

**DEVELOPING
A
STAFFING FORMULA
FOR THE
WILLOW CREEK SCHOOL DIVISION**

ROBERT IRA COWIE

B.Ed., University of Lethbridge, 1979

A One Credit Project
Submitted to the Faculty of Education
of the University of Lethbridge
in Partial Fulfillment of the
Requirements for the Degree

MASTER OF EDUCATION

LETHBRIDGE, ALBERTA

December, 1993

ABSTRACT

This project is an attempt to devise a staffing formula for the Willow Creek School Division. Firstly, a review of the literature on the topic was undertaken. Then, with the cooperation of the senior administrators of several comparable school systems in Alberta who provided pertinent documents for examination, an investigation into their staffing policies and practices was initiated. Thirdly, meetings were conducted with the Superintendent of Schools for Willow Creek School Division for the purpose of combining what has been learned with the needs of each of its unique situations. Finally, simulations were conducted to test the two formula proposals developed using three schools in Willow Creek as testing grounds.

This document will provide a foundation for the process of devising staffing policy for the Willow Creek School Division; it will be passed along to a formal committee of school administrators charged with the responsibility of finalizing a staffing system.

TABLE OF CONTENTS

1) Section One - A Review of the Literature	1
Introduction	1
Austin Independent School District	1
Classroom Teacher Formula	3
Assistant Principals	5
Reactions, Observations, Conclusions	6
Another Approach	8
Halliday's Formula	10
Reactions, Observations, Conclusions	13
2) Section Two - Comparable School Systems in Alberta	17
School District A	17
Reactions, Responses, Reflections	19
School District B	19
Reactions, Responses, Reflections	24

School District C	24
School District D	27
Reactions, Responses, Reflections	30
School District E	33
Summary	34
Reactions, Responses, Reflections	40
3) Section Three - Formula Development	43
Initial Conference with the Superintendent of Willow Creek	44
A Conversation with the Superintendent of School District #2	45
Second Conference	46
The Formula	47
Staffing Formulas for the Willow Creek School Division	47
General Guidelines	48
Alternative A	49
Alternative B	51

4) Section Four Simulations	54
Simulation #1 - F.P. Walshe School	54
Alternative A	54
Alternative B	56
Reactions, Observations, Conclusions	58
Simulation #2 - Granum Schools	58
Alternative A	58
Alternative B	60
Reactions, Observations, Conclusions	62
Simulation #3 - J.T. Foster School	62
Alternative A	63
Alternative B	64
Reactions, Observations, Conclusions	66
5) Section Five - Summary and Recommendations	68
Recommendation 1	68

Recommendation 2	68
Recommendation 3	69
Recommendation 4	69
Recommendation 5	70
Recommendation 6	70
Recommendation 7	70
References	72
Appendices	73
Appendix A	74
Appendix B	77
Appendix C	82
Appendix D	86
Appendix E	93
Appendix F	109
Appendix G	112

Literature Review

Introduction

In the course of an ERIC search of the literature dealing with staffing, two major studies were uncovered that have attempted to create formulas for large school settings. Even though this study is for a smaller setting, the ideas presented do have applicability here and are summarized below so as to provide a basis for this endeavor.

Austin Independent School District

During the 1980-81 school year, the Austin Independent School District (AISD), in Austin, Texas, undertook a large study that sought to investigate the issue of elementary staffing. The study was in response to misgivings the Austin Association of Public School Administrators (AAPSA) had with the manner in which assistant principals, helping teachers, teachers, counselors, clerical staff and instructional coordinators were assigned to the many schools of the system. They felt that districtwide guidelines should not form the basis for such appointments as the needs of each individual school should.

The council suggested:

The district should conduct a study to develop a formula for determining the allocation of personnel positions and services for individual campuses. The formula should be "weighted" and take into account such items as the following:

- Enrollment
- Multiplicity of programs
- Achievement levels
- Socioeconomic status
- Attendance
- Significant change of students/staff
- Special Education Programs
- Gifted and Talented Programs

As the study was initiated by the Office of Research and Evaluation of AISD, they found that both a search of ERIC and survey of the 97 largest school districts in the

United States and Canada furnished little information. Most districts were using a formula similar to that already being employed in AISD based on policies for the entire system. The researchers proceeded with the belief that they were breaking new ground in educational inquiry.

As the study progressed, several recommendations emerged as being important in providing direction for the research. These include:

- 1) The purpose of the formula is to introduce information in addition to enrollment into the process for allocating staff to schools.
- 2) The outcome of using the formula should be consistent with the purpose for using it; i.e., the results should be valid.
- 3) The formula should have a just impact on schools. Extraneous factors such as school size should not alter the impact of the formula.
- 4) Some mechanism must be created to prevent excessive adjustment.
- 5) For our purposes, the formula should not add to existing staff. The result should be a redistribution of staff.
- 6) The use of a formula cannot remove the impact of individual decision makers from the resource allocation process.
- 7) The District should not become a slave to the formula. As conditions change, the variables used in a formula should probably change.

As the above recommendations were stated in the first report of the Office of Research and Evaluation, 1981-1982 Evaluation Findings, it is interesting to note that the list grew by four additional considerations when the Final Technical Report was published. Numbered to fit in the appropriate spot in the original list, they are:

- 2) The variables (as referred to in #1 above) thought to be relevant must be measurable.
- 6) Conversely, (in reference to #4) the formula must make an adjustment that is large enough to be real.
- 8) It is not appropriate to assign all positions using a formula. For example, each school gets one principal.

9) Unique schools should be treated separately.

(Elementary Staffing Study. Final Technical Report.

Appendices. D-4,5).

It was decided by the directors of the study that they did not have ample time for investigating a formula for all elementary staff positions and as a result focussed their attention upon developing formulas for classroom teachers, assistant principals, helping teachers and counsellors. For similar purposes of expediency and relevance, this endeavor will concentrate upon the formulas devised for teachers and assistant principals.

Classroom Teacher Formula

The study developed the basic formula:

$$\text{Number of teachers} = \text{BASE} = \text{ADJUSTMENT}$$

The BASE segment of the formula is easily calculated by dividing the projected enrollment of a school by the pupil/teacher ratio (PTR) determined by AISD.

$$\text{BASE} = \frac{\text{Enrollment}}{\text{PTR}}$$

More specifically, the formula was designed to satisfy AISD's requirements for pupil/teacher ratio at each grade level and was further broken down as follows:

$$\text{BASE} = ((K + \text{Gr1})/22) + ((\text{Gr2} + \text{Gr3})/26) + ((\text{Gr4} + \text{Gr6})/28)$$

where K, Gr 1, Gr2, etc., refer to the projected enrollment at each grade level. This calculation produces an "unrounded" number of teachers to be assigned to the school.

The ADJUSTMENT component is much more complex as it is based upon many different variables designed to "fine tune" the number of teachers generated by the BASE ingredient. These variables were selected from larger groups of factors all deemed to

have influence upon the number of teachers required by a particular campus. The four groups of factors considered were:

- 1) Enrollment
- 2) Educational and Economic Deprivation
- 3) Student Diversity &
- 4) Special Education

Since school size or Enrollment was already being considered in the BASE element of the formula, it was eliminated from the ADJUSTMENT portion. Further, one variable was chosen to represent each of the remaining three factors so as to eliminate any possibility of variables being redundant.

To characterize Educational and Economic Deprivation, the "percentage of students receiving free or reduced-priced lunches" (FL) was chosen. To depict Student Diversity, the variable "achievement diversity" (AD) was used. Finally, to represent the Special Education requirements of a school, the "percentage of students served by special education" (SE) was incorporated into the formula.

An Advisory Principals' Team (APT) was given the task of estimating the relative importance of these three variables and concluded that they should be given weightings as follows:

FL -	% of free lunch students	.....	3
AD -	achievement diversity	.....	3.5
SE -	% of special education students	.....	1

That is, the achievement diversity of a school is 3.5 times as important as special education is in determining the number of teachers required by a school and the percentage of students receiving free or reduced-price lunches is 3 times as significant.

(It should be noted that the values 3.5, 3 and 1 do not appear in the final configuration

of the formula as depicted below. They have been adjusted so as to accommodate a primary directive of the study: "No school shall have a PTR greater than 30 - 1 or less than 20 - 1." The values chosen below, .7105, .609 and .203 reflect that directive, yet still maintain the 3.5, 3 and 1 ratio between the variables.)

The ADJUSTMENT element of the formula becomes:

$$A = ((.7105 \times ADz) + (.609 \times FLz) + (.203 \times SEz)) \times (E / AS)$$

where E = the projected enrollment of the school and

AS = the average school size for the AISD.

To fully understand this segment of the formula, it must also be made clear that the administrators of this study were proceeding on the assumption that their formula would not result in a change in the number of teachers in AISD but rather a redistribution of established personnel. This explains why the values ADz, FLz and SEz, scores representing the chosen variables, have been expressed as z scores. Since z scores have the tendency to total zero (or close to it) when an entire distribution is sampled (like a school district), the net effect is that the ADJUSTMENT value in the formula does not add or delete staff, it "redistributes" them.

The formula was applied to all the schools in AISD and numbers were generated for BASE, ADJUSTMENT and Number of Teachers. Significance was attached to those results that indicated a difference between a school's rounded BASE and its rounded Number of Teachers. Of 61 total schools, 37 showed a difference in these values (60.7%). (1981-1982 Evaluation Findings, XII - 7,8).

Assistant Principals

The AISD study composed a formula for the Number of Assistant Principals a school should have that is very similar to the teacher formula.

$$\text{Number of AP's} = \frac{\text{Enrollment}}{\text{PAR}} = \text{Adjustment};$$

where PAR is the districtwide pupil/administrative assistant ratio. The main difference between this formula and the teacher formula comes in the factors chosen for the Adjustment portion and the variables used to represent them. The five factors named for this formula are:

- 1) Enrollment (which was again eliminated from the Adjustment section)
- 2) Educational and Economic Deprivation
- 3) Special Education
- 4) Desegregation &
- 5) Achievement

The school's percentage of low income students (Lz) was designated to represent Educational and Economic Deprivation, the percentage of students arriving by bus (Bz) depicted Desegregation and the percentage of students served by Special Education (Sz) was again a variable as it was before. Two additional factors were identified and incorporated into the Adjustment component; the percentage of students with records on the Disciplinary Action File (Dz) and the percentage of classrooms located in portable buildings (Pz). (The "z" used to represent each of these variables indicates that once again they were converted to z-scores with the aim of only redistributing staff.)

$$\text{Adjustment} = 3(\text{Lz}) + 4(\text{Bz}) + 2(\text{Dz}) + (\text{Sz}) + (\text{Pz})$$

The weightings of the Adjustment section were again recommended by the APT.

Reactions, Observations, Conclusions....

The AISD researchers concluded that it

"was possible, in principle, to redistribute teacher positions equitably using a formula employing information in addition to enrollment to make assignments.

It is unclear whether the realities of the law and particular school conditions will prevent the practical applications of such a formula."

(1981-1982 Evaluation Findings, XII - 1).

One gets the impression that this team of investigators is apprehensive about whole-heartedly recommending this approach to staffing. This is perhaps best explained by the fact that their results seem to indicate that about 60% of the schools in the district are under or overstaffed by at least one classroom teacher. To suggest this to a senior administration and/or school board could be committing political suicide. As well, teachers may not take kindly to allegations that their positions should be eliminated or shifted because of some "formula". With these thoughts in mind, it is perhaps easy to comprehend why the study proceeded with the understanding that it operated only to "redistribute" staff. Further, the assurance that no changes in staffing policy would be made in the school year immediately following the publishing of the results was declared from the outset. These decisions were sound ones.

However, one also gets the impression from the report that the directors of the study believe that their findings do have merit and that the question of developing a staffing formula that considers variables beyond school enrollment should be further investigated. It would be interesting to contact the AISD today and see if any changes have been made in their staffing policies.

Evaluation Findings 1981-1982 was not nearly as pleased with the results of its examination of the assistant principal formula:

"The roles of the assistant principal, helping teacher, and counsellor are not perceived uniformly across the district. There does not appear to be a consensus as to how these positions should be allocated, although there is some agreement that they should be allocated as a "package". That is, the assignment of these positions to campuses should not be done in isolation."

(Evaluation Findings 1981-1982, XII-1)

The researchers were careful to state (Elementary Staffing Study. Final Technical Report. Appendices. D-12) that:

"Perhaps the most important finding resulting from the attempt to develop a formula for providing administrative assistance is that the roles of assistant principals, helping teachers, and counsellors are not clearly defined or differentiated."

The report places or "replaces" much of the responsibility of choosing the above-mentioned school personnel squarely on the shoulders of senior administration. This would indicate that although a BASE + ADJUSTMENT formula that considers many different variables besides enrollment has potential for identifying the number of classroom teachers required by a school, it may be inappropriate for other aspects of staffing.

Another Approach

Halliday (1989, chapter 15) suggests that there are two "traditional" approaches to staffing schools. That is, to use a fixed pupil/teacher ratio (and perhaps incorporating other variables as was attempted with the elementary schools in AISD) and staffing schools according to a set number of teachers/class. As Halliday develops his discourse on staffing, it becomes apparent that he advocates the latter method, with some important modifications. The call is sent out for a national uniformity to staffing that may be appropriate for his native England, but appears to be inapplicable to this study. Still, some of the issues and possible practices suggested deserve consideration.

Halliday justifies the teacher/class technique in secondary schools with important differences between them and elementary settings. (p. 73,74)

- 1) When staffing is effected assuming that teachers will teach for a specified amount of time, as they do in secondary schools, the teacher/class approach seems best. Halliday provides the example "1.5 teachers/class assumes that all teachers will spend two-thirds of the working week teaching a full class, leaving one-third for correction and preparation."
- 2) The diversification of the curriculum at the secondary level increases the number of courses to be offered, causes the size of each class to decrease, and in effect, necessitates the hiring of more teachers per pupil enrolled. This includes the consideration that many "specialty area" teachers must be assigned to handle the "practical classes" offered in secondary schools.
- 3) As continual "modernization" and modification occurs in curriculum, greater demands are made upon secondary teachers to attend workshops and other professional development sessions. This requires administrators to build time into their staffing agenda for the release of teachers for such activities. (This author suggests that many elementary school administrators would tender similar demands for their schools as well.)

The "alternative approach" (to the two traditional methodologies described above) "is to provide a staff establishment, planned within a national economic framework and a predetermined budget, which enables the school to have sufficient teachers, appropriately qualified, to teach a reasonable range of the subjects recommended in the national curriculum. This will take account of:
(Halliday, 1989, 74)

- 1) the size of the school and the number of classes at each stage
- 2) the need for every class to have a teacher for every day of the week

- 3) the requirement that teachers have adequate time for preparation and correction
- 4) the need to ensure that, in setting the average teaching time expected of teachers, an allowance is made for covering the classes of colleagues on short-term absence
- 5) the policy adopted by the Ministry of Education on replacing teachers on study and maternity leave.

Halliday places considerable responsibility upon the national governing bodies of education to provide policies that will assist each jurisdiction in that staff establishment. Such assertions are not appropriate for this work. National norms for the teaching load of each individual teacher, although appealing, are not practicable in the current political climate of a small, rural school division within which this research is conducted. However, the notion of combining the amount of instructional time/teacher with the number of classes to be offered raises some interesting concerns that can be applied to such a school setting.

Halliday's Formula

In contrast to the fairly complex endeavor undertaken by AISD, Halliday derives a staffing formula based on some simple and straightforward assumptions. One of these is the basic assignment of **teachers/class**.

"If a school consisted of one class and the teacher was expected to be with this class for all of the school week, the staffing requirement for the school would be 1 teacher." (Halliday, 1989, 79).

Halliday presents the required calculation founded on a simple "reciprocal relationship" as follows:

$$\text{Teachers required (T)} = \frac{\text{Number of classes (N)}}{\% \text{ week teacher teaches}}$$

To build on Halliday's examples, suppose teachers are required for a 10-class school and each teacher is expected to teach 87.5% of the time. (The percentage of instructional time at 87.5 is chosen, as it represents a fairly typical situation for a senior high school teacher in Willow Creek. It assumes that the teacher will be assigned one full semester of 4 - 80-minute blocks and another semester of 3 - 80-minute periods, or roughly the equivalent for a junior high assignment; $7/8 = 87.5\%$ with 12.5% preparation time.)

The number of teachers necessary for this school would be:

$$(T) = \frac{10}{7/8} = 10 \times 8/7 = 11.43 \text{ teachers}$$

It would seem fair that an administrator would request a teaching complement of 11.5 full-time equivalent (FTE) teachers.

As already noted, the curriculum at the secondary level is so diversified that the amount of time required for each subject area becomes an important aspect to be considered. The above formula seems a bit too simplistic and Halliday modifies it to include a calculation of the number of teachers required for each subject.

Suppose that in the assumed school above that each class is to receive five classes of mathematics instruction per week. $5/40 = 1/8 = 12.5\%$ of teaching time devoted to that particular subject. The number of mathematics teachers required would be:

$$= .125 \times 11.43 = 1.42875 - 1.43 \text{ teachers}$$

"In general terms the formula becomes:"

$$(T) = \frac{\text{Number of classes (N)}}{\% \text{ week teacher teaches (E)}} \times \% \text{ week subject taught (C)}$$

$$\text{i.e. } T = N/E \times C$$

(Halliday, 1989, 80).

The diversification of the curriculum in secondary schools is even further reflected in Halliday's model as he addresses the problem of offering an option block to each grade. He states:

"One way of achieving a balance between adequate choice and staffing demand is to provide head teachers with guidelines which reflect the allowance made in applying the formula. In small schools an allowance, in that part of the curriculum where choice exists, of 1.5 places/student would be sufficient to provide reasonable choice; in larger schools this could be reduced to 1.25 places/student." (Halliday, 1989, 82).

It seems that Halliday is suggesting that this "allowance" may cause staffing of a school to be expanded beyond the number given by the original formula. To develop his ideas further, he provides an example similar to the one below.

Consider a school with three Grade 9 classes where administration has placed a limit of 30 students on any one option course. The number of places to be staffed is:

$$\begin{aligned} &= 3 \times 30 \times 1.5 &&= 135 \text{ places} \\ & &&= 4.5 = 5 \text{ groups} \end{aligned}$$

This would provide an average of $135/5 = 27$ students per optional class. The staffing of these five groups may or may not be accomplished from within the original complement of teachers. In general then, the national (or provincial) requirements for optional curricula must be considered in the staffing of a school, no matter what its size.

