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ABSTRACT

The work carried out in Edmonton School District Number 7 as part of the Educational Quality Indicators (EQI) project in the Alberta (Canada) schools resulted in development and validation of processes, criteria, and reporting methods related to student achievement in six "essential learning outcomes" keyed to the more traditional Alberta Education subject-based curriculum. The approach was based on the concept of common "tasks" performed by students at different levels of years of schooling and the assessment component was predicated on the principle that teachers' informed judgments about student performance are valid and reliable. This report describes the processes used, the principles and definitions to which all participants adhered, student growth results over 3 years, and implications. Samples of teacher documentation, performance criteria lists, prototype student tasks, and examples of student work are appended. Also examined were the role and potential of computer technology in recording, analyzing, and presenting student growth. Samples of prototype user screens are included. Assessment development in the district remains a work in progress, as the report attests. Eight tables and eight figures present study findings. (Contains 27 references.) (SLD)

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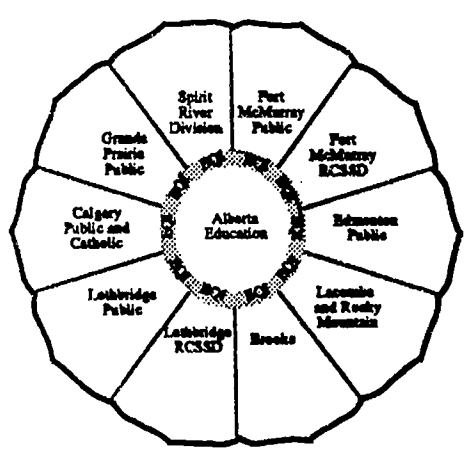
Student Growth: The Development of Enhanced Practices for Assessment, Evaluation, and Communication

Edmonton Scho. District No. 7

Educational Quality Indicators:
Collaboration in Action



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Student Growth: The Development of Enhanced Practices for Assessment, Evaluation, and Communication

Edmonton School District No. 7

Under Contract to Alberta Education
Edmonton, Alberta

Please Note

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Acknowledgements

The Edmonton Public Schools' Educational Quality Indicators Project is the continuation of processes to identify district indicators and measures. Superintendent of Schools Michael A. Strembitsky and Associate Superintendent Bruce McIntosh initiated the district's involvement. Assistant Superintendents Ian Wilson and Dick Baker supervised the project.

A Management Planning Committee guided the design of the project. Its members included: André Durand, Assistant Superintendent Consulting Services; Dale Armstrong, Director Student Assessment; Fern Schmidt, Director Curriculum; and John Travers, Consultant.

Development of materials, processes, and technology were supervised by members of the Design Advisory Committee consisting of: George Tkachyk, Supervisor Consulting Services; Simon van der Valk, Supervisor Student Information and Monitoring; Boris Oskin, Supervisor Information Support Services; Anne Mulgrew, Consultant Student Assessment; Rick Johnson, Consultant Student Assessment; and Lasha Rowe, Consultant Curriculum. This committee was assisted by consultants Carol Anne Inglis, Dan Clarke, Jean Stiles, Shirley Wacowich, June Mielnichuk, and Billy Spindler, Senior Analyst, Information Support Services. The Design Advisory Committee enlisted the partnership of district schools in the design of the project materials and processes.

Students and staff of the following schools participated:

Belgravia	Grandview	McKernan	Spruce Avenue
Bisset	Heights	Minchau	Stratford
Capilano	Holyrood	Montrose	T. D. Baker
Clara Tyner	Jasper Place	Mount Pleasant	Tipaskan
Daly Grove	John D. Bracco	Oliver	Vernon Barford
Delton	Kate Chegwin	Queen Elizabeth	W. P. Wagner
Donnan	LaPerle	Queen Mary Park	Wellington
Dunluce	Lendrum	Richard Secord	York
Forest Heights	Malmo	Ross Sheppard	
Fraser	Mary Butterworth	S. Bruce Smith	
Glengarry	McCauley	Sifton	

Thanks are due to the many students, teachers, and administrators from these schools as well as consultants and central services staff who have made contributions to the project. Hundreds of products of student work have been generated and analyzed and continue to serve as source material for generating tasks, criteria, exemplars, and prototypes. Special thanks are offered to the

teachers, principals, consultants, and analysts who made the extra effort to share their work with the Association for Supervision and Curriculum Development (ASCD) Expanded Assessment Consortium May 1993 meeting in Edmonton. Many of these same individuals have made presentations on behalf of the project at the EQI/CASS conference in January 1993 and at other conferences and conventions.

Professors Thomas Maguire and W. Todd Rogers, University of Alberta, provided thoughtful comments and suggestions in March 1991.

Abstract

The work carried on in this district's EQI project resulted in the development and validation of processes, criteria, and reporting methods related to student achievement in six "essential learning outcomes" keyed to the more traditional Alberta Education subject-based curriculum. The approach used was based on the concept of common "tasks" performed by students at different levels of years of schooling and the assessment component was predicated on the principle that teachers' informed judgments about student performance are valid and reliable.

The report describes the processes used, the principles and definitions to which all participants adhered, student growth results over three years, and the implications. For reference, samples of teacher documentation, performance criteria lists, prototype student tasks, and examples of student work are appended.

Also examined as part of the project was the role and potential of computer technology in the recording, presentation, analysis, and reporting of student growth. The report includes samples of prototype application user screens developed and tested during the project.

In essence, this "final" report is a summary of results achieved to-date of work that is still in progress. Classroom teachers continue to develop and refine the developed techniques to accommodate their individual teaching styles and the students' readiness for this type of performance assessment. As the capabilities and affordability of the newer technologies improve, their non-intrusive application to in-school student assessment is also being enhanced.

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Chapter 1

Introduction

In 1989, Edmonton Public Schools identified as a first requirement that a review be carried out of relevant existing indicators and measures of district performance used in the ongoing performance monitoring processes. At that time, these included the results of:

- annual staff and student district attitude surveys
- alternating biennial parent and general community attitude surveys
- district grade 3, 6, and 9 achievement tests in mathematics, language arts, science, and social studies
- Alberta Education grade 3, 6 and 9 achievement tests
- Alberta Education grade 12 diploma examinations
- International Baccalaureate examinations

Although these indicators and measures provided useful information about the district's overall performance, there were obvious deficiencies in the range and nature of student achievement strategies and measures. The curriculum-based tests were unable to differentiate among grade levels of achievement except at the 3, 6, 9, and 12 levels. The usefulness of this type of externally evaluated "paper and pencil" testing was considered inadequate due to the widely dispersed grade levels and, for the provincial tests, the annual rotation of subjects across the 3,6, 9 spectrum. In addition, the existing tests were unable to extract from the results any measures of student performance related to six "essential learning outcomes", (see Definitions).

To achieve the result of the project, namely "that students, parents, staff, the board, and the general community have valid, accurate, and useful information about student achievement and growth", the following five issues were addressed:

1. What instruments and strategies that facilitate assessment and annual communication of student achievement for individual student, school, and district reporting requirements?
2. What standards should be established against which student achievement is evaluated relative to the graded curriculum?

3. What strategies should be used to emphasize assessment, evaluation, and communication of continuous development of skills, attitudes, and knowledge?
4. What strategies need to be developed to gather teacher judgments and evidence of student demonstration of the curriculum relative to the essential learning outcomes?
5. What opportunity can be provided for students to demonstrate their highest level of achievement?

Assumptions

The assessments that count -- the assessments that most strongly influence student learning and academic self-concept -- are those developed and used by teachers in the classroom.
Richard J. Stiggins, Phi Delta Kappan, January 1988

Throughout the development of the project, the following assumptions were made and adhered to:

- The student's teacher is responsible for assessing and periodically reporting student achievement (Section 13 of the Alberta School Act).
- The achievement and performance of each student are measurable.
- Student growth in achievement is one of the indicators for measuring student, school, and district performance.
- Teacher judgment about student achievement and performance is valid and reliable.

Definitions

Achievement	demonstration of knowledge, skills, and attitudes students are expected to learn
Achievement Criteria	evidence accepted that students have demonstrated a selected indicator at each of the twelve grade levels
Anchor	representative responses, products, or demonstrated behaviours used to characterize achievement criteria
Assessment	process of collecting information about student achievement and performance

Curriculum	statement of outcomes and expectations for student achievement
Essential Learning Outcomes	the critical knowledge, skills, and attitudes for all students and are the foundation for courses of study, outcomes, and expectations
Evaluation	judgement made, utilizing assessment information, relative to achievement criteria
Exemplar	an anchor that represents the most successful characterization of achievement criteria
Expectations	the knowledge, skills, and attitudes which students demonstrate at a specified grade
Grade	level of achievement
Growth	evidence of positive change in student achievement over time
Indicator	criteria accepted as evidence that a priority has been met
Measure	a quantitative statement that describes the extent to which a priority is being met
Monitoring	the assessing, evaluating, and communicating of student achievement and growth
Outcomes	the intended knowledge, skills, and attitudes students demonstrate as a result of schooling
Performance	how well a student demonstrates grade level expectations
Performance Assessment	the process of collecting information through activities that require students to construct a response, create a product, or demonstrate a behaviour

Portfolio	a purposeful collection of products and criteria that exhibits achievement and growth to students and others
Products	students' self-reflections, teacher notes describing the context of activities, a variety of written, drawn, audio-taped, video-taped, or computer-generated samples of student work, and information about the student and the student's work
Reporting Student Growth	the process of communicating change in student achievement relative to the curriculum over time
Selected Indicators	student demonstrations of learning outcomes used for monitoring purposes
Standard	quantitative statement of the desired level of achievement and performance
Task	an integrated series of activities that allow for a variety of responses to challenging situations, questions, or problems
Year-in-school	the number of years a student has attended school (excluding kindergarten)

Principles

1. Assessment, evaluation, and communication of student growth are based on the curriculum and are aligned with the school's philosophy and programming principles.
2. Information about methods of assessment and results of evaluation is available to students, parents, and the community.
3. Student growth is assessed, evaluated, and communicated for all learning outcomes.
4. Evaluation and communication of student growth is ongoing and used to plan effective programming.
5. Student growth is demonstrated through a variety of performances evaluated by the teacher.

6. Student growth is enhanced when students participate in the assessment, evaluation, and communication processes.
7. Student growth is enhanced when assessment, evaluation, and communication are viewed positively by the student.
8. Methods of communicating student growth vary depending on audience and purpose.
9. Methods of assessment and evaluation of student growth vary depending on student learning patterns and are developmentally appropriate.

Design Requirements

From the above principles, requirements for the design of an initial task for field testing were established:

1. Tasks are seen to be valid and reliable by students, staff, parents, and the community and these publics are satisfied with the information they are supplied about student growth.
2. Tasks are based on essential learning outcomes.
3. Teachers are involved in the development of criteria and the growth measure.
4. Criteria are developed to evaluate the grade level of achievement.
5. Tasks are undertaken by students currently demonstrating a wide range of performance and achievement.
6. Tasks are as typical as possible of normal classroom and real-life experiences and involve the students in multiple activities.
7. There is opportunity for student-to-student and teacher-to-student interactions.
8. Classroom teachers are trained to use student products in making judgments about student achievement.

Project Design Framework

To achieve the planned results of the developmental project, the framework for the project assumed five major components:

1. design and validation of instruments and strategies to allow for student demonstration of achievement;
2. design and validation of strategies and criteria to allow for teacher judgment, data collection, and confirmation;
3. investigation of workable applications of the "portfolio assessment" concept;

4. development of prototype technology that would accommodate school and district needs for data entry and computer display, communication, and storage of information about student achievement and growth; and
5. overall management of the project to ensure coordination of the four main development areas.

To enhance current district and provincial assessment practices and to overcome the deficiencies of the conventional paper and pencil "fill in the blank or circle the correct answer" type of assessment instrument, emphasis was placed on the concept of multiple activity tasks linked to a set of essential learning outcomes.

Chapter 2

Related Literature and Research

Large Scale Assessment

Large scale assessments such as the Alberta Education and Edmonton Public Schools achievement tests are important because they serve accountability and monitoring functions and produce school and district information in a form easily managed by leadership staff and trustees. However, the results of large scale assessments should be interpreted with caution because they are "limited by political and practical considerations that undermine their fidelity to important learning outcomes." (Shepard, 1989) Limitations listed by Shepard include:

- The content of large scale tests is negotiated by committees of teachers and experts and does not measure the depth and breadth of learning in particular classrooms.

- Large scale testing narrows the content. These tests do not measure performance on the full range of outcomes.

- Practical considerations limit test formats to multiple choice or short answer responses, short reading passages, and rough draft writing.

An over-emphasis given to the results of large scale assessments can lead to narrowing of instruction and practising certain test formats in order to raise test scores. Test scores raised in this manner are not necessarily reflective of higher achievement but might be indicative of enhanced test writing skills.

Classroom Assessment

Comprehensive assessment and evaluation of student achievement should be centred in the classroom. Teachers, the primary evaluators of student

achievement, use a wide range of assessment methods to measure student achievement.

"Teachers face many kinds of assessment demands and measure dozens of student characteristics, from ability to achievement to personal traits and social characteristics. Not only must they chart these factors for individual students, but they must also maintain a sense of how the class as a whole is functioning. Teachers simply don't have the time to measure a student trait and then wait for several weeks while the computer transforms the results into a percentile or grade equivalent score. To make decisions that keep instruction moving, teachers need data immediately and they must gather... from a constantly changing environment. They rely most heavily on assessments provided as part of instructional materials and assessments they design and construct themselves and very little on standardized tests or test scores. But more important, as virtually every recent study of school testing tells us, teachers depend heavily on their own observations and judgements, not just on paper and pencil tests. Clearly, the assessments that influence classroom learning and students' academic and personal self-concept are those developed and used by teachers on a daily basis." (Stiggins, 1985)

Teachers' observations and evaluations of student achievement during the ongoing classroom learning experience are based on their knowledge of the curriculum, how children learn, and the past performances of students. Teacher judgments are critical for making programming decisions for students. Teachers need to make their judgements explicit and communicate their judgements to students and parents more effectively.

Anrig (1992) reinforces the belief that effective assessments can be created with the classroom as the centre of concern. He calls these "instructional assessments [which] would:

- "be performance-based projects, portfolios, experiments, and other student-constructed responses and, increasingly, involve the use of computers;
- be fully integrated into the classroom curriculum, so that assessment and instruction are no longer seen as distinct functions;
- provide continuous performance feedback that the student and teacher can use daily to plan the next learning steps;
- actively involve learners in tasks (often working with other students) that have meaning to them and will help develop in-depth understanding of what is being learned; and

- involve the teacher as a coach or mentor, rather than a dispenser of knowledge."

Records of Achievement

In Great Britain, the Department of Education and Science has an initiative to implement Records of Achievement ("RoA"). The RoA recognizes and rewards the whole range of student abilities and achievements. In a recent presentation to Edmonton Public Schools' staff, Andy Hargreaves from the Ontario Institute for Studies in Education explained that RoA emphasizes four achievement aspects:

1. intellectual, cognitive;
2. application of knowledge, problem solving;
3. personal, social; and
4. positive feelings about learning.

He encouraged teachers to evaluate student achievement in all of these aspects and explained that assessing all aspects of achievement increases the students' opportunities to experience success, thus building self-esteem. Another important component of the RoA is the involvement of students in their own assessment.

"We must constantly remind ourselves that the ultimate purpose of evaluation is to enable students to evaluate themselves." (Costa, 1989)

This involvement improves diagnosis and increases students' feelings of ownership and responsibility for their own learning.

"The work at the heart of an assessment culture requires students to alter their perceptions of themselves as active learners. Authentic assessment challenges students to become thoughtful judges of their own work. Theirs is the work of posing questions, making judgments, integrating criticisms, reconsidering problems, and investigating new possibilities. With this work comes the responsibility of assessment. Students must educate themselves to become accurate evaluators of their own efforts. They must come to recognize and build on the strengths in their work and to diagnose and treat their weaknesses. No longer the passive subjects of testing and evaluation, students are key players in the process of assessment." (Zessoules and Gardner, 1991)

Teachers within Edmonton Public Schools are implementing similar ideas. Many teachers conduct parent conferences during which they chronicle the growth and achievements of students. Sometimes students are involved in planning and conducting a part of the conference. Teachers and students compile portfolios of student work to demonstrate how the child has grown and the range of outcomes

and expectations achieved. Many school staffs have set priorities to learn more about how to evaluate, record, and communicate a broader range of student achievements.

Performance Assessment

Globally, there has been increased attention given to alternative methods called "authentic" or "performance" assessment. These types of assessment are being promoted to balance large-scale, standardized testing. Basically, performance assessments require the student to perform real-life tasks and teachers to evaluate their performances. A performance assessment, for example, would evaluate students on their ability to cooperate with others to solve a problem rather than on their ability to list the steps they would take to solve a problem when given the chance.

Grant Wiggins, a proponent of performance assessment, has visited Edmonton Public Schools twice and has generated a great deal of interest in this type of assessment. There are many teachers who would like to explore more authentic ways of testing and to become increasingly adept at its use.

"In performance-based areas, we do not assess competence on the basis of one performance. We repeatedly assess a student's work. Through portfolios or a season of games. Over time and in the context of numerous performances, we observe the patterns of success and failure and the reasons behind them. Traditional tests--as arbitrarily timed, superficial exercises (more like drills on a practice field than like a game) that are given only once or twice--leave us with no way of gauging a student's ability to make progress over time." (Wiggins, 1989)

Some experts go so far as to say that:

"All forms of authentic testing can be summarized numerically or put on a scale. Therefore individual results can be combined to provide a variety of information about aggregate performance at the classroom, school, district, state, and national levels." (Neil, 1989)

On the other hand, other experts think that:

"The differences between accountability and instructional assessment are so fundamental and necessary that it may not be desirable to merge the two purposes [. . .] While the substance of accountability tests must be improved by keeping conceptions of real learning in mind, their susceptibility to distortion should not be allowed to contaminate classroom uses of student data." (Shepard, 1989)

Some have cautioned that the addition of alternative assessments will require time and resources. Despite unprecedented interest in performance assessments, Harrington-Lueker (1991) suggests that attention will have to be given to:

- starting with curriculum and instruction. "Changing the way schools assess students implies significant changes in curriculum and instruction as well."
- teacher literacy about assessment in general and new assessments in particular. "The best programs involve teachers every step of the way."
- reliability. Judgments based on clearly-stated sets of standards with specific criteria will be critical. There is a need to build on the success of performance-based writing and music assessments

The Challenge

As staff become more involved in alternate forms of assessment over a broader range of outcomes they will also need to discover alternate ways of recording and communicating the results to students, parents, and the community.

"Given the obvious importance of classroom assessment to the success of instruction and the pressures under which such assessment is usually conducted, we would expect teacher training to devote a great deal of time and energy to methods of classroom assessment. In fact, it does not. One can only conclude that training in classroom assessment is not regarded as relevant or helpful for teachers. Most teacher training programs do not require a course in educational measurement to graduate, and many programs do not even offer one. Those courses that are offered emphasize developing paper and pencil tests, using standardized tests, and understanding the statistical aspects of assessment. Daily assignments, performance assessments, tests that accompany textbooks, and oral questions -- all key strategies of classroom assessment -- are often virtually ignored." (Stiggins, 1988)

To become adept at alternate forms of assessment, teachers will need encouragement, time for professional development, and appropriate models. They will require opportunities to talk with and learn from each other. The implementation of varied methods of classroom assessment and ways of communicating the results will provide a much-needed balance to large-scale assessment and will increase public confidence that our students are achieving success.

Chapter 3

Project Design

Student Portfolios

One of the ways of enhancing current practices for assessing, evaluating, and communicating student achievement and growth is through the use of portfolios. To guide the developmental work on this topic, Edmonton Public Schools has defined a "student portfolio" as a purposeful collection of student products that exhibits to the student and others the student's demonstration of achievement, growth and performance in essential learning outcomes. This collection includes criteria for selection, achievement criteria, student self-reflections, and teacher notes describing the context within which the products were obtained. The student is involved in the selection of the contents.

The relationship of the portfolio technique to developmental assessment is described by David Elkind:

> Developmental assessment involves documenting the work that a child has done over a period of time. Usually this is done by having a child keep a portfolio that includes all of his or her writing, drawing, math, explorations and so on. In looking through such a portfolio, we can get a good idea of the quality of work that the child is capable of doing and of his or her progress over the given period.
>
> (Early Education Conference Presentation, Edmonton, 1989)

In Edmonton Public Schools, the initial project developmental work on the student portfolio system focused on the following issues:

- Application: the usefulness of the information
- Responsibility: the role of students, teachers, parents, community, administrators, and trustees
- Content: what is developed and how
- Reporting: communication of student growth information to the many publics

- Design: task development, validation, and administration; technology design and testing

- Evaluation: the criteria for making judgments

- Management and Logistics: storage, movement, access, and School Act requirements for student records

- Implementation: staff development and training

The development of workable strategies for teacher use of portfolio assessment in the day-to-day realities of the classroom environment was seen to take priority over any concerns about the physical format of a portfolio. Differentiation had to be made between the use of portfolio contents for district accountability and for individual student assessment.

A vital component of the design framework has been extensive teacher involvement in the ongoing development of appropriate teacher strategies and in the identification of a realistic set of student products that could be incorporated within the portfolio. The following have been identified for further investigation:

- narrative, personal, and informational writing
- student self-reflection analyses
- photographs, videocassettes, and audiotapes
- letters of reference
- tables and reports of investigative student work
- models
- artwork of all kinds
- student work done on a computer and retained on disk
- teacher judgments, assessment criteria, task descriptions, exemplars, and context notes

The relationship of the use of student portfolios to a generally enhanced school and district assessment system can be illustrated by the conceptual schema shown in Figure 1.

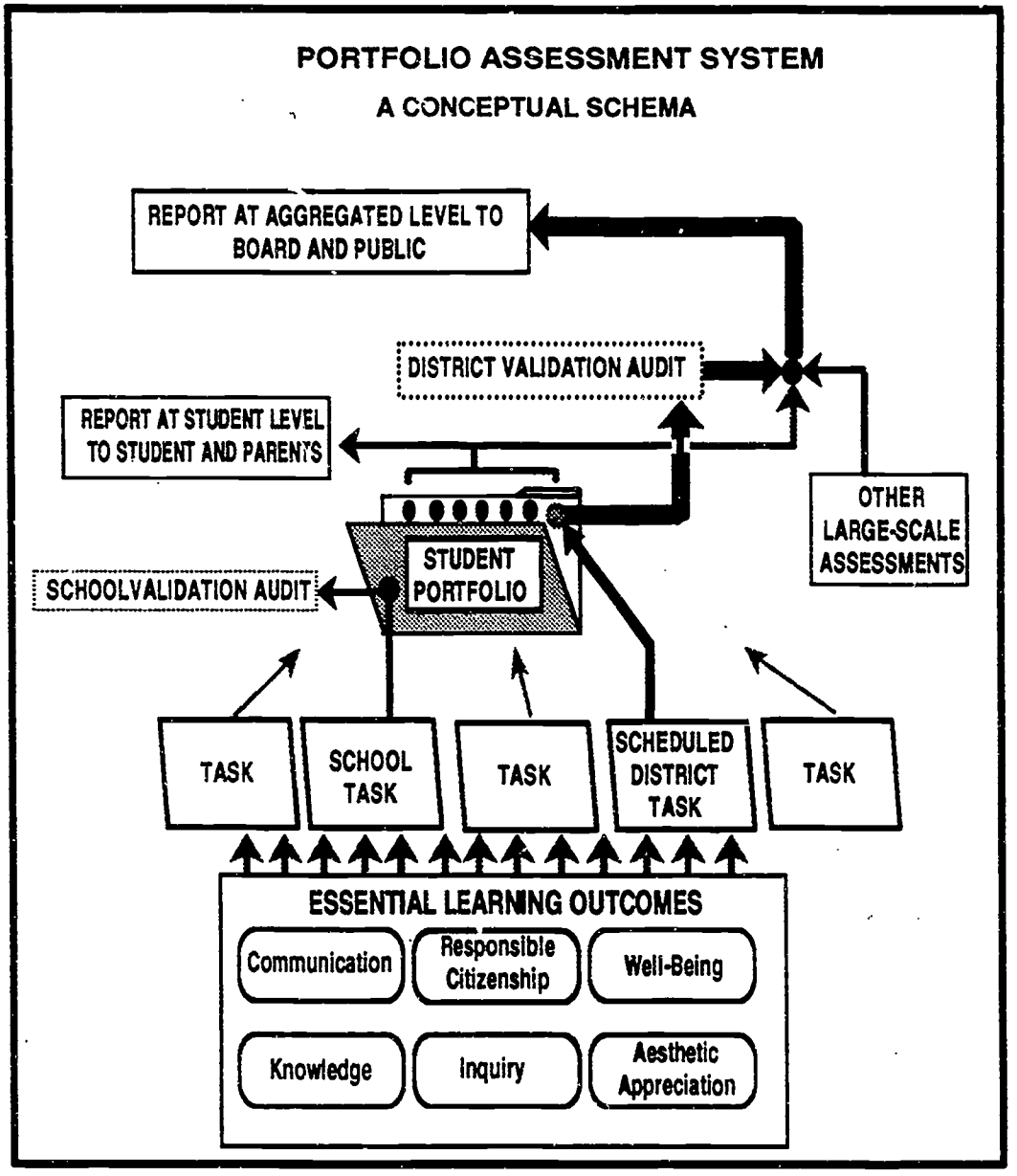

Figure 1: Portfolio Assessment System

Prototype Computer Technology

In the initial project design it was clear that there would be two major logistical restraints to obtaining maximum benefit from the proposed enhanced student assessment process:

- human limitations on the part of the teacher in coping with a wide array of media and achievement criteria; and
- communicating student growth information to parents and aggregated school and student information to the community.

The design therefore assumed the following additional objectives:

- to investigate the potential of current "pen-based" computer technology
- to develop prototype computer screens for easy entry and clear presentation of student growth information
- to identify requirements for upgrading the district's wide-area computer network to accommodate the requirements for central collection of student achievement data, including the transfer of compressed image data
- to develop teacher-usable applications for local computer preparation of meaningful "progress reporting" to parents

Chapter 4

Findings

To solely use standardized achievement tests is like casting a net into the sea -- a net that is intentionally designed to let the most interesting fish get away. Then, to describe the ones that are caught strictly in terms of their weight is to radically reduce what we know about them. To further conclude that all the contents of the sea consist of fish like those in the net compounds the error further. We need to know more about those we catch. We need new nets.

Dr. William T. Randall, Commissioner of Education, State of Colorado
(ASCD Consortium Presentation, Colorado, 1992)

Table 1

Comparison of Assessment Methodologies

Old	New
assess student achievement after 3, 6, and 9 years of schooling	**assess student achievement after, at least, each year of schooling**
assess student achievement relative to grades 3, 6, and 9 curriculum	**assess student achievement relative to all levels of the curriculum**
assess student achievement relative to language arts, mathematics, science, and social studies	**assess student achievement relative to the total curriculum**
gather school and district information about student achievement at four points in the student's career	**gather school and district information about student growth in achievement on an annual basis**
assess externally to instruction -- evaluate the student's work by someone other than the student's teacher	**assess as ongoing part of instruction -- the student's teacher evaluates (subject to validation and audit at the district level)**
assess students based on their responses on a "paper and pencil" measure	**assess students based on their performance of assigned tasks including, but not limited to, "paper and pencil" measures**
analyze individual student performance on four tests used by the teacher	**use individual student performance on tasks for diagnosis and planning by teacher, student, and parent and for celebration of success**

It is important to emphasize that the new strategies designed, field tested, and piloted in this development project are supplements to, rather than replacements

for the traditional and current assessment practices. The results demonstrate the potential for enhancement of existing student assessment in our schools.

Measuring Growth -- Field Test of Prototype Task

A prototype task was developed and field tested with "year one" students (i.e. students in their first year of schooling, excluding kindergarten -- see Definitions) in nine elementary schools in June 1990. The multiple activity task was based on the general theme of "change" and required the students to participate in an activity related to at least two writing activities, drawing, self- reflection, and reading.

Teachers made judgments on grade level of achievement based on the initial set of achievement criteria. The field test addressed essential learning outcomes, indicators, grade level of achievement, and identification of the sources from which teacher judgments were made. The essential learning outcomes and selected indicators are shown in Table 2:

Table 2

Learning Outcomes and Selected Indicators

LEARNING OUTCOME	SELECTED INDICATORS
COMMUNICATION	reading writing
RESPONSIBLE CITIZENSHIP	participating cooperating providing service
WELL-BEING	making choices exhibiting positive life habits
KNOWLEDGE	applying calculating
INQUIRY	hypothesizing researching decision making
AESTHETIC APPRECIATION	valuing expressing

The results of the prototype task in June 1990 were analysed with the objective of developing achievement criteria and a more refined task for administration in the 1990-91 school year. The analysis and developmental work were carried out by working committees of teachers, district consultants, and curriculum specialists.

Inservice training was provided in May 1991 to teachers of year one students in nine schools selected to pilot the more comprehensive measure which was administered in May 1991 to year one students (other years optional) in nine pilot schools. The student products were collected for analysis and central scoring in July 1991.

In 1991-92, trials were carried out with tasks developed for students in years one to twelve in 40 demonstration sites as well as cohort participation of students now in year two in the nine pilot schools. Analysis of the results of these measures continued in 1992-93, in preparation for administration of the tasks as growth measures in April 1993.

Table 3

Assessment Task Development and Process Chronology

1989-90	one task developed and field tested in nine elementary schools
1990-91	prototype task developed and field tested in nine elementary schools at the year one level achievement criteria established and validated by teacher, consultant, and curriculum specialist teams
1991-92	14 tasks developed and the 1989-91 tasks revised 15 tasks piloted in 35 schools representing "years in school" one to twelve (see Table 4) each task cross referenced to essential learning outcomes and relevant course of study outcomes and expectations inservice training and consultant facilitation to complete judgments for each essential learning outcome and selected indicator provided to teachers achievement information recorded by teachers over 2,000 students participated in the administration of the tasks
1992-93	analysis of teacher judgments against criteria provided initial verification of the validity of the assessment instruments and strategies administration of the tasks as growth measures and assessment of results

Table 4

Assessment Tasks and Essential Learning Outcomes

No.	TASK NAME	ESSENTIAL LEARNING OUTCOMES DEMONSTRATED *
1	Patterns	All 6 outcomes
2	Relationships	All 6 outcomes
3	Adapting to the Environment	All 6 outcomes
4	Opposites	All 6 outcomes
5	Traffic Flow	All 6 outcomes
6	Points of View	Communication
7	Linking the Past to Today	Communication
8	Heroes and Heroines	Communication
9	Literary Traditions	Communication
10	A Greek Myth	Communication
11	Limits to Population	Inquiry
12	"Roto-copters"	Inquiry
13	Exploration of Shapes	Inquiry
14	Transportation	Inquiry
15	"All Summer In A Day"	Inquiry

*** Essential Learning Outcomes:**

- Communication
- Responsible Citizenship
- Well-being
- Knowledge
- Inquiry
- Aesthetic Appreciation

Table 5

Achievement of Year One Students in Pilot Assessment Tasks

Essential Learning Outcome	Indicator	Exceeds Grade One (%)	Grade One (%)	Not Yet Grade One (%)	N= (valid cases out of 422)
COMMUNICATION	Reading	7.5	59.5	33.0	348
	Writing	11.7	53.5	34.8	368
RESPONSIBLE CITIZENSHIP	Participating	8.3	68.9	22.8	360
	Cooperating	5.8	70.5	23.7	359
	Providing Service	4.3	64.5	31.2	349
WELL-BEING	Making Choices	14.4	67.6	18.0	367
	Positive Life Habits	15.9	61.0	23.1	364
KNOWLEDGE	Applying	10.0	65.1	25.0	371
	Calculating	8.1	54.5	37.4	369
INQUIRY	Researching	7.8	65.0	27.2	371
	Making Decisions	14.3	63.5	22.2	370
AESTHETIC APPRECIATION	Valuing	9.2	59.2	31.6	370
	Expressing	15.1	63.1	21.8	371

All student work from the tasks was judged separately by the student's teacher and by analysts who had had major involvement in the establishment of scoring criteria. The levels of agreement on each indicator and the resulting correlations are shown in Table 6 and Figure 2.

Table 6

Correlation Between Analyst and Teacher Judgments

Indicator	Scores Agree	Scores Differ by 1 Grade	Scores Differ by >1 Grade	Correlation
Reading	66.4	30.2	3.4	0.5
Writing	72.8	26.3	0.8	0.7
Participating	74.1	24.5	0.8	0.6
Cooperating	71.1	27.3	1.7	0.5
Providing Service	70.2	27.0	2.8	0.5
Making Choices	77.7	21.2	0.9	0.6
Positive Life Habits	76.9	21.4	1.7	0.6
Applying	78.2	20.8	1.0	0.7
Calculating	74.8	23.6	1.6	0.6
Researching	81.5	18.4	0.5	0.7
Making Decisions	81.1	18.4	0.5	0.7
Valuing	79.6	19.2	1.2	0.7
Expressing	79.0	20.5	0.5	0.7

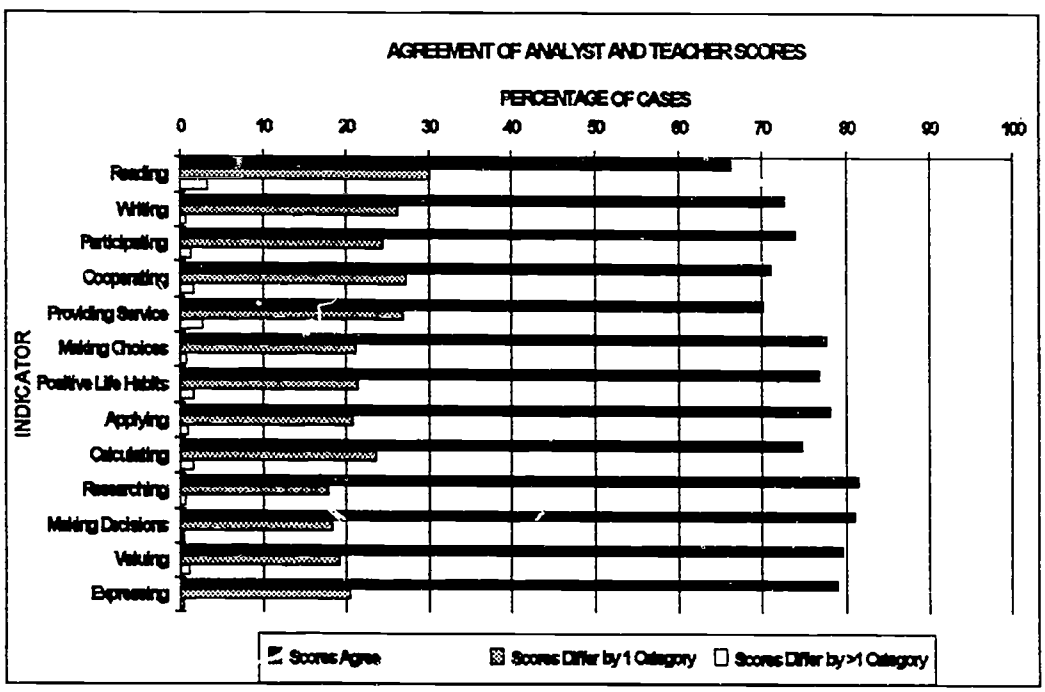

Figure 2: Analyst and Teacher Score Agreement

Development of Achievement Criteria

Achievement criteria for selected indicators of communication for grades 1 to 12 were developed in 199-91 by a committee of ten teachers and two consultants. These indicators were revised and refined in July 1991 for grade 1, and during 1991-92 for grade 2. Preliminary criteria for other selected indicators of inquiry for grades 1 to 12 were developed during 1991-92 and will be revised and refined during 1992-93. Criteria for the selected indicators of the other four essential learning outcomes were developed during 1992-93.

Student Growth Results: 1991-1993

The results of the assessment tasks administered from 1991 to 1993 are shown in Table 7 and Figure 3.

Table 7
Percentage of Students at Given Grade Levels of Achievement

INDICATOR, DATE, AND YEAR IN SCHOOL	< Grade 1	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Reading: 1991 - Year 1	33.7	48.2	18.1	0.0	0.0	0.0
Reading: 1992 - Year 2	1.0	23.8	53.5	21.7	0.0	0.0
Reading: 1993 - Year 3	0.0	2.9	28.5	55.2	13.4	0.0
Writing: 1991 - Year 1	42.6	41.6	15.8	0.0	0.0	0
Writing: 1992 - Year 2	1.0	25.6	57.6	15.8	0.0	0.0
Writing: 1993 - Year 3	0.0	3.5	31.4	59.3	5.8	0.0
Participating: 1991 - Year 1	24.6	59.5	15.9	0.0	0.0	0.0
Participating: 1992 - Year 2	1.5	10.8	68.5	19.2	0.0	0.0
Participating: 1993 - Year 3	0.0	2.3	19.0	70.1	7.5	1.1
Cooperating: 1991 - Year 1	25.1	61.5	13.4	0.0	0.0	0.0
Cooperating: 1992 - Year 2	1.5	10.8	70.5	17.2	0.0	0.0
Cooperating: 1993 - Year 3	0.0	2.3	17.8	72.4	6.3	1.1
Providing Service: 1991 - Year 1	23.2	63.7	13.2	0.0	0.0	0.0
Providing Service: 1992 - Year 2	0.5	11.3	70.5	17.7	0.0	0.0
Providing Service: 1993 - Year 3	0.0	1.7	18.4	72.4	6.3	1.1
Making Choices: 1991 - Year 1	22.4	62.7	14.9	0.0	0.0	0.0
Making Choices: 1992 - Year 2	1.0	8.0	71.1	19.9	0.0	0.0
Making Choices: 1993 - Year 3	0.0	1.2	19.6	72.6	5.4	1.2

Table 7 *(continued)*

INDICATOR, DATE, AND YEAR IN SCHOOL	< Grade 1	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Positive Life Habits: 1991 - Year 1	22.1	62.3	15.6	0.0	0.0	0.0
Positive Life Habits: 1992 - Year 2	1.0	8.5	70.6	19.9	0.0	0.0
Positive Life Habits: 1993 - Year 3	0.0	1.2	23.2	66.1	8.9	0.6
Applying: 1991 - Year 1	24.3	60.9	14.9	0.0	0.0	0.0
Applying: 1992 - Year 2	1.0	13.7	70.1	15.2	0.0	0.0
Applying: 1993 - Year 3	0.0	1.1	24.7	65.5	8.6	0.0
Calculating: 1991 - Year 1	28.2	60.4	11.3	0.0	0.0	0.0
Calculating: 1992 - Year 2	1.0	13.7	71.6	13.7	0.0	0.0
Calculating: 1993 - Year 3	0.0	1.7	23.0	67.2	8.0	0.0
Researching: 1991 - Year 1	19.1	65.7	15.2	0.0	0.0	0.0
Researching: 1992 - Year 2	0.0	8.5	71.0	20.5	0.0	0.0
Researching: 1993 - Year 3	0.0	0.6	15.6	78.0	5.8	0.0
Making Decisions: 1991 - Year 1	25.9	59.7	14.4	0.0	0.0	0.0
Making Decisions: 1992 - Year 2	0.5	13.7	72.6	13.2	0.0	0.0
Making Decisions: 1993 - Year 3	0.0	2.9	21.1	70.2	5.8	0.0
Valuing: 1991 - Year 1	19.1	65.7	15.2	0.0	0.0	0.0
Valuing: 1992 - Year 2	0.0	8.5	71.0	20.5	0.0	0.0
Valuing: 1993 - Year 3	0.0	0.6	15.6	78.0	5.8	0.0
Expressing: 1991 - Year 1	15.7	63.2	21.1	0.0	0.0	0.0
Expressing: 1992 - Year 2	0.5	10.5	68.0	21.0	0.0	0.0
Expressing: 1993 - Year 3	0.0	0.6	19.0	73.0	5	0.0

* Note: "Year 2" data covers a two-year period and "Year 3" data covers a three-year period.

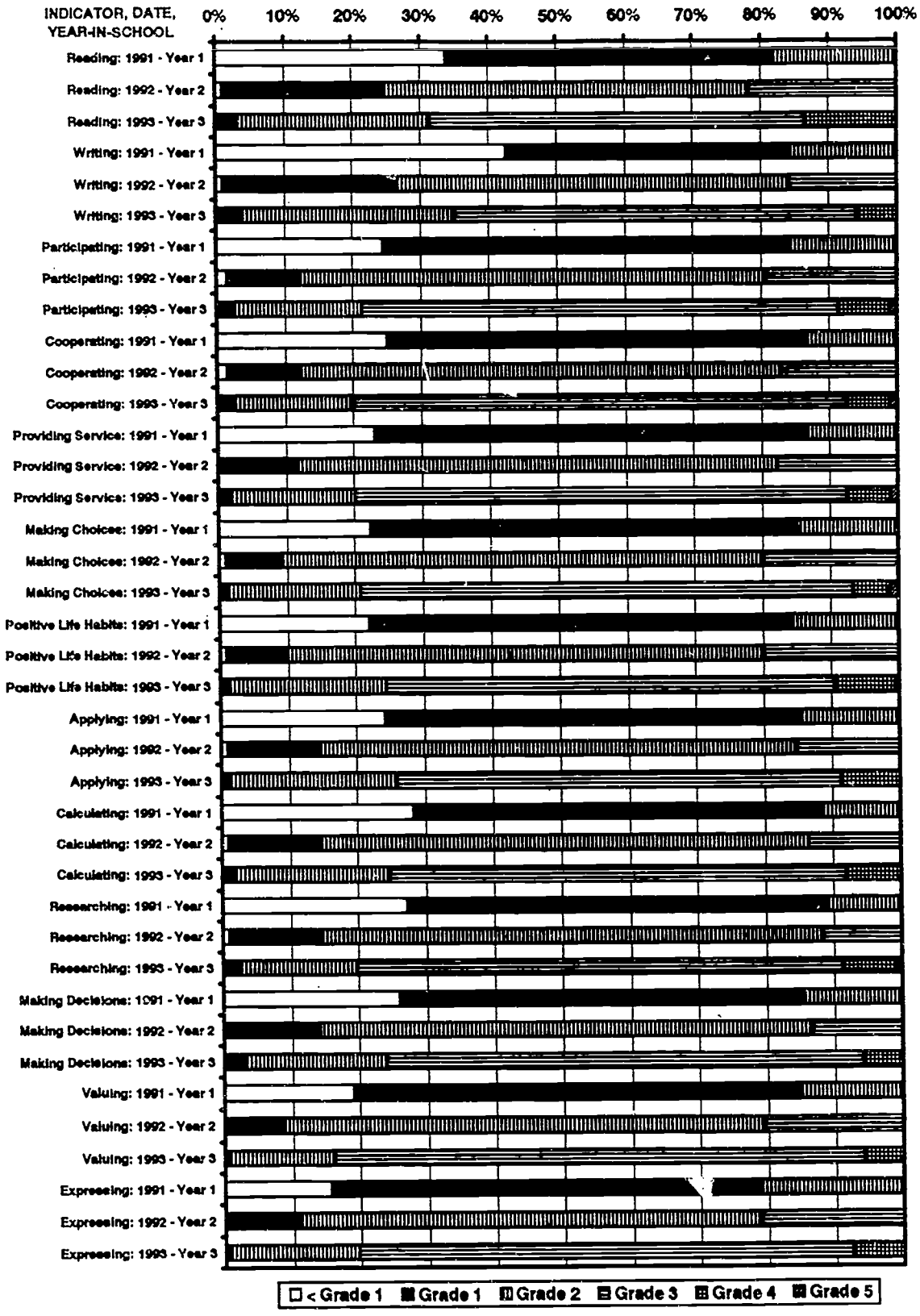

Figure 3: Distribution of Students by Grade Level of Achievement

Growth In Essential Outcomes

The average grade level of achievement of year 1, 2 and 3 students in the essential learning outcomes is shown in Table 8.

Table 8

Growth In Essential Outcomes

Indicator	Average Grade Level of Achievement of Year One Students 1991	Average Grade Level of Achievement of Year Two Students 1992	Average Grade Level of Achievement of Year Three Students 1993
Reading	0.9	2.0	2.79
Writing	0.7	1.9	2.67
Participating	0.9	2.1	2.86
Cooperating	0.9	2.0	2.86
Providing Service	0.9	2.1	2.87
Making Choices	0.9	2.1	2.84
Positive Life Habits	0.9	2.1	2.85
Applying	0.9	2.0	2.82
Calculating	0.8	2.0	2.82
Researching:	0.8	2.0	2.87
Making Decisions	0.9	2.0	2.79
Valuing	1.0	2.1	2.90
Expressing	1.1	2.1	2.88

Curricular Relevance

Developmental work has proceeded on the topic of relating essential learning outcomes and selected indicators to language arts, mathematics, science, social studies, health, and art.

Assessment Task Administration 1991-92

To maintain reliability of procedures and results, teachers at demonstration sites were provided with specific task administration routines for each of the 15 tasks. These guidelines included a statement of purpose, a process model, and an outline of steps and activities.

District Implications

Multiple strategies and measures for student assessment are now included in district practices in Edmonton Public Schools. Current and proposed practices in

each of the 193 schools are guided by the ten principles for assessment, evaluation, and communication of student growth, (see pages 4 - 5).

Portfolio Design

Initial work on establishing suitable physical designs for a student portfolio was an important catalyst for the examination of more vital issues such as the possible range of contents in a portfolio, the implications of regulations under the School Act that define contents of a student record and the access to that record, and logistical problems that could be associated with full utilization of a portfolio assessment system. Models of suitable portfolio "containers" were produced but it soon became clear that the most suitable physical arrangements for managing most of the potential contents of a student's portfolio were those developed at the local school and classroom level. The number of methods used is likely to be as numerous as the number of teachers employing portfolio assessment procedures.

Prototype Pen-based Computer Technology

Two competing pen-based devices on the market were evaluated for possible application as data collection systems for teacher use in the classroom. The findings were:

- both computers showed instability in their operating systems
- hand-printed character recognition was inconsitent and unreliable
- the devices were bulky and unsuitable for teacher use in the classroom setting
- acquisition costs are high

Clearly, the pen-based systems are still using an immature technology. Further evaluation or development of suitable pen-based application software is therefore not planned until this system is more stable and mature.

Prototype User Screens

A series of prototype screens has been developed using the standard "Windows" screen format and Visual Basic s the development language. Development is continuing in parallel with the development of assessment tasks and related reporting procedures in the design project. Static screen capture images of the various interfaces developed to-date are shown in Figures 4 to 8.

The flexibility of the design tool is such that suitable screens and the underlying application for the capture and presentation of student growth information can now be developed very quickly, including the incorporation of scanned image and recorded sound when appropriate.

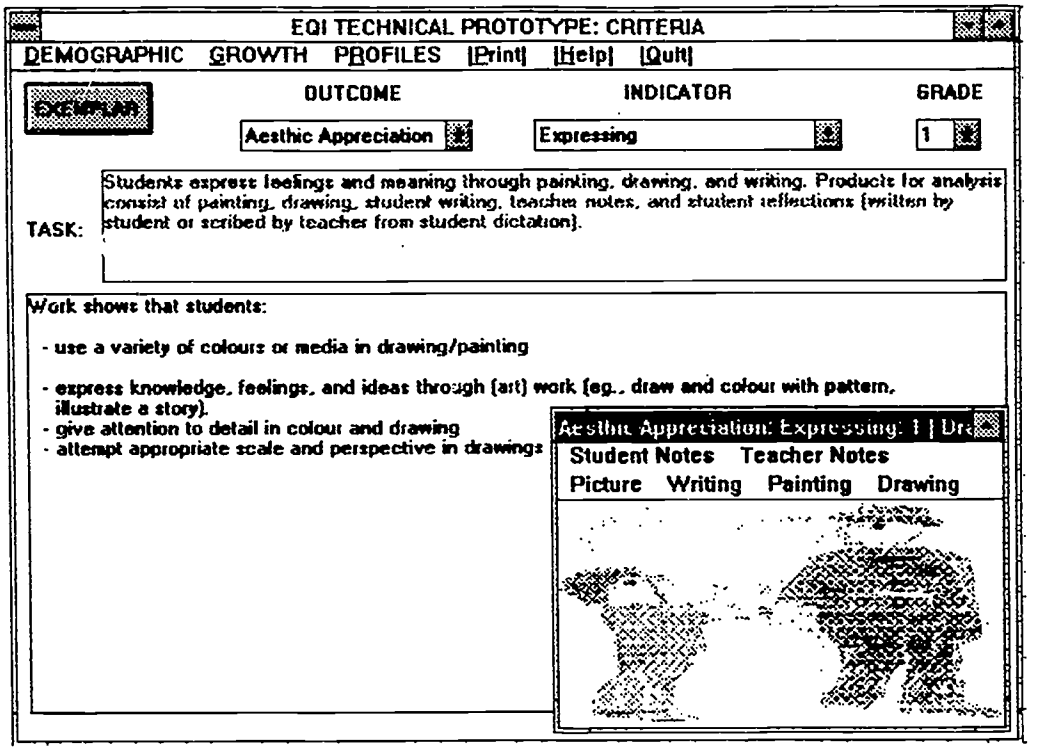

Figure 4: A Screen to Display Criteria and Scanned Images of Student Work

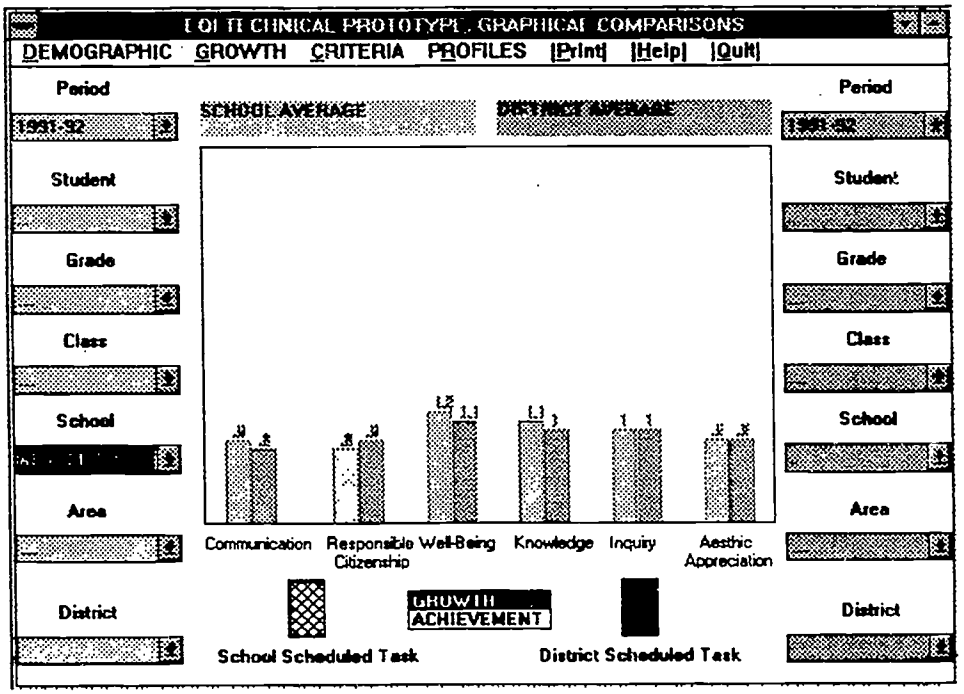

Figure 5: A Screen to Display Graphical Comparisons at Student, Class, School, District, or Date Level

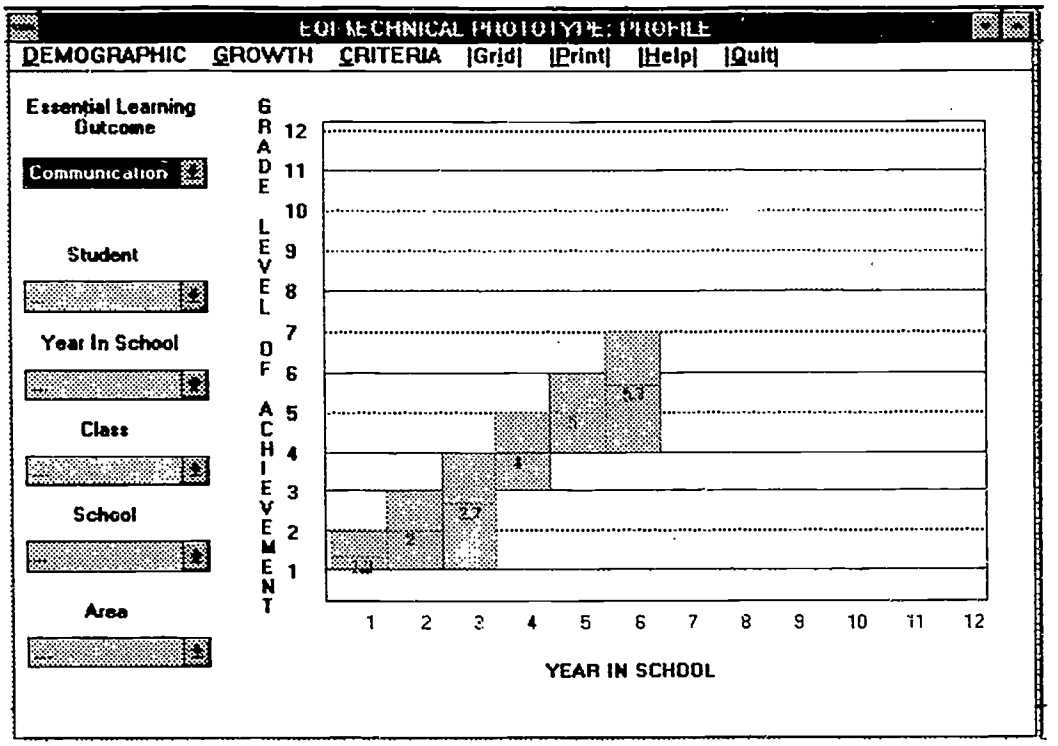

Figure 6: A Screen to Display Profiles by Student, Class, School, Area, or District (based on range of achievement by year-in-school)

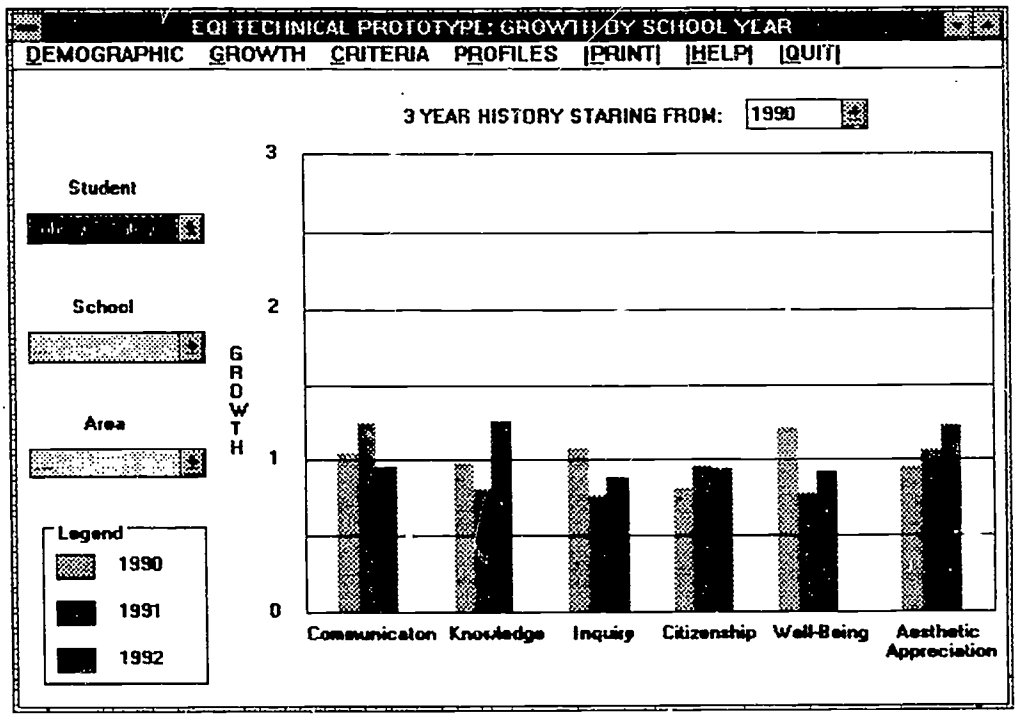

Figure 7: A Screen to Display Student Growtn by School Year

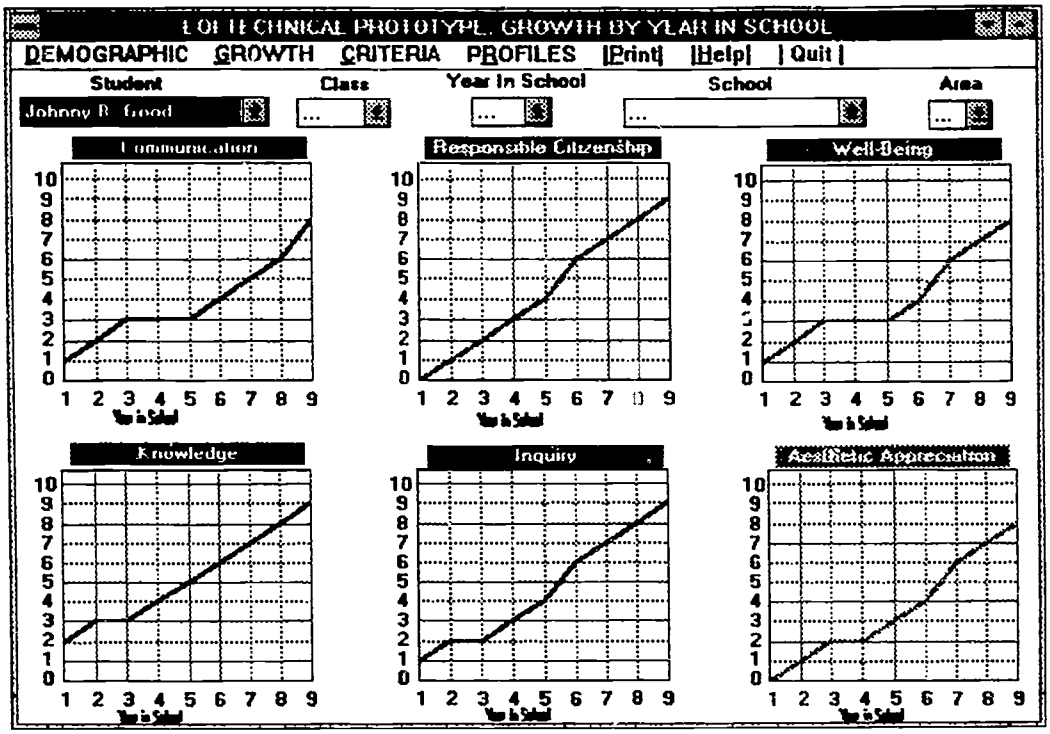

Figure 8: A Screen to Display Student Growth by Year-in-School for All Six Essential Learning Outcomes

Wide-Area Networking

The technical requirements for an upgraded wide-area network have been identified and are being implemented for full use by September 1994. These address the need to accommodate high data traffic flow, image transfer, distibuted processing of data where appropriate, and internal school and central connections to local area networks.

The recent developments in data communications standards and implementation of fibre optic systems have made the technical concept feasible. The wide-area network, which interconnects all schools and central operating units independent of computer type, will meet the data communication needs and storage demands of the district's monitoring functions. The system will incorporate direct connection to InterNet, SchoolNet, and the Edmonton Public Library catalogue system. Issues that continue to be addressed include:

- affordability
- cooperative line charge arrangements with the carriers
- continuing instability of local area networks
- security and integrityof data
- the role of "multimedia" in the assessment process and the technical challenge of handling heavy data traffic on a wide-area network

Computer Assisted Student Progress Reporting

A flexible and stable application has been written which allows teachers to key-enter their own commentary for each student and produce a centrally printed progress report, via local area network to the school office. The report includes the student's picture, comments, and "marks". The system is in use in three schools and incorporates many design features suggested by classroom teachers.

There is a clear connection between this developmental work and the work related to user screens for presentation and capture of student growth information. The current progress reporting system is designed for the Macintosh computer but it is planned that a DOS/Windows version will shortly be available for use by a wider range of schools. The system is compatible with the district's wide-area network standards. It is anticipated that the two initiatives, (progress reporting and student growth user screens), will be merged.

Chapter 5

Conclusions

Although there remain many unanswered questions and much work still has to be done, the findings from the first three years of the project are encouraging and give promise for the future. Teacher and student comments indicate that the tasks and results can be useful in enhancing the reporting of student achievement and growth. The data derived from the teacher evaluations can be used by teachers as part of their assessment of the individual student's achievement and growth and can be aggregated at the school and district level to provide useful accountability information. At the same time, portfolios of student work can be used to discuss and validate a student's individual progress during conferences among teachers, parents, and students.

The feasibility of developing easy-to-use computer applications for the capture, display, and communication of student achievement and growth has been established.

Follow-Up

- Revision and design of tasks for students in years one to twelve
- Preparation of teachers for task administration
- Refinement, development, and application of achievement criteria
- Judgment of student achievement in the demonstration schools
- Collection and reporting of growth information
- Development of paper and computer formats for display of growth data at all levels
- Preparation of a staff development plan
- Attempt to resolve identified issues

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DOCUMENTING STUDENT ACHIEVEMENT

Include the original of this form as a cover page with each student's collection of work. Forward a second copy to Student Assessment by June 15.

Student Name: _____

Year in School: _____ Instructional Group: _____

School: _____

Teacher: _____ Homeroom: _____

Directions for completing this form: Provide the student's grade level of achievement for each essential learning outcome and selected indicator. Base your judgement on the work of the student to date and the work from this task. In those cases where a judgement is not a specific grade, indicate an approximate level by writing "not yet (grade level)" or "exceeds (grade level)". Circle the ✓ if the products resulting from the task are a primary source for making the judgement, or consistent with the judgement. Mark the ○ if other products or observations provide better evidence of the judgement. List these other sources to the right. Please write any additional information that would help others interpret this student's growth on the back of this sheet.

OUTCOMES SELECTED INDICATORS	GRADE	SOURCES FOR MAKING JUDGEMENTS
COMMUNICATION		✓ ○
reading		✓ ○
writing		✓ ○
RESPONSIBLE CITIZENSHIP		✓ ○
participating		✓ ○
cooperating		✓ ○
providing service		✓ ○
WELL-BEING		✓ ○
making choices		✓ ○
exhibiting positive life habits		✓ ○
KNOWLEDGE		✓ ○
applying		✓ ○
calculating		✓ ○
INQUIRY		✓ ○
hypothesizing		✓ ○
researching		✓ ○
decision making		✓ ○
AESTHETIC APPRECIATION		✓ ○
valuing		✓ ○
expressing		✓ ○

FORM: DSA 92

EVALUATION: ACHIEVEMENT CRITERIA
(Graded By Selected Indicators - Grade One)

Judgements, at grade level, are to be based on a holistic impression of the student's work and the criteria demonstrated.

ESSENTIAL LEARNING OUTCOME: STUDENTS DEVELOP AND USE EFFECTIVE FORMS OF **COMMUNICATION** IN VARIED SITUATIONS.

Selected Indicator: **Reading**

Work judged **Grade One Level** shows that students:

- recognize the pattern in a story and may describe and/or explain it
- demonstrate book knowledge (left-to-right; book order)
- note titles, authors, illustrators
- respond personally to a book (likes, dislikes, interpretations)
- read printed words and understand their meanings
- recognize that illustrations tell or enhance the story
- share books confidently by reading, retelling or responding
- retell the content with understanding (details, sequence, characters, structure, main idea)
- locate information in a book to support what they are saying
- extend information in a book to other areas
- demonstrate storytelling behaviours (stance, awareness of audience, use of props)

Selected Indicator: **Writing**

Work judged **Grade One Level** shows that students:

- print along a line (left to right), with spacing between words
- use drawing to complement written work
- formulate and record ideas
- use capitalization (in titles, to begin a sentence)
- copy work from a model provided
- use inventive spelling (*strar* for *straw*; *horese* for *horse*)
- organize writing using a sequence such as: beginning, middle, ending, a pattern, a writing form
- recall and retell events
- express personal feelings and understandings through words
- use punctuation
- use descriptive words

ESSENTIAL LEARNING OUTCOME: STUDENTS **PARTICIPATE RESPONSIBLY** IN THEIR LOCAL NATIONAL, AND WORLD COMMUNITIES.

Selected Indicator: **Participating**

Work judged **Grade One Level** shows that students:

- submit all products and attempt all tasks (holistic impression of whole growth-portfolio)
- show determination to do their best (pride in work)
- show confidence by expressing positive and negative opinions about activities
- identify how "my hard work" or "my best work" contributes to success
- share in discussions
- identify desire to work independently

Selected Indicator: **Cooperating**

Work judged **Grade One Level** shows that students:

- work on and at tasks
- show willingness to cooperate with students and adults (follow directions)
- show willingness to present their comments
- look at other patterns and record them
- use other people's ideas

Selected Indicator: **Providing Service**

Work judged **Grade One Level** shows that students:

- help themselves ("Patterns help me learn.")
- help others

Patterns (Pilot Year) May 1991
Edmonton Public Schools

ESSENTIAL LEARNING OUTCOME: STUDENTS UNDERSTAND, APPRECIATE, AND USE THE SKILLS NECESSARY TO MAINTAIN AND BE RESPONSIBLE FOR THEIR **WELL-BEING.**

Selected Indicator: **Making Choices**

Work judged **Grade One Level** shows that students:

- choose items for use in activity (food for kebobs, materials for rubbings)
- give reasons for choices ("I liked it that way".)
- take care in producing a product
- make choices for their reflections
- represent patterns in several ways, and in more complex ways (weave names into a color pattern)

Selected Indicator: **Exhibiting Positive Life Habits**

Work judged **Grade One Level** shows that students:

- exhibit positive lifestyle or contentment in illustrations (smiles, suns, bright colors)
- take risks (print on pictures, inventive spelling)
- show pride in work (care and details, "I put my best drawings in")
- are aware of what they are learning
- express feelings (likes and dislikes) about self and work done
- show positive outlook in story and other writing ("I like my kebob because...")
- value own product and contribution ("it's good, I'm good, This is my pattern")
- use words or terms that are aesthetically pleasing (pretty, colorful, beautiful)

ESSENTIAL LEARNING OUTCOME: STUDENTS PROCESS AND UNDERSTAND THE **INFORMATION** ACQUIRED THROUGH COURSES OF STUDY AND OTHER SCHOOL EXPERIENCES AND APPLY THIS KNOWLEDGE MEANINGFULLY.

Selected Indicator: **Applying**

Work judged **Grade One Level** shows that students:

- make a pattern
- describe patterns in a variety of ways (labelled drawings, verbal descriptions, mathematical descriptions)
- apply the principle of patterns, in art, in real life situations (life cycles, birthdays, rainbows, routines), and in writing
- use symbols and words to represent the same things
- perceive and represent objects realistically
- apply knowledge of language to express ideas (sentence structure, book knowledge, punctuation)
- draw upon many sources (teacher, charts, friends, books)

Selected Indicator: **Calculating**

Work judged **Grade One Level** shows that students:

- count by 1's, 2's, 5's, 10's...
- label patterns (connect symbol to concrete objects): words (marshmallow, grape, colors), letters (A, B, A, B), numbers (1, 2, 2, 1)
- order objects and numbers (by length, size)
- demonstrate criteria above
- use odd and even numbers

ESSENTIAL LEARNING OUTCOME: STUDENTS DEVELOP **INQUIRY** STRATEGIES TO ENHANCE LEARNING THROUGHOUT LIFE.

Selected Indicator: **Hypothesizing**

Work judged **Grade One Level** shows that students:

- formulate, plan and create a pattern
- continue a pattern (literature pattern, object pattern, number pattern)
- take the idea of patterns and apply it to a different situation

Selected Indicator: **Researching**

Work judged **Grade One Level** shows that students:

- read a book and find a pattern in the text or illustrations
- gather and use ideas from different sources (charts, phone numbers, peers)
- use books and charts to spell words

Selected Indicator: **Decision Making**

Work judged **Grade One Level** shows that students:

- make a choice about a pattern or book or topic
- decide what to draw to illustrate story
- make decisions for completing reflections page
- state why they picked a particular pattern
- express thoughts and/or opinions using "because"

ESSENTIAL LEARNING OUTCOME: STUDENTS APPRