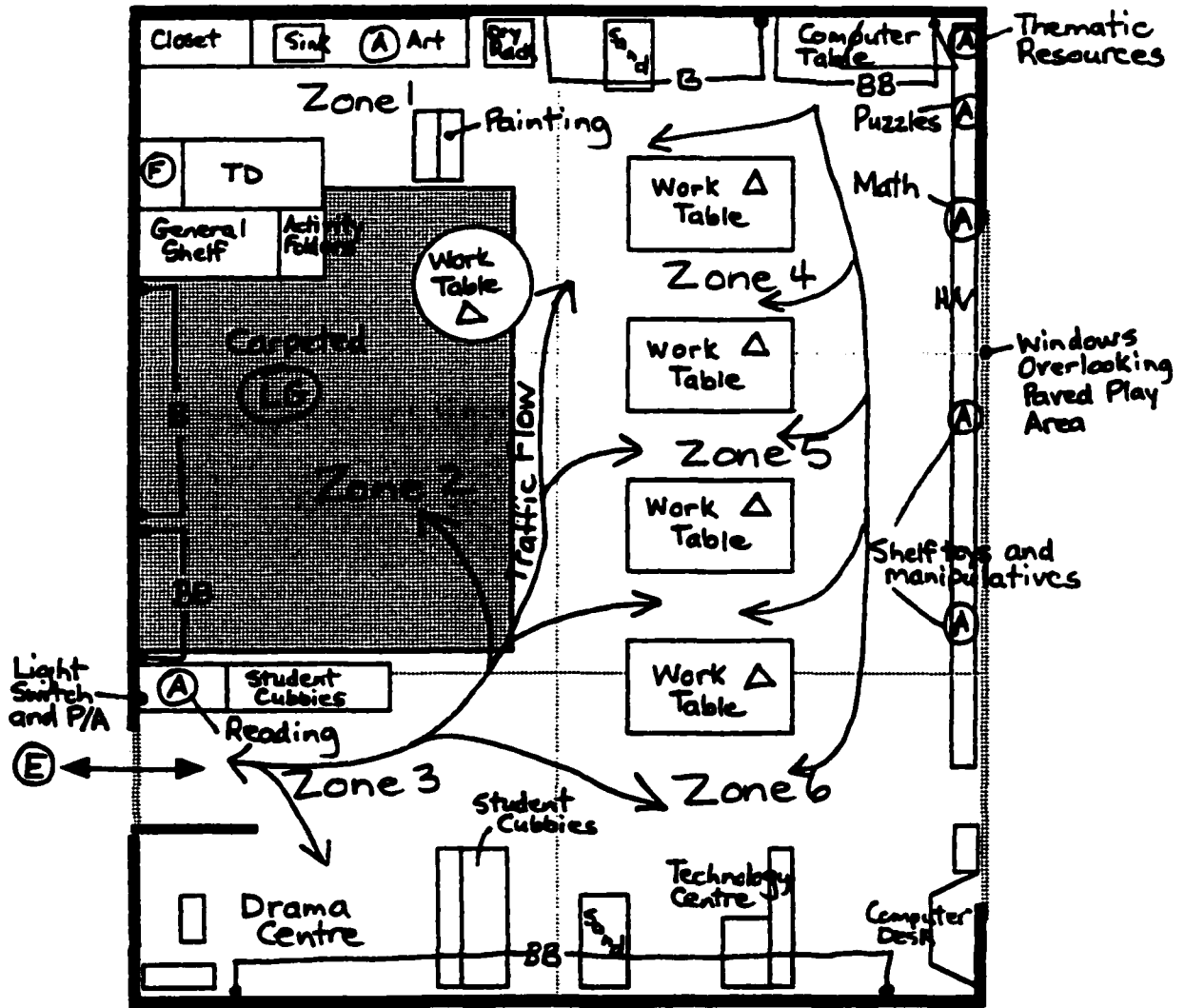
The building was designed with a closed classroom concept in mind and therefore the classroom was independent from all other classrooms housed in the school. This contributed to little external noise from other classes in school because the classroom door could be closed at any time. The school had a modern heating/ventilation system that was working properly and pumped nice cool air throughout the school and classroom. Windows, overlooking the playground, were located on one side of the classroom. These windows were above the students viewing height and the teacher informed me that they were

not a distraction and that if privacy was required from the outdoors drapes could be drawn. The drapes extended the entire length of the classroom.

Specific notes regarding the physical arrangement include the following: There were no assigned desks for students; students were very familiar with the routines and had been grouped so that strong ones could assist weak ones; all five behaviour challenges in the class were separated from each other; tables were provided that accommodate 5 students per table; there was strong evidence of the use of centres in the room; however quiet areas were not available for students who needed this learning environment; there were shelves and cupboards located around the perimeter of the classroom that were low enough for students to use; these shelves housed learning supplies such as manipulatives for math, writing and reading materials; there was a large group area intended for gathering students to teach lessons and give instructions; teacher resources were located in a closet at the rear of the room directly behind the teachers desk which faced the student groupings; there was a large carpeted area in this classroom used for large group instruction and free-choice play; in/out bins were used for all student work which was completed and that which was marked; there was a bin for each subject or folder that the students were working on; selected pieces of work were placed in portfolios which were cumulative compilations of the students work; cubbies were used for storing students personal materials brought from home, two students per cubby; other supplies such as writing materials and workbooks were stored in buckets throughout the room; there were many bulletin boards around the classroom displaying the students work and learning materials; there was 1 large black board which was used for writing notes, which was located on the wall opposite to the windows; the teachers desk sat about 3 feet from the back wall of the classroom and faced toward the student groupings. The classroom layout can be seen on the following page.

Classroom Layout - School CC Gr. 1

Special Notes: Windows span the entire length of the classroom, but they are above the students visual height. Student distraction due to the windows is minimal unless there is a great deal of activity happening immediately in front of the window.



Legend

- | | |
|--|--|
| △ No assigned seats | LG Large Group Area |
| A Storage Shelf | H/V Heating/Ventilation |
| TD Teacher Desk | F Files |
| BB Bulletin Board | E Entry/Exit |
| B Blackboard | |

Case Study #4: School CH, Grade 1

The school was located in a large community of approximately 90,000 people. The teacher was very organized and had a pleasant personality. It was obvious that child centred, activity based learning, was an important component of the teachers philosophy. The class consisted of 25 students, 15 boys and 10 girls. The philosophy of the teacher reflected activity centred learning in which students were engaged for much of the time in structured activities. Upon completion of the structured activities the students were granted free-choice activities which were language based in the morning and free-choice in the afternoon. All supplies for the structured activities were present at the students assigned table. There was not a lot of movement in the class during the structured activities. However, during language and free-choice based activities movement around the room increased dramatically. This did not seem to draw students off-task because students were actively engaged in activities of their own interest.

There were assigned desk groupings of between 4 and 6 in each group. The classroom consisted of 5 tables for groupings and 6 tables for centres. This made for little of space between groupings and contributed to congested areas in the classroom. The teacher had a large group area where most of the mini-lessons and instructions for activities were taught. There were several centre oriented areas around the perimeter of the room. These included centres for theme relative materials, large and small blocks, drama (home), reading, puzzles, writing, science, creative art, and painting. The large group area was also used for big and small building blocks, large toys, and games during free-choice activities.

The building was originally designed to be open concept and most classrooms have been outfitted with temporary walls with no doors. This classroom has no walls separating it from the other grade one classroom. This contributed to some of external noise from other classes in the pod, but

surprisingly this was not dramatic. This was due to the careful team planning by both grade one teachers that ensured consistent quiet times and active times.

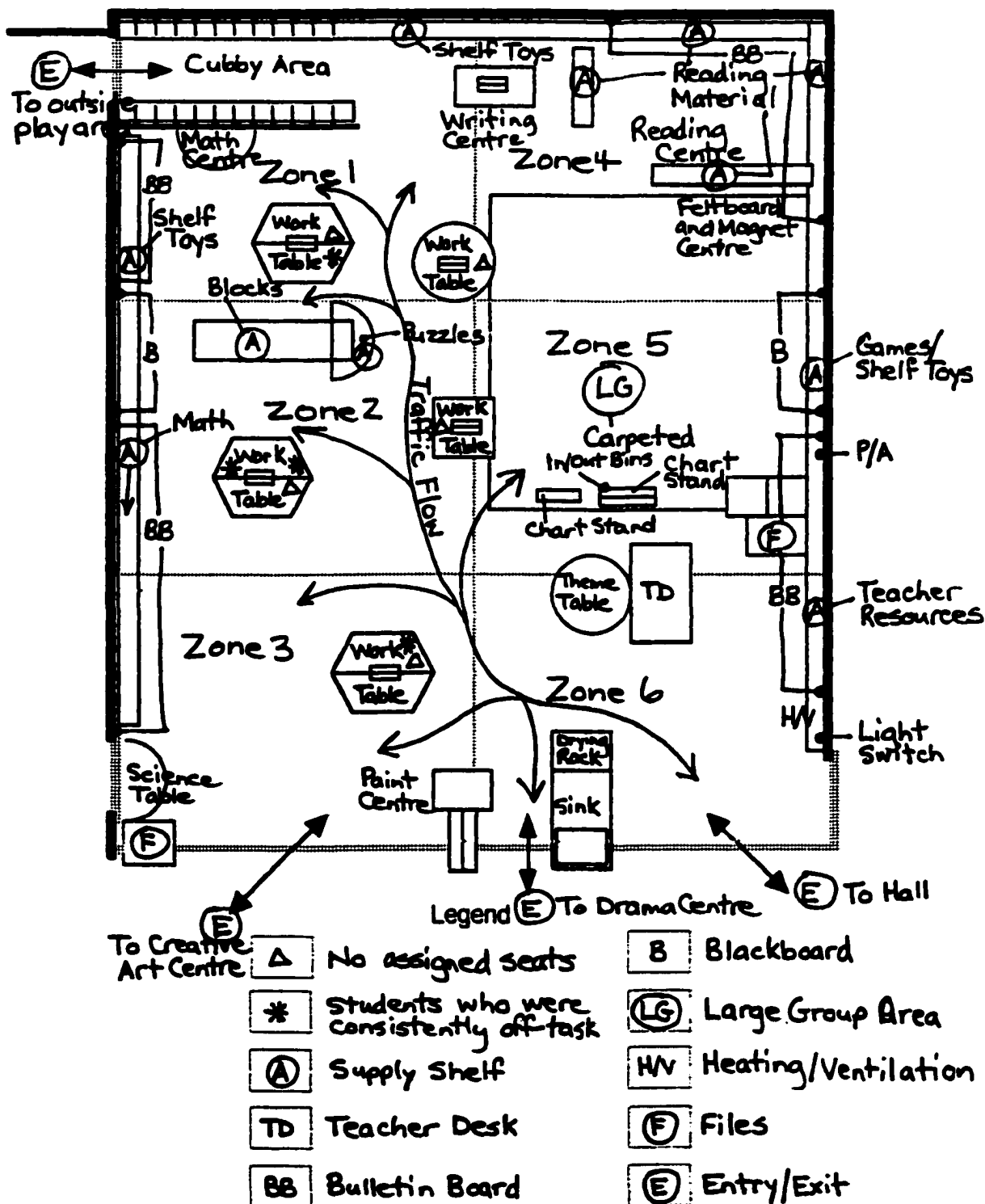
The school had a modern heating/ventilation system that was working properly and pumped nice cool air throughout the school and classroom. One small window, overlooking a small outdoor play area, was located at one end of the room. At the other end was the students coat room which housed the students cubbies, snacks and indoor supplies. There was access to the small play area via the student coat room. The teacher informed me that the coat room was out of bounds during learning time. There were drapes so the windows could be closed off during times when privacy from the outside was required.

Specific notes regarding the physical arrangement include the following: Tables were provided for student groupings of between 4 and 6 with behaviour challenges divided among the groups; table groupings were spread throughout the room, but located more so to the rear of the classroom so as to avoid a lot of distraction from other classes in the pod; organization and routine was established and students knew fairly well what their expectations were; there was strong evidence of the use of centres in the room, however quiet desks were not provided around the room for students that required this type of learning environment; there were many shelves located around the perimeter of the room that were low enough for students to use that housed a variety of toys and games, puzzles, felt and magnetic pieces, theme related materials, science supplies, paper and writing tools, manipulatives for math, and reading materials; writing materials for each student were provided at each table grouping; there was a large group area intended for gathering students for mini-lessons and giving instructions; teacher resources and files were located directly behind the teachers desk which sat at the front of the room; there was a large carpeted area in this classroom used as the large group gathering area and for free-choice play; there was use of in/out bins used for student work which was

completed as homework and that was checked by parents; cubbies were used for storing students personal materials brought from home and these were located at the rear of the classroom in a separated area; there were many bulletin boards around the classroom displaying the students work and learning materials; there was 1 small black board which was used for writing notes, located at the large group gathering area; the teachers desk sat about 3 feet from the wall of the classroom and faced towards the students. The classroom layout can be seen on the following page.

Classroom Layout - School CH Gr. 1

Special Notes: Due to the open concept design of the school, external noise is a major factor in teachers planning and execution of activities.



Case Study #5: School HT, Grade 2

The school was located in a medium sized community of approximately 27,000 people. The teacher was very organized and had a pleasant personality. It was obvious that teacher direction and structure were important components of the teachers philosophy. The class consisted of 23 students, 14 boys and 9 girls. The philosophy of the teacher reflected teacher directed activity in which students were engaged for much of the time in learning tasks that were aimed at a specific end. Upon completion of the structured activities the students were granted free-choice activities. Only those students who completed the assigned tasks were granted free-time. All supplies for the structured activities were presented and handed-out during the mini-lesson and completed at the students assigned desks. There was not a lot of movement in the class during the structured tasks. However, free-choice activities movement around the room increased dramatically. This seemed to draw students off-task because some students where engaged in free-choice while others attempting to get the assigned tasks completed.

The classroom consisted of 5 desk groupings. There were assigned desk groupings of between 4 and 6 students in each group. A few students were delegated to single desks due to their social behaviours. The perimeter of the classroom had supply shelves, a long counter, two computer areas, a reading resource rack, and an art drying rack. This made for little space around the large group area and contributed the congestion in the classroom. The teacher had a large group area where most of the mini-lessons and instructions for activities were taught. There was little evidence of the use of activity centres except during free-choice activities. The large group area was also used for big and small building blocks, large toys, and games during free-choice activities.

The building was designed in two distinct phases with a partial open-concept in mind. There was a thin divider that was closed which separated the participating classroom from the one next to it. This contributed to little external

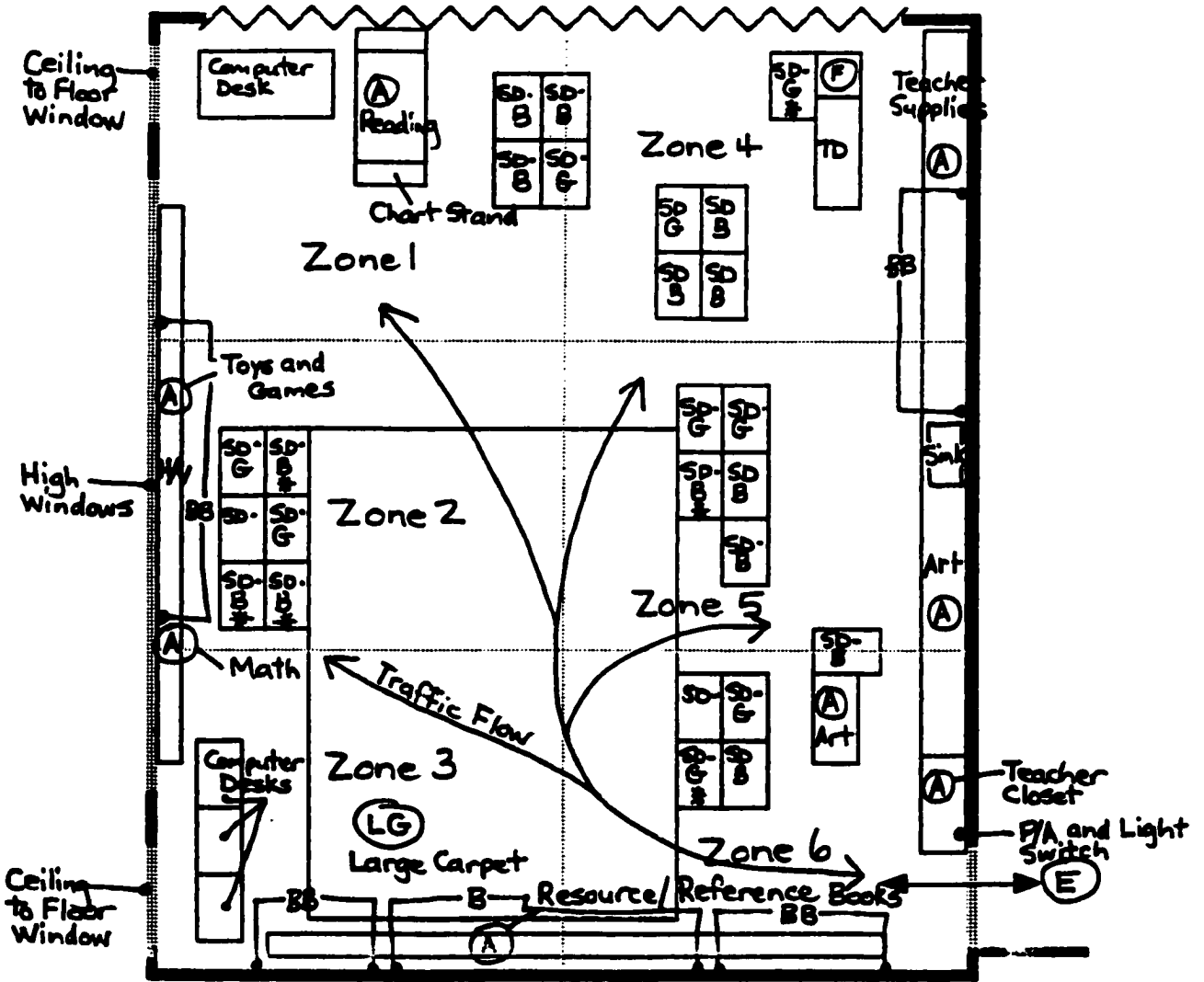
noise from other classes in school because the divider was closed and the classroom door could be closed at any time. The classroom was located in the new wing of the school. The school had a fairly modern heating/ventilation system that was in proper working order. However on the day I was observing it seemed very cool. Two small windows, overlooking the playground, were located on either side of the classroom. As well, the classroom had windows extending across the roof line of the classroom. All of the windows were covered by drapes and the teacher informed me that they were not a distraction. The drapes extended the entire length of the classroom.

Specific notes regarding the physical arrangement include the following: Desks were provided for student groupings of between 4 and 6 with attempts made to keep behaviour challenges divided among the groups; groupings were spread around the perimeter of the room, located close to frequented shelves and computers; organization and routine was established and students knew fairly well what their expectations were; there was little evidence of the use of centres in the room besides free-choice; however quiet desks were provided around the room for students that required this type of learning environment; there were many shelves located around the perimeter of the room, low enough for students to use, that housed a variety of toys and games, paper and writing tools, manipulatives for math, and reading materials; writing materials for each student were provided and kept in each students desk; there was a large group area intended for gathering students for mini-lessons and giving instructions; teacher resources and files were located directly behind the teachers desk; there was a large carpeted area in this classroom used as the large group gathering area and for free-choice play; in/out bins were not used for students completed work; materials brought from home were kept in the hall or at students desks; there were between 3 and 5 bulletin boards around the classroom displaying the students work and learning materials; there was 1 large black board which was used for writing notes, which was located at the large

group gathering area; the teachers desk sat about 3 feet from the wall of the classroom and faced towards the students. The classroom layout can be seen on the following page.

Classroom Layout - School HT Gr. 2

Special Notes: This classroom has folding doors which separate it from another classroom. The doors can be opened for learning activities that are shared by both teachers.



Legend

- | | | |
|--|-------------------------------|--------------------------------|
| SD Student Desk | B-Boy
G-Girl | B Blackboard |
| # Students who were consistently off-task | (LG) Large Group Area | W/V Heating/Ventilation |
| (A) Supply Shelf | TD Teacher Desk | (E) Files |
| BB Bulletin Board | (E) Entry/Exit | |

Case Study #6: School MG, Grade 2

The school was located in a large community of approximately 90,000 people. The teacher was organized and had a pleasant personality. It was obvious structured learning was an important component of the teacher's philosophy. The class consisted of 26 students, 9 boys and 17 girls. The philosophy of the teacher reflected teacher directed learning activities in which students were engaged for much of the time in structured seat tasks. All supplies for the structured activities were present at the large group area and taken to the students assigned desks. There was not a lot of movement in the class during the structured seat tasks. Students engaged in structured centre based activities that were theme related during the last period of the day in the afternoon. These activities also took place at the assigned desks so there was little movement around the room.

The classroom consisted of several variations of groupings, some in rows and some in boxed groupings. Groupings ranged from singles, to pairs, to large groups of 5 and 6 for seat tasks. There were also assigned groupings of between 4 and 6 students in each for the structured centre based activities. One student opted for a single desk due to trouble they had focusing. The perimeter of the classroom had supply shelves, a computer area, a reading resource area, a large supply table, and an art area. This made for little space around the large group area and contributed the congestion in the classroom. The teacher had a large group area where most of the mini-lessons and instructions for activities were taught. There was some evidence of the use of structured activity centres, but little evidence of a free-choice nature.

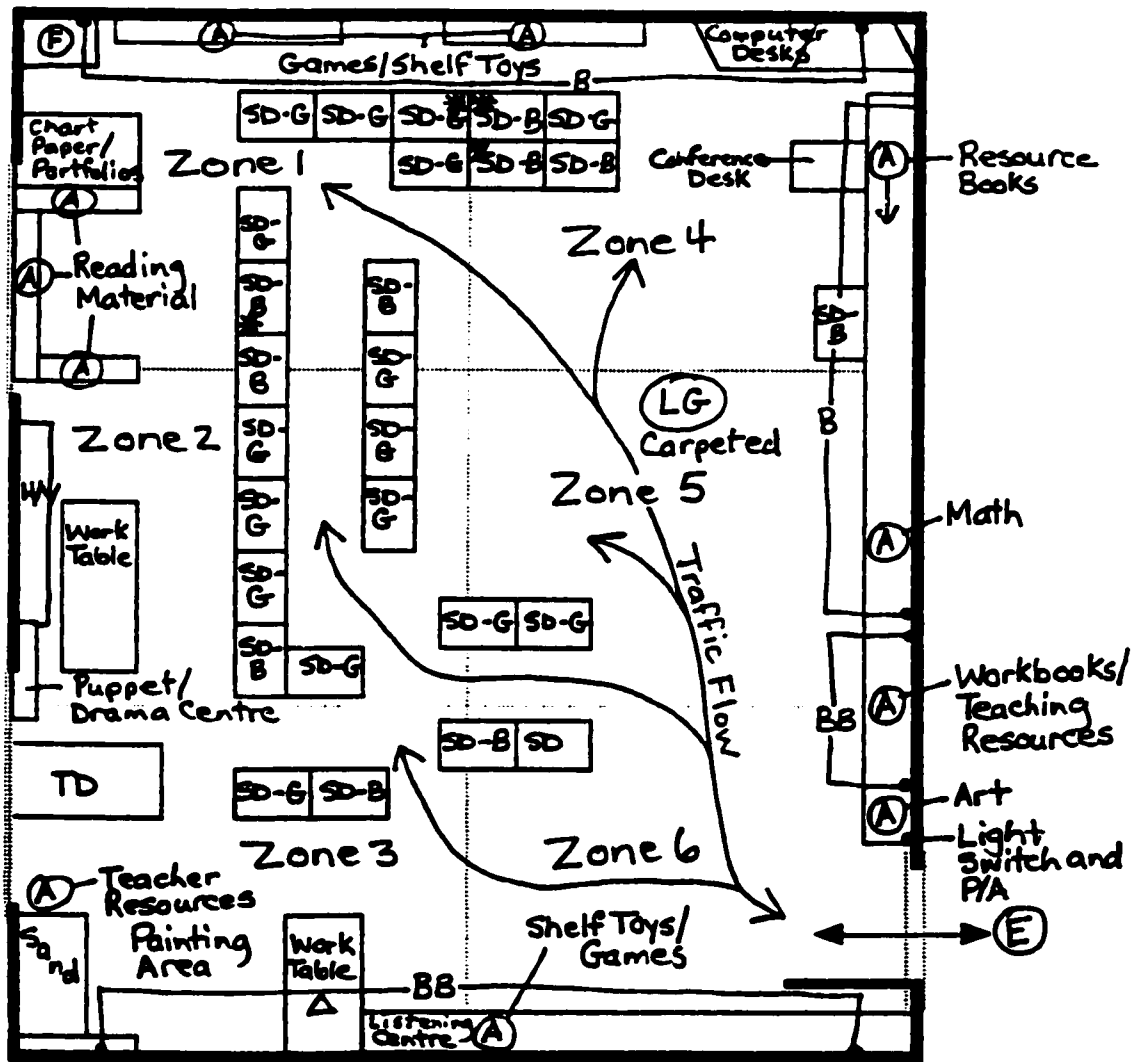
The building was designed with a closed classroom concept in mind and therefore the classroom was independent from all other classrooms housed in the school. This contributed to little external noise from other classes in school because the classroom door could be closed at any time. The school had a modern heating/ventilation system that was working properly and pumped nice

cool air throughout the school and classroom. Windows, overlooking the tarmac and playground, were located on one side of the classroom. These windows were at the students viewing height but were of little distraction because all student desks faced in the opposite direction. The teacher informed me that if privacy was required from the outdoors drapes could be drawn. The drapes extended the entire length of the classroom.

Specific notes regarding the physical arrangement include the following: Desks were provided for student groupings of between 2 and 8; groupings were spread around the perimeter of the room, located close to frequented shelves and computers; organization and routine was established and students knew fairly well what their expectations were; there was little evidence of the use of free-choice centres; however there was evidence of structured activity based centres; noise level was relatively low and therefore there was no need for quiet desks; there were many shelves located around the perimeter of the room, low enough for students to use, that housed a variety of toys and games, paper and writing tools, manipulatives for math, and reading materials; writing materials for each student were provided and kept in each students desk; there was a large group area intended for gathering students for mini-lessons and giving instructions; teacher resources and files were located directly behind and beside the teachers desk; the classroom was entirely carpeted; in/out bins were not used for students completed work; materials brought from home were kept in the hall or at students desks; there were between 3 and 5 bulletin boards around the classroom displaying the students work and learning materials; there were 2 large black boards which were used for writing notes, which were located at the large group gathering area and on the far end wall of the classroom; the teachers desk sat about 6 to 10 feet from the front wall of the classroom and faces towards the students. The classroom layout can be seen on the following page.

Classroom Layout - School MG Gr. 2

Special Notes: The windows in the classroom which span almost the entire classroom length, look out to the playground and are at students visual height, contribute to the distraction of students when there are other students outside.



Legend

- | | | | | |
|----|---|-----------------|-----|---------------------|
| SD | Student Desk | B-Boy
G-Girl | B | Blackboard |
| * | Students who were consistently off-task | LG | LG | Large Group Area |
| A | Supply Shelf | H/V | H/V | Heating/Ventilation |
| TD | Teacher Desk | P | P | Files |
| BB | Bulletin Board | E | E | Entry/Exit |

Case Study #7: School MS, Grade 1/2

The school was located in a very small community of approximately 500 people. The teacher was organized and had a pleasant personality. It was obvious that structured learning was an important component of the teacher's philosophy. The class consisted of 24 students, 12 boys and 12 girls. The philosophy of the teacher reflected teacher directed learning activities in which students were engaged for much of the time in structured seat tasks. All supplies for the structured tasks were present at the large group area and taken to the students assigned desks. There was not a lot of movement in the class during the structured seat tasks. Students engaged in structured centre based activities that were theme related during the afternoon. These activities took place in several assigned areas of the school and incorporated two classes into one. Students were assigned a group and expected to complete one activity per day. In total 10 groups were developed and each group worked at one of the 10 centres. The centres were divided amongst 3 teachers: 4 activities took place in the home teacher's room; 4 activities took place in another teacher's room; and 2 activities took place in the special education resource teacher's room. During this structured activity time the noise level was much higher than any other time in the day and there was a lot more movement around the room. This did not seem to contribute to off-task behaviour because all students were actively engaged in learning tasks.

The classroom consisted of groupings of 6 or 8 students, all in box groupings. Students were assigned to one of the groupings. Additional tables are located around the classroom for students who need to be away from their grouping to focus during structured tasks. The perimeter of the classroom had supply shelves, a computer area, a reading resource area, and an art area. This made for little space around the perimeter of the large group area and contributed the congestion in this area. The teacher had a large group area where most of the mini-lessons and instructions for activities were taught. There was some evidence

of the use of structured activity centres, and free-choice activities. Students were required to finish assigned tasks and have them marked before they were allowed to get a free-choice activity.

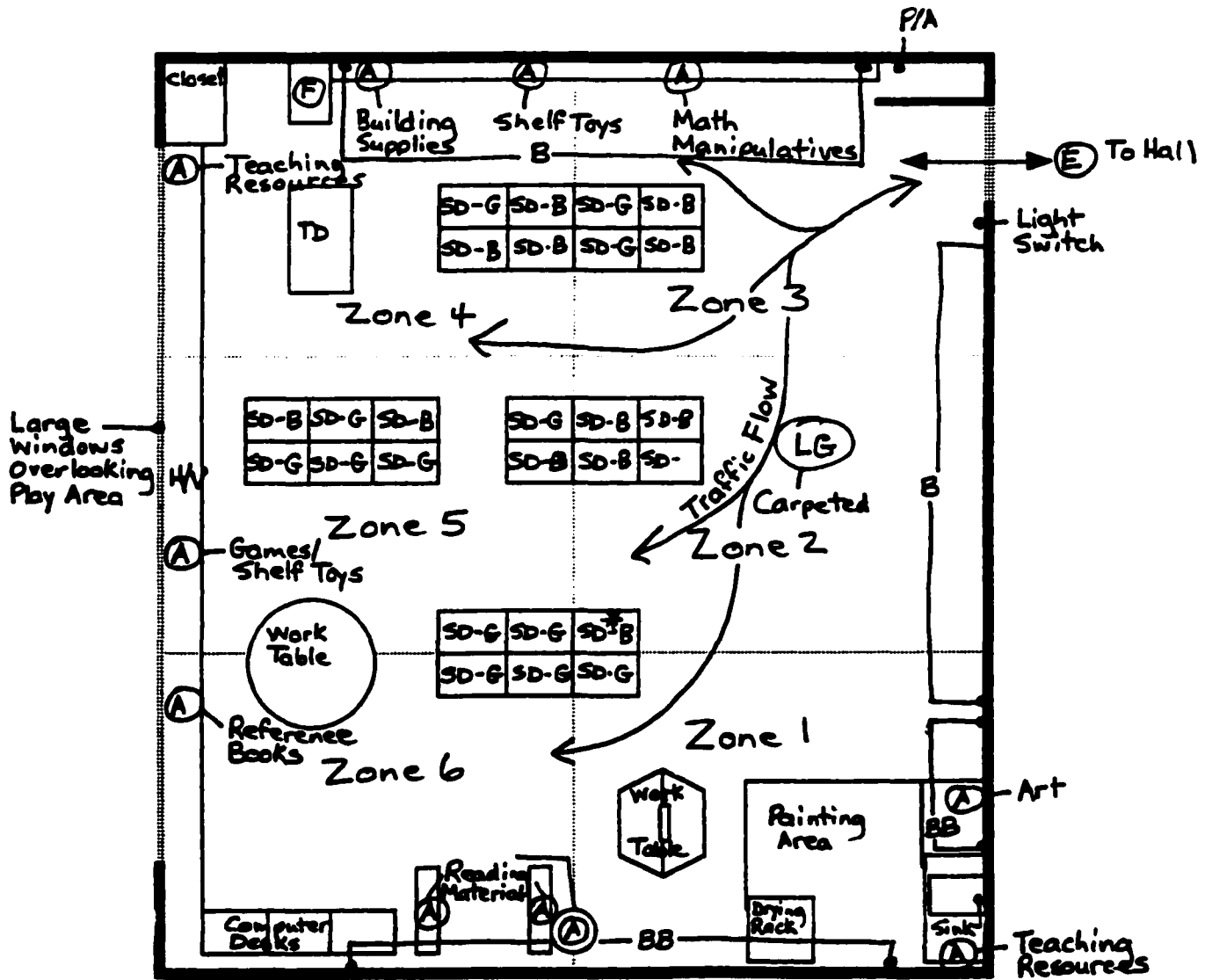
The building was designed with a closed classroom concept in mind and therefore the classroom was independent from all other classrooms housed in the school. This contributed to little external noise from other classes in school because the classroom door could be closed at any time. The school had heating/ventilation system. However there was no evidence that it was working during the day I conducted my observation. Large windows, overlooking the kindergarten playground, are located on one side of the classroom. These windows were at the students viewing height with drapes open and seemed to be a distraction for some of the students. Those students that got off-task were interested in the plants they were growing that were sitting in the window. The teacher informed me that if privacy was required from the outdoors drapes could be drawn. The drapes extended the entire length of the classroom.

Specific notes regarding the physical arrangement include the following: Desks were provided for student groupings of 6 and 8; groupings were spread around the perimeter of the large group area, located close to frequented shelves; organization and routine was established and students knew fairly well what their expectations were; there was evidence of the use of free-choice centres and structured activity based centres; noise level was relatively low during structured seat tasks but this changed when students engaged in free-choice and structured activity centres; there were many shelves located around the perimeter of the room, low enough for students to use, that housed a variety of toys and games, paper and writing tools, manipulatives for math, and reading materials; writing materials for each student were provided and kept in each students desk; there was a large group area intended for gathering students for mini-lessons and giving instructions; teacher resources and files were located directly behind and beside the teachers desk; the classroom was almost entirely

carpeted; in/out bins were not used for students completed work; materials brought from home were kept in the hall or at students desks; there were between 3 and 5 bulletin boards around the classroom displaying the students work and learning materials; there were 2 large black boards used for writing notes, which were located at the large group gathering area and on the side of the classroom opposite the windows wall of the classroom and at the front of the classroom; the teachers desk sat about 3 feet from the wall with the windows and faced towards the students. The classroom layout can be seen on the following page.

Classroom Layout - School MS Gr. 1/2

Special Notes: The windows in the classroom which span the entire classroom length, look out to the Kindergarten play area and are at students visual height, contribute to the distraction of students when there are other students outside.



Legend

- | | | |
|--|--------------------------------|----------------------------|
| SD Student Desk | B-Boy | B Blackboard |
| * Students who were consistently off-task | G-Girl | LG Large Group Area |
| (A) Supply Shelf | H/V Heating/Ventilation | (F) Files |
| TD Teacher Desk | (E) Entry/Exit | |
| BB Bulletin Board | | |

FINDINGS

Teachers had very similar ideas concerning the importance of the physical arrangement of the classroom. The following section will look at teacher response and provide findings that support the notion that the arrangement of the classroom and student off-task behaviour are linked and that further investigations could be made into the conduciveness of the physical classroom to accommodate the varying needs of students. The anecdotal checksheets which are presented in the Result and Discussion section provide additional supporting evidence.

Classroom Rules and Routines

All teachers in the 7 Case Studies believed that well established classroom routines and student expectations were very important. All of the 7 Case Studies had groupings of some sort and teachers in each of these cases believed that this assisted not only in developing social relationships within the class, but also in providing opportunities for students to assist each other in completing tasks without interrupting the teacher. As well, 2 of the teachers incorporated centres into the physical layout of the classroom. Two of the teachers had groupings of students that had 4 or less students per group, 3 had groupings of desks that had between 2 and 5 students per grouping, 2 had groupings that were between 6 and 8 students per grouping. In the classes with groupings of students of less than 4, the counts of off-task behaviour were minimal. However the layout of the classroom had heavy traffic congestion due to the lack of space. This was also the case in 1 of the classrooms with activity centres in addition to the student groupings. Classes that had groupings of between 6 and 8 students showed off-task behaviour more frequently than any of the other classes. Those classes that had students grouped for the most part in 4's or 5's showed minimal counts of off-task behaviour of an interrupting nature and observable on-task behaviour was most noticable in classes that combined small groupings with activity centres. Students in classes where they were grouped in small groupings

and had activity based learning as a part of their everyday routine seemed to work more cooperatively in solving learning problems as a group. In 3 Cases teachers encouraged the students to participate in the classroom physical arrangement and creation of centres. These classrooms had very few problems with off-task behaviours during my observations. All 7 teachers believed that having materials clearly labelled and placed in areas that were accessible and visible were extremely important.

Access to Resources and Materials

Access to resources within their classroom affected the overall management of students, all of the 7 teachers believed that learning and teaching materials should be easily visible and accessible to students. Of the 7 Cases, 5 teachers had students assigned to assist with handing out materials and workbooks so as to avoid any congestion during transitions. One important factor in deciding the physical arrangement of the classroom mentioned by 3 teachers was the location of specific features within the classroom. This was a determining factor in the placement of the: computers close to electrical outlets; teacher preparation area close to resources and storage; teaching area close to blackboards, chart stands and teaching materials; student desk placement, so that sight lines were not obscured and traffic flow patterns are not bottle necked; groupings of desks and singles so that students who need to focus could have spaces of their own with little interruption and students who work well in groups could be placed accordingly; and centres were located where they are practical and could easily be cleaned and organized. Another important point made by 5 teachers of the 7 Cases was the fact that the access to resources contributes to greater student independence and less teacher interruption.

Physical Learning Environment

Examining how the physical learning environment affected teaching in the 7 Case's showed many different responses. Of the 7 Cases, 2 teachers mentioned the fact that if the physical space is set up so as to encourage student

independence the teacher can spend more time with individuals that really need the one on one they require. As well, in 2 Cases teachers added that the physical space should be comfortable, safe, non-threatening, happy, exciting, and positive to encourage students to stay on-task and avoid disruption. Although in all 7 Cases teachers had a large group gathering area, only 3 of the teachers mentioned the fact that this area was a teaching tool that was valuable to their classroom. With all students gathered in one place it was easier for the teacher to monitor any off-task behaviour. This was not always the case, however. Having the large group gathered in one space contributed to a lot of social off-task behaviour when the teacher was not looking directly at the large group.

Techniques to Manage Off-Task Behaviour

In all Cases a disciplinary model was in place to deal with continual off-task behaviour. The assertive discipline model was mentioned by 1 teacher as being a universal model accepted by the schools in this board. This included the use of a time-out area within the room. Each teacher used some form of time-out within their classrooms. Time-out had different meanings in each Case. However time-out inferred an area that was isolated from the fast pace in the rest of the classroom. Another technique mentioned was the use of activity based centres. Two teachers used continual activity based centres and this kept students preoccupied and discouraged off-task behaviour.

Physical Arrangement

Each of the 7 teachers felt that the physical arrangement of their classroom contributed to the overall management of their students. In 1 Case the teacher mentioned the fact that students needed space for walkways, work centres, gathering for lessons, and playing that were well maintained and visible. Another teacher mentioned the fact that the space between objects in the room provided easier pathways for circulation and traffic flow. This teacher also mentioned that there was less conflict because students were spread out when

working. Another teacher believed that grouping the students provided opportunities for students to copy, socialize, help others with explanations or missed instructions when the student should have been listening during lesson periods for the expectations of the activity. All of the teachers mentioned that they rearrange the environment from time to time and have students switch groupings.

Areas in the classroom that were difficult to see and hear students activities were another area of the physical space addressed. Five of the 7 teachers mentioned that there were places in their classrooms that were difficult to see and hear what students were doing. Of these 5 teachers 1 mentioned the fact that the teacher desk was not in an ideal position for seeing and hearing all students. In addition 2 of the teachers mentioned that certain centres such as reading, computers, blocks and drama were obscured by mini walls or furniture.

When teachers were asked to comment on the noise level in their classroom all 7 teachers mentioned that there was noise of some sort in their classrooms. Of the 7 teachers 2 mentioned that the students spent a lot of time talking, so the room could be very noisy at times. One teacher mentioned that although the classroom was very noisy the students produced a lot of quality work. Another teacher mentioned that more noise occurs when students are in groupings facing each other. This teacher also mentioned that there is less noise when students are activity involved in independent activities. In certain cases the classrooms were in pods consisting of other classes. One teacher mentioned that students know the noise level can not get too high due to the open concept of the pod in which the class sits. Another teacher mentioned that the noise level in the pod depended upon the activities taking place and the time of year. This teacher mentioned the fact that periods around holidays tended to be a lot noisier than other periods. Two teachers felt that the noise level depended on the tolerance level of the teacher and the activities that were taking place within the classroom. One teacher believed that students needed to be dead

silent when language activities were taking place, but allowed quiet talking during math activities and even high noise levels during hands-on activities.

The frequency of teachers asking students to be quiet in a given period was another area addressed. All 7 teachers mentioned transitions and group activities as a factor contributing to the amount of times which more noise occurred and students needed to be reminded to use quieter voices. Of the 7 Cases 3 teachers mentioned that on average they had to remind students 2 or less times a day to keep the noise level down. In 3 Cases the teachers responded that students needed to be reminded several times throughout the day as the need arose. One teacher made mention that the frequency increased dramatically during the afternoon hours.

When asked to respond on how certain desk arrangements helped to alleviate off-task student behaviour, all 7 teachers mentioned the fact that individual desks were necessary for those students that needed to focus. One teacher who had experienced both grouped seating arrangements and isolated seating arrangements mentioned that there was far less off-task student behaviour in isolated seating arrangement. The same teacher noted that students listened to directions carefully in these arrangements because they couldn't depend on others. When chatting occurred the teacher mentioned that it was usually about the task and not socializing. Another teacher noted that grouped arrangements make it easier to pair up strong students with weaker students so that peer tutoring can take place. Of the 7 Cases 5 teachers had small groupings of desks and this seemed to act as a good model. One teacher noted that rows did not work well with primary age students. This teacher went on to say that students at this age needed social time and needed to interact when problem solving during learning tasks.

Describing times in the day when the traffic flowed less smoothly throughout the room was another area examined. Four teachers mentioned transitional times including periods when students were coming in from outside or getting

ready for home or recess, as hectic in certain parts of the classroom. As well, these teachers mentioned activity times as very hectic for traffic flow. One teacher mentioned that the traffic flows least smoothly when the students are engaged in activities all over the classroom and not at specified areas in the room. Classroom routines and expectations are very important. One teacher mentioned that if teachers and students have a clear understanding of the expected pattern or routine then traffic flows much more smoothly. Only 2 teachers noted that traffic flow was not a problem in their classroom.

RESULTS AND DISCUSSION

Cross analysis of all data developed several themes which reflect the classroom experiences related to the physical arrangement of classrooms and the management of student off-task behaviour. In this study three interrelated themes were universal amongst all classes observed: Teacher philosophy, classroom organization and classroom physical arrangement.

Teacher Philosophy

All of the teachers observed during this study had distinct philosophies of classroom management. Some believed that centre-based learning was essential, while others believed that that teacher direction was more important. All of the teachers incorporated a mix of the two teaching philosophies. Student off-task behaviour was less of an issue in classes where the teacher had well defined routines and expectations. Students had the knowledge necessary to work at tasks with independence in these classrooms because they had been taught the necessary skills and expectations.

Students in classes that were more centre-based seemed to display less off-task behaviour. There was constant conversation taking place in these classes and students were continually engaged in learning tasks. In classes that focused more on teacher directed activities, that were for the most part seat tasks, the off-task student behaviour was more visible. Students were expected to sit at their assigned desks and complete tasks which were to be discussed by the teacher during large group time. Students got up and walked around the room or began talking to students around them. They seemed less able to independently problem solve and therefore drew others off-task. This type of off-task behaviour was most noticeable in Case Studies #1, #2, #5, #6 and #7. These 5 classes were teacher directed and seat tasks seemed to be the norm. The teachers in these classes marked work as students completed tasks and this seemed to create line-ups and congestion in certain areas of the classrooms. The congestion caused by the marking of tasks, in turn, created off-task student

behaviour on the part of students that were not completed tasks. One benefit of the teacher directed classroom was the fact that students had a relatively quiet environment to complete work because off-task behaviour was dealt with instantaneously.

In classes that were centre-based there was a much higher noise level. This did not seem to draw students off-task. The only time that it was noticeable was during the transitions when there was less organization and structure. This type of off-task behaviour was most noticeable in Case Studies #3 and #4. These classes were centre-based with emphasis placed on creating student independence. The classes did not begin the year as such. The teachers informed me of the months of practise that took place teaching the students the routines and expectations. Once these were in place and all students knew them well, centre-based activities were developed with a specific focus in mind. Both classes incorporated structured and free-choice centre based activities in which students independently completed tasks with little teacher assistance. In one of these classes the students were already researching in the library on a regular basis. Due to the amount of time that the teachers of these two classes spend on structuring the learning environment, and teaching the routines and expectations, students went about their business with great independence and required little teacher assistance. This enabled the teacher to focus more attention on classroom management, monitoring student learning and off-task behaviour. Although students did get off-task some of the time the teacher was able to direct them back on task in these classes with little trouble.

Classroom Organization

All of the classrooms had specific organizational frameworks. Most of the classroom teachers believed that organization was extremely important in deterring off-task student behaviour. This was reflected in the way that materials were presented and the manner in which they were stored for students to access independently. Classrooms that had less emphasis on organization

tended to show more off-task behaviour on the part of the students.

Organization was also evident in the daily routines within these classes. Those classes that had well organized lessons and routines that were well established tended to show less off-task behaviour on the part of the students. For example, several of the classes had storage bins or cubbies for students to store completed work and items that they had brought from home. In these classes there was little confusion as to the routine of placing completed work and leaving items brought from home in these specific places. This assisted students in staying focused on the task at hand rather than being side tracked by completed work or toys brought from home. In classes where students did not have individual storage facilities and were forced to leave work and toys in their desks. This contributed to a lot of off-task behaviour.

The classrooms that had supplies and materials organized in marked bins and containers which were easily accessible to students encouraged students to be independent in seeking out the necessary items to complete tasks. In these classroom, students were knowledgeable as to the whereabouts of specific supplies and materials and accessed them when the need arose. This created less of a need for the teacher to remind students and left the teacher open to assist students. This was a common element in classes which were centred-based. In these classes, students had learned the routines and developed an understanding of where supplies and materials were located and were encouraged to access these supplies and materials independently. Students were also expected to return the supplies and materials when they finished using them. For example, in one of the cases the teacher had a storage bin for everything. This included all writing materials, paper, journals, and portfolios. Students knew where to locate the materials that they required for a specific activity and knew that when they were completed the materials were returned to the same storage bin.

In some of the classes students continually approached the teacher and

asked for supplies. This was most common in classrooms that were more teacher directed. The reason seemed to stem from the teachers' need to know who was taking the materials and what materials were being taken. This took away from the teachers' ability to assist individual students. For example, in one Case the teacher was giving a group lesson to a small group of students and was approached 3 times in a span of 15 minutes for supplies including new workbooks, an eraser, and a pencil. This was not the case in classes that were more child-centred and directed. In fact, materials such as the ones listed above, were readily available and accessible for students to get independently without interrupting the teacher.

Classroom Physical Arrangement

Each of the classrooms had a distinct layout. This depended upon the philosophy of the teacher and the physical constraints of the classroom itself. All of the classes had groupings of some sort whether they be in attached rows, or actual quadrilateral groupings. These groupings ranged in size from 2 to 8 students. None of the classrooms had separated rows. The teacher in Case Study #6 had the students in attached rows similar to what may be seen in a theatre or lecture hall. All of the desks faced the large group area and away from the large windows in the class that overlooked the playground. This proved to be very helpful in keeping students focused on the teacher rather than what was happening outside. The teacher in Case Study #1 commented that students at this age learn a lot from their peers and need to be able to talk to each other on a regular basis when problems arise and it was for this reason that groupings were recommended for this age group. The study found that those classes that had larger groupings of students together tended to have more off-task behaviour in these groupings.

The most common arrangement was groupings of between 4 and 6. In Case Study #3, the teacher had assigned groups of 5 students and no assigned desks. Once students were assigned to one of the five groups all of the group members

sat at a large table to complete assigned tasks. This seemed to work well in this class. The teacher could easily assign stronger students to each group and divide the social problems up amongst the five groups. The teacher at this school stated that the only downfall of the layout was that there were really no quiet places in the room where students could depend on total silence if they needed it. In Case Study #4, the teacher had assigned groupings of 5 students per table mixing the groupings up with strong students and distributing the behaviour problems amongst the groupings. Again, the teacher of this class commented on the inability to provide space for students who needed a quiet work environment. The emphasis of these two classes was to provide an environment that students could have the opportunity to problem solve together in their groupings. The groupings reflected this by having cooperative values placed upon them.

Most of the classes had student desk groupings that were assigned by the teacher. In Case Study #7, the teacher believed that separating the girls from the boys was essential to keeping them on-task. In Case Study #2, the teacher separated boys from other boys and girls from other girls. The teacher in this case believed that this would alleviate any social talking between the same sex students. In both cases, students still engaged in off-task behaviour by turning around in their desks or walking to other students desks to ask questions or simply to chat. It was overtly obvious that they were off-task in these classes.

A few of the teachers encouraged the students to take an active role in the process of desk assignment. For example, the teacher in Case Study #6 brought the students together for a discussion regarding desk assignments and asked them to provide input. From this input the teacher assigned students to desk groupings. The teacher, in this case, also took into account the social implications of pairing certain students together. In Case Study #1, the teacher placed all the students names in a jar and picked one out at a time. This was done as the teacher moved from grouping to grouping. In Case Study #5, the

teacher assigned the students to groupings that were compatible with each other and encouraged the students to comply with classroom rules and routines to keep their position in the grouping.

In any case, all of the teachers agreed that student groupings needed to be changed regularly. One teacher commented that it is good to change the groupings every 2 months. Another teacher noted that the students would request a move. When the students requested a move the teacher would begin the process.

All of the classes had a large group gathering area. The large group gathering area was used for a variety of purposes. The teachers used it to teach lessons and read stories throughout the day. As well, it was used as a large area for activities that took place during free-play and structured centre activities. For example, if students were doing an activity that required a lot of space, such as building a zoo (which was taking place in Case Study #4) the students would take it to this area where they had a large space to work. Many of the teachers had rules regarding the use of this space during structured activities. Students were required, for the most part, to complete structured activities at their assigned groupings unless the space was required for the activity. Students were allowed to use the large group area for free-choice activities in the classes that offered this option. The noise level of the classroom increased in all cases when this space was used to teach lessons or when it was used during free-choice and structured centres. This was really noticeable in classes that had a lot of teacher directed activities as the expectation of quietness was more pronounced. For example, in Case Study #5 the students were engaged in structured activities to begin the day and when students completed the structured activity they were allowed to get a free-choice activity. This drew a lot of students who were still completing the structured activity off-task. The noise level was less noticeable in Case Studies #3 and #4 as there was a continual level of noise which was considered acceptable. At any rate, there were less occurrences of off-task

behaviour when the large group space was being used for free-choice or centre activities because of the active engagement of students in tasks while using this space. However, this was not the case during lesson periods held in the same space. There were many more off-task behaviours displayed while the teacher was teaching a lesson and the students were seated in the large group area. A few of the more obvious behaviours witnessed were students whispering, poking, rocking, moving, and playing with others hair. Students had to be redirected back to the lesson more readily when they were gathered in the large group area of the classroom. On several occasions during my observations students were sent back to their desks when caught off-task and this seemed to alleviate any further off-task behaviour on the students part.

The increased incidence of off-task student behaviour during large group gatherings seemed to be due largely to the opportunities available for doing so. In classes that had a lot of opportunities for chatting and engaging in cooperative problem solving throughout the day, as witnessed in centre-based programmes, there tended to be less off-task behaviour while students were grouped together in the large group area. However, in classes where the expectation for much of the day was for students to work quietly at their own desk, students tended to get off-task more often during large group time. The reason for this increased off-task behaviour may have been due in part to the lack of opportunity throughout the day to socialize with other students within the classroom.

All of the classes had centres of some sort. In Case Studies #2, #6 and #7 the teachers encouraged structured activity time in which students engaged in teacher directed activity centres. Centres such as painting, drama, computers, and reading were used as part of the structured activities. Free-choice centres were not prevalent in these classes. During my observations of students engaged in these structured centres the expectation of quietness was lessened to a minimal degree allowing students to whisper to each other without being

reprimanded. The noise level of the students was continually monitored by the teacher. In Case Studies #1 and #5 the teachers encouraged structured centres. Students were also allowed to choose a free-choice activity centre upon completion of the structured activity centre. The expectation of quiet structured activity time was present while students worked in groups to complete activity tasks. Students in these classes were permitted to whisper to each other during these structured activity periods. During free-choice activities the noise level in the class increased significantly. This was a period in which students knew they could chat with their peers using inside voices while they engaged in unstructured activities. When the noise level did get high the teacher would stop the students and remind them to use inside voices. In Case Studies #3 and #4 the programs were for the most part centre-based and therefore included centres for math, science, writing, creative art, building and large toys. Although structured theme related activities were the focus for the first part of the day, students were pretty well free to choose the activity they wished to complete and upon completion choose a free-choice activity centre. The students in these classes had over 10 centres to choose from during activity time. These classes were much noisier than the others, providing students with the opportunity to problem solve with other students and work in small groups. Although the noise level was higher than the other classes, the noise was more productive. Students were engaged in learning activities of interest and tended to stay focused on tasks throughout my observations. Students rarely interrupted other students working at tasks and if they did it was because they needed help solving a problem. The chatting that took place in these classrooms tended to be more focused on the tasks that student were completing rather than social chats.

All classes had storage facilities for learning materials and supplies. In Case Studies #1, #5, #6 and #7 most of the common daily supplies (such as pencils, workbooks and learning resources for activities) were stored in the students desks.

The teacher from Case Study #1 stated that if the supplies were in the students desk there was less of a chance that they would go missing. Other materials (such as math manipulatives and creative art materials) were kept in specific places around the room for students to access independently when the need arose. In these classes students were required to ask for new supplies (such as pencils or workbooks) when they were needed. This created a few problems with interruption throughout the day. When students needed supplies they needed to go to the teacher and interrupt what the teacher was doing. This created several occurrences of off-task behaviour. In Case Studies #3 and #4 the common daily supplies (such as pencils, crayons, erasers and scissors) were stored in bins that were located at each grouping of desks. Each bin consisted of enough of these supplies for the entire group of students. Other supplies (such as workbooks and learning resources) were located in specific bins that were marked for students to access independently. The teachers of these classes continually monitored the workbooks and replaced them when the need arose. The teacher in Case Study #3 noted that students are expected to hand in any finished tasks to the right bin for checking and that the monitoring of their workbooks takes place at this time. These two classes were centre-based classes and therefore required materials that were readily accessible to the students on a continual basis. There were less occurrences of off-task behaviour in these classes because students had materials readily accessible and knew where to locate other materials to replace the ones that were in the bins on their desks. The teacher in Case Study #4 noted that the classroom should be set up with all centres and all materials for lessons ready to go before the students arrive each morning. During my observations of these classrooms students had no need to interrupt the teacher for supplies.

Summary and Concluding Statements

This study investigated the classroom experiences of teachers related to the

arrangement of the physical space of their classrooms and how this affected off-task behaviour in their classrooms. The study was conducted using a qualitative approach in which case study was involved. The measurement instruments that were used in this study were created through careful examination of several tools that Emmer et. al. (1981a) created to do research studies on teacher effectiveness in managing classrooms. The tools in question focus on the measurement of student off-task behaviour in attempting to identify the effects of the physical space in the management process. In total, 10 randomly selected schools were invited to be a part of the study. Each was sent a package consisting of a cover letter, description of the study, a letter of approval by the board, a consent form and the ethical procedures to be followed. Of the 10 schools 3 declined due to time constraints placed on them from other sources. Once principals had met with the teachers of primary classes at their school and taken volunteers for the study the consultation process began. Observations dates were established with the teachers that volunteered and research proceeded.

The physical space and students of each classroom were subjects of the primary and secondary observations. Regular teachers of these randomly selected classrooms were given an interview questionnaire during the first phase of this study and informal discussions took place when observations were concluded. It was the intention of this study to elaborate on the CMIS and show the influences that the arrangement of the physical classroom had on the overall ability to manage student off-task behaviour.

The findings of this study point to three specific themes that appear to be most important in determining the teachers' effectiveness in managing classroom disruptions and student off-task behaviour. Although they are separate, in so much as they each warrant a study of their own, they are very much interrelated, in that they depend upon each other in managing a classroom effectively. These themes included the philosophy of the teacher, the

organization of the classroom and the arrangement of the physical learning space.

With respect to the philosophy and organization of the classroom, the study found that classes were most effective in deterring off-task behaviour when students knew their expectations and routines well, and could carry through with them independently. As well, classes that encouraged cooperative ventures in which students assisted one another on a continual basis tended to foster more on-task behaviour because students were engaged in learning and peer teaching rather than spending time idle.

Classes where frequent teacher direction was the focus showed marked accounts of off-task student behaviour. This seemed to stem from the students needing to know whether or not directions were being followed correctly. Hence, students would interrupt other students to confirm directions or continually approach the teacher to reassure that they were on track. On the other hand, classes that were more centre-based tended to produce students that were independent and creative in problem solving techniques. They were encouraged to confer with other students to solve problems.

Findings indicated that classes that are well organized tend to assist students in becoming independent. This was truly the case in classes that were for the most part centre-based. Teachers who relied on this philosophy believed highly in the organization of daily lessons and materials, routines and student expectations. These teachers continually had well planned lessons and materials ready for learning tasks. As well, they had supplies and materials for the learning tasks in marked bins for students to access independently. Although classes that had a more teacher directed focus had good organization of lessons and a classroom physical arrangement that was conducive to independent work, there was less evidence of marked locations for students to access materials independently. Students in these classes tended to approach the teacher for the materials that they needed.

With respect to the physical arrangement, the study showed evidence that the arrangement of the learning space was regarded as a major factor influencing off-task student behaviour by all of the teachers. Providing spaces for different learning styles and activities was seen as a very important influence on student behaviour.

Many positive characteristics of classroom physical arrangements were witnessed during my observations. These characteristics affected how much off-task behaviour students engage in while in the classroom. The physical arrangement of a classroom was limited by the architectural layout of the school. However, within the constraints of four or less walls of a classroom teachers could effectively arrange a layout that was conducive to learning, encouraged cooperative student behaviour, and provided students with an organizational environment from which to develop positive independent classroom habits. Foremost was the use of the space within the classroom. Students need space to move but they also need space to work. It was found that the physical arrangement must incorporate spaces for these two components. Findings indicate that learning centres that focused on a wide variety of skills and interests should be scattered throughout the classroom, so that they engage the students actively and so that congestion was kept to a minimum in one particular area of the classroom. Other findings indicate that the physical arrangement of the classroom should include grouped sets of desks for students who work cooperatively in group situations, as well as single desks for students who need more privacy to focus. A conferencing area should also be included, within the physical arrangement of the classroom, in which teachers can meet with students with little interruption. An area for large group activities which can be utilized by students during free-choice and structured activities should be the hub of the classroom. The physical arrangement should include areas in which portfolio's, workbooks, journals, resources and classroom materials can be accessed independently by students. Other ideas that teachers of this

study believed were important were: Separating the boys from the girls; separating the same sexes from each other; dividing students with social problems among groupings; and dividing students who were academically gifted among groupings.

Findings show that classrooms that were centre based tended to produce more noticeable on-task student behaviour during learning activities. This seemed to stem from the engagement of students in learning tasks. There was very little down time in which students could engage in overt off-task behaviour. Students of these classes did tend to chat more frequently off-topic but it was plainly obvious that this didn't affect the completion of tasks in which they were engaged. In fact, more often than not, students engaged in conversation regarding the task that they were completing rather than what they did at recess or last night. Off-task student behaviour was less of an issue in classrooms that were centre-based due to the expectation of task completion rather than order and quietness. Desk arrangements enabled students to engage in discussions that were off-task, but at the same time the expectation of task completion was predominant and students worked hard to complete centre activities while they engaged in conversation with others. Centre based classrooms tended to encourage independence, accountability and responsibility on the part of the student. Supplies and materials were readily available for students to access on their own. The physical arrangement of the classroom was conducive to heavy traffic with lots of space between groupings and centres. These characteristics assisted in providing an atmosphere of student cooperation and compliance without the expectation of order.

Teacher directed classes tended to show more counts of behaviour that were obviously off-task. Off-task student behaviour tended to stem from the expectation of order and quietness in the classroom. Although students in these classes had the expectation to get to work quietly and quickly, the classroom layouts of these classrooms encouraged students to engage in off-task

behaviour due to the positioning of desks side by side or in groupings.

It can be seen that the arrangement of the physical space is a major factor contributing to the off-task student behaviours witnessed in the cases of this study. Additional research in this area could be conducted into the ways in which students react to changes in the physical arrangement of their classroom. As well, future research should look at the differences between division levels in schools, related to physical classroom arrangement. Although this study has shown a connection and interrelationship between the physical arrangement of a classroom and student behaviour further studies should be conducted in this area to develop a full understanding of this relationship. Until this occurs, teachers and educators alike may wish to use information in this study to develop an effective physical arrangement that will assist them in deterring off-task student behaviour.

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Appendix A

Form 1: Board of Education Researcher Code of Ethics

Form 2: Board of Education Board Policy #4123

Simcoe County Board of Education

Researcher Code of Ethics

The researcher must abide by the following code of ethics:

1. The research procedure shall not be harmful in any way to the subject participating.
2. The researcher will be under the jurisdiction of the administration and the principal of the school selected for research in terms of his/her conduct while working in the school.
3. The data collected in the performance of the research will be kept in strict confidence. No names of persons tested, their results, or the names of the teachers, principals, or schools, shall be mentioned or attention be unduly attracted to them during the course of or following research undertaken unless authorized by the administration. General or specific results as would be used for research papers for scientific journals will be accepted.
4. The researcher shall not, in any way, attempt to attract the interest of the media to his/her research unless authorized by the administration. If the researcher is contacted by representatives of the media, the researcher is bound to say nothing about the research unless the researcher has been given permission by the administration.
5. Research that is not supporting or facilitating the operation of the system is subject to the discretion of the administration and the school principal(s). If the administration and the principal refuse the use of the school facilities to a researcher external to the system, the researcher must accept this decision.
6. In accordance with research policy #4123, any researcher that is undertaking research in this system that identifies the board in any manner, must obtain the approval of the administration for the use of the data.

Date:

Signature:

Educational Research Policy #4123

Simcoe County Board of Education
Policy #4123

Educational Research

The Simcoe County Board of Education recognizes that educational research can promote an understanding and improvement of education in its schools and enhance informed educational decision-making at all levels. The Board, therefore, endeavours to provide and promote such activities through its Education Research Services.

The board further recognizes that confidentiality is essential to the successful conduct of research and subsequent use of findings. To ensure confidentiality in research studies conducted in its schools, through Education Research Services, individual schools, teachers, students or other persons will not be identified in any report or in any discussion of any project without prior consultation and agreement.

Education Research projects will be monitored through the Administrative Council and reported to the Board on a regular basis.

Appendix B

Tool 1: Questionnaire For Observations/Interviews

Tool 2: Anecdotal Observation Sheet

Interview Questionnaire

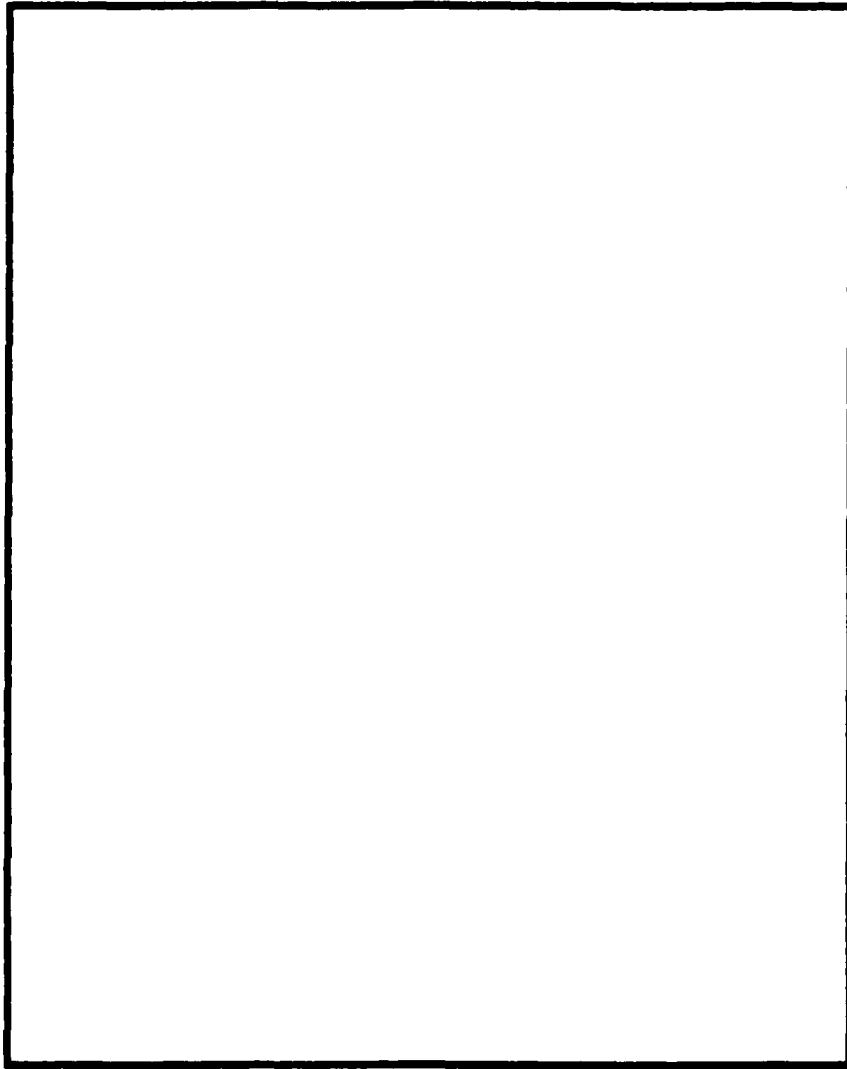
1. What grade do you teach?
2. For how long?
3. How many students in your class?
4. How do you motivate student independence with respect to arranging the classroom?
5. How does access to resources within your classroom (such as learning materials, supplies, support, and equipment) affect the overall management of students?
6. How does the physical learning environment affect your teaching?
7. What techniques do you use to manage student behaviour in your classroom?
8. How do you feel that the physical arrangement of your classroom contributes to the overall management of your classroom?
9. What areas of your classroom do you feel are hardest to hear and see what students are doing?
10. Comment on the noise level in your classroom.
11. How often do you have to ask students to be quiet in a given period? (ie. between arrival and morning recess, morning recess and lunch hour, lunch hour

and afternoon recess or afternoon recess and home time)

12. How do you feel that certain desk arrangements help to alleviate off-task student behaviour?

13. Describe times in the day when the traffic flows less smoothly throughout the room?

14. On the following page is a layout of your classroom. Please feel free to use this when answering the interview questions.



Legend



Anecdotal Observation Check Sheet

1. Positive student behaviour created by the physical arrangement of the classroom.

2. Negative student behaviour created by the physical arrangement of the by the physical arrangement of the classroom.

3. Traffic flow during transitions.

4. Teachers ability to see and hear students.

5. Distractions created by the physical classroom arrangement.

6. Availability of classroom resources and materials.

7. Use of storage facilities/handling in work

8. Use of activity centres

9. Traffic flow during activity times

10. Use of physical environment to deter off-task student behaviour

Appendix C

Measurement Tools from in Emmer and Evertson's (1981 a) Classroom Management Improvement Study, (The tools in this section have been used only as a guide in creating the tools actually used in this study)

Tool 1: Suggested Guideline Questions for Anecdotal Observations and Interviews

Tool 2: Descriptions of Each Component Rating

Tool 1: Suggested Guideline Questions for Anecdotal Observations and Interviews

Prescription 1: Readyng the Classroom (Initial Primary Observation)

- 1.1 What is the room arrangement?
- 1.2 Describe the overall appearance or ambience of the room
- 1.3 Did any problems arise that could be attributed to traffic patterns, student access to important areas of the room, or teacher's inability to see all student work areas?
- 1.4 Describe any aspect of room arrangement, contents, or decoration which appeared to distract students from their tasks or detract from the smooth functioning of the room.
- 1.5 Were there adequate numbers of desks, chairs, equipment, and supplies for the day's activities?
- 1.6 Describe storage areas for student's and teacher's supplies.
- 1.7 Did equipment used in the day's activities work well?
- 1.8 Describe name tags used. Were there any problems related to them?

Prescription 2: Planning Rules and Procedures (Secondary Observations)

- 2.5 Did any problems arise that could have been attributed to inadequate procedures or guidelines for use of pencil sharpener, fountain, washroom, centres, supplies areas, or other areas of the classroom? Describe them.

Prescription 5: School Activities (Secondary Observations)

- 5.3 What was the format of all class activities and does the arrangement of the classroom take these dynamics into account: whole group, small group, or individualized? Attach a day plan.

Prescription 6: Strategies for Potential Problems (Primary and Secondary Observations)

- 6.4 Describe any other constraints that teacher had to deal with; environmental factors such as heat, noise from outside the room, a student with an unusual handicap, etc.

Prescription 7: Monitoring (Secondary Observations)

- 7.2 Did the teacher have a clear view of all students from the teacher's usual work space?

Prescription 9: Organizing Instruction (Secondary Observations)

- 9.5 Describe any use of centres or stations. include any instructions for their use given by the teacher.

Use of Small Groups

- 9.8 Describe the seating of students in small groups, the teacher, and the out of group, what were the reasons?

Prescription 10: Student Accountability (Secondary Observations)

- 10.2 Describe the system used for turning in work. What did students do with their work when they finished it?

Tool 2: Descriptions of Each Component

2. Room Arrangement

2a. Suitable traffic patterns. The teacher and students are able to move about the room easily, without interrupting each other's work. Lanes to the washroom, pencil sharpener, and major work and group areas are open. Needed materials and supplies are accessible.

2b. Degree of visibility. The students desks/chairs and work areas, and any place the teacher spends much time (e.g., teacher's desk, overhead projector, reading group area) are placed so that a clear line of sight is available. The teacher can see all of the students; the students can see the teacher and relevant instructional displays during whole class instruction.

6. Disruptive Student Behaviour

6a. Amount of disruption. "Disruptive behaviour" refers to any student that interferes with instructional, attentional, or work activities of the teacher or two or more other students. Excluded from this definition are inattentive behaviours and behaviours that involve only one or two other students, such as one student whispering to another, writing notes, or goofing off. However, if the behaviour elicits the attention, although not necessarily the involvement, of numerous other students, then it would be considered disruptive behaviour. Note that "disruptive behaviour" does not have to be as extreme as a fight. Rather, it is any behaviour that distracts or interferes with two or more students attending to their work or the lesson.

7. Inappropriate behaviour

7a. Amount of inappropriate behaviour. "Inappropriate behaviour" will mean all types of nondisruptive behaviour that are contrary to stated or implied classroom rules or procedures. Disruptive behaviour will be excluded since it has

already been covered. Some common types of inappropriate, but non-disruptive, behaviour might include talking out-of-turn (call outs), whispering to neighbor, passing notes, being out of one's seat, reading or working on an inappropriate task, tardy entry to class, failure to complete work, not following established procedures, gum chewing, or goofing off. Of course, any of the preceding may be disruptive under some circumstances; but we want to establish the frequency of non-disruptive behaviours that occur, and the teachers reactions to them.

8. Classroom Climate

8b. Relaxed, pleasant atmosphere. The teacher and students seem to get along nicely. There is an absence of friction, tension, or antagonism; behaviour is friendly and courteous. The teacher and children obviously like each other.

9. Miscellaneous

9a. Distractions. A distraction is some phenomenon that may or may not be controlled within the environment (ie. windows beside desks) that causes the students to be distracted from some aspect of the lesson. The observer will have to judge whether the phenomena is distracting to the students and whether it continues to be distracting after a period of time.

Appendix D

Interview Questionnaire Responses

Interview Questionnaire Responses - School AC: Gr. 1/2

1. What grade do you teach: Grade 1/2
2. For how long? 2 years
3. How many students in your class? B = 11 G = 9 Total = 20
4. How do you motivate student independence with respect to arranging the classroom? Scissors, pencils, and other materials are clearly labelled and/or placed in specific areas of the room throughout the year. Students help with classroom arrangement.
5. How does access to resources within your classroom (such as learning materials, supplies, support, and equipment) affect the overall management of students? Consistency is the key. Once students know where everything is, management of students is much easier as they are able to get their own things independently.
6. How does the physical learning environment affect your teaching? The more students can work independently, the more time I can have for individual attention
7. What techniques do you use to manage student behaviour in your classroom? Three strikes and their out of the room for extreme behaviour. One warning, then they lose 5 minutes of activity time.
8. How do you feel that the physical arrangement of your classroom contributes to the overall management of your classroom? Greatly! I change the arrangement of desks each month (No matter what grade). Student input is essential to the decision of arrangement.
9. What areas of your classroom do you feel are hardest to hear and see what students are doing? House centre and block centre
10. Comment on the noise level in your classroom. Dead silence when I take a reading group (10 minutes). Then I circulate to assist students then take the next reading group. Quiet talking is encouraged during math. Higher noise levels during all hands-on activities.

11. How often do you have to ask students to be quiet in a given period? (ie. between arrival and morning recess, morning recess and lunch hour, lunch hour and afternoon recess or afternoon recess and home time) Usually once or twice in each time slot.

12. How do you feel that certain desk arrangements help to alleviate off-task student behaviour? Sometimes small groups are good because neighbour can help another student with explanation of task or explain choices should a problem arise. Rows don't work well with this age group. They need social time.

13. Describe times in the day when the traffic flows less smoothly throughout the room? None

Interview Questionnaire Responses - School B: Gr. 3

1. What grade do you teach: Grade 3

2. For how long? 2 years in this grade (35 years in teaching)

3. How many students in your class? B = 11 G = 16 Total = 27

4. How do you motivate student independence with respect to arranging the classroom? Students for the first term were allowed to select their own seats. After that I assigned seats for the next two terms. Students know that if they need to be by themselves they may move to empty tables and desks in Zones 4 and 5.

5. How does access to resources within your classroom (such as learning materials, supplies, support, and equipment) affect the overall management of students? Students know where to find new workbooks as needed without disrupting the class. We do have a bottleneck at the cubbies in Zone 5 and this is where many workbooks are kept for marking. I assign various students the task of handing these out when needed.

6. How does the physical learning environment affect your teaching? I find I tend to teach more lessons with the students gathered together on the carpet in the large group area at the front due to the rooms having temporary walls and

no doors.

7. What techniques do you use to manage student behaviour in your classroom? I suppose I use facial and body language to manage student behaviour. I often just stop, stand and stare at the student. As a last resort a student is isolated.

8. How do you feel that the physical arrangement of your classroom contributes to the overall management of your classroom? The physical arrangement tends to encourage students to talk more and to depend upon each other. They tend to copy or at times help one another with explanations or missed instructions. The small room and many students make it harder to separate desks and some students become dependent on others.

9. What areas of your classroom do you feel are hardest to hear and see what students are doing? When I am at the front of the room, it is easy to see and hear students in all areas. If I am at my desk, students in Zone 5 behind the cubbies are difficult to see. The teachers desk placement is not ideal because teacher had their back to the class and this can cause management problems.

10. Comment on the noise level in your classroom. Students know that the noise level may not get too high due to no classroom door and open concept pod set-up.

11. How often do you have to ask students to be quiet in a given period? (ie. between arrival and morning recess, morning recess and lunch hour, lunch hour and afternoon recess or afternoon recess and home time) I do not think I have to remind the students of the noise factor more than once or twice during the day.

12. How do you feel that certain desk arrangements help to alleviate off-task student behaviour? After experiencing seating in groups and then isolated seating for the Grade 3 assessment I feel that isolated seating results in less off-task student behaviour. Most students listened to directions carefully because they couldn't depend on others. When they were chatting with neighbours it

was usually about the task and not socializing. Conversations were shorter.

13. Describe times in the day when the traffic flows less smoothly throughout the room? At dismissal traffic flow does not run smoothly due to the lack of space for lining up. During silent reading at lunch time with monitors in the room, the traffic flow to the book bins clogs up in Zone 6.

Interview Questionnaire Responses - School CC: Gr. 1

1. What grade do you teach? Grade 1
2. For how long? 2 years
3. How many students in your class? B = 12 G = 12 Total = 24
4. How do you motivate student independence with respect to arranging the classroom? Materials are accessible to students and students are aware of their locations. Students help in set-up of new centres (ie. store, craft, sand, etc.)
5. How does access to resources within your classroom (such as learning materials, supplies, support, and equipment) affect the overall management of students? I creates more independence and less questions. Students know where materials belong and this helps at clean-up time.
6. How does the physical learning environment affect your teaching? The classroom is lacking space for independent work areas (ie. study carrels). I find it difficult to keep the carpet / meeting area clear. It is not used during desk work. Chatter is always there as students face each other.
7. What techniques do you use to manage student behaviour in your classroom? I use green light, yellow light, red light and lions quest. As well there is a time-out area (random area in the classroom).
8. How do you feel that the physical arrangement of your classroom contributes to the overall management of your classroom? It makes it easier for the teacher to circulate. The traffic moves freely, there is less conflict and students are spread out when working.
9. What areas of your classroom do you feel are hardest to hear and see what

students are doing? The students are hard to hear and see in the house centre due to the shelving unit which is placed here.

10. Comment on the noise level in your classroom. There is always a dull chatter. Most noise occurs when all students are sitting at the tables facing each other. There is less noise when students are involved in independent activities.

11. How often do you have to ask students to be quiet in a given period? (ie. between arrival and morning recess, morning recess and lunch hour, lunch hour and afternoon recess or afternoon recess and home time) During an average day I have to tell the students to be quiet 1 or 2 times. On a high energy day about 3 times.

12. How do you feel that certain desk arrangements help to alleviate off-task student behaviour? I only have tables, so occasionally I move children to work in the house centre, teacher's desk, or wood-working table if they need to be isolated.

13. Describe times in the day when the traffic flows less smoothly throughout the room? The traffic moves less smoothly when all children are working at the tables.

Interview Questionnaire Responses - School CH: Gr. 1

1. What grade do you teach: Grade 1

2. For how long? 25 years

3. How many students in your class? B = 15 G = 11 Total = 26

4. How do you motivate student independence with respect to arranging the classroom? I use learning centres in language, math, construction, reading, writing, etc. Materials are organized in two's, easily displayed, easily accessible, and easily tidied. Therefore, one routines are established children can work very independently.

5. How does access to resources within your classroom (such as learning materials, supplies, support, and equipment) affect the overall management of

students? Very important - children learn the routines and usually carry out independently. It encourages cooperation, care and pride for the overall appearance of our classroom. Children are happy in this learning environment.

6. How does the physical learning environment affect your teaching? I can circulate easily and spot "hot spots" easily. It feels safe, relaxed, non-threatening, and positive. Children seem happy and enjoy learning. There is a good balance between teacher directed and child directed activities.

7. What techniques do you use to manage student behaviour in your classroom? I use a bell for stop, look and listen to the teacher. As well I use a time out chair for not listening, and following rules (progressive 5, 10, 15 min.) with an automatic 10 for hands-on. I also rely on a social skills class for repeat offenders.

8. How do you feel that the physical arrangement of your classroom contributes to the overall management of your classroom? Very well! It allows for freedom and easy of movement, independence, and self direction. As well there is less noise because children are busy in various areas of the classroom therefore more spread out.

9. What areas of your classroom do you feel are hardest to hear and see what students are doing? Perhaps the 'Reading Centre', but I try not to block off areas visually. Also the block wall that separates the coat area but students know that they are not allowed in this area during class time

10. Comment on the noise level in your classroom. Usually very acceptable. This also depends on the time, season, occasion of the year. For example, Hallowe'en and Christmas makes the children very excited and chatty.

11. How often do you have to ask students to be quiet in a given period? (ie. between arrival and morning recess, morning recess and lunch hour, lunch hour and afternoon recess or afternoon recess and home time) Usually not at all. On a chatty day maybe twice.

12. How do you feel that certain desk arrangements help to alleviate off-task

student behaviour? I use individual desks, if needed. Also, I will sit at a certain table or beside a certain child.

13. Describe times in the day when the traffic flows less smoothly throughout the room? Probably morning entrance and end of the day dismissal because the classroom coat area and hallway are highly congested. All children do the same thing in one area. For example, getting ready to go home.

Interview Questionnaire Responses - School HT: Gr. 2

1. What grade do you teach? Grade 2

2. For how long? 1 (Many years in primary)

3. How many students in your class? B = 14 G = 9 Total = 23

4. How do you motivate student independence with respect to arranging the classroom? Remind students that if they wish to retain their current seating they must obey the classroom rules. Rules are posted in the classroom and visible to all students.

5. How does access to resources within your classroom (such as learning materials, supplies, support, and equipment) affect the overall management of students? The classroom layout is determined by specific needs (ie. special lesson, guest, visitor), location of computer equipment and electrical outlets, teaching situation (ie. individual, small group, large group), location of teacher prep/resource area, pupil interaction patterns, teaching area (ie proximity to the blackboard, alternate resources), ease of cleaning by custodial staff, sight lines by pupils and staff, traffic patterns in the room, exit for emergencies and regular use, pupil resources (ie. library, shelf storage of materials, storage of activities and manipulatives).

6. How does the physical learning environment affect your teaching? If I am comfortable with the layout, it works!

7. What techniques do you use to manage student behaviour in your classroom? Assertive discipline program, school code of behaviour, support

of/by administration, experience/trial and error.

8. How do you feel that the physical arrangement of your classroom contributes to the overall management of your classroom? See question 4

9. What areas of your classroom do you feel are hardest to hear and see what students are doing? Behind the computer table desk.

10. Comment on the noise level in your classroom. Comfortable! Constructive! Happy! Conversations reflect constructive happy people.

11. How often do you have to ask students to be quiet in a given period? (ie. between arrival and morning recess, morning recess and lunch hour, lunch hour and afternoon recess or afternoon recess and home time) There is no definitive or quantitative answer for such an open ended question. As the need arises,...

12. How do you feel that certain desk arrangements help to alleviate off-task student behaviour? In this room we have groups. Isolation or individual arrangements happen if: consistent inappropriate behaviour occurs, work habits are not appropriate, and special circumstances.

13. Describe times in the day when the traffic flows less smoothly throughout the room? Traffic flows smoothly when both the teacher and students have a clear understanding of the expected pattern or routine.

Interview Questionnaire Responses - School MG: Gr. 2

1. What grade do you teach: Grade 2

2. For how long? 5 years +

3. How many students in your class? B = 9 G = 16 Total = 26

4. How do you motivate student independence with respect to arranging the classroom. I have a preliminary discussion and get students input on having their own space when working independently.

5. How does access to resources within your classroom (such as learning materials, supplies, support, and equipment) affect the overall management of students? All materials are easily accessible so some students can be using them

while others are working (eg. computer centre, listening centre, etc.)

6. How does the physical learning environment affect your teaching? I strive to create a comfortable, happy, exciting atmosphere so that I am always enthusiastic about our learning experiences. I like to have room to sit beside a student for individual help.

7. What techniques do you use to manage student behaviour in your classroom? I start with a set of classroom rules and consequences which are set up by the students and with teacher guidance (all based on making a good learning environment for everybody).

8. How do you feel that the physical arrangement of your classroom contributes to the overall management of your classroom? They achieve our goals. Children are moved to a different section every 2 months.

9. What areas of your classroom do you feel are hardest to hear and see what students are doing? I have a good overall view with all students facing the teaching area.

10. Comment on the noise level in your classroom. Generally, the noise level is proportionate to the activities taking place. Higher noise level when they are experimenting and working with manipulatives (which is expected). I use a hand and count signal to get students' attention.

11. How often do you have to ask students to be quiet in a given period? (ie. between arrival and morning recess, morning recess and lunch hour, lunch hour and afternoon recess or afternoon recess and home time) At times, reminders are needed when students are doing group activities (often self-directed). Also, some students have difficulty in focusing on tasks and distract others. Reminders are required when I work with small groups at times.

12. How do you feel that certain desk arrangements help to alleviate off-task student behaviour? Some students need desk placement closer to the teacher's general area so they can be helped or reminded quietly to get back on-task.

13. Describe times in the day when the traffic flows less smoothly throughout the

room? None

Interview Questionnaire Responses - School MS: Gr. 1/2

1. What grade do you teach: Grade 1/2
2. For how long? 24 years
3. How many students in your class? B = 12 G = 12 Total = 24
4. How do you motivate student independence with respect to arranging the classroom? Children sit in groups of 6. Children work independently but rely on one another for help.
5. How does access to resources within your classroom (such as learning materials, supplies, support, and equipment) affect the overall management of students? Children need to know where things are so they can always find them, use them, and put them away. Most supplies, etc., are easily accessible to the children.
6. How does the physical learning environment affect your teaching? I have space at front for lesson. Children sit in groups of 6 for sharing of ideas, helping each other and socializing.
7. What techniques do you use to manage student behaviour in your classroom? I separate boys from girls; boisterous children are placed next to quiet ones.
8. How do you feel that the physical arrangement of your classroom contributes to the overall management of your classroom? It is important to the overall management. We need walkways, work centres, a place to be together for lessons, play areas etc.
9. What areas of your classroom do you feel are hardest to hear and see what students are doing? All areas are easy to hear and see the students.
10. Comment on the noise level in your classroom. This group is very social. They spend a lot of time talking so the room can be very noisy at times. However, they produce a lot of quality work.

11. How often do you have to ask students to be quiet in a given period? (ie. between arrival and morning recess, morning recess and lunch hour, lunch hour and afternoon recess or afternoon recess and home time) Many times! Morning is usually quieter because we do most of our written work. Afternoon is noisy and hectic because of activities. Whenever it too noisy I stop all students.

12. How do you feel that certain desk arrangements help to alleviate off-task student behaviour? I seat weaker students beside strong ones. They act as helpers and role models.

13. Describe times in the day when the traffic flows less smoothly throughout the room? Activity time finds students all over the room with toys everywhere making traffic flow less smoothly.

Appendix E

Anecdotal Check Sheet Responses

Anecdotal Observation Sheet Responses - School AC: Gr. 1/2

1. Positive student behaviour created by the physical arrangement of the classroom. Students enter and get shoes on without cue. Students know the routines and carry through independently. Teacher can see all students when seated at their desks. Use of B/B visible by all students. Those students in quieter groups got work done quickly. Sharpener is away from desk groupings.
2. Negative student behaviour created by the physical arrangement of the classroom. Boys sitting together talk throughout announcements and during lesson periods. Large windows and southern exposure mean that there is a need to keep curtains closed so that heat doesn't become overwhelming. Curtains closed also means less distraction from the outdoors. Some students don't sit in large group area during large group time. Instead they sit behind desks and crawl under desks. Boys in Zone 3 had a very difficult time staying on-task from the beginning of the observation. No sign in/out routine so students sneak out while teacher is busy.
3. Traffic flow during transitions. Students entered and got to their desks without a problem. Desks are organized with lots of space between groupings. Students line up to see teacher for work marking. This makes area around teacher congested and very distracting for those students in the immediate area of the teacher.
4. Teachers ability to see and hear students. When the teacher is giving lessons or students are at their own desks they can be seen and heard easily. When teacher is marking, students are hard to see at the end of the room opposite to where the marking is taking place.
5. Distractions created by the physical classroom arrangement. Boys sitting beside other boys tended to pull each other off-task during period when they were expected to listen (ie. large group time). Students approach teacher anytime that they have a problem and this was very distracting to other students in the area. When teacher leaves the room those students who have

been identified as contributing most often to off-task behaviour in the class began distracting others.

6. Availability of classroom resources and materials. Students have manipulatives accessible to them all the time for use during assigned tasks and free choice.

They are placed on shelves around the perimeter of the classroom and students are allowed to get them when ever the need arises. Note books, pencils, etc. are stored in students desks and given out when students approach teacher and request them (they must show the book or short pencil)

7. Use of storage facilities/handing in work. No in/out bins for handing completed work in. Students approach teacher and wait for marking to be completed. This contributes to a lot of noise in the class which is very distracting for those students working. Teacher does marking at one group of desk that are placed together with four students known to spend a lot of time off-task. All work is marked by teacher and then placed back in students desk.

8. Use of activity centres. Teacher uses free-choice activity centres only for those students who have completed the assigned tasks from the morning. It is an incentive for students to get work completed. Students may choose from several centres including blocks, painting, house, etc. The noise level is much higher during free-choice activity time because students are moving around the classroom and talking to each other.

9. Traffic flow during activity times. The traffic flow is quite good due to the spacing of the groupings of desks. Students can go from one area of the classroom to another with little worry about bumping into desks. The only area of the classroom that is congested is the area around and behind the teachers desk.

10. Use of physical environment to deter off-task student behaviour. The arrangement of the desks means easy visibility of students during seat work. During free-choice activity time this is very much a different story. Students who are playing in the house centre are pretty well blocked in and therefore free from

the teachers visibility.

Anecdotal Observation Sheet Responses - School B: Gr. 3

1. Positive student behaviour created by the physical arrangement of the classroom. Students hand into in/out bins upon arrival. Students know the routines and carry through independently. Separating girls and boys discourages socialization that can occur when they sit next to the same sex peers. Desk arrangement encourages students to stay on-task because they can be seen all of the time.
2. Negative student behaviour created by the physical arrangement of the classroom. The thinness of the walls and the fact that the room had no door made the environment a little louder than usual because all classes in the pod were contributing to noise. Students turn around and socialize with same sex peers. This was really observable with the boys. During L/G time students congregate at front and sit with their friends who drag them off-task. The L/G area is not large enough for all students, therefore not all students sit away from desks.
3. Traffic flow during transitions. There are 27 students in this class so you would expect the traffic to be congested however this was not the case when they had to go places. This was due for the most part to the layout of the desks. Students created very little distraction when moving from activity to activity or around the room. Some students were the exception to this. They interfered with other students when they were moving around the room. This occurred most often with the boys in Zone 3.
4. Teachers ability to see and hear students. The room is very opened and all students are facing the B/B at the front of the room so the teacher has eye contact with them at all times or can view all students from behind. The teacher circulates and has eye contact much of the time.
5. Distractions created by the physical classroom arrangement. The students

face two large windows. This was distracting to some of the students in Zone 1 and Zone 3. Originally intended to be an open concept school the classroom has make shift walls that are very thin and therefore do not keep out the noise of other classes very well. Interruptions from outside. There is no door on this classroom and therefore external noise is a factor.

6. Availability of classroom resources and materials. Students can access materials that they need for learning independently (this includes math manipulatives). Workbooks are also accessible so when students finish a workbook they can get another with little distraction. The pencil sharpener is at the back of the room away from students so it is no a distraction. All art supplies are stored in a cabinet with a sink. These materials are available to students during art activities.

7. Use of storage facilities/handling in work. Upon arrival to the classroom in the morning and completing classroom seat work tasks students hand work into in/out bins. Any materials needed for lessons are in the classroom (ie. math manipulatives, art supplies, science materials etc.)

8. Use of activity centres. Data unavailable at this time.

9. Traffic flow during activity times. Data unavailable at this time.

10. Use of physical environment to deter off-task student behaviour. All students desks face the front of the class. The teachers desk is behind them and they can therefore be monitored while the teacher is at the teacher desk, during lessons, or during seat work activities. Materials are around the outside of the classroom and desks are set up in groups in the middle therefore little distraction when supplies needed.

Anecdotal Observation Sheet Responses - School CC: Gr. 1

1. Positive student behaviour created by the physical arrangement of the classroom. Students know the routines and follow through with little teacher assistance. They are encouraged to work independently but at the same time

assist those in their group with task completion. A limited number of students are at each centre (max. 5). Students know what is expected and can carry through with little teacher assistance. Materials are out at each centre and students are fully aware of what to do at each centre.

2. Negative student behaviour created by physical arrangement of the classroom. The high activity does mean more noise than usual, however the noise is productive noise rather than destructive. Students approach teacher when a problem arises rather than solving it within their group. The noise level means that those who need quiet to work cannot get it. This contributed to a large number of incidence of off-task behaviour by students who could not focus. However, the off-task behaviour that was witnessed was not overly distracting to other students.

3. Traffic flow during transitions. During structured activity time there is very little traffic because students are grouped at certain desks. No real problem here! During transitions between activity centres there is lots of space between the activity tables and the L/G area and students use this area for traffic. The centres are developed around the outside of the class and the middle of the class is left open for the students to travel from centre to centre.

4. Teachers ability to see and hear students. The teacher can see most areas of the room with little problem. The teacher circulates around the room during activities to assure that all students are on-task and understand the task that they are completing. There are areas in the classroom that are not as easily visible during free-choice activities (ie. Store, behind the teachers desk).

5. Distractions created by the physical classroom arrangement. The noise level is fairly high and seemed to be distracting to certain students during structured activity time. It was confirmed that 5 students in this class are mildly behaviourally challenged. One does have an attention problem and is greatly affected by the noise level in this room. Teacher informed me that this is one of the downfalls of running an activity based program. There is a lack of quiet

space.

6. Availability of classroom resources and materials. Students had most materials at the activity centres they went to or knew where to get the needed materials. During more structured activities materials are provided and stored by subject in separate bins. They are all in the teachers possession. These include all journals and portfolios. Students have accessibility to all learning materials on the shelves (ie. math manipulatives, writing and art supplies). This room is really well organized and all materials are stored in specific areas of the room.

7. Use of storage facilities/handing in work. Very organized! A bin or folder for everything. All work is handed in at the end of activity time and placed in specific folders or bins. Teacher collects all journals and math activities when they are complete and places them in their portfolio when they are totally complete. Two students share one cubby and store anything that needs to go home or that they brought from home here.

8. Use of activity centres. The program is activity based and therefore activity centres are the focus of most student tasks. They have 5 centres going at a time with 5 students at each centre. Groups for activity centres were chosen randomly once each of the five mild behaviour problems were separated. Students have free choice activities once they have completed structured activities. Students do have periods in the day when they can work independently free from the constraints of the group.

9. Traffic flow during activity times. The layout of the room provides an area for structured activities and an area for free choice activities, with little traffic flow difficulty. The only difficulty I could see was too many students crowded into one activity centre. This proved to be a congested area. After conferring with the teacher I was informed that a parent had brought different cuts of wood in and all the students were eager to use it to build something with.

10. Use of physical environment to deter off-task student behaviour. The teacher had 5 centres, 5 groups, and 5 mild behaviour challenges in this class and

managed to split them up! Wow. The teacher had certain areas for certain activity tasks at free choice time. These were part of the routine and the rules of the classroom. For example writing and quieter activities were the only activities allowed at the tables during free-choice. Louder activities were encouraged on the floor or at the appropriate centre.

Anecdotal Observation Sheet Responses - School CH: Gr.1

1. Positive student behaviour created by the the physical arrangement of the classroom. Students know the routines very well and abide by them independently. Students work together during structured lesson activities and are encouraged to ask peers to solve problems they encounter. Teacher has grouped strong students with weak students so that peer tutoring takes place.
2. Negative student behaviour created by physical arrangement of the classroom. Noise level is high at times during the day because of the openness of the room (open pod consisting of two grade one classes and a kindergarten class). A lot of external noise during activity based learning centres in math and language. There are several students who have been identified with behaviour or academic difficulties and they really need one-on one assistance during circulation around the room.
3. Traffic flow during transitions. The traffic flows smoothly through the centre of the classroom where it is open. Around the desks there is little space and it is very tight between some tables enabling access only by single file. Students manage to line up with little problem when bell rings for recess and lunch.
4. Teachers ability to see and hear students. The room is reasonably open and therefore easy to observe from anywhere in the the room. There are only a few areas in the room that are difficult to observe (i.e. cubbies, reading centre, big blocks, and home centre). Due to the active engagement during activity based learning the noise level is high making it difficult to hear exactly what is going on. The teacher can hear those student in the immediate area to that of

the teacher.

5. Distractions created by the physical classroom arrangement. The room is an open pod with another grade one and a kindergarten class adjoining. This causes distractions when other classes are actively engaged in activity based learning. Noise level is high pretty much all the time when students are learning and therefore those students that are easily distractible have nowhere to go. The entrance to the room is open to all rooms and therefore external distractions are caused when people come calling.

6. Availability of classroom resources and materials. All materials are available on the students desk groupings or on shelves around the perimeter of the room. Each desk grouping has a bucket in the centre that consists of a pencil, eraser, ruler, scissors and set of crayons for each student. Manipulatives for activity based learning are on the shelves around the room in specific bins which are labelled. For specific activities teacher has the materials prepared and ready for the students to utilize upon completion of a mini-lessons.

7. Use of storage facilities/handing in work. Students hand in homework baggies (snuggle books) to a bucket upon arrival in the classroom in the morning. Teacher checks the work and places it in their portfolio or sends it home for good. Snuggle books are exchanged at the end of each day by the students. Any finished work is marked as teacher circulates then it is placed in the students cubbies to be taken home to be reviewed by parents and sent back the next day.

8. Use of activity centres. Once students finish any assigned tasks they may choose a book based activity in the morning and free-choice activity in the afternoon. This encourages students to complete assigned tasks and get them checked. It should be noted that book based activities revolve around language (i.e. writing, drama, drawing, etc.). Students who rush through their work are sent back to do their work again. Teacher has specific expectations that students know they are to meet before they may go to activity centres. A

limit of four students may attend one centre at any given time.

9. Traffic flow during activity times. For the most part groupings of desks are spread out enough that there is little problem with movement around the room. It is a little congested when students congregate in one area.

10. Use of physical environment to deter off-task student behaviour. The groupings of desks are spaced out enough that there is little distraction from other groups. Teacher has attempted to place student groupings away from the other pods so that there is as little distraction as possible from the other classes during structured lesson times. As well, the teacher has grouped stronger students with weaker students and scattered the behaviour problems throughout the class.

Anecdotal Observation Sheet Responses - School HT: Gr. 2

1. Positive student behaviour created by the physical arrangement of the classroom. Routines guide students to expected behaviour independently (ie. entry routine = chair down, shoes on, sit on carpet). Agenda is written on the board and reviewed with students. Rewards offered for compliance and listening. Uses board for lesson with all students on floor in front of teacher. Uses lights to get students attention. Posted rules are drawn to the attention of students.

2. Negative student behaviour created by the physical arrangement of the classroom. Locality of pencil sharpener enables students to talk off-task without being seen by teacher. Students in Zone 2 tended to be the most off-task sector of the class. The students in this sector talked a lot off-task when the teacher was elsewhere. (Refer to Classroom Layout). During group times students are allowed to sit where-ever they choose. Students did engage in off-task talking during large group times.

3. Traffic flow during transitions. Large amount of open space, therefore traffic flowed smoothly for most of the observation. Only congested when students

took building toys to the carpet and began building. Line up for teacher was in the path of desk groupings. This drew students from these groupings off-task to talk to those in line.

4. Teachers ability to see and hear students. Classroom layout enables teacher to have almost complete visibility of all students. All students are visible during seat work assignments and most free choice activities. Computers in Zone 1 are not visible from the teachers desk. Teacher circulates around the class and talks to students.

5. Distractions created by the physical classroom arrangement. Radio was on in the background at the beginning of the observation. Free choice activities were taking place too close to Zone 2 drawing students from this grouping off-task. (ie. student building creations beside the desks in Zone 2). Positive distraction caused by the teacher circulating around the room. This kept students for the most part on-task. Windows are draped closed (only two small windows).

6. Availability of classroom resources and materials. Students are encouraged to use manipulatives during math and can get them independently. All materials are available for students to retrieve from the shelves around the perimeter of the classroom. Student must ask the teacher for materials such as pencils or workbooks.

7. Use of storage facilities/handing in work. All materials are on shelves or in cupboards that are accessible to students. Students hand in work to teachers desk when complete and wait for teacher to check it if teacher is available. If not students know that the routine is for them to choose a free choice activity.

8. Use of activity centres. Using activity centres really helped to keep students engaged and on-task. For structured activity centres students were broken into small groups of about four or five, however most split further into groups of two. Those that stayed in larger groups spend more time off-task. Free time is used as an incentive for students to complete assigned tasks.

9. Traffic flow during activity times. A little congested with students during free-

choice activities in the LG area. Students chose to go to areas that were not in use during structured activity time with the cue of the teacher. Teacher informed students that only those working on construction activities were allowed on the carpeted floor. Hence no real traffic problems. Most students were sitting at their desks.

10. Use of physical environment to deter off-task student behaviour. Groupings are spaced so that students only interact with those in their own group. LG area for free choice in centre of room and accessible to all students. Free choice activities are individual. Group activities are done in pairs.

Anecdotal Check Sheet Responses - School MG: Gr. 2

1. Positive student behaviour created by the physical arrangement of the classroom. Almost all desks are facing away from two large windows which overlook the playground. They face the main B/B. L/G area is large enough for all students to sit together, however some students sat beside other students that pulled them off-task during L/G time. Students know their routines and expectations and most carry through independently without teacher assistance. Door way is wide open giving easy access to students leaving and entering the room. When teacher circulates, students can get assistance and they stay totally focused on the assigned tasks. B/B is easily visible by all students.

2. Negative student behaviour created by the physical arrangement of the classroom. Students are talking off-task during L/G time. Boys sitting together and girls sitting together at the back of the L/G area seemed to loose focus during L/G time. Students in Zones 1 & 4 were more off-task and louder than those in any of the other Zones. They also dragged students from other Zones off-task. Teacher marks work from desk at front of classroom and students gather around wanting assistance with word spellings and instructions. This drew some students off-task (i.e. student at lone front desk easily distracted when this happened). The room is air conditioned therefore students are cool on this day

which reached 89 degrees.

3. Traffic flow during transitions. Certain areas of the classroom are tight squeezes for students. This encourages them to walk to alternative entrances to their desks. A lot of seat work and therefore little movement around the classroom. In Zone 4 line ups at teacher create a little congestion in this area.

4. Teachers ability to see and hear students. Students are very visible from anywhere in the classroom during seat work. The teacher has established routines for controlling the noise level and therefore there is little problem hearing students from their own desks.

5. Distractions created by the physical classroom arrangement. Proximity of friends to each other dragged some students off-task. Teacher conference desk is positioned beside a student who is easily distracted and has difficulty getting assigned tasks completed.

6. Availability of classroom resources and materials. Materials needed for learning are accessible on the many shelves that are located around the perimeter of the classroom. The materials are not labelled and are in no particular order. Workbooks and materials that are used for academic subjects are only accessible with teacher permission. Most materials that they use regularly are stored in their desks.

7. Use of storage facilities/handling in work. Materials are stored around the perimeter of the classroom in no particular order (i.e. art supplies are scattered around the room in certain areas). The teacher circulates and marks work as the students complete tasks, therefore workbooks go back into their desks when they have been marked. Some work is handed in to the teachers desk, however there are no in/out bins.

8. Use of activity centres. The teacher uses structured activity centres in which students are split into small groups of approximately 5 students. Each group does the same activity and they complete one activity per/day. They do many of the activities while seated at their grouped desks (see the classroom layout for

the desk groupings).

9. Traffic flow during activity times. Data unavailable.

10. Use of physical environment to deter off-task student behaviour. Desks are facing away from large windows and toward the main B/B. Well established routines that students carry through with a certain amount of independence and teacher guidance make transitions smooth. L/G area is large enough for all students to sit so that teacher can monitor all students. The conference centre, where the teacher spends the most time, is close to a student who needs a lot of one-on-one.

Anecdotal Observation Sheet Responses - School MS: Gr. 1/2

1. Positive student behaviour created by the physical arrangement of the classroom. Students know routines from hours of practise, therefore they carry through independently. During L/G time all students are visible and teacher is able to monitor any off-task behaviour. Desk arrangement gives students easy access to all learning materials and to their own desk with little interference with others. If students get off-task they are sent to a table away from their regular desk (time out area). All students could see the B/B and get info. copied down from it. Students all do the same tasks at their own desks.

2. Negative student behaviour created by the physical arrangement of the classroom. Some students were chatty during L/G time and therefore didn't get the directions fully. Students line up at teachers desk to have work checked and marked. This drew students seated around the teachers desk off-task. The group of 8 desks seemed to engage in more off-task behaviour than any other group.

3. Traffic flow during transitions. Students stay in their own desks to do their work. When they do get out they can make it anywhere in the room easily due to the lack of traffic. Students manage quite well at getting materials (ie. books, activities, etc.) during transitions with little interruption to others.

4. Teachers ability to see and hear students. Teacher circulates around the room during seatwork and can see all that happens during the circulation. The only time that I noticed off-task behaviour during the teachers circulation was when the teacher stopped and focused in on one student. Students in Zone 3/4 were most notably off-task when the teacher was busy with other students. They did go back on-task when the teacher began circulating again.

5. Distractions created by the physical classroom arrangement. Work checking done at the teachers desk draws students not involved off-task. Large windows cause students to become distracted. (plants in windows=students off-task). Interruptions from distracting. Door was closed when another class outside the classroom seemed to be the most began playing the piano.

6. Availability of classroom resources and materials. Student get miscellaneous supplies from the teacher (ie. workbooks, pencils). During structured activities the supplies are provided at each centre. Students can get learning materials independently (ie. books, rulers, etc.) when they are needed. When they are needed for the entire group one student is asked to get them and hand them out.

7. Use of storage facilities/handling in work. There was no use of in/out bins for student work, therefore students stand in line or wait at their desks for teacher to check work. Most supplies are stored in the classroom for the teacher to access (ie workbooks). Certain materials are available for students to access (ie. manipulatives).

8. Use of activity centres. They use activity centres however they are integrated with another class for the centres. I can not include the way that students conduct their business during this period due to the many variable that come into play (ie. differing classroom management strategies, routines, etc.)

9. Traffic flow during activity times. The students are divided into small groups and then distributed to three separate areas: a) home classroom, b) other Grade 1 classroom c) resource room. This means that during structured activities

each teacher only has 18 students and therefore very little, if any, off-task behaviour not only because they are actively engaged but because of the student teacher ratio.

10. Use of physical environment to deter off-task student behaviour. Having larger groups allowed for more space and less circulating. Therefore teacher could monitor off-task behaviour and stop it immediately. Availability of student learning materials encouraged independence.

Tables

Table 1: 7 Major Roles of the Teacher, (Woolfolk 1990, p. 5-8)

Table 2: How to Modify the Classroom Environment, (Gordon 1974, p. 156-178)

Table 1: 7 Major Roles of the Teacher, (Woolfolk, 1990, p. 5-8).

1. **Teacher as Instructional Expert:** Teacher must constantly make decisions about teaching materials and methods. These decisions are based on a number of factors, including the subject matter to be covered, the abilities and needs of students and the overall goals to be reached. What is the best way to teach subtraction to second graders? How can I teach creative writing to a seventh grader who has never mastered basic writing skills? What book should I use to teach reading to eleventh graders who read at a fifth-grade level but are insulted by fifth-grade readers? Which would be best for this lesson: Lecture, discussion, discovery learning, programmed instruction, recitation, or seatwork? Would a micro-computer be a worthwhile investment for the school, and how would I use it in my classes? Teachers face hundreds of these instructional decisions each week. In addition, they are expected to know the answers to a multitude of questions about the subject itself.

2. **The Teacher as Motivator:** Nothing the teacher does results automatically or magically in student learning. The student must act. One of the most important roles a teacher assumes is that of motivator. For today's media-saturated students, ordinary school activities may have little immediate appeal. Even having an exciting introduction to each lesson is not enough to spark and maintain interest and concentration.

3. **The Teacher as Manager:** Most elementary school teachers spend only an average of 20 to 30 percent of the day in direct verbal interaction with students, (Rosenshine, 1977). Much of the remaining time is spent in some form of management. The figure for direct teaching in secondary schools is higher, but managing the class still takes up a large percentage of the teacher's time. Management includes supervising class activities, organizing lessons, completing forms, preparing tests, assigning grades, training aides, and keeping records. Given only 24 hours in a day, teachers must be skillful managers of time, projects, deadlines, and people if they hope to have any private life beyond working hours.

4. **The Teacher as Leader:** Although teachers must be concerned with the needs of each student, in reality they seldom work with individuals for an extended period of time. Teaching, almost inevitably, is leading a group of students. An effective teacher is an effective leader, using the power of the group to promote individual growth. In the role of group leader, "the teacher is expected to be a referee, detective, limiter of anxiety, target of hostile feelings and frustrations, friend and confidant, substitute parent, object of affection and crushes, and ego supporter". (Ornstein and Miller 1980, 226).

5. **The Teacher as Counselor:** Although teachers cannot be expected to act as guidance counselors, they must be sensitive observers of human behaviour. They must try to respond constructively when students' emotions get in the way of learning. They must know when a particular student needs to see a mental health specialist. In every class there are students who bring their personal problems to the teacher. In addition, the teachers are expected to administer standardized intelligence, achievement, or interest tests and to interpret the results of these tests for the students and their parents.

6. **The Teacher as Model:** No matter what you do as a teacher, you will be acting as a model for your students. Enthusiasm for a subject is more likely to be taught by an enthusiastic teacher giving a less than perfect demonstration than by a bored instructor lecturing brilliantly on the value of the subject. At times, teachers use modeling intentionally. The demonstrations in physical education, chemistry, home economics, and industrial arts are examples of direct modeling. In many other cases, however, teachers constantly act as models in demonstrating how to think about problems. If teachers can involve their students in thinking through various alternative solutions to problems, the students are more likely to learn that they themselves are capable of problem solving in all kinds of situations.

7. **The Teacher as Reflective Professional:** As mentioned earlier, there is a growing emphasis in the field of education on the teacher as a reflective professional. Reflective teachers try to understand why particular actions have certain effects in their classes. They analyze their teaching from a number of perspectives of theoretical orientations. Their analysis is guided by a rich source of knowledge about children, classrooms, schools, learning, teaching, and subject matter being taught. They enjoy teaching but are never completely satisfied with their current level of expertise, always trying to improve. This may mean assuming the role of student again through inservice education, or graduate work.

Table 2: How to Modify the Classroom Environment (Gordon 1974, p. 156-178)**Enriching the Environment**

Use colored light; play music; put in learning centres; add a library section; install an art centre, for construction, fingerpainting, clay, watercolors, oils, wood sculpting, metal sculpting, etc.; use audio visual materials; decorate in bright colors; set up displays; give demonstrations; put in a rap session area; make a puppet stage, stage puppet plays; install a creative writing corner; invite guest speakers.

Impoverishing the Environment

Darken the room; put down pieces of carpet where noisy activities take place; put away all materials except those being used in the present activity; schedule the use of materials, limit their availability; schedule quiet times; install study carrels; use earphones on audio-visual equipment; install room dividers, partitions; have students, and teachers remove shoes; use a focusing technique such as television, films, filmstrips; install a mediation corner.

Enlarging the Environment

Study trips; visits to off-school areas and events; visits to on-school areas and events; use of library facilities; use of multipurpose rooms such as the gymnasium; use of outside resources - people and things; combining classrooms occasionally; team-teaching to permit smaller groups; cross-age tutoring (students teach other students); use of aides or paraprofessionals to free the teacher to work in different ways with different groups; expanding the classroom into the halls or adjacent lawns on occasion; use of specialists, consultants, experts.

Planning Ahead for the Environment

Hold training sessions to show students how to operate new equipment and machines; have dry runs or rehearsals for unusual or complicated procedures; hold discussions of grading and evaluation procedures at the beginning of the year; plan (and rehearse in advance) how to be helpful to substitute teachers; share verbally (and post list of) known important dates and events; develop and use individual calendars of events, using duplicate copies, one for the student to have at home and one at school; discuss openly those school rules and policies over which the teacher and class have no control, and let students know in advance the penalties for violation of these rules and policies; advise students of the costs for (and limits on) use of books, materials, equipment; especially useful for young students or students new to the school are orientation walks, tours of facilities, guided trips around the school; schedule time for special people such as school counsellors, psychologists, bus drivers, administrators, curriculum specialists, librarians, nurses, coordinators, so they may talk to the students about how they can be of help.

Simplifying the Environment

Put materials, books, tools, and equipment, where students can reach them; review procedures, rules, and regulations, and substitute simple ones for those that are complicated; post rules, policies, and regulations, where students can see them easily; lower doorknobs, handles, and hooks; put a small step-stool by high cabinets; design storage for playground materials so that they can be managed by the students themselves; put operation rules and instructions on machines and equipment used by students; label drawers, cabinets, files, storage areas; use color code when possible; eliminate unused or seldom used equipment, furniture, materials.

Systematizing the Environment

Assign certain tasks to certain people; develop a check-out procedure for books and other materials; use the meat market's take a number technique for scheduling time with the teacher; alphabetize, color code, set up filing systems, use check-out trays containing everything need for a project; use in-basket and out basket technique for handling assignments; use round-robin assignments for routines like attendance-taking, opening-and-closing tasks, handling money collections, form-filing, handling visiting dignitaries, clean-up, materials inventory, etc.; develop checklists to assure completion of tasks; develop flowcharts to illustrate complete operations such as laboratory set-ups or takedowns.

Rearranging the Environment

Put away unused material; design effective traffic patterns; rearrange furniture or desks in a circle for discussion; get rid of unused furniture; keep electrical equipment away from water outlets; put all material for a project in one area; get additional pencil sharpeners, wastebaskets etc.; keep materials in inaccessible locations (high on shelves, cupboards) if they require close supervision when used by students; put equipment and machines that are for individual use in study carrels or other areas, to be used by only one person at a time; remove doors from much-unused cabinets; arrange for clothing, lunchbox storage near the entrance.