It should be noted at this point that this author has not lost sight of the fact that Halliday's situation is very different from the one being investigated here. The schools of the Willow Creek School Division are even **more** diversified than the ones he cites. For example, it may not be possible to provide a choice of even 1.25 places/student in the optional subject complement of some small schools as the limits of choices/student

may be pre-determined by the expertise of the staff assigned to handle the core subjects. Nevertheless, his work does have relevance to this piece.

Halliday concludes his chapter with a brief example outlining how a school in Swaziland with five "forms" and a total of 16 classes might be staffed with 31 teachers and two administrators through application of his principles. Various tables are provided that attempt to describe how his formulas were utilized. A general table, as follows, quickly outlines how the teachers would be deployed on such a campus:

Form	1	2	3	4	5	Total
# of Classes	4	4	3	3	2	16
Basic Staff	6.66	7.18	5.64	6.83	4.95	31.26
Admin.						1.73

Total Staff 32.99 = 33 teachers

(Halliday, 1989, 85).

Reactions, Observations, Conclusions....

Some quick checks on Halliday's figures provide some data that would make most Southern Alberta school trustees choke. Basic staff allotments of 6.66 and 7.18 for forms (grades) containing four classes puts the average amount of instructional time/teacher down around 60%, leaving 40% for preparation and marking. Keep in mind that he operates under the assumption that class sizes may average as high as 35.

This is just not acceptable for the environments to be considered here. But, some quick modifications of his hypothetical school staff portrayed above might bring

about the results described below. These changes might bring about a staffing portfolio as follows:

Grade	8	9	10	11	12	Total
# of Classes	4	4	3	3	2	16
Basic Staff	4.44	4.57	3.43	3.43	2.29	18.16
Admin.						2

Total Staff20.16 = 20 teachers

For our purposes, let us assume that the 16 classes in the school average 20 students/class as might be more typical of a rural, Southern Alberta school; 16 x 20 provides us with a school of about 300 students. The figures outlined above were calculated using Halliday's ideas, by predetermined instructional time for teachers to be 87.5% and 90%, again which might be more typical of a rural school. It should be added that some adjustments may need to be made to accommodate the handling of special interest areas like Music, Art and Special Education. This author suggests that they need not necessarily be calculated by formula, but rather assigned on an "ad hoc" basis.

Halliday's formula doesn't seem to take into consideration that teachers can be "shared" between grades; they need not be responsible for teaching only one type of student all day. In small rural schools, teachers can and do teach at two or three different levels. This provides administrators with much flexibility in constructing a timetable as well as allowing for a much smaller number of teachers being assigned.

The assignment of two administrators in the modified illustration provided above may look to be a bit superfluous. It bears mentioning that a rural school of grades 8

through 12 would not require both of those principals to be full-time administrators and would require them to teach. A typical scenario might have the principal of the school teaching 1/4 of the school day, while the assistant principal teaches 1/2 time but, within reasonable time limits, these allotments may be revised from year to year in order to accommodate unforeseen circumstances in the school's demography. Such an administrative arrangement also furnishes timetabling flexibility as an administrator's teaching periods can be spread irregularly throughout the week, whereas a regular classroom teacher's cannot. However, it may increase the average number of pupils/class in the school.

In conclusion, it seems appropriate at this point to recommend a mixed approach to staffing smaller schools. That is, mathematical formulas like Halliday's do appear to be useful in determining the number of teachers that are required by schools with a relatively stable number of classes, say, two or three at each grade. But formulas like these should only be implemented when combined with certain arbitrary decisions regarding the staffing of the specialist positions in a school that a formula may not cover. Smaller schools will require Band instructors, Art teachers, Special Education and Resource Room teachers that cannot be included when calculating average class sizes and thus not allocated according to a precise formula. These specific positions must be filled on a "need" basis. There will be times when a small school has need of an Art teacher and perhaps other years when it does not. The size of the staff of such a school will fluctuate accordingly.

This recommendation begins to look like an attempt to combine the ideas of AISD, incorporating an Adjustment segment, with the principles of Halliday on staffing schools according to the number of register classes. It is, with an important difference.

The Adjustment portion of this approach is not a mathematical formula, but rather an "as need arises" apportionment that allows an in-school administrator to request teachers above the normal allotment for the school. This differs from the "political" process that is often used to staff small schools, in that the basis for these requests can be the same or similar variables identified by AISD in its Adjustment portion of its staffing formula. The process becomes "non-political" when these variables are documented in policy as part of the "formula" that determines the staffing needs of the small school.

It should be noted that these variables must be well researched and then mutually agreed upon by school board trustees, senior and school administrators. The construction of this type of formula may be more time consuming and expensive to construct than a strictly mathematical approach, but it may save time and money in the long run.

By implementing such a strategy, school boards and senior administrators are equipped with a "more" objective method for assigning teachers, but at the same time are given enough flexibility in their policy to accommodate the special situations a school may encounter from year to year. This author proposes such a "formula" for the schools of the Willow Creek School Division.

Comparable School Systems in Alberta

The second stage of this project involved contacting seven different school jurisdictions in Alberta that were perceived to be comparable in demography to Willow Creek. The superintendents of these school districts were asked to provide all policies and/or information they used for the staffing of their schools (see Appendix F). It was hoped that these documents would provide some foundation for the establishment of similar policies in Willow Creek. Following are summaries of the replies received from five of the jurisdictions surveyed, with additional comments from this author as each district's staffing practices are assessed. The sixth, a small rural school jurisdiction in Southern Alberta, responded to requests for staffing information from their district by indicating that they were currently reviewing their staffing formula with the intent of completing it by February, 1994. No other staffing practices, policies or procedures were provided. The 7th district did not respond to the formal request or a follow-up phone call.

School District A

Whereas some school jurisdictions have attempted to construct formulas for staff establishment, others have simply developed regulations that "establish the administrative, instructional, and support staff school allocations." One such jurisdiction in Central Alberta has formulated a policy (School Staffing Allotments) that outlines five areas of concern:

- 1) Instructional Staff
- 2) Guidelines for Staff Deployment
- 3) Course Enrollments
- 4) Definitions
- 5) School Support Staff

Under 1) Instructional Staff, the policy considers staff allocations based on pupil/teacher ratios and consideration to small schools and special programs.

The basic staff allocation is listed as:

Grades 1 and 2 - ratio 1 : 19 and

Grades 3 - 12 - ratio 1 : 20.5

A small school allocation is listed as well, indicating a further allotment of:

1.5 teachers for schools of less than 200 students

1.0 teachers for schools of less than 100 students

3 teachers for small high schools (K-12) and further special allotments for the Vocational Education program in the district's composite high school and flexible considerations given to staffing schools with Special Education programs and "special circumstances".

In 2), the Guidelines for Staff Deployment section, the policy details the teaching requirements of the staff. The number "1400 minutes/week instructional time" is assigned to all staff, but the Teacher Preparation Periods section is written so as to accommodate any unforeseen, special cases. Administration time for any school administrator is to be determined individually in consultation with the superintendent.

In the third section, Course Enrollments, policies are laid out establishing "minimums" for high school principals when planning academic, general elective, vocational and business education courses. If these minimum enrollments cannot be met, the courses may not be offered. An additional statement indicates that special consideration may be given to Distance Education courses.

The Definitions section briefly specifies what is meant by the terms: "Period", "Special Class", "Program" and "Small Senior High Schools".

The final section of this jurisdiction's School Staffing Allotments policy designates the number of secretaries, library technicians and teacher assistant positions that may be assigned to any school as follows:

"One clerical staff for the first 200 students or fraction thereof in a school plus prorated additional staff for each additional 200 students."

"One additional support staff will be allotted to each of the high schools."

The policy is concluded with some very flexible statements for establishing Library support staff, as well as provision for individual schools to increase their support staff if their school budget will allow it.

Reactions, Responses, Reflections

As one examines this policy, a feeling of "flexibility" seems to be predominant. Attempts to establish precise pupil/teacher ratios, minimums in instructional time for teachers and high school course enrollments and specification of important terms do indicate a move toward certain rules and should be applauded. However, many of these statements are accompanied by other "special consideration" statements that tend to provide continuous opportunity to modify the number of staff to be assigned if the board or senior administration deem it necessary.

Depending upon what a school board wants and needs from such a pliable policy, perhaps it can be useful to a small, rural school district. The reaction of this author, at least initially, is one of doubt as it is supposed that such a policy may not have enough substance to be useful in making tough staffing decisions.

School District B

One of the school districts surveyed, a county in Southern Alberta, has taken a more rigorous approach to developing a staffing formula than the one just described. Upon request, the superintendent provided copies of two policies the county uses for

staffing its schools. The first, and most comprehensive, outlines mathematical calculations and procedures for determining the number of regular classroom teachers, Guidance Counsellors, Home Economics and Industrial Arts teachers, as well as define boundaries for teacher preparation and administrative time for all schools. The second policy is designed specifically for deciding how many school aides should be assigned to each school.

To begin, the Teaching Staff Formula, as delineated in the board's Policy Handbook, identifies five factors that must be taken into consideration. These include:

- Grades 1 and 2, especially Grade 1, should have a lower enrollment than the higher grades.
- The small schools, because of being forced to have combined grades, should have a lower teacher-pupil ratio than medium and large schools. _____ and _____ should have special consideration because of the high percentage of Native students.

_____ should have some extra staff consideration because of the low enrollment in the high school. The suggestion in this formula is that this extra consideration be one teacher.

- The two senior high schools should have some Guidance Counsellor time (other than the Principal).
- Industrial Arts and Home Economics classes are usually small. They range between 8 - 20 students. This is necessary because of the nature of the instruction and equipment available. The staffing formula suggests one extra teacher for Home Economics and one extra for Industrial Arts for the school offering these courses.

The main body of the staffing formula employed by this county is broken down into 10 sections, each of which deals with a specific grade level, specific aspect of staff establishment or special situation that pertains to each school. Each section is designed to generate a number of teachers to which each school is entitled under each consideration. The total of these numbers from each section is calculated in the 10th section labelled Teacher Entitlement.

Section One, **Grades 1 and 2**, produces the number of teachers to which a school is entitled by simply dividing the total enrollment of grades 1 and 2 by pre-determined values reflecting desirable pupil/teacher ratio. These values are:

- 22 for schools of more than 200 students
- 21 for schools of 150 - 200 students
- 20 for schools of 100 - 150 students
- 19 for schools under 100 students
- 18 for schools under 50 students (2 specific schools are mentioned in this category because of their Native population)

Section Two, **Grades 3 and Up**, is structured in the exact same manner as the first. It divides the total enrollment in the school from grades 3 through 12 by pre-determined values as follows:

- 26 for schools of more than 250 students
- 25 for schools of 200 - 250 students
- 24 for schools of 150 - 200 students
- 23 for schools of 100 - 150 students
- 22 for schools under 100 students
- 21 for schools under 50 students (2 specific schools are mentioned again because of their Native population)

Section Three, **Small High School**, declares that one teacher should be added to the totals from sections 1 and 2 for any school that houses a senior high school with enrollment of 50 students or less.

Section Four, **Guidance Counsellors**, arbitrarily assigns a .5 teacher to the county's largest school, its central high school located in the largest centre.

Section Five, **Home Economics and Industrial Arts**, also discretionally assigns two teachers to the central high school, one for each area.

The total of the first five sections is calculated in Section Six as a sort of **basic** teacher entitlement for each school.

Section Seven moves into a different area of concern, **Teacher Preparation Time**, a very important consideration in establishing staff numbers for a school. Four similar calculations are designated in this section for determining how many additional teachers must be assigned to a particular school in order to furnish teachers with preparation time. These calculations appear to be based on a 40-period standard teaching week.

- for Elementary Schools

$$\frac{2 \times (\text{Total of No. 6})}{40}$$

- for Elementary - Junior High Schools

$$\frac{2.5 \times (\text{Total of No. 6})}{40}$$

- for Elementary - Junior - Senior High Schools

$$\frac{3 \times (\text{Total of No. 6})}{40}$$

- for Junior - Senior High Schools

$$\frac{3.5 \times (\text{Total of No. 6})}{40}$$

The numbers generated in this section are then added to the running total Teacher Entitlement in Section Eight to compensate for the periods that each teacher will spend in preparation. Conceivably, the numbers computed here will provide teachers with between 2 and 4 periods of preparation time per week.

Section Nine, **Leadership and Administration Time Principals and Vice-Principals**, produces values to be included in the number of teachers required by a school. The administrative allotments are specified according to the number of teachers required by each school and stated in the total to this point in Section Eight. Administrative time is apportioned as follows:

- .25 basic - up to and including 4 teachers in #8
- .5 - over 4 up to and including 8 teachers in #8
- .75 - over 8 up to and including 12 teachers in #8
- 1.00 - over 12 up to and including 16 teachers in #8
- 1.25 - over 16 teachers in #8

Section Ten provides the total **Teacher Entitlement** for any given school as Sections Eight and Nine are combined.

This particular county also has a separate policy for determining how many aides will be assigned to schools within its boundaries. This policy states:

"School Aides are provided in County schools to do a variety of tasks that include doing clerical duties, noon hour supervision and a variety of other activities connected with the school. The Board of Education approves the provision of lay personnel to schools for the purpose of enabling the principal, in particular, and also teachers to spend more time on matters directly related to the improvement of instruction."

This policy is careful to describe their aides as lay personnel who will act responsibly and not discuss confidential school business with members of the general public. Aides are to be "reasonably" competent typists.

The formula for determining how many or how much aide time should be allowed for each school is a simple one based on hours/week and the population of the school.

Identified as **Extent of Assistance**, the policy exists as:

50 students or fewer	14 hours/week aide time
- 51 - 100 students	21 hours/week
- 101 - 150 students	28 hours/week
- 151 - 250 students	35 hours/week
- 251 - students	49 hours/week

An additional final statement is included, allocating a full-time secretary-stenographer to the county's large central high school. In a letter included with this policy, the superintendent made it clear that lay library staff are allocated to each school using the same guidelines as outlined above for aides.

Perhaps it also bears mentioning that the staffing policies of this district do not include policies for the assignment of distance education or special education staff. These areas are reviewed and settled on an annual basis by school and senior administrators.

Reactions, Responses, Reflections

This writer found the staffing policy of this county to be worthy of further consideration. It is not a complex system for staff establishment, but it does seem to address the central concerns in staffing of teacher/pupil ratio, size of schools, teacher preparation time, special subject areas and administration time.

The policies are outlined in a clear, simple and concise manner that allows for modification or amendment as the need arises or situations change. The copy of the policy used in this study shows that it has been amended three times since being initially implemented in 1983.

Mathematical calculations are used in determining the Teacher Entitlement for each school, but they are far from being complicated. For the most part, the formula operates as a straightforward running total that evolves as each aspect of staffing is considered.

At this point, I have no hesitation in recommending that this basic formula receive careful consideration in constructing a similar formula for Willow Creek.

School District C

When an even larger county in Southern Alberta was contacted and asked to divulge their staffing procedures, the superintendent willingly revealed that they don't really employ any specific formula. He suggested that they would be most interested in

the results of this analysis, as he has begun his own investigation into the possibility of developing a policy that would suit their needs.

The superintendent offered that they do take certain factors into consideration in the staffing of their schools, but they are applied more as a matter of "historical precedent" than a specific formula. Some of these considerations were identified as follows:

- Attempts are made to keep pupil/teacher ratios comparable between similar schools.
- Elementary teachers are assured approximately 90 minutes of preparation time per week, while junior/senior high schools work out their own allocations.
- Administration time is historical.
- Hutterite Colony schools are given teacher assistant support when the PTR reaches 23:1. Other teacher assistants are assigned on an as-needed basis.

The superintendent was careful to point out that one area of staffing in his county is addressed in policy. When the PTR for ECS reaches 30:1, classes are split and teacher assistants are assigned when class sizes exceed 15 students.

The superintendent was also accommodating enough to provide a summary of staffing in his system for the current 1993-94 school year. This staffing summary is broken down into different sections (see Appendix) that reflect the various staffing procedures at each level of schooling. These sections include ECS, Elementary, Hutterite Colony Schools, Secondary Schools, and Special Education. Other than Special Education, each section furnishes a breakdown of how every school in the system at that level is staffed. This breakdown includes **Projected Number of Students**, **Staff Allotment** and **P.T.R.** for the current school year. Totals are calculated for each category under each section of the summary. Each section is supplemented with **Notes** that refer to special situations in some schools, staffing of specialty positions like

Industrial Arts and Home Economics, preparation time for teachers and allocations of administration time. The Special Education section simply identifies the number of positions that have been designated at each school.

Careful examination of these figures indicates that some important educational factors are being taken into consideration in staff establishment, even if they are not documented in policy. This writer suggests that these would include:

1) Pupil/Teacher Ratio (PTR) is an important factor used in ascertaining how many teachers should be authorized for each school. This is indicated by the simple fact that the ECS, Elementary, Secondary and Colony schools sections in the summary are designed to show the PTR of each school based on the simple calculation:

$$\frac{\text{Projected Number of Students}}{\text{Staff Allotment}} = \text{PTR}$$

The PTR in ECS classes for this county range from 17:1 to 23:1 for an average of just under 20:1.

The PTR in Elementary schools ranges from a low of 19.8:1 to a high of 22.6:1 for an average of 21.3:1.

The PTR in Hutterite Colony schools ranges from 14:1 to 26:1 for an average of just under 19:1.

The PTR in Secondary schools ranges from a low of 17.3:1 to a high of 20.6:1 for an average of 18.9:1.

It becomes obvious that this county has given serious consideration to keeping class sizes around 20 students and staff their schools accordingly.

2) The notes that are included with the different sections of the staffing summary reflect an attempt to consider appropriate administrative allocations for each Elementary and Secondary school.

3) A supplemental statement in the Elementary section seems to suggest that administration and preparation time allocations in such schools are not fixed and may be adjusted from year to year.

4) Some statements in the summary indicate that staffing allocations are considered to be "flexible". As conditions change, so may the number of personnel in a school. These statements, interestingly enough, seem to indicate that any changes that occur would result in increases in staff allotment rather than decreases.

Although this county remains without a specific formula for staffing its schools, it is evident that factors usually examined in the development of such an instrument are being reflected upon by this school jurisdiction as it staffs its schools.

School District D

Another county in Central Alberta has developed a policy for establishing both professional and support staff positions in their schools. Although not a "mathematical" approach, it is certainly clear and concise.

As is often the case with this type of policy, some guidelines are stated initially to establish its base. These guidelines include:

1) A staffing formula will allot:

- a) staff for general instruction in grades 1 through 12
- b) administrative staff
- c) pupil personnel services staff
- d) library or instructional materials centre staff
- e) relief staff to provide preparation time for all teachers

2) The superintendent of schools shall be responsible for ensuring that each school is staffed according to this policy, but is given discretionary power for adjusting staff allocation when appropriate.

3) The policy shall only be used to determine the number of staff to be allocated to each school and does not encompass the manner in which professional personnel are deployed in the schools.

4) Staff will be allocated based on projected enrollments in April of each school year and finalized according to September 30 and February 28 enrollments.

5) The superintendent may increase staff by up to 4.25% to accommodate any unforeseen circumstances that may arise.

The actual staffing of schools according to this policy is to be accomplished according to approved ratios. Certificated teachers will be allocated as:

Elementary 1 - 24 pupils

Junior High 1 - 23 pupils

Senior High 1 - 21 pupils

Special staff like administrators, counsellors, special education teachers, relief teachers and library personnel will be assigned by the ratio of: 1 - 100 pupils.

This policy is careful to cite The School Act, Section 44, ss (3), para (c) as its legal reference (see Appendix D).

With concerns about the economic state of education in this province at the forefront of most discussion and the impending cuts that accompany same, it seems most appropriate that any jurisdiction, as this county does, should have a policy on Reduction in Professional Staff Work Force. The Board of Trustees for this county "believes that where circumstances necessitate the reduction of professional staff, it should be performed reasonably and in a spirit of good faith" (see Appendix). This policy goes on to establish eight well defined guidelines on how a reduction in professional staff is to be effected.

While many of these eight declarations establish basic logistics for how staff reduction is to be accomplished, the second of the guidelines for reduction is perhaps the most important in that it affirms that staff may be transferred or terminated according to:

- a) qualifications
- b) relative competency
- c) seniority
- d) the availability of an alternative position suitable to the teacher's qualifications and interests, within the system.

The fourth guideline places the burden of responsibility for applying the above standards and the recommending of which contracts should be terminated squarely on the shoulders of the superintendent.

This policy cites The School Act, (1988), Sections 87, 88 and 90 as its legal reference (see Appendix D).

This county also has a policy that establishes particular guidelines and routines for how the libraries are to be managed within their school system. The most relevant of these for this study is number 2), under Procedures, which states:

"Professional and technical direction of the library program in a school should be related to school enrollment and meet or exceed the following:"

SCHOOL SIZE	TEACHER-LIBRARIAN	TECHNICAL/CLERICAL
150 students	.25	.25
300 students	.5	.5 - 1
500 students	1	1
700 students	1	1.5 - 2
1000 students	1	2

"Small schools may need special staffing consideration in order to achieve the goals of our library program. In the absence of a teacher-librarian, professional direction and involvement will be provided by the principal and teaching staff of the school."

The School Act, (1988), is once again cited as legal reference.

Reactions, Responses, Reflections

As a regular classroom teacher who aspires to be a school administrator, this writer is forced to react to the staffing policies of this county with some apprehension. One cannot help but get the feeling that much of the focus in preparing the above policies was given to "how to get rid of unwanted teachers". It seems that designing ways of terminating teachers is more important than establishing schemes for deploying them. The superintendent of Willow Creek has informed this author that every school jurisdiction in Alberta is required by law to have such a policy, but it still might be interesting to interview some teachers who are currently employed by this county to investigate their impressions of this policy.

To elaborate further, let us examine Guideline 2 under "Reduction In Professional Staff Work Force". To suggest that the board may recommend transfer or termination of a teacher on the basis of "qualifications of the professional staff to meet existing enrollment patterns, course offerings, stated educational objectives, and the needs of the school system", seems fine initially. But upon further analysis, one becomes uneasy about "meeting needs". What kind of needs? What educational objectives? What are enrollment patterns?

To maintain that the board may recommend transfer or termination of a teacher on the basis of the "relative competency of staff members" is a scary statement. Relative to what? Relative to the competency of other teachers in the jurisdiction or relative to some teaching standards as determined by some governing body? Let there be no doubt that not all teachers are the same, and as a responsible member of the profession, I am forced to admit that there are some people teaching in classrooms today who do not have the best interests of their students at heart. But if one is to create specific

avenues for the dismissal of these individuals, it must be done in such a manner as to ensure that committed teachers do not become the targets of spontaneous animosity that is aided by ill-conceived policies.

"Seniority" is included as one of the factors in determining how transfers and terminations may be effected. As a veteran of over 15 years in the same rural school jurisdiction, this scribe heartily applauds such a move. To suddenly terminate an individual who has devoted his/her time for many years to the people of a small, rural school district in favour of a younger, perhaps more eager person, seems ethically wrong. We do need young, enthusiastic teachers in our classrooms working with our children, but we cannot be allowed to forget the contributions of our experienced personnel either.

"Availability of an alternative position suitable to the teacher's qualifications and interests within the system" is a good factor to include with this policy. If it can be determined that an individual is no longer meeting the needs of his/her current position, then it is the responsibility of the school system to look for other employment for this person, within its system. Conceivably, the degree of responsibility on the part of the school jurisdiction could be a function of the seniority of the professional staff member in question.

The anxiety created by the seeming ambiguity of Guideline 2 in the policy statement referred to above indicates to this author that it might be difficult to develop an atmosphere of trust between teachers and trustees. The inclusion of such a policy with the recommendations of this study will not occur.

Surprisingly, the guidelines for establishing numbers of library and technical/clerical staff within this jurisdiction, although not as elaborate as some, seem

better developed than the procedures for determining numbers of certificated teachers. As determined by school size, some clear allocations have been made under Procedure 2 of the School Libraries policy. Although not totally aware of what would be reasonable staffing for a library, the numbers used in this procedure seem appropriate.

However, under Professional Staff Positions Procedure 1, it would seem that a more clearly defined "formula" is called for. To simply state:

1) General instruction -

Elementary	1 - 24 pupils
Junior High	1 - 23 pupils
Senior High	1 - 21 pupils

leaves too much to chance or misunderstanding. Does this mean that teachers will be allocated to schools solely on class size or numbers in each grade or entire numbers within the school? No doubt the players involved know what they mean and how this guideline is to be employed, but one cannot help get the feeling that this policy needs to be "tightened up" so as to avoid complications in the near future as staffing becomes a major educational issue in Alberta.

Finally, this author energetically approves the provision in the initial guidelines of this staffing policy as the superintendent is given latitude for increasing professional staff by up to 4.25% if programming difficulties or small school enrollment problems do arise. This is a responsible move on the part of the board. One could suggest that the only issue of concern here would be the magnitude of the figure quoted. Perhaps it could be argued that 4.25% is too small an allowance.

School District E

In response to the request for information on policies and regulations pertaining to staffing, a Southern Alberta school division very similar in size and structure to Willow Creek provided copies of three important documents. These include:

- **Staffing Formula and Assignment of Staff**
- **Support Staff - Instructional** (secretaries, librarians, special education staff, etc.)
- **Staffing Formula - Custodians**

From the school division's Education Policies Manual, the Staffing Formula and Assignment of Staff policy is initiated with a general statement outlining how this plan of action is to be activated. This outline places responsibility for staff allocation upon the shoulders of the Associate Superintendent of the school division, as well as indicating that school principals will be accountable for ensuring that the assigned staff are deployed properly.

As has become apparent in analysis of the policies and procedures of the other school districts examined so far, this jurisdiction has also created its staffing formula by setting some basic guidelines in place. In this case, these include:

- 1) Classes should be regulated so as to provide high quality learning experiences for students.
- 2) Principals will consult with their staff members before finalizing staff deployment.
- 3) When possible, homeroom classes will be organized within certain size ranges:

Grades 1 - 2	.....	21 - 27 students
Grades 3 - 6	.....	23 - 30 students
Grades 7 - 9	.....	23 - 32 students
Grades 10 - 12	.....	20 - 32 students

Further to these basic ranges, this third guideline also establishes a maximum of 32 students for any class in grades 3 through 9, as well as specifying maximums and

minimums for Industrial Arts, Home Economics, Vocation Education and Senior High Academic courses.

- 4) Instructional and Preparation Time should be distributed equitably to classroom teachers.
- 5) Differentiated teaching time should be assigned to teachers assuming administrative, counselling and library duties in order that they may reasonably meet Board expectations for the fulfillment of these additional responsibilities.

The actual staffing formula, entitled Staffing Allocation Guidelines, is composed of 12 sections, some of which provide methods for calculating the number of teachers to which a school is entitled and others which make specific policy statements on how staff are to be assigned.

The twelve sections are summarized as follows:

1) **General Staff Allocation -**

$$\text{Grades 1 - 2 - Staff entitlement} = \frac{\text{Total Enrollment}}{22.5}$$

$$\text{Grades 3 - 9 - Staff entitlement} = \frac{\text{Total Enrollment}}{27}$$

In Grades 10 - 12, the board has developed a formula for staff entitlement of the two larger high schools in this district. For the third, smaller high school, a separate calculation has been established.

Grades 10 - 12 - Larger High Schools

Staff entitlement is "based upon the number of student credits taught per grade level."

Grade X	- enrollment x 40 = student credits
Grade XI	- enrollment x 35 = student credits
Grade XII	- enrollment x 30 = student credits

$$\text{No. of classes} = \frac{\text{Student credits}}{28.5 \text{ students/class}}$$

$$\text{No. of teachers} = \frac{\text{No. of classes}}{35 \text{ credits/teacher}}$$

Grades 1 - 12 - Smaller High School

$$\text{No. of classes} = \frac{\text{Student credits}}{24 \text{ students/class}}$$

2) Centralized Special Education Rooms -

The number of these rooms/school is detailed in a school by school and level by level listing. The details of same are not central to this discussion, but can be found in the appendices (see Appendix E).

3) Resource Time:

$$\text{No. Resource Staff} = \frac{\text{Total Elementary Enrollment}}{350}$$

4) Learning Assistance Program - outlines some special assistance allocations for specific schools in the district.

5) Industrial Arts/Home Economics

As is often the case in rural Alberta school jurisdictions, these programs are offered only in the larger schools of the system. Consequently, students who wish to enroll in such courses are forced to travel to the larger centers. The provision of staff for these programs is handled subsequently:

"A full-time teacher equivalent will be deducted from feeder school staffs and added to the magnet school in accordance with the following formula:

$$STAFF = \frac{E}{20} \times \frac{120}{1400}$$

where E = enrollment in the program."

6) **Occupational Program** - 1 teacher is to be allocated for every 11 students in the program.

7) **Administrative Time** - 1 administrator is to be allocated for every 325 students.

8) **Special Education Administrative Time:**

"Additional administrative time will be provided at the rate of .05 F.T.E. for each Special Education classroom in a school."

9) **Counselling:** - counsellors are to be assigned on the basis of enrollment as follows:

Total Junior High Enrollment
(in schools over 200 students) 1 : 450

Total Occupational Program Enrollment 1 : 150

Total Senior High Enrollment 1 : 300

10) **Library** - 1 librarian is to be allocated for every 700 students in a senior high school. (Although not specifically stated in the policy, perhaps it is assumed that all schools will have at least one librarian.)

11) **Preparation Time** - preparation time will be provided for all teachers according to percentages of time their schools operate per week as follows:

1510 - 1529 min./week 6% prep time

1530 - 1559 min./week 8% prep time

1560 - 1600 min./week 10% prep time

1601 - 1640 min./week 12.5% prep time

12) The staffing formula is concluded with a summary statement that seems to allow for unique needs of a school that may arise. Although staffing allocations determined from the calculations of the formula are to be rounded to the nearest quarter (.25), this final statement allows for that to be adjusted by senior administration when necessary. Dates (September 2, 30 and February 3) are designated for purposes of review of staff allocations for all schools.

In contrast to many school districts where **Support Staff - Instructional** personnel seem to be assigned on an "as needed" or "historical" basis, this school division has created a very comprehensive and detailed formula for establishing the number of such individuals to which a school should be entitled.

The allocation of this type of personnel is to be based upon the September 30th enrollments of schools and provides allocations established as a certain number of instructional hours. A general allocation per school is augmented according to many variables that exist in each school as follows:

Basic Allocation Per School	1400 hours
PLUS: Allocation Per FTE teacher	50 hours
ECS/Elem. Allocation for 1 - 100 students	3.0 hours/student
ECS/Elem. Allocation for 101 - 200 students	2.5 hours/student
ECS/Elem. Allocation for over 200 students	2.0 hours/student
PLUS:	
JHS Allocation for 1 - 100 students	3.2 hours/student
JHS Allocation for 101 - 200 students	3.2 hours/student
JHS Allocation for over 200 students	3.2 hours/student

PLUS:

SHS Allocation for 1 - 100 students 9.0 hours/student

SHS Allocation for 101 - 200 students 6.0 hours/student

SHS Allocation for over 200 students 3.5 hours/student

PLUS: Summer wind-down and start-up

Larger schools - over 400 students 140 hours

Medium schools - 201 - 400 students 100 hours

Smaller schools - 100 - 200 students 70 hours

PLUS: Resource Assistance:

$$\frac{\text{Elementary Enrollment} - \text{Total Sp. Ed. Enrollment}}{3} = \text{No. of hours}$$

PLUS: Centralized L.A.P.

$$\frac{\text{Jr. High Enrollment} - \text{Total Sp. Ed. Enrollment}}{3} = \text{No. of hours}$$

PLUS: Special Additions (per school year)

- which appears to be a provision for special allocations required due to unforeseen circumstances.

Finally, this formula contains an interesting provision that allows for "a maximum surplus of 10% of the current year's allocation to be carried forward to the succeeding year." But, it should also be noted that deficits are to be deducted from the succeeding year's allocation.

The next section of this policy outlines important considerations on what types of days will be deducted from the Instructional Support Staff and Special Education Support

Staff allocations and what days won't. Perhaps it is necessary to specifically identify statutory holidays, sick leave, medical appointments and other leaves as not being deducted from the allocation, as the same type of time restrictions that apply to teachers do not apply to these personnel. Since they do not have a Collective Agreement like teachers do, it is probably imperative that the board carefully designate how their time is to be used.

Of more interest for this work is III - Guidelines under Support Staff - Instructional, and in particular, 1) Classifications. Here support staff are given different titles as determined by their "group". Groups appear to be separated by difference in responsibilities. The policy is careful to detail how many and what type of secretaries will be assigned to each of their schools as follows:

Secretary IV - one per school of 400 students or more (plus high schools)

Secretary III - one per school (with the exception cited)

Secretary I or General Assistant - one per school

The actual numbers in these designations are not as important for this study as is the simple fact that some guidelines for the number of secretaries to be allocated to each school are documented in policy.

Further to those designations, the balance of the policy concerns itself with details like experience, increments, salary scale, hours of work, absences and leaves, benefits and other important "terms of employment" that are not of use to this investigation, but certainly are essential considerations on the part of the board.

Finally, this school division has gone so far as to create a **Staffing Formula for Custodians** and placed it in policy accordingly. This formula takes on an even more

rigorous and detailed mathematical approach to staffing than the allocation of teachers method described earlier.

Firstly, a number of variables that are to be considered in determining the number of custodial staff to be allocated are identified. These variables include number of floor levels in each school, grade levels taught in the school, a mud factor (probably determined by geography), hours/week of community use and adult education programs, number of portable classrooms, community school status and finally, an allocation for supervision of custodial staff.

These factors have been used in combination with some "cleaning factors" to develop a very comprehensive formula (see Appendix) for determining the number of custodial hours to be assigned to a particular school. The final numbers are calculated by examining 1) total number of students and numbers of students at special grade levels (ECS), 2) total number of teachers and numbers of teachers at special grade levels (ECS), 3) number of classrooms, and 4) total area of the school.

The final calculation for number of custodians required by a certain school is rounded to the nearest quarter (.25), as was the practice in other policies examined earlier. Some summarizing notes are provided to once again allow for special unforeseen circumstances, and responsibility for the ultimate allocation of custodial time for each school is given to the Secretary-Treasurer.

Reactions, Responses, Reflections

This author's overall reaction to the staffing policies developed by this school division is a positive one. The administration and board for this district are to be congratulated for the meticulous and thorough approach they have taken in developing their platform for staff establishment.

Under guidelines for class sizes, this district has not "painted itself into a corner" or limited its flexibility as it establishes desirable ranges for home room class sizes to fall within rather than identifying pupil/teacher ratios that can be troublesome; problematic in that when ratios are exceeded by minimal amounts, a policy or formula indicates that changes should occur. When an acceptable range is identified, the school jurisdiction gives itself more leeway in assigning numbers of staff and students to classrooms.

Of equal significance to these ranges is the fact that class size maximums and minimums have been well defined for special areas like home economics and vocational education, where difficult decisions must often be made on the reality of offering certain courses. These decisions may be made easier with these boundaries in place.

Designating a "rounding off" value at .25 indicates that the board wishes to act responsibly in providing adequate teachers for their classrooms as well as treating their teachers as professionals. Allocating teachers in strange numbers like 18.375, 21.6, etc. may not be the most responsible method of staffing.

Basing staff allocation for high schools upon the number of student credits to be offered in the school is an interesting approach. It assumes that students in each of the three grade levels will be required to complete a certain number of credits per year in order to obtain their diploma, and the school should be staffed accordingly. As well, it assumes that teachers will be responsible for teaching a certain number of credits per year. This appears to be a sound method of appropriate sophistication.

Perhaps the only areas of the high school formula that could be questioned are the pre-determined numbers that the creators (board?) have arbitrarily chosen to reflect their staffing needs. These include:

- 1) defining 40, 35 and 30 credits as supposed average loads for students in Grades X, XI and XII.

- 2) specifying 28.5 students/class
- 3) indicating that teachers will teach 35 credits/year.

This is not to suggest that these numbers are particularly bad, but rather that they may be areas of concern to those who wish to create a formula similar to this one and may want to look carefully at establishing their own values.

Of particular interest to those who consider the identification of teacher preparation time as an important consideration in such a formula as this would be this district's "percentage approach". To determine amounts of preparation time based on the number of minutes a school operates per week is good common sense, as well as being responsible to the taxpayer.

To create such a comprehensive policy for the allotment of support and custodial staff as this district has, indicates that it is very concerned with the quality of assistance it provides for its teachers and schools. The decision makers of this jurisdiction are to be commended for the detail of its policies in these two areas.

Summary

After careful examination of the staffing policies, procedures and formulas of the five school jurisdictions delineated above, the next phase of this project is to develop a staffing formula for the Willow Creek School Division. Although there are some features of certain methods and routines that are more appealing to this author than others, perhaps it would be fair to say that the final product may be a reflection of education practice in all of the different regions.

FORMULA DEVELOPMENT

The Willow Creek School Division is a small, rural school district in Southern Alberta, servicing the agricultural communities of Fort Macleod, Granum, Claresholm, Stavely and Nanton with ten public schools. Several Hutterite Colony schools also fall under its jurisdiction. Because of the nature of providing education to communities such as these, the schools tend to be rather diverse in structure and format.

In the larger towns of Fort Macleod, Claresholm and Nanton, schooling is provided from ECS through Grade 12 by two or three schools. In the smaller communities of Granum and Stavely, schooling is offered from ECS to Grade 9. Most of the schools operate across two, and sometimes three, different divisions of the grade levels. Formats include:

K - 3, K - 4, K 9, 4 - 7, 4 - 8, 8 - 12, 9 - 12 and even one school that offers Grades 5 - 12.

Many students are bussed from the surrounding smaller communities to the Willow Creek Composite High School in Claresholm, as it can offer a wider range of programs than are available in the small schools. Fort Macleod schools contain a fairly concentrated population of Native students.

The purpose of the third and final stage of this research project was to construct a staffing formula for the Willow Creek School Division. This process was initiated by firstly meeting with the Willow Creek Superintendent of Schools to present and analyze the information compiled from the ERIC search and the request to comparable school systems for their documents on the subject. Then, working with the superintendent, the task of developing a formula that would meet the staffing requirements of the schools in this jurisdiction was undertaken. The following is a summary of how these events

unfolded, as well as the unveiling of the formula and policies which now stand as a testament to those labors.

Initial Conference

In a meeting with the superintendent of the Willow Creek School Division, an outline and summary of the materials compiled in the first two sections of this document was presented.

It was quickly established that although the works of AISD (1982) and Halliday (1989) are both substantial and beneficial to the field of staffing formulas, it would be inappropriate to build a formula for Willow Creek based on such tenets. It was decided that the basis of those formulas is just too sophisticated for the needs of a small, rural school division in Alberta.

This author recommended to the superintendent that the work of AISD and Halliday could provide a general basis for the construction of a staffing formula, but that the information collected from surrounding, comparable school districts would be of more use in the final analysis. The superintendent agreed wholeheartedly.

More specifically, following a recommendation from this author, it was decided that the bulk of the Willow Creek Staffing Formula would be modelled after the work of **School District B**, as outlined in the previous section of this document. This would provide a foundation to which other facets of staffing could be added, based on the procedures of the other four school districts. It was also agreed that the superintendent of School District B should be contacted to provide some clarification on some key points, and he was contacted at a later point in time.

The remainder of the meeting revolved around examining the documents collected from the five different school jurisdictions in Alberta with a concerted attempt

to identify those factors and variables from each that would be relevant to our task. With the research that this writer had already conducted in hand, recommendations were made to the superintendent on which aspects from each district were applicable to Willow Creek. When components were encountered with which this writer had no expertise, the superintendent was able to provide information and guidance as to what was suitable for Willow Creek.

This initial conference was concluded with an agreement that this writer would now pursue the construction of a formula for Willow Creek based on the decisions made at this meeting about the data collected. It was also decided that the superintendent would provide specific data on the demographics of Willow Creek that would be incorporated into certain areas of the formula (see Appendix G). After an initial draft of a formula, this data would also be used to "simulate" the staffing of some schools in Willow Creek. The results of these simulations would then be evaluated by this researcher and the superintendent in terms of suitability to the needs of Willow Creek. The outcomes of all of these decisions follow.

A Conversation with the Superintendent of School District B

In order to clarify some points in the staffing formula of School District B, the superintendent was contacted by telephone. Specifically, he was questioned on the structure of item 7 in their formula, Teacher Preparation Time. As outlined earlier, this section adds an allotment to the teacher entitlement of a school, based on a fraction of the total of the first five factors. In review of item 7, this exists as:

- for Elementary Schools

$$\frac{2 \times (\text{Total of No. 6})}{40}$$

- for Elementary - Junior High Schools

$$\frac{2.5 \times (\text{Total of No. 6})}{40}$$

- for Elementary - Junior - Senior High Schools

$$\frac{3 \times (\text{Total of No. 6})}{40}$$

- for Junior - Senior High Schools

$$\frac{3.5 \times (\text{Total of No. 6})}{40}$$

The superintendent was asked how the arbitrary values 2, 2.5, 3 and 3.5 were arrived at in these calculations. It was pre-supposed that these numbers indicated the number of preparation periods of 40/week that a teacher at each level should be allocated. The superintendent confirmed that supposition, suggesting that these values had been derived from "historical" circumstances in the schools. Further, he indicated that the implementation of this section of the formula had become somewhat problematic in his jurisdiction, as many schools were no longer operating on a 40-period week.

Along another line, the superintendent indicated that school administrators in his county were attempting to convince him that Special Education teachers and other special staff should be considered in the first five sections of the formula. This would provide a larger value in No. 6, thus providing a larger base for the Preparation Time calculation in No. 7. He conveyed that he was currently not contemplating giving in to such pressure, and the Special Education allotment for each school would continue to be addressed in a subsequent section of the formula. This also coincides with the tentative agreements made between this author and the superintendent of Willow Creek.

Second Conference

After an initial draft of a formula was constructed based on the decisions reached in the initial conference and the subsequent follow-up work, a second meeting between

this writer and the superintendent of Willow Creek was held to ensure that both were thinking along the same lines. The formula that follows is a combination of that initial draft and the thoughts presented in that second meeting.

The Formula

Following the precedent set by **School District B**, a county in southern Alberta, it was decided that the most appropriate staffing formula for Willow Creek would be a "running total" sort that would "build" to a final value, where the sum of a number of different staffing factors or considerations would provide a "staff entitlement" for each school. Some of these factors will be representative of considerations raised by the other four school districts surveyed. The combination of these considerations and the framework provided by School District B has led to the development of the two "potential" Willow Creek Staffing Formulas that follow.

Staffing Formulas for the Willow Creek School Division

Because of Willow Creek's relative newness to the concept of a staffing formula, as well as being somewhat hesitant about constructing a formula that might become more restrictive than useful, it was decided to develop two alternative drafts. These alternatives could then be examined further in terms of their appropriateness for Willow Creek. It could be that the final staffing formula for Willow Creek will be a combination of the two alternatives.

In particular, this decision was reached in order to address the complexities of staffing the high schools. It could be that Alternative B (with its "credit" approach, as modelled after School District B and a different approach to allocating administration time) is more facilitative to the staffing of high schools than Alternative A.

General Guidelines

As was the case with most of the formulas examined, school jurisdictions find it necessary to identify some general guidelines in the construction of a staffing formula. These factors may simply be factors that should be considered as the mathematical rules are developed, or they may be additional aspects of staffing that cannot be addressed mathematically. For Willow Creek, these guidelines shall include:

- Every school in Willow Creek shall be allocated a "trained" librarian.
- Guidance Counsellor time shall be allocated on a per school basis. (Modified in Alternative B.)
- Classes in Grades 3 - 9 shall not exceed a specified maximum (30 suggested); a smaller maximum shall be specified for split classes.
- Industrial Arts and Home Economics classes shall **not** be offered to classes of less than 10 and more than 20.
- Vocational Education classes shall **not** be offered to classes of less than 8 and more than 20.
- Senior High School Academic classes shall **not** be offered to classes of less than 10 and more than 32.
- Instructional and Preparation Time will be distributed as equitably as possible to all classroom teachers in each school.
- The superintendent of schools shall be responsible for ensuring that all schools are staffed according to this formula. Responsibility for the deployment of staff allocations in each school shall fall upon the principal and be subject to the approval of the superintendent.
- Support staff shall be allocated on a "historical" basis.
- Total staff allocations (including support staff) for each school shall always be rounded up to the nearest quarter (.25) F.T.E.
- The superintendent may add up to 1.5% staffing (on a division wide basis) to compensate for any special unforeseen circumstances.

These general guidelines shall be included with both alternatives.

Alternative A

The following formula is used in determining the number of professional staff in each of the division's schools:

1) ECS, Grades 1 and 2 **Number of Teachers**

Divide total grades 1 and 2 enrollment by:

22 for schools of more than 200 students

21 for schools of 150 - 200 students

20 for schools of 100 - 150 students

2) Grades 3 and Up

Divide total grades 3 and up enrollment by:

26 for schools of more than 250 students

25 for schools of 200 - 250 students

24 for schools of 150 - 200 students

23 for schools of 100 - 150 students

(It should be noted that the arbitrary values 20 - 26 are not indelible and may be modified at any time. For example, each value could be increased or decreased by the same amount, depending upon needs of the time.)

3) Guidance Counsellor

It was decided that guidance counsellor allocations should be conducted on a "per school basis". Some of the ten schools in Willow Creek will be allotted counsellor time based on some "historical" considerations and current needs. These schools include:

J.T. Foster School in Nanton

Stavelly Schools

Willow Creek Composite High School in Claresholm

West Meadow School in Claresholm

Granum Schools

G.R. Davis School in Fort Macleod

F.P. Walshe School in Fort Macleod

Counsellor time allocations may range from .25 to .75.

4) **Total 1 - 3**

5) **Teacher Preparation Time**

This section is designed to add to the teacher entitlement of a school based on a fraction of the entitlement to this point. The values A, B, C and D are totally arbitrary and may be chosen to represent "historical" considerations and current needs. Perhaps a reasonable suggestion would be that:

$$A = 3.5, B = 4, C = 4.5, \text{ and } D = 5.$$

The designation of four different calculations for schools of each type is not necessarily a permanent feature in the formula. It may be decided that fewer categories are necessary or indeed that one calculation is appropriate for all schools.

- for Elementary Schools

$$\frac{A \times (\text{Total of No. 4})}{40}$$

- for Elementary Junior High Schools

$$\frac{B \times (\text{Total of No. 4})}{40}$$

for Elementary - Junior - Senior High Schools

$$\frac{C \times (\text{Total of No. 4})}{40}$$

- for Junior - Senior High Schools

$$\frac{D \times (\text{Total of No. 4})}{40}$$

5) **Total of 4 and 5**

6) **Administration Time**

Up to and including X teachers in No. 5	- .75
Up to and including Y teachers in No. 5	- 1.00
More than Y teachers in No. 5	- 1.25

(The values of X and Y are totally arbitrary and are to be determined in consultation with the superintendent. The administrative allotments of .75, 1.00 and 1.25 may be subject to scrutiny as well.)

7. Total of 5 and 6 = Teacher Entitlement _____

Alternative B

The following formula is used in determining the number of professional staff in each of the division's schools:

1) ECS, Grades 1 and 2 Number of Teachers

Divide total grades 1 and 2 enrollment by:

22 for schools of more than 200 students
21 for schools of 150 - 200 students
20 for schools of 100 - 150 students

2) Grades 3 - 9

Divide total grades 3 through 9 enrollment by:

26 for schools of more than 250 students
25 for schools of 200 - 250 students
24 for schools of 150 - 200 students
23 for schools of 100 - 150 students

(It should be noted that the arbitrary values 20 - 26 are not indelible and may be modified at any time. For example, each value could be increased or decreased by the same amount, depending upon needs of the time.)

3) Guidance Counsellor

Staff will be assigned according to the following ratios:

Total Junior High Enrollment 1 : 500

Total Senior High Enrollment 1 : 400

Note: 1) The numbers: 400 and 500 are not indelible and may be subject to further scrutiny or modified as conditions in Willow Creek change.

4) Total of 1 - 3 _____

5) Teacher Preparation Time

As in Alternative A, this section will add to the teacher entitlement of a school, based on a fraction of the entitlement to this point. The values A, B and C are totally arbitrary and may be chosen to represent "historical" considerations and current needs. Perhaps a reasonable suggestion would be that:

$$A = 3.5, B = 4, \text{ and } C = 4.5.$$

- for Elementary Schools

$$\frac{A \times (\text{Total of No. 4})}{40}$$

- for Elementary - Junior High Schools

$$\frac{B \times (\text{Total of No. 4})}{40}$$

- for Elementary - Junior - Senior High Schools

$$\frac{C \times (\text{Total of No. 4})}{40}$$

Note: 1) This section has been modified from Alternative A. The junior/senior high school calculation does not appear, as prep time for high school teachers is "built in" to the next section.

6) Grades 10 - 12

For W.C.C.H.S. and F.P. Walshe, staff entitlement is based upon the number of student credits taught per grade level.

Grade X - enrollment x 40 = student credits

Grade XI - enrollment x 35 = student credits

Grade XII - enrollment x 30 = student credits

$$\text{No. of classes} = \frac{\text{Student credits}}{25 \text{ students/class}}$$

$$\text{No. of teachers} = \frac{\text{No. of classes}}{35 \text{ credits/teacher}}$$

Grades 10 - 12 - J.T. Foster High School

$$\text{No. of classes} = \frac{\text{Student credits}}{20 \text{ students/class}}$$

Note: 1) The numbers 20 and 25 students/class are not indelible and may be subject to further scrutiny. The number: 35 credits/teacher is fairly permanent; if it did change, it would probably increase, nominally.

2) W.C.C.H.S. and F.P. Walshe Schools run grades 9 - 12 and 8 - 12 respectively. It may be possible to include the junior high grades in this credit scheme so as to facilitate easier staffing of the whole school. Such a practice at J.T. Foster School (Grades 5 - 12) may be more difficult, as some teachers work at all three levels.

7) **Total of 4 - 6**

8) **Administration Time**

Administration time will be allocated to
W.C.C.H.S. and F.P. Walshe School on the ratio 1 : 275

Administration time will be allocated to
all other schools on the ratio 1 : 325

9) **Total of 7 and 8 = Teacher Entitlement**

SIMULATIONS

Using data supplied from the office of the Superintendent of Schools for the Willow Creek School Division, the following simulations were conducted to "test" the alternative formulas for suitability. The institutions simulated were chosen to represent the diverse nature of the schools in Willow Creek.

Simulation #1 - F.P. Walshe School

F.P. Walshe School in fort Macleod currently (1993-1994) offers schooling in Grades 8 through 12. With a full-time equivalent staffing of 23.25, it provides education for 412 students, 78 of which are Native Canadians. This produces a pupil/ratio of 1 : 17.7. Using Alternatives A and B, the following staffing simulations were conducted for this school:

Alternative A

The following formula can be used in determining the number of professional staff in F.P. Walshe School:

Number of Teachers

1) ECS, Grades 1 and 2

N/A for this school

0

2) Grades 3 and up

Divide total grades 3 and up enrollment by:

26 for schools of > 250 students

For F.P. Walshe, this value will be adjusted to 22, to more closely approximate what is currently being done in Willow Creek:

412/22 =

18.73

(It should be noted that the arbitrary value 22 will be subject to question before this type of formula is ever adopted or implemented.)

3) Guidance Counsellor

For Alternative A, it was decided that guidance counsellor allocations should be conducted on a "per school basis". Counsellor time allocations may range from:

.25 to .75

For F.P. Walshe School in Fort Macleod, it would seem appropriate to allocate the maximum of .75 counselling time.

.75

4) Total 1 - 3

19.48

5) Teacher Preparation Time

For F.P. Walshe School, it is appropriate to use the 4th option under this section, for Junior - Senior High Schools:

$$\text{Prep Time} = \frac{5 \times (\text{Total of No. 4})}{40}$$

$$\text{Prep Time} = \frac{5 \times 19.48}{40}$$

2.435

6) Total of 4 and 5

21.915

7) Administration Time

Up to and including 10 teachers in No. 5	- .5
Up to and including 15 teachers in No. 5	- .75
Up to and including 20 teachers in No. 5	- 1.00
More than 20 teachers in No. 5	- 1.5

F.P. Walshe School fits the last category:

1.50

(The values of 10, 15 and 20 are totally arbitrary and will be further reviewed in consultation with the superintendent. The administrative allotments of .5, .75, 1.00 and 1.5 may be subject to further scrutiny.)

8) Total of 5 and 6 = Teacher Entitlement

23.415

In following the initial "rounding" guideline put in place for this formula, it is fitting that F.P. Walshe School be allocated a FTE staff of:

23.5

Alternative B

The following formula can also be used in determining the number of professional staff in F.P. Walshe School:

Number of Teachers

1) Grades 1 and 2

Divide total grades 1 and 2 enrollment by:

22 for schools of more than 200 students

21 for schools of 150 - 200 students

20 for schools of 100 - 150 students

N/A for this school

0

2) Grades 3 - 9

Divide total grades 3 through 9 enrollment by:

26 for schools of more than 250 students

25 for schools of 200 - 250 students

24 for schools of 150 - 200 students

23 for schools of 100 - 150 students

Normally, this would include Grades 8 and 9 at this school but, for the purpose of continuity and the problem of assigning teachers who teach both Jr. and Sr. High classes, Grades 8 and 9 will be covered under Section 6:

0

3) Guidance Counsellor

Staff will be assigned according to the following ratios:

Total Junior High Enrollment 1 : 500

Total Senior High Enrollment 1 : 400

For F.P. Walshe School, this becomes a two-part calculation:

Jr. High Enrollment = 178

Sr. High Enrollment = 234

Counselling Time allocation at F.P. Walshe =

$$178/500 + 234/400 = \underline{\underline{.941}}$$

Note: 1) The numbers: 400 and 500 are not indelible and may be subject to further scrutiny or modified as conditions in Willow Creek change.

4) **Total of 1 - 3** .941

5) **Teacher Preparation Time**

It would not be appropriate to include this section, as prep time for all teachers is "built in" to the credit approach of the next section.

0

6) **Grades 8 - 12**

For F.P. Walshe, staff entitlement is based upon the number of student credits taught per grade level.

Grade VIII - $89 \times 40 = 3560$

Grade IX - $89 \times 40 = 3560$

Grade X - $82 \times 40 = 3280$

Grade XI - $78 \times 35 = 2730$

Grade XII - $74 \times 30 = \underline{2220}$

15 350

$$\text{No. of classes} = \frac{15\,350}{22 \text{ students/class}} = 697.72$$

$$\text{No. of teachers} = \frac{697.72}{35 \text{ credits/teacher}} = 19.93$$

Teacher Allocation at F.P. Walshe is:

19.93

7) **Total of 4 - 6** 20.87

8) **Administration Time**

Administration time will be allocated to F.P. Walshe School on the ratio 1 : 275

$412/275 = \dots$ 1.5

9) Total of 7 and 8 = Teacher Entitlement 22.37

In following the initial "rounding" guideline put in place for this formula, it is fitting that F.P. Walshe School be allocated an FTE staff of:

22.5

Reactions, Observations, Conclusions...

It is interesting to note that while Alternative A produces a staff entitlement slightly above what the school is currently being allocated, Alternative B yields a value .75 below the present FTE in F.P. Walshe School of 23.25.

The central consideration must be the number 22, as it is used in both alternatives. Even modifying it slightly produces a substantial change in the staff allocation for this school. It may be that a whole number is inappropriate for this calculation. A value like 21.5 or 22.5 may be more suitable.

For the purposes of Willow Creek, further simulations must be conducted before any final decisions are reached on a staffing formula and the student/class numbers must be carefully examined.

Simulation #2 - Granum Schools

Granum Schools currently (1993-1994) offer schooling in ECS through Grade 9. With a full-time equivalent staffing of 8.25, it provides education for 117.5 FTE students. This produces a pupil/ratio of 1 : 14.2. Using Alternatives A and B, the following staffing simulations were conducted for this school:

Alternative A

The following formula can be used in determining the number of professional staff in Granum Schools:

1) ECS, Grades 1 and 2

Divide total enrollment by:

20 for schools of 100 - 150 students

For Granum Schools: $30.5/15^* =$ 2.0

*(ECS students attend on a half-time basis. This explains a number like 30.5 FTE)

2) Grades 3 and up

Divide total grades 3 and up enrollment by:

23 for schools of 100 - 150 students

For Granum Schools: $87/18^* =$ 4.8

* (It seemed appropriate that the arbitrary values 20 and 23 should be 15 and 18 for Granum because of the small size of the school, the nature of its structure, i.e. many classrooms house two grades and the current pupil/teacher ratio in the schools.)

3) Guidance Counsellor

For Alternative A, it was decided that guidance counsellor allocations should be conducted on a "per school basis." Counsellor time allocations may range from:

.25 to .75

For Granum Schools, it would seem appropriate to allocate the minimum of .25 counselling time. .25

4) Total 1 - 3 7.05

5) Teacher Preparation Time

For Granum Schools, it is appropriate to use the 2nd option under this section, for Elementary - Junior High Schools:

$$\text{Prep Time} = \frac{4 \times (\text{Total of No. 4})}{40}$$

$$\text{Prep Time} = \frac{4 \times 7.08}{40}$$

6) Total of 4 and 5

.7

7.75

7) Administration Time

Up to and including 10 teachers in No. 5	.5
Up to and including 15 teachers in No. 5	- .75
Up to and including 20 teachers in No. 5	1.00
More than 20 teachers in No. 5	- 1.5

Granum Schools fit the first category:

.5

(The values of 10, 15 and 20 are totally arbitrary and will be further reviewed in consultation with the superintendent. The administrative allotments of .5, .75, 1.00 and 1.5 may be subject to further scrutiny.)

8) Total of 5 and 6 = Teacher Entitlement

8.25

In following the initial "rounding" guideline put in place for this formula, it is fitting that Granum Schools be allocated a FTE staff of:

8.25

Alternative B

The following formula could alternatively be used in determining the number of professional staff in Granum Schools:

1) Grades 1 and 2

Number of Teachers

Divide total grades 1 and 2 enrollment by:

20 for schools of 100 - 150 students

For Granum Schools: $30.5/15^* =$

2.0

2) Grades 3 - 9

Divide total grades 3 through 9 enrollment by:

23 for schools of 100 - 150 students

For Granum Schools: $87/18^* =$ 4.8

* (The arbitrary values 20 and 23 have again been replaced with 15 and 18 for the reasons stated under Alternative A.)

3) Guidance Counsellor

Staff will be assigned according to the following ratios:

Total Junior High Enrollment 1 : 500

For Granum Schools

Jr. High Enrollment = 30

Counselling Time allocation at Granum Schools =

$30/500 = .06$.1*

* (Common sense dictates that this value be rounded off or the concept of calculating counselling time becomes meaningless.)

4) Total of 1 - 3 6.9

5) Teacher Preparation Time

As in Alternative A, it is appropriate to use the 2nd option under this section, for Elementary - Junior High Schools:

$$\text{Prep Time} = \frac{4 \times (\text{Total of No. 4})}{40}$$

$$\text{Prep Time} = \frac{4 \times 6.9}{40}$$

.7

6) Grades 10 - 12

N/A for this school 0

7) **Total of 4 - 6** 7.6

8) **Administration Time**

Administration time will be allocated to
Granum Schools on the ratio 1 : 300

$$117.5/275 = .39 \quad \underline{\quad .4 \quad}$$

9) **Total of 7 and 8 = Teacher Entitlement** 8.0

In following the initial "rounding" guideline put in place for this formula, it is fitting that Granum Schools be allocated a FTE staff of:

8.0

Reactions, Observations, Conclusions...

As was the case with Simulation #1, the choice of arbitrary values such as 20 and 23 or 15 and 18 is critical to the workability of formulas for staffing. Because only slight increases or decreases in these values can create radical changes in the staff allocation for a school, officials charged with the responsibility of determining these numbers must be extremely cautious.

The allocation of .1 counselling time in Alternative B seems inconsequential, if not totally irrelevant. Allotting counselling time to a small school on a ratio basis is probably ill-advised.

In fact, it could be that a setting like Granum schools is just so small that applying formulas like these is totally inappropriate. Perhaps this situation is so special that a separate policy for its staff allocation must be developed.

Simulation #3 - J.T. Foster School

J.T. Foster School in Nanton currently (1993-1994) offers schooling in Grades 5 through 12. With a full-time equivalent staffing of 17.82, it provides education for 291

FTE students. This produces a pupil/ratio of 1 : 16.3. Using Alternatives A and B, the following staffing simulations were conducted for this school:

Alternative A

The following formula can be used in determining the number of professional staff in J.T. Foster School:

	Number of Teachers
1) ECS, Grades 1 and 2	
N/A for this school	<u>0</u>
2) Grades 3 and up	
Divide total grades 3 and up enrollment by:	
26 for schools of more than 250 students	
For J.T. Foster School: $291/20^* =$	<u>14.55</u>
* (It seems appropriate that the arbitrary value 26 should be 20 for J.T. Foster because of the size of the school, the nature of its structure, i.e. some teachers teaching at three different levels and the current pupil/teacher ratio in the school.)	
3) Guidance Counsellor	
For Alternative A, it was decided that guidance counsellor allocations should be conducted on a "per school basis". Counsellor time allocations may range from:	
.25 to .75	
For J.T. Foster School, it would seem appropriate to allocate a value roughly commensurate with current practice:	<u>.5</u>
4) Total 1 - 3	<u>15.55</u>
5) Teacher Preparation Time	

For J.T. Foster School, it is appropriate to use the 3rd option under this section, for Elementary - Junior - Senior High Schools:

$$\text{Prep Time} = \frac{4.5 \times (\text{Total of No. 4})}{40}$$

$$\text{Prep Time} = \frac{4.5 \times 15.55}{40}$$

	<u>1.64</u>
6) Total of 4 and 5	<u>17.19</u>
7) Administration Time	
Up to and including 10 teachers in No. 5	- .5
Up to and including 15 teachers in No. 5	- .75
Up to and including 20 teachers in No. 5	- 1.00
More than 20 teachers in No. 5	- 1.5

J.T. Foster School fits the third category: 1.0

8) Total of 5 and 6 = Teacher Entitlement 18.19

In following the initial rounding guideline put in place for this formula, it is fitting that J.T. Foster School be allocated a FTE staff of:

18.25

Alternative B

	Number of Teachers
1) ECS, Grades 1 and 2	
N/A for this school	<u>0</u>
2) Grades 3 - 9	
Divide total grades 3 through 9 enrollment by:	
26 for schools of more than 250 students	
For J.T. Foster School (Grades 5 - 9):	
197/20* =	<u>9.85</u>

* (It again seemed appropriate that the arbitrary value 26 should be 20)

3) Guidance Counsellor

Staff will be assigned according to the following ratios:

Total Junior High Enrollment 1 : 500

Total Senior High Enrollment 1 : 400

For J.T. Foster School, this becomes a two-part calculation:

Jr. High Enrollment = 118

Sr. High Enrollment = 94

Counselling time allocation at J.T. Foster =

$$118/500 + 94/400 = \underline{\underline{.471}}$$

4) Total of 1 - 3

10.32

5) Teacher Preparation Time

Since the staff entitlement to this point is based solely on elementary and junior high enrollment at J.T. Foster, it is appropriate to use the 2nd option under this section, for Elementary - Junior High Schools:

$$\text{Prep Time} = \frac{3.5 \times (\text{Total of No .4})}{40}$$

$$\text{Prep Time} = \frac{3.5 \times 15.55}{40}$$

1.36

6) Grades 10 - 12

For J.T. Foster High School, staff entitlement can be based upon the number of student credits taught per grade level.

Grade X	-	32 x 50	=	1280
Grade XI	-	29 x 35	=	1015
Grade XII	-	33 x 30	=	<u>990</u>
Total				3285

$$\text{No. of classes} = \frac{3285}{20 \text{ students/class}} = 164.25$$

$$\text{No. of teachers} = \frac{164.25}{35 \text{ credits/teacher}} = \underline{4.69}$$

$$7) \quad \text{Total of 4 - 6} \quad \underline{16.37}$$

8) **Administration Time**

Administration time will be allocated to
J.T. Foster Schools on the ratio:

1: 300

$$291/300 = .97 \quad \underline{1.0}$$

$$9) \quad \text{Total of 7 and 8} = \text{Teacher Entitlement} \quad \underline{17.37}$$

In following the initial "rounding" guideline put in place for this formula, it is fitting that J.T. Foster School be allocated a FTE staff of:

17.5

Reactions, Observations, Conclusions...

As was the case with F.P. Walshe School, once again it is interesting that Alternative A produces a staff entitlement slightly above what is currently being allocated and Alternative B yields a value .35 below the present FTE in J.T. Foster School of 17.85. Perhaps this can be attributed to the "precision" of Section 6 in Alternative B, Grades 10 - 12. By basing staff allocations upon the number of student credits required to be taught in the school, a very "exact" value is computed for the number of high school teachers needed. In actuality, the number of high school teachers necessary for a school of this "different structure" (Grades 5 - 12) may not be as easily calculated as this formula suggests. As was the case with Granum, perhaps some special considerations must be made for J.T. Foster School as well, at least at the high school level.

After conducting simulations of both alternatives in three very different school settings, it is conceivable that each of the formulas may be appropriate for some schools and inappropriate for others. Further, it may be that a combination of the two options presented here will provide a solution to the staffing question at still other schools. Whatever the choice may be for those who will determine the staffing formula for the schools of Willow Creek, additional simulations should be performed before any decisions are reached.

SUMMARY and RECOMMENDATIONS

This project is the first stage in the development of a staffing formula for the Willow Creek School Division. The next stage will involve the formulation of a committee charged with the responsibility of making decisions on what the actual formula will be. The members of this committee will be school administrators from across the division, as well as the superintendent. This author may be asked to act as an advisor/resource person for this group. The committee will then submit a proposal to the Board of Trustees for the Willow Creek School Division for their input and eventual approval. Most certainly, this document will provide direction for the undertakings of all parties.

To initially facilitate their task as well as provide closure for this piece, it is now suitable that a number of recommendations be made to those who will make the final decisions.

Recommendation 1

Although three simulations were executed to investigate the suitability of the alternatives presented, this is not enough testing of the proposals developed. Members of the committee who will seek to refine and further embellish the thoughts revealed here must be urged to conduct further simulations so as to expand the information base from which decisions will be made.

This author recommends that staffing simulations should be effected for all schools in Willow Creek before any conclusions are reached.

Recommendation 2

The two alternatives contributed in this endeavor are offered only as "potential" suggestions for Willow Creek policy. They are not proposed to be the state of the art development in staffing formulae. Perhaps their best contribution exists as a starting

point for the discussions that must occur in order for the developmental process to continue.

This author submits that the final staffing formula for Willow Creek may be a combination of the alternative proposals presented here and the staffing guidelines and procedures implemented in other jurisdictions that were mentioned but not included in Alternative A or B.

Recommendation 3

It is obvious that quality education is a moving target. Those who provide it must be continually aware of the need to update and revise plans, procedures, policies and practices.

This author recommends that the staffing policy for Willow Creek contain some provision for the continual assessment and evaluation of the effectiveness of the formula. Before any policy is adopted, it should be constructed so as to facilitate annual revision and possible amendment.

Recommendation 4

Whatever form the final staffing formula for Willow Creek takes, it should not result in a reduction of overall professional staff, at least not initially. This is suggested largely because of the work done by AISD presented in the literature review. This large metropolitan school district sought only to redistribute its teachers in activating their complex formula. Such action is appropriate for a small, rural school division as well.

This author submits that the final staffing formula for Willow Creek should not be used as a tool for the termination of and reduction in professional staff. Its purpose is to allocate the optimum number of teachers in every school so as to provide quality education, while at the same time being fiscally responsible.

Recommendation 5

As this project has unfolded, it has become apparent that the choices of important numbers in staffing formulas like PTR, percentage of administration time, teacher preparation time and counselling allocations, are crucial. In order to develop simulations that approximated current staffing procedures in Willow Creek, this author was forced to "play" and experiment with those important figures. As important as these values are, they must be carefully considered by the committee before any decisions are finalized.

This author encourages those who seek to develop staffing formulas to be flexible with the numbers they choose and be willing to change any and all numbers in the formula for the purpose of creating the best formula possible.

Recommendation 6

The process of developing such a key element in education as this formula is a lengthy and complex one. The ramifications of the decisions to be made on the staffing of schools are far-reaching in terms of the effect they will have upon the schooling of the children of Willow Creek. As a result, the final outcome must be reached only after serious contemplation, reflection and study of the matter at hand. Even though it has been suggested that Willow Creek has needed a staffing policy for some time and has fallen behind its comparable, neighbouring school districts in this regard, "quick" action could be detrimental to the purposes of such a project.

This author recommends that after a formula is finalized, it should not be implemented or adopted into policy for a period of at least one year.

Recommendation 7

At the time of this writing, it seems that the world of educational research is undergoing a "paradigm shift". That is, researchers are placing less value upon the rigor

and objectivity of the empirical, scientific, and quantitative methods for investigation and turning more toward subjective, qualitative measures in analysis of pedagogical questions. The belief that education is more of an "art form" than a "process" is becoming more and more prevalent. This suggests that we in education must be open to "messy" solutions to problems and recognize that there are some things that don't lend themselves to precision.

In conclusion, this author recommends a "human" approach to a staffing "formula" rather than a cut and dried, rigorous, mathematical model. In this frame of reference, "formula" refers as much to specific policy statements that are designed to handle the uniqueness of the diverse situations to be encountered in the interesting world of small town schools as it does to the accuracy of numeric computations. The staffing formula for Willow Creek may turn out to be "messy" rather than mathematically "tidy", as many different, specific situations and variables must be considered in the assorted schools across the division. This "messiness" should not be of concern to organizers; it is simply the nature of the beast.

REFERENCES

- Austin Independent School District. (1982). Elementary staffing study. Final technical report. Appendixes. Austin, Texas: Office of Research and Evaluation, AISD. pp. B10-B11, D3-D22, D59-D60. (ED228256)
- Austin Independent School District. (1982). 1981-1982 Evaluation findings. Austin, Texas: Office of Research and Evaluation, AISD. pp. XII-1 - XII-14. (ED228249)
- County of Lacombe No. 14. (1992). School staffing allotments. Education Policies Manual.
- County of Lethbridge No. 26. (1993). Summary of staffing. Office of the Superintendent.
- County of Mountain View No. 17. (1993). Professional staff positions. School Board policy.
- County of Mountain View No. 17. (1993). Reduction in staff work force. School Board policy.
- County of Mountain View No. 17. (1993). School libraries. School Board policy.
- County of Vulcan No. 2. (1988). Teaching staff formula. Board of Education Policy Handbook.
- Foothills School Division No. 38. (1983). Staffing formula and assignment of staff. Education Policies Manual.
- Foothills School Division No. 38. (1983). Support staff - Instructional. Education Policies Manual.
- Foothills School Division No. 38. (1983). Staffing formula - Custodians. Education Policies Manual.
- Halliday, I. (1989). Teacher management and records in the national education system: Resource book for educational administrators. London, England: Commonwealth Secretariat. Chapter 15. (ED341122)
- Willow Creek School Division. (1993). Information of current staffing in schools. Office of the Superintendent.

APPENDICES

APPENDIX A



COUNTY OF LACOMBE NO. 14
EDUCATION POLICIES MANUAL

CODE: GCD-R
TITLE: School Staffing Allotments

REFERENCE - LEGAL:
- CROSS:

PAGE: 1 of 2

The following regulations will be used to establish the administrative, instructional, and support staff school allocations. Subject to the approval of the Superintendent, the Principal shall determine school program needs and deployment of staff to provide for: teacher preparation time, administration time, and counselling services. Where circumstances warrant special consideration in the staff allotment, the Superintendent, in consultation with the principal, may change the staff allotment.

1. Instructional Staff

- a) Basic Staff Allocation (All Schools)
 - i) grades 1 & 2 - ratio 1:19
 - ii) grades 3-12 - ratio 1:20.5
- b) Small School Allocation
 - i) less than 200 - 1.5 teachers (Mirror, Clive)
 - ii) less than 100 - 1.0 teachers (Satinwood)
- c) Small High Schools (K-12) - 3 teachers (Alix, Bentley, Eckville)
(Eckville Elementary and Junior/Senior High School to be counted as one school for this allocation.)
- d) Vocational Education Allotment - 3 teachers (Lacombe Composite High School)
- e) Special Education - Allotment to be determined by need.
- f) Special circumstances - consideration given to schools with special needs not identified in the allotment.

The Superintendent may increase the overall staff entitlement by 1% of the total to accommodate special needs and circumstances.

2. Guidelines for Staff Deployment

a) Teacher Preparation Periods

The assignment of teacher preparation periods shall be assigned by the principal according to the following regulations:

- (i) No teacher (F.T.E.) shall be assigned less than a yearly average of 1400 minutes per week of instructional time.
- (ii) Part-time teachers may receive preparation time equivalent to the ratio of their employment.
- (iii) Principals may assign less than 1400 minutes per week instructional time in special circumstances where the teacher has assumed other responsibilities. The Principal shall inform the Superintendent of these special cases.

b) Administration

The principal of the school shall, in consultation with the Superintendent, determine the administrative time for each school administrator.



COUNTY OF LACOMBE NO. 14
EDUCATION POLICIES MANUAL

CODE: GCD-R
TITLE: School Staffing Allotments

REFERENCE - LEGAL:
- CROSS:

PAGE: 2 of 2

3. Course Enrolments

In consultation with the Superintendent, High School Principals are expected to plan programs within the following minimums with respect to course enrolments:

- Academic and general electives - Lacombe Composite High School - 20
- Academic and general electives - Small High Schools - 10

In all high schools, a second section of a course should not normally be considered until the enrolment exceeds 30.

- Vocational High School Courses - 12 - 10
- Vocational High School Courses - 22 - 8
- Vocational High School Courses - 32 - 8
- Business Education Courses - Lacombe Composite High School - 15
- Small High Schools - 10

* Special Consideration given to courses offered through Distance Education.

4. Definitions

- "Period" - is the equivalent of 40 minutes of instructions.
- "Special Class" - special education classes approved by the Board.
- "Program" - includes courses and special programs offered in a school.
- "Small Senior High Schools" - senior high schools with an enrolment less than 120.

5. School Support Staff

This allotment regulation applies to all school secretarial, library technicians, and teacher assistant positions not provided for under special education program arrangements.

One clerical staff for the first 200 students or fraction thereof in a school plus prorated additional staff for each additional 200 students.

One additional support staff will be allotted to each of the high schools.

(The Board will provide special allocation for Library support staff.)

Schools may provide support staff over and above this allotment from the school budget allotment.

May, 1980
Revised April, 1982
Revised June, 1986
Revised March, 1989
Revised June, 1992

APPENDIX B

<p>COUNTY OF VULCAN NO. 2 Board of Education Policy Handbook</p>	CONTROL CODE: GCK
	CATEGORY: TEACHING STAFF FORMULA

This formula would take the following factors into consideration:

- Grades 1 and 2, especially Grade 1, should have a lower enrollment than the higher grades.
- The small schools, because of being forced to have combined grades, should have a lower teacher-pupil ratio than medium and large schools. Milo and Arrowwood should have special consideration because of the high percentage of Native students.
- Lomond should have some extra staff consideration because of the low enrollment in the high school. The suggestion in this formula is that this extra consideration be one teacher.
- The two senior high schools should have some Guidance Counsellor time (other than the Principal).
- Industrial Arts and Home Economics classes are usually small. They range between 8 - 20 students. This is necessary because of the nature of the instruction and equipment available. The staffing formula suggests one extra teacher for Home Economics and one extra for Industrial Arts for the school offering these courses.

The following formula is used in determining the number of professional staff in each of the County schools:

1. Grades 1 and 2 Number of Teachers

Divide total grades 1 and 2 enrollment by:

22 for schools of more than 200 students

21 for schools of 150 - 200 students

20 for schools of 100 - 150 students

19 for schools under 100 students

18 for schools under 50 students (including Milo and Arrowwood because of the native students)

<p>COUNTY OF VULCAN NO. 2 Board of Education Policy Handbook</p>	CONTROL CODE: GCK
	CATEGORY: TEACHING STAFF FORMULA

2. Grades 3 and Up

Divide total grades 3 and up enrollment by:

26 for schools of more than 250 students

25 for schools of 200 - 250 students

24 for schools of 150 - 200 students

23 for schools of 100 - 150 students

22 for schools under 100 students

21 for schools under 50 students (including Milo and Arrowwood because of the native students)

3. Small High School

- add one teacher for a school which has a senior high enrollment of 50 students or less.

4. Guidance Counsellors - Senior High

.5 teacher for C.C.H.S.

5. Home Economics and Industrial Arts

- 1 teacher for Home Economics and 1 teacher for Industrial Arts at C.C.H.S.

6. Total 1 - 5

7. Teacher Preparation Time

- for Elementary Schools $\frac{2 \times (\text{Total of No. 6})}{40}$

- For Elementary - Junior High Schools
 $\frac{2.5 \times (\text{Total of No. 6})}{40}$

COUNTY OF VULCAN NO. 2 Board of Education Policy Handbook	CONTROL CODE: GCK
	CATEGORY: TEACHING STAFF FORMULA

7. Teacher Preparation Time (Cont'd)

- For Elementary - Junior - Senior High Schools

3 x (Total of No. 6)

40

- For Junior - Senior High Schools

3.5 x (Total of No. 6)

40

8. Total of 6 and 7

9. Leadership and Administration Time

Principals and Vice-Principals

0.25 basic - up to and including 4 teachers in No. 8

0.5 - over 4 up to & including 8 teachers in No. 8

0.75 - over 8 up to & including 12 teachers in No. 8

1.00 - over 12 up to & including 16 teachers in No. 8

1.25 - over 16 teachers in No. 8

10. Total of 8 and 9 Equals Teacher Entitlement

Date of Adoption: December 12, 1983

Date of Amendment: May 14, 1984

June 18, 1990

April 19, 1993

<p>COUNTY OF VULCAN NO. 2 Board of Education Policy Handbook</p>	Control Code: HIBA
	Category: SCHOOL AIDES

School Aides are provided in County schools to do a variety of tasks that include doing clerical duties, noon hour supervision and a variety of other activities connected with the school.

The Board of Education approves of the provision of lay personnel to schools for the purpose of enabling the principal, in particular, and also teachers to spend more time on matters directly related to the improvement of instruction.

I ELIGIBLE PERSONNEL

In these regulations the words "school aide" are used to describe lay personnel employed in the schools. The person engaged must be a reasonably competent typist. He/she should also be a responsible person who will not communicate confidential matters of the schools to the public.

II EXTENT OF ASSISTANCE

1. Schools shall be allowed school aide assistance on the following basis:

1- 50 students	14 hours/week
51-100 students	21 hours/week
101-150 students	28 hours/week
151-250 students	35 hours/week
251- students	49 hours/week

2. In addition to the above provisions, County Central High School shall be allocated one full time secretary-stenographer.

III RATE OF PAY

Rate of pay to be that which is established by the Board of Education.

Date of Adoption: September 12, 1961

Date of Amendments: February 12, 1968
October 8, 1968
November 9, 1970
August 19, 1974
August 15, 1977
May 12, 1986
November 21, 1988

APPENDIX C

SUMMARY OF STAFFING
1993-94
(June 1993)

ECS

<u>School</u>	<u>Projected No. of Students</u>	<u>Staff Allotment</u>	<u>1993-94 P.T.R.</u>
R.I. Baker	41.5	1.80	23.0:1
Coalhurst Elementary	19.0	0.90	21.1:1
Dorothy Dalgliesh	18.0	1.00	18.0:1
Noble Central	5.5	0.50	11.0:1
Sunnyside	8.5	0.50	17.0:1
TOTALS	92.5	4.70	19.7:1
	=====	=====	=====

NOTE: Each student is counted as 0.5 FTE.

Elementary

<u>School</u>	<u>Projected No. of Students</u>	<u>Staff Allotment</u>	<u>1993-94 P.T.R.</u>
Jennie Emery Elementary	313.0	14.72	21.3:1
John Davidson	144.0	6.36	22.6:1
Coalhurst Elementary	266.0	12.50	21.3:1
Dorothy Dalgliesh	124.0	5.75	21.6:1
Huntsville	67.0	3.18	21.1:1
Noble Central	110.0	5.00	22.0:1
Shaughnessy	65.0	3.18	20.4:1
Sunnyside	105.0	5.30	19.8:1
TOTALS	1,194.0	55.99	21.3:1
	=====	=====	=====

- NOTES: 1. Calculations do not include special education positions or administration allotments. Prep time is included.
2. Administration and preparation time staffing (in full-time equivalents) is as follows:

<u>School</u>	<u>Administration</u>	<u>Preparation</u>
Jenny Emery Elementary	1.28	0.72
John Davidson	0.64	0.36
Huntsville	0.12	0.18
Shaughnessy	0.12	0.18
Sunnyside	0.20	0.30
Dorothy Dalgliesh	0.75	0.25
Noble Central	0.10	0.00*
Coalhurst Elementary	1.00	0.50

* Arranged internally.

Percentages allotted for administration and preparation are guidelines

Hutterite Colony Schools

<u>School</u>	<u>Projected No. of Students</u>	<u>Staff Allotment</u>	<u>1993-94 P.T.R.</u>
Allenby	26.0	1.00	26.0:1
Chin Lakes	35.0	2.00	17.0:1
Gold Ridge	23.0	1.00	23.0:1
Hofmann	18.0	1.00	18.0:1
Rock Lake	14.0	1.00	14.0:1
White Lake	17.0	1.00	17.0:1
TOTALS	133.0 =====	7.00 =====	19.0:1 =====

Secondary Schools

<u>School</u>	<u>Projected No. of Students</u>	<u>Staff Allotment</u>	<u>1993-94 P.T.R.</u>
R.I. Baker	292.0	15.45	18.9:1
Picture Butte High	308.0	17.84	17.3:1
Kate Andrews High	403.0	19.55	20.6:1
Coalhurst High	216.0	11.50	18.9:1
Noble Central	86.0	4.60	18.7:1
TOTALS	1,305.0 =====	68.94 =====	18.9:1 =====

NOTES: 1. Staffing to account for industrial education and home economics is included in the above staff allotment as follows:

R.I. Baker	+1.50 FTE
Coalhurst High	+0.75 FTE

2. Calculations do not include special education positions.
 3. Administration time is not in the foregoing calculations. School allotments are as follows:

Kate Andrews High	1.25 FTE	Noble Central	0.40 FTE
R.I. Baker	1.00 FTE	Picture Butte High	1.00 FTE
Coalhurst High	0.75 FTE		

4. Preparation time is determined individually-by schools and is included in PTR calculations.

Special Education

<u>School</u>	<u>FTE Positions</u>
Jennie Emery Elementary	2.00
John Davidson	1.00
R.I. Baker	2.75
Picture Butte High	1.36
Kate Andrews High	1.00
Huntsville	0.00
Shaughnessy	0.20
Sunnyside	0.20
Dorothy Dalgliesh	1.20
Noble Central	0.40
Coalhurst High	1.00
Coalhurst Elementary	1.60
McMan	1.00
Central Office	<u>1.30</u>
 TOTALS	 15.01
	=====

APPENDIX D

GCA

PROFESSIONAL STAFF POSITIONS

POLICY

The Board believes that the allocation of professional or certified teaching staff to the schools shall be made on a rational basis treating all schools in a fair and equitable manner. To determine the number of professional positions on each staff, a staffing formula shall be developed and used.

GUIDELINES

1. A staffing formula will allot:
 - a) staff for general instruction in grades one through twelve;
 - b) administrative staff;
 - c) pupil personnel services staff;
 - d) library or instructional materials centre staff;
 - e) relief staff to provide preparation time for all teachers.
2. The Superintendent of Schools shall be responsible for ensuring that each school is staffed according to this policy and its supporting regulations. However, in order to provide flexibility in their implementation, the Superintendent shall have the discretionary power to adjust the staff allocation (upwards or downwards) in any school, so long as any such adjustment provides for less than a full-time teacher above or below formula.
3. This policy and its supporting regulations pertain only to the allocation of staff to schools. They do not imply staff utilization patterns within schools. This is the responsibility of the principal, subject to the approval of the Superintendent of Schools.
4. Staff is to be allocated on the basis of pupil enrolments as projected for the following September by the Superintendent of Schools as at April 1, with final staffing to be determined according to actual September 30 enrolments and February 28 enrolments.
5. The Superintendent may add up to 4.25% staffing (on a total County basis) to compensate for or to provide for programming difficulties, small school enrolment problems, etc.

PROCEDURES**School Staffing:**

Certificated teachers will be provided to schools on the basis of the following formulae:

1. General instruction -

Elementary	1 - 24 pupils
Junior High	1 - 23 pupils
Senior High	1 - 21 pupils

GCA

PROFESSIONAL STAFF POSITIONS

- 2 Special staffing (e.g. administrative, counselling, special education, library, relief teachers, etc.).

1 100 pupils

Legal Reference: The School Act, Section 44,ss (3), para (c)

Date of Approval: May 12, 1976

Dates of Amendment: May 11, 1977
July 8, 1981
September 8, 1993

GCPA

REDUCTION IN PROFESSIONAL STAFF
WORK FORCEPOLICY

The Board believes that where circumstances necessitate the reduction of professional staff, it should be performed reasonably and in a spirit of good faith.

GUIDELINES

1. Where staff reductions are necessitated due to declining enrolments or changes in program, it may be necessary to relocate staff or alternatively terminate contracts.
2. Offer of a transfer may be made under Section 85 of the School Act (1988) (Refer to Policy GCI). The decision of the Board to offer a transfer or terminate shall be based on consideration of all of the following:
 - a) qualifications of the professional staff to meet existing enrolment patterns, course offerings, stated educational objectives, and the needs of the school system;
 - b) relative competency of staff members;
 - c) seniority;
 - d) the availability of an alternative position suitable to the teacher's qualifications and interests, within the system.
3. The Board will give every consideration to offering a teacher that has been terminated under this policy a contract if a suitable position becomes available at a later date.
4. The Board delegates to the Superintendent responsibility for applying these criteria and for recommending to the Board those contracts of employment which should be terminated.
5. The Board shall give notice of termination of contract or of designation under Sections 88 and 90 of the School Act, stating the reasons for doing so.
6. The Board will, upon request, grant the teacher a hearing before the Board or a committee of the Board for the purpose of objecting to the termination of contract or of designation.
7. The teacher may terminate his/her contract by giving thirty (30) days notice in writing to the Board under Sections 89 and 90 of the School Act (1988).
8. A teacher has the right of appeal to a Board of Reference under Sections 114 and 115 of the School Act, providing he/she has not terminated the contract under Section 89 (1).

Legal Reference: The School Act (1988), Sections 87, 88, 90

Date of Approval: January 10, 1979

Dates of Amendment: April 13, 1983

HIBD**SCHOOL LIBRARIES****POLICY**

The Board believes that school libraries perform an essential function in the educational process. They serve to accommodate the diverse learning styles and informational needs of students and provide a combination of human and learning resources, facilities, equipment and processes that assist students in developing a commitment to informed decision making and the skills of lifelong learning.

Students should have access to a school library program which is integrated with the instructional programs and based on a cooperative planning model.

GUIDELINES

- 1) School library programs should be developed and implemented to meet and preferably to exceed the recommended minimum standards for school libraries as set forth by Alberta Education.
- 2) School library programs should:
 - a) provide services, facilities and materials that are integrated with the instructional program;
 - b) receive professional and technical direction by qualified personnel;
 - c) provide appropriate learning resources which meet curricular, informational and recreational needs;
 - d) provide an environment conducive to learning through effective use of space, facilities, equipment and supplies.
- 3) All school libraries should be open to students before school, during the lunch break and after school hours.
- 4) Wherever appropriate, services and materials available through other libraries and community agencies should be sought.
- 5) As members of Parkland Regional Library System schools receive a per pupil allotment grant for the purchase of print materials; therefore, each school library should have a clearly defined level of funding from the school mini budget to purchase materials not available through its PRLS allocation.
- 6) Inservice should be provided to staffs to acquaint them with the library program and to assist them with the most effective use of resources.

PROCEDURES

- 1) Every school shall develop a library program plan and include hours of operation.

HIBD

SCHOOL LIBRARIES

- 2) Professional and technical direction of the library program in a school should be related to school enrolment and meet or exceed the following:

SCHOOL SIZE	TEACHER-LIBRARIAN	TECHNICAL/CLERICAL
150 students	.25	.25
300 students	.5	.5 - 1
500 students	1	1
700 students	1	1.5 - 2
1000 students	1	2

Small schools may need special staffing consideration in order to achieve the goals of our library program.

In the absence of a teacher-librarian, professional direction and involvement will be provided by the principal and teaching staff of the school.

- 3) The size of the basic collection should be dependent upon the school enrolment and instructional program. A minimum basic collection for a school of 250 students should include:

print and nonprint materials	4000 titles	Preferred 5000
magazines	20 titles	30
newspapers	2	3
encyclopedias	1 current set	2
films, kits, video, etc.	as available from IMC or ACCESS	
pamphlets, pictures, models, globes - to meet program needs		

The ratio of fiction to nonfiction and reference should range from 15% - 30% fiction and 70% - 85% nonfiction and reference depending on the needs of the school.

- 4) While the Board recognizes its ultimate responsibility, the selection of learning resources is delegated to the professional staff.
- 5) Materials shall be selected in accordance with the guidelines set down in the following:
- Guidelines for Tolerance and Understanding
 - Controversial Issues Policy Statements
 - Canadian content priorities
 - Alberta Education Program of Studies
- 6) In selecting learning resources, professional personnel will consult reputable selection tools.
- 7) Gift materials shall be judged by the criteria outlined in guideline 5-
- 8) Selection is an ongoing process and will include the removal of materials no longer appropriate and the replacement of lost and worn materials. Weeded materials shall remain available for sale at a nominal cost to the public at least once during the school year.
- 9) If materials are challenged, the school receiving a complaint regarding a learning resource shall try to resolve the issue informally and the principal or other appropriate staff shall explain the school's selection procedure, and the intended educational usefulness of the particular resource.

HIBD

SCHOOL LIBRARIES

If the issue is not resolved and the questioner wishes to file a formal challenge, a copy of the Library Program Policy, Guidelines and Procedures and a REQUEST for RECONSIDERATION of LEARNING RESOURCES form shall be provided by the principal to the party concerned.

If, upon return of the form, which shall be forwarded to the Superintendent, and if the Superintendent cannot deal with the challenge to the satisfaction of the challenger, an advisory group shall be convened to consider the challenge.

The advisory group shall consist of members appointed by the Superintendent, and may make recommendations in regard to the acceptability of the resources in question. If the recommendations of the advisory group are not acceptable to the challenger, the recommendation shall be taken to the Board who may uphold, alter or reject the recommendations of the advisory group in order to resolve the issue. (see HNB)

Legal Reference: The School Act (1988).

Date of Approval: June 3, 1985

Date of Amendment: March 13, 1991
October 13, 1993

APPENDIX E

Foothills School Division #38
Education Policies Manual

Control Code.

G-301

Category:

**STAFFING FORMULA AND
 ASSIGNMENT OF STAFF**

The Board believes the assignment of staff and class size are very important factors in the provision of quality education to students. The assignment of appropriate numbers of teachers to the regular instructional program is a priority of the Board. As schools must be staffed by teachers performing a variety of different roles, staff shall be allocated in accordance with a divisional staffing formula. Administrators are expected to deploy staff to leadership and other professional support roles in an amount of time equivalent to but not exceeding the formula allocations. Staff allocations for Special Education programs, other than resource, will also be approved by the Board.

The overall administration of this policy is the responsibility of the Associate Superintendent, Human Resources. Administration of this policy at the school level is the responsibility of the principal.

Amended: 17 June 1992

Amended: 15 August 1988

Amended: 07 September 1983

Foothills School Division #38 **Education Policies Manual**

Control Code

G - 301 R

Category:

STAFFING FORMULA AND
ASSIGNMENT OF STAFF

Guidelines

The Board believes these to be the primary objectives to be considered by Principals in assigning responsibilities to teachers.

1. Class sizes, student groupings and overall school organization should focus upon the provision of high quality learning experiences for students.
2. Principals will consult with staff prior to finalizing school organization and staff deployment.
3. Whenever possible, regular homeroom classes should be organized within the following class size ranges:

Grades 1 - 2	- 21 - 27
Grades 3 - 6	- 23 - 30
Grades 7 - 9	- 23 - 32
Grades 10 - 12	- 20 - 32

Note:

- a. Classes in grades 3 - 9 may not exceed a maximum of 32 (27 for split classes) students.
- b. Industrial Arts and Home Economics - minimum 12; maximum 20.
- c. Vocation Education - minimum 8; maximum 20.
- d. Senior High School Academic - minimum 12; maximum 34.
4. Instructional and Preparation Time should be distributed equitably to classroom teachers.
5. Differentiated teaching time should be assigned to teachers assuming administrative, counselling and library duties in order that they may reasonably meet Board expectations for the fulfillment of these additional responsibilities.

Amended: 21 April 1993
 Amended: 17 June 1992
 Amended: 20 September 1991

Page 1 of 4

G-301 R

STAFFING FORMULA AND
ASSIGNMENT OF STAFFSTAFFING ALLOCATION GUIDELINES:

The total of the following allocations rounded to the nearest .25 shall be a guideline for allocating staff to each school.

1. General Staff Allocation:

Grades 1 - 2 - Divide Grade 1 and 2 enrolments by 22.5 to obtain staff entitlement.

Grades 3 - 9 - Divide Grade 3 to 9 enrolments by 27 to obtain staff entitlement.

Senator Riley and Foothills Composite

Grades 10 - 12 - based upon number of student credits taught per grade level

Grade X = enrolment x 40 = student credits

Grade XI = enrolment x 35 = student credits

Grade XII = enrolment x 30 = student credits

Student credits = no. of classes
28.5 students/class

No. of classes = no. of teachers
35 credits/teachers

Oilfields (gr. 10-12)

Student credits = no. of classes
24 students/class

2. Centralized Special Education Rooms:

LD Primary/Inter. Level I	- Joe Clark	1.0
GLD Level II/III	- Joe Clark	1.0
GLD Level II	- Composite	1.0
GLD Level II/III	- Okotoks Jr.	1.0
LD Junior	- Okotoks Jr.	2.0
LD Primary/Inter.	- C. Ian McLaren	1.0
GLD Primary Level I	- C. Ian McLaren	1.0
GLD Junior Level I	- C. Ian McLaren	1.0
GLD Primary Level I	- Spitzee	1.0
GLD Inter. Level I	- Spitzee	1.0
GLD III	- P.P.E.	1.0
LD Classrooms	- P.P.E. (3 rooms)	3.0
GLD II/III (Challenge)	- Big Rock	1.0
ACE - Alternative Community Education Program	- (F.C.E.S.)	<u>1.0</u>
		17.0

Amended: 21 April 1993

Amended: 17 June 1992

Amended: 20 September 1991

Foothills School Division #38 **Education Policies Manual**

Control Code

G - 301 R

Category:

**STAFFING FORMULA AND
 ASSIGNMENT OF STAFF**

3. Resource Time:

Staff will be allocated based upon the Elementary enrolment divided by 350.

4. Learning Assistance Program: (as approved by administration on a centralized basis)

Joe Clark	.5
Okotoks Junior High School	1.0
Senator Riley	.5
Foothills Composite	.5

5. Industrial Arts/Home Economics:

A full time teacher equivalent will be deducted from feeder school staffs and added to the magnet school in accordance with the following formula:

$$\text{STAFF} = \frac{E}{20} \times \frac{120}{1400}$$

where E = enrolment in the program

6. Occupational Program:

Staff will be allocated based upon the ratio:

1:11

NOTE: The sub-total of the above will relate to the calculation of the preparation time.

7. Administrative Time:

Administrative time will be provided based upon the ratio of:

1:325

8. Special Education Administrative Time:

Additional administrative time will be provided at the rate of .05 F.T.E. for each Special Education classroom housed in a school.

Amended: 21 April 1993
 Amended: 17 June 1992
 Amended: 20 September 1991

Page 3 of 4

G - 301 R

STAFFING FORMULA AND
ASSIGNMENT OF STAFF

9. Counselling:

Staff will be allocated based upon the following ratios:

Total Junior High Enrolment	
(in schools of over 200 JHS students)	1:450
Total Occupational Program Enrolment	1:150
Total Senior High Enrolment	1:300

10. Library:

Staff will be provided to senior high schools on the basis of the proportion of the ratio 1:700.

11. Preparation Time:

The preparation time provided shall be based upon the sub-total of 1 - 6 and based upon the following percentages:

School which operates	1510 - 1529 min/wk - 6%
	1530 - 1559 min/wk - 8%
	1560 - 1600 min/wk - 10%
	1601 - 1640 min/wk - 12.5%

12. The total of the above allocations rounded to the next nearest quarter (.25) shall be a guideline in establishing the total professional staff allocated to each school. The total allocation will be determined considering the staffing formula, school organization, the pupil-teacher ratio (exclusive of segregated Special Education classes) and the unique needs of the school. The Associate Superintendent, Human Resources, in consultation with the Superintendent of Schools, may approve additional staff to schools based upon their overall needs.

For the purposes of this regulation, enrolment figures will be examined September 2nd, 30th and February 3rd of each school year. Senior high schools will be staffed based upon the specific enrolment for each.

Foothills School Division #38 **Education Policies Manual**

Control Code

G - 416 R

Category: SUPPORT STAFF - INSTRUCTIONAL

I GENERAL ALLOCATION

Hours Allocated Per School Year (September 1 to August 31):

Instructional hours shall be provided to each school according to the staffing formula below. Total Hours of Instructional Support Staff time allocated to a school based on September 30th enrolments of the current school year, (exclusive of statutory holidays) shall be arrived at on the basis of the following formula:

NOTE: As a result of budget decisions, support staff allocations for the 1993/94 school year will be 95% of the amount provided by formula.

Basic Allocation Per School	1400 hours
PLUS: Allocation Per F.T.E. Teacher	50 hours
* ECS/ELEM. Alloc. for 1 to 100 students (F.T.E.)	3.0 hrs/student
* ECS/ELEM. Alloc. for 101 to 200 students (F.T.E.)	2.5 hrs/student
* ECS/ELEM. Alloc. for over 200 students (F.T.E.)	2.0 hrs/student
PLUS: JES Alloc. for 1 to 100 students	3.2 hrs/student
JES Alloc. for 101 to 200 students	3.2 hrs/student
JES Alloc. for over 200 students	3.2 hrs/student
PLUS: SES Alloc. for 1 to 100 students	9.0 hrs/student
SES Alloc. for 101 to 200 students	6.0 hrs/student
SES Alloc. for over 200 students	3.5 hrs/student
PLUS: Summer wind-down and start-up	
Larger Schools - 401 + Oilfields	140 hours
Medium Schools - 201 - 400	100 hours
Smaller Schools - 100 - 200	70 hours
PLUS: Resource Assistance:	
<u>Elementary Enrolment Minus Total Sb. Ed. Enrol</u>	= x hrs.
3	
PLUS: Centralized L.A.P.	
<u>Junior High Enrolments Minus Total Sb. Ed. Enrol</u>	= x hrs.
3	
PLUS: <u>Special Additions</u> (per school year)	
Foothills Composite:	
Foods - Cafeteria	<u>2,790 hours</u>
Beauty Culture	<u>1,395 hours</u>

Where special need is shown for additional clerical assistance, the Divisional Administration may approve time in addition to the above allotments.

* For those ECS programs under the jurisdiction of Foothills School Division.

Amended: 21 April 1993

Amended: 17 June 1992

Amended: 27 March 1992

Page 1 of 3

G-416 R

SUPPORT STAFF - INSTRUCTION/

A maximum surplus of 10% of the current year's allocation will be allowed and will be carried forward to the succeeding year. Any deficits incurred will be deducted from the succeeding year's allotment.

=====

INSTRUCTIONAL SUPPORT STAFF

(SECRETARIES, LIBRARY ASSISTANTS, GENERAL OFFICE ASSISTANTS)

The instructional hours allocated under the above formula will be supported as follows:

<u>NO DEDUCTION FROM ALLOCATION</u> <u>(supported directly by Division)</u>	<u>DEDUCTED FROM ALLOCATION</u> <u>* ALL TIME AS APPROVED BY PRINCIPAL</u>
<ul style="list-style-type: none"> ■ Statutory Holidays ■ Sick Leave ■ Medical/Dental Appointments ■ Compassionate Leave ■ Planning and Advisory Committees (as requested by Div. Admin. and do not benefit the school directly) 	<ul style="list-style-type: none"> * July Wind-up and August Start-up * All regular operational days worked including: <ul style="list-style-type: none"> . Preparation Days . Professional Development Days . Professional Development Activities * Staff meeting and Parent-Teacher Interview time * Emergency closure of schools (time definite) * Orientation sessions

=====

SPECIAL EDUCATION SUPPORT STAFF

(HANDICAPPED STUDENT ASSISTANTS AND SPECIAL EDUCATION TEACHER ASSISTANTS, ESL ASSISTANTS AND CLASSROOM TEACHER ASSISTANTS RESULTING FROM HEAVY ENROLMENTS)

Special Education Support staff will be supported as follows:

<u>NO DEDUCTION FROM ALLOCATION</u> <u>(supported directly by Division)</u>	<u>PROVIDED AS PART OF THE</u> <u>ALLOCATED HOURS/WEEK</u> <u>* IF DEEMED NECESSARY AND</u> <u>APPROVED BY THE PRINCIPAL</u>
<ul style="list-style-type: none"> ■ Statutory Holidays ■ Sick Leave ■ Medical/Dental Appointments ■ Compassionate Leave ■ Planning and Advisory Committees (as requested by Div. Admin. and do not benefit the school directly) 	<ul style="list-style-type: none"> * 5 Professional Dev. Days/year * other Prof. Development activities <ul style="list-style-type: none"> * 2 Preparation Days/year (August and January) * Time for Staff meetings and Parent Teacher Interviews as approved by the Principal (keeping within allocated hours) * Orientation Sessions * Emergency Closure of schools (time definite)

Amended: 21 April 1993
Amended: 17 June 1992
Amended: 27 March 1992

Foothills School Division #38 Education Policies Manual

Control Code

G - 416 R

Category

SUPPORT STAFF - INSTRUCTIONAL

II. SPECIAL ALLOCATIONS

Special Education Teacher Assistants (SETA) and Handicapped Student Assistants (HSA):

An allocation of personnel may be made relative to specific Special Education classrooms as needed. These hours are not included in the general allocation above (I).

1. Handicapped Student Assistants are employed to manage and assist with individual student needs; in certain circumstances the assistant may be required to supervise more than one student. At the teacher's discretion, Handicapped Student Assistants may be assigned to work with other children in other classrooms. This situation may occur when the Handicapped Student Assistant's designated student is being integrated into other programs and/or classrooms or if it is felt that the student's dependency on the Handicapped Student Assistant is no longer required or is in need of being reduced over time. If the student(s) leaves or the condition(s) change so that no further assistance is required, the position is terminated. These positions are dependent on the needs of the student(s) and are viewed on an ongoing basis. The needs of the program and the individual student(s) are primary to the existence of this position.

Tentative placement for the forthcoming year will be communicated in writing by the Personnel Office in consultation with the Assistant Superintendent (Student Services) by June 25th with confirmation of the placement by September 15th. The Principal and/or Special Education teacher are responsible for notifying the Assistant Superintendent (Student Services) prior to June 15th of each year of any of the above-noted changes affecting a Handicapped Student Assistant position. Termination of any of these positions will not occur until discussions have been held between the Assistant Superintendent (Student Services), the Principal and Special Education teacher.

The Handicapped Student Assistant will be given a minimum of two weeks notice in the event the position is terminated. If this notice period is not possible due to circumstances, the Handicapped Student Assistant will be placed in another temporary position in the school or Division for two (2) weeks or be given two weeks pay in lieu of notice. The employee may be transferred to another ESA or other position if a suitable vacancy exists.

DEFINITIONS:

SETA: A Special Education Teacher Assistant placed in the General Learning Difficulties or Learning Difficulties classrooms to provide general assistance to the teacher and students.

Amended: 21 April 1993

Amended: 17 June 1992

Amended: 27 March 1992

Page 3 of 3

G - 416 R

SUPPORT STAFF - INSTRUCTIONAL

HSA: A Handicapped Student Assistant provides care and assistance to an individual student in either a special education classroom and/or a regular classroom.

III. GUIDELINES:

1. Classifications:

The following specific positions are permissible under the allocation:

Secretary IV - one in schools of 400 or more students (plus high schools)

Secretary III - one per school except at Foothills Composite where a maximum of two shall be permissible.

Secretary I or General Assistant - one or more per school.

Library Assistant - one per school.

Beautician II, Cook I and Cook II - Foothills Composite.

The classification of instructional support staff shall be as follows:

GROUP I: Secretary I, General Assistants, SETA's (Special Education Teacher Assistants), Beautician I and Cook I.

GROUP II: Handicapped Student Assistants, Cook II, Beautician II.

GROUP III: Secretary III (Only one Secretary III per approved school).

GROUP IV: Secretary IV (Only one Secretary IV per approved school).

2. Transition Period:

During the transition to the new 4 Group Classification, Secretaries in Group III or IV will not be moved to Step 5 or 6 in year one but merely to the next highest salary level in the Group to which the Secretary was reclassified. After this transition year they may be recommended for movement along the steps (wherever applicable.)

Foothills School Division #38 Education Policies Manual	Control Code G - 416 R
	Category SUPPORT STAFF - INSTRUCTIONAL

3. Probationary Period:

Instructional Support Staff shall be on a minimum six-month probationary period commencing at Step 1. If there is evidence of previous specialized training, the employee may commence at Step 2. If documentation shows evidence of combined training and related experience, the employee may commence at Step 3.

4. Evaluations/Increments:

(a) Probationary Increment:

Following the satisfactory completion of the probationary period, a positive evaluation report and upon the recommendation of the principal and approval of the Deputy Superintendent, full and part-time employees will be classed as permanent staff and promoted to the next higher step of the same group. (Please refer to G-140.6 R - Supervision and Evaluation of Support Staff.)

(b) Yearly Increments:

One year from the last increment, and upon the recommendation of the principal, the employee may be promoted, but only to the next higher step.

(c) Increments for Part-time Employees:

In keeping with the incremental policies set forth for part-time and full-time instructional support staff, part-time employees will qualify for an increment after the completion of the probationary period and thereafter upon the accumulation of 850 hours. No employee may qualify for more than one increment per year.

(d) Employees in one group when moving to a higher group should be placed at a step which would not result in loss of rate of pay per hour.

(e) When an employee is promoted from Group I to Group II, III, or IV, that person may be moved to lower steps to give recognition to the fact that a competency level in one group does not automatically indicate competency in the higher group.

(f) During the first year of implementation of the Group IV classification effective September 1, 1990, employees who are currently at Step 5 or 6 shall be placed at Step 4 of Group III or Group IV (whichever is applicable). Yearly increments on the grid will follow according to 4(b) above.

Amended: 21 April 1993
 Amended: 17 June 1992
 Amended: 27 March 1992

Page 5 of 8

G - 416 R

SUPPORT STAFF - INSTRUCTIONAL

5. Pay Scale:

See Appendix (A) - To Principals, Para-Professional Association and Executive Council only.

6. Responsibility:

The general responsibility of the Instructional Support Staff is to assist the professional staff to achieve the educational objectives of the school. Specific expectations and responsibilities are outlined in the individual job descriptions.

7. Hours Of Work:

Hours of work for full-time and part-time staff shall be set by the principal and in no case shall be less than 2 hours per day.

8. Statutory Holidays: (See G-422 R)9. Attendance of Special Education Support Staff at Staff Meetings, Parent/Teacher Interviews, etc.

Special Education Assistants (ESA, SETA, ESL) are assigned a maximum number of hours per week, for example, 35 hours per week on days that the student(s) attends. Administration will be expected to adjust the work schedule to facilitate attendance at Parent/Teacher Interviews, staff meetings, etc. keeping within the original allocation of hours. Special education staff who attend Professional Development days will continue to be paid according to their usual daily allocation of hours. (Preparation days, lieu days, etc. cannot be claimed.)

Example: If special education support staff attend staff meetings, parent/teacher interviews, or other similar functions, principals and teachers must ensure that the special education support staff work a reduced work week or days in order to adhere to the assigned number of hours. In no case will extra hours be paid beyond the original weekly allocation.

10. Salary on School Closure Days: (See G-422 R)11. Absences: (see G-422 R)

Foothills School Division #38
Education Policies Manual

Control Code

G - 416 R

Category

SUPPORT STAFF - INSTRUCTIONAL

12. Substitutes:

- a) In the event of illness, the principal shall be empowered to arrange for substitute coverage if necessary. If a substitute is required for an Instructional Support Staff member, the hours of the substitute shall be deducted from the school's allocation whereas the salary of the regular permanent employee shall be borne by the Division. At the discretion of the Principal, the substitute may be paid at Step I of the applicable group to which the employee they are replacing is assigned or Step I of a lower group depending upon the qualification and experience of the substitute.
- b) Substitutes for Instructional Support Staff shall be selected from a Division-approved list.

13. Casual or Temporary Employees:

Casual help approved by the Principal shall be reimbursed based upon Group I, Step I of the Pay Scale or at a rate approved by the Deputy Superintendent of Schools (i.e. casual student help). STEP, PEP, ESP, and other government funded programs shall be administered in accordance with the guidelines set forth.

14. a. Salary Computation - 20 hours/week or OVER:

Eighteen (18) days per month for September to June (the 18 days includes professional development days, teacher convention days, parent/teacher interview days, etc.) *If you do not work these days or you have any personal leaves during the month, they will be adjusted on your cheque for the following month.

Sixteen (16) days for the month of July.

Holiday pay for the month of August.

Any extra hours that you are required to work during the month will be paid on your cheque for next month.

Please note that statutory holidays are in addition to in the 18 working days. Hours worked for statutory holidays, absences for illness, medical/dental appointments, compassionate leave, personal leave, etc. are to be reported on the monthly Time Sheet and Absentee Report (PR 110), signed by the employee, approved by the Principal or Supervisor and returned to the Payroll Supervisor at Division Office no later than the 4th of the following month.

Amended: 21 April 1993

Amended: 17 June 1992

Amended: 27 March 1992

Page 7 of 8

G-416 R

SUPPORT STAFF - INSTRUCTIONAL

Any adjustments, personal leave, or extra hours worked will be adjusted on following month's pay. If an employee has worked more than 190 days, the additional days will be included in the June pay. If they work less than 190 days, the days not worked will be deducted on their June pay. If any employee terminates employment during the year, adjustments will be made in accordance with days worked. Holiday pay will be included in the June pay or termination date only.

b. Salary Computation - LESS THAN 20 hours per week:

Instructional support staff working under 20 hours per week will be paid by automatic deposit on the 16th day of the following month for total hours worked for the previous month (e.g. all hours worked from September 1-30 will be paid by the 16th of October). All time will be reported on the monthly Time Sheet and Absentee Report (PR 110), signed by the employee, approved by the school principal or supervisor and returned to the Payroll Supervisor at Division Office no later than the 4th day of the month. Holiday pay will be paid on termination date or in the June pay.

- 15. Sick Leave Benefits: (See G-422 R)
- 16. Employee Benefits: (See G-422 R)
- 17. Job Posting: (See G-422 R)
- 18. Confidentiality: (See G-422 R)

Provision of Additional Assistance to Schools

While all schools run a variety of extra-curricular activities such as drama festivals, science fairs, debate tournaments, etc. which require additional para-professional time and/or funding, it is appropriate that each school plans which activities it can support from regular time and budget allocations, and which should be partly or wholly supported by fees (e.g. entry fees) charged to the specific event.

Exceptions to this general rule will be considered when:

- a) It is a major provincial or national event.
- b) Supporting fees are set beyond the control of the sponsoring school.
- c) Need is clearly demonstrated in advance by the presentation in writing of a detailed budget.

Foothills School Division #38 **Education Policies Manual**

Control Code

G-418.1 R

Category STAFFING FORMULA - CUSTODIANS

School _____ Date _____

1. No. of F.T.E. Students as at _____)
 No. of E.C.S. Students (F.T.E.) + _____) $\div 225 =$ _____
2. No. of F.T.E. Teachers as at _____)
 No. of E.C.S. Teachers (F.T.E.) + _____) $\div 11 =$ _____
 No. of F.T.E. Para-Prof. Staff + _____)
3. No. of Classrooms (including Library) _____ $\div 8 =$ _____
4. Gross Area (sq. ft., incl. Portables) _____ $\div 15,000 =$ _____
5. TOTAL _____
6. Full Time Equivalent Required (line 5 \div 4) _____
7. Hours per week per formula (line 6 \times 40) _____
8. Variable hours per week per Schedule (see below**) _____
9. Total hours per week (line 7 + line 8) _____
10. F.T.E. required (line 9 \div 40) _____
11. Rounded to the nearest .25 F.T.E. _____

****Variable Hours per Week**

Grade Level _____
 Mud Factor (low, medium, high) _____
 Floors (number above 1) _____
 Community Use (low, medium, high) _____
 Adult Education (low, medium, high) _____
 Supervision of Custodial Staff _____
 Portables _____
 Relocatables _____
 * Design & Location _____
 Community School Status _____
 TOTAL Variable Hours/Week _____

* _____

Amended: 15 DECEMBER 1989

Amended: 30 NOVEMBER 1987

Amended: 19 MAY 1987

G-418.1 R

STAFFING FORMULA - CUSTODIANS

VARIABLES INCLUDED IN CUSTODIAL STAFFING ALLOCATION

	<u>Hrs/Wk</u>
Floor Levels: Number above 1	1.0
Grade Level: Per Jr. High Grade in Elementary School (maximum 7.50)	2.5
Jr. or Sr. High School	10.0
Mud Factor: Low	2.5
Medium	5.0
High	7.5
Community Use: Low - under 15 hrs/wk	1.0
Medium - 15-30 hrs/wk	3.0
High - over 30 hrs/wk	5.0
Adult Education: Low - under 10 hrs/wk	0.5
Medium - 10-15 hrs/wk	1.0
High - over 15 hrs/wk	1.5
Portable Classrooms: per classroom	1.25
Relocatable Classrooms: per 8 classrooms	2.5
Supervision of Custodial Staff: per 2 hr shift for each custodian except Head Custodian (maximum 1 hr per 8 hr shift)	.25
Community School Status	5.0

NOTE:

Variable hours will be reviewed from time to time and adjustments made when necessary.

Under special circumstances additional hours may be approved by the Secretary-Treasurer in consultation with the Director of Maintenance and Principal.

The final allocation of custodial time for each school shall be the responsibility of the Secretary-Treasurer.

Amended: 15 DECEMBER 1989

Amended: 31 OCTOBER 1989

Amended: 26 FEBRUARY 1988

APPENDIX F

Box 610
Nanton, Alberta
T0L 1R0

Superintendent of Schools

Dear Sir/Madam:

I am an M.Ed. student at the University of Lethbridge. In completion of the requirements for my degree, I am currently conducting a research project that investigates the development of a **staffing formula** for my own jurisdiction, the Willow Creek School Division. With this goal in mind, I am writing you now to request your assistance with my research.

My advisor for this project is Dr. E. Falkenberg of the Faculty of Education at the University of Lethbridge. I am also working in consultation with my own superintendent, Mr. E. Patterson, whose cover letter you found enclosed.

Staffing policies, practices and formulas continue to be difficult, if not controversial, topics to address in educational administration. The combination of factors like declining enrollments, budgetary concerns, local politics and increases in curricular demands has created an issue in education that is difficult to get an objective handle on. Consequently, not much literature exists that deals specifically with staffing formulas.

I have been advised that your school system, along with six others I have chosen, is comparable to Willow Creek in terms of its size and structure. Therefore, I respectfully request that you send me all policies and/or information that your jurisdiction implements as it addresses the business of staffing its schools.

Perhaps my inquiry is best stated specifically as follows:

Does your district use any specific formula(s) that facilitate(s) the assigning of classroom teachers, assistant principals, teacher assistants, clerical staff, counsellors, librarians and/or any special subject areas (like Art or Music) to any or all of your schools? If so, what are these formulas and how are they applied?"

I appreciate the magnitude of the task of compiling a response to such a request, particularly at this busy time in the school year. Further, I understand the boldness of my solicitation. I can only say that I would be most happy to share any and all information that I am able to gather from other Alberta school jurisdictions like yours, thus making some effort to compensate you for your time.

If you should graciously accommodate my request, please understand that any information I use will remain confidential. Copies of any documents you provide me with may appear in the appendices of my final product, but no name of any school jurisdiction will be used.

If you should graciously accommodate my request, please understand that any information I use will remain confidential. Copies of any documents you provide me with may appear in the appendices of my final product, but no name of any school jurisdiction will be used.

Regardless of your decision on whether or not to accommodate my request, I would appreciate hearing from you. Please send your response to me at the address listed above.

If you have any questions, concerns or problems with my request, please feel free to contact me at home (646-2946) or at J.T. Foster School in Nanton (646-2264). Dr. Falkenberg can be reached at the University of Lethbridge (329-2154).

Thank you for your time and consideration with this matter.

Yours truly,

Rob Cowie
M.Ed. Student - University of Lethbridge
Mathematics Teacher - J.T.. Foster School, Nanton

APPENDIX G

Nov. 10/93

COMPARISON OF ADMINISTRATION TIME IN WCSD SCHOOLS

<u>Principals/ Asst. Principals</u>	<u>Admin. Time</u>	<u>No. of Periods</u>	<u>FTE Teachers</u>	<u>Total Teachers</u>	<u>FTE Secretaries</u>	<u>FTE Students</u>	<u>Total Students</u>
Brian Warwick	680	17 x 40	9.37	11	1.00 (1)*	161.0	181
Tricia Waddell	160	4 x 40					
John Ryan	1040	26 x 40	17.85	19	1.57 (2)	291.0	291
Dave Patterson	680	17 x 40					
Darriel Gatz	440	11 x 40	10.4	13	0.8 (1)	161.0	168
Bill Powlyk	775	15 x 40 5 x 35	11.9	15	1.0 (1)	200.0	231
Helen McKee	310	6 x 40 2 x 35					
Janet Ramsey-Brown	975	25 x 39	17.4	19	1.0 (1)	312.0	312
Don Peters	390	10 x 39					
Roy Malec	1600	40 x 40	24.475**	27	2.0 (2)*	360.0	360
Les Shimp	640	16 x 40					
Steve Harris	600	15 x 40	8.25	10	0.8 (1)	117.5	126
John Wevers	1001	29 x 34	15.2	17	1.0 (1)	241.5	268
Robert Whitehead	408	12 x 34					
Noel Doherty	750	19 x 40	20.25	22	1.0 (1)	387.0	387
Doug Pinder***	650	16 x 40					
Dave Gregory	1200	30 x 40	23.25	25	2.0 (2)	412.0	412
Wes Olmstead	1200	30 x 40					

* Not Including Community School Secretaries - .75 at A.B. Daley and 1.0 at W.C.C.H.S.

** W.C.C.H.S. will have 23.475 FTE teachers in the second semester.

*** Doug Pinder also shows 700 minutes of administration time when he doesn't teach Phys.Ed. Option.

November 9, 1993

ADMINISTRATION TIME - 1993-1994

Brian Warwick	680/1525	44.6%
Tricia Waddell	160/1525	10.5%
John Ryan	1040/1600	65.0%
Dave Patterson	680/1600	42.5%
Darriel Gatz	440/1600	27.5%
Bill Powlyk	775/1550	50.0%
Helen McKee	310/1550	20.0%
Janet Ramsey-Brown	975/1560	62.5%
Don Peters	390/1560	25.0%
Roy Malec	1600/1600	100.0%
Les Shimp	640/1600	40.0%
Steve Harris	600/1600	37.5%
John Wevers	1001/1545	64.8%
Bob Whitehead	408/1545	26.4%
Noel Doherty	750/1550	48.4%
Doug Pinder	650/1550	41.9%
Dave Gregory	1200/1600	75.0%
Wes Olmstead	1200/1600	75.0%

STUDENT-TEACHER RATIOS

<u>School</u>	<u>FTE Teachers</u>	<u>FTE Students</u>	<u>Ratio</u>
A.B. Daley School	9.37	161.5	1:17.2
J.T. Foster School	17.85	291.0	1:16.3
Stavely Schools	10.4	161.0	1:15.5
Claresholm Elementary	11.9	200.0	1:16.8
West Meadow School	17.4	312.0	1:17.9
W.C.C.H.S. (Year Av.)	23.975	360.0	1:15.0
w/o B. Kohn (1.0)*	22.975	353.0	1:15.4
Granum Schools	8.25	117.5	1:14.2
W.A. Day School	15.2	241.5	1:15.9
w/o J. O'Sullivan (1.0)**	14.2	241.5	1:17.0
G.R. Davis School	20.25	387.0	1:19.1
w/o K.Craig (.5)***	19.75	381.0	1:19.3
F.P. Walshe School	23.25	412.0	1:17.7

* Barbara Kohn teaches T/EMH full time to 7 WCCHS students. 1.0 taken off FTE teacher total and 7 students taken off FTE student total.

** Judy O'Sullivan is an extra teacher paid for by Indian Affairs.

*** Kathryn Craig teaches 840 minutes of special education to 6 students. .5 was taken off FTE teacher total and 6 students were taken off FTE student total.

Helen McKee does Psychological Testing and Enrichment for .5 FTE.

WCCHS has 24.475 FTE teachers in semester 1 and 23.475 FTE teachers in semester 2. This was calculated on the yearly average, which is 23.975 FTE teachers.

TOTALS

THESE TOTALS ARE BASED ON THE AVERAGE YEARLY FTE TEACHERS AND ON THE SEPTEMBER 30 ENROLLMENT COUNT.

Totals Including Colonies, Kookonnoni Group Home, Special Education, Psychological Testing and Enrichment; not including Home Schooling:

Semester 1:	165.845		
Semester 2:	164.845		
Average FTE:	165.345	2778.5	1:16.80

Totals Including Colonies, Kookonnoni Group Home, Home Schooling:

165.345	2800.5	1:16.94
---------	--------	---------

Totals without Special Education Teachers (2.5 teachers, 13 students) and Psychological Testing/Enrichment (0.5 teachers), but incl. Colonies. Kookonnoni Group Home, not including Home Schooling (22 students):

162.345	2765.5	1:17.03
---------	--------	---------

Schools with All Teachers, but not including Colonies (6.0 teachers, 132 students), Kookonnoni Group Home (1.0 teachers, 3 students), Home Schooling (22 students):

157.845	2643.5	1:16.75
---------	--------	---------

Schools Only without Special Education (2.5 teachers, 13 students), Psychological Testing/Enrichment (.5), Colonies, Kookonnoni Group Home, Home Schooling:

155.345	2643.5	1:17.02
---------	--------	---------

For Information Only:

Colonies:	6.0 teachers	132 students
Kookonnoni Group Home:	1.0 teachers	3 students
Psych. Testing/Enrichment	0.5 teachers	
Special Education:	2.5 teachers	13 students
Home Schooling:		22 students

WILLOW CREEK SCHOOL DIVISION NO. 28

September 30, 1993 Final Count

GRADE	WAD R	WAD H	GRD R	GRD H	FPW R	FPW H	GRAN R	CES R	WM R	WCCHS R	STAV R	ABD R	JTF R	DC R	EC R	TC R	PC R	LBC R	CL R	KOOK R	HS R	SUB R	SUB H	Total Students
ECS	53	-	-	-	-	-	17	62	-	-	14	39	-	-	-	-	-	-	-	-	-	185	0	185
1	50	16	-	-	-	-	12	54	-	-	14	33	-	0	3	2	7	3	1	-	2	181	16	197
2	70	10	-	-	-	-	10	61	-	-	14	31	-	2	5	1	4	5	2	-	2	207	10	217
3	54	14	-	-	-	-	10	54	-	-	19	38	-	3	4	4	4	3	2	-	2	197	14	211
4	-	-	81	25	-	-	18	-	68	-	15	40	-	0	0	0	2	2	3	-	2	231	25	256
5	-	-	69	26	-	-	13	-	50	-	23	-	36	3	5	4	4	4	1	-	2	214	26	240
6	-	-	56	20	-	-	16	-	71	-	20	-	43	1	4	2	2	2	1	-	2	220	20	240
Spec Ed	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	0	3
Elementary	175	40	209	70	0	0	79	169	189	0	105	142	79	9	21	13	23	19	10	0	12	1253	111	1364
7	-	-	74	29	-	-	6	-	67	-	10	-	40	2	0	2	2	4	1	-	3	211	29	240
8	-	-	-	-	68	21	12	-	56	-	27	-	43	0	3	3	3	0	2	-	2	219	21	240
9	-	-	-	-	68	21	12	-	-	47	12	-	35	3	4	2	1	4	1	-	3	192	21	213
Spec Ed	-	-	2	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	2	-	8	0	8
Jr. High	0	0	76	29	136	42	30	0	123	51	49	0	118	5	7	7	6	8	4	2	8	630	71	701
10	-	-	-	-	66	16	-	-	-	106	-	-	32	-	-	-	-	-	-	-	1	205	16	221
11	-	-	-	-	63	15	-	-	-	99	-	-	29	-	-	-	-	-	-	-	1	192	15	207
12	-	-	-	-	69	5	-	-	-	100	-	-	33	-	-	-	-	-	-	-	-	202	5	207
Spec Ed	-	-	3	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	1	-	8	0	8
Sr. High	0	0	3	0	198	36	0	0	0	309	0	0	94	0	0	0	0	0	0	1	2	607	36	643
Subtotals	228	40	288	99	334	78	126	231	312	360	168	181	291	14	28	20	29	27	14	3	22	2675	218	2893
School Total	268	-	387	-	412	-	126	231	312	360	168	181	291	14	28	20	29	27	14	3	22	2893	-	2893
Act. 93 FTE	241.5	-	387.0	-	412.0	-	117.5	200.0	312.0	360.0	161.0	161.5	291.0	14.0	28.0	20.0	29.0	27.0	14.0	3.0	22.0	2582.5	218.0	2800.5
Proj. 93 FTE	243.0	-	360.0	-	395.0	-	107.0	199.0	299	345.0	163.5	160.5	295.0	14.0	26.0	20.0	29.0	26.0	15.0	4.0	40.0	2741.0	-	2741.0
Act. 92 FTE	284.0	-	360.0	-	395.0	-	107.0	210.0	288.0	360.0	162.0	158.5	290.0	16.0	26.0	19.0	23.0	24.0	14.0	7.0	37.0	2780.5	-	2780.5

Actual 1993 FTE: 2800.5

Actual 1992 FTE: 2780.5

Actual 1993 FTE: 2800.5

Projected 1993 FTE: 2741.0

Difference: 59.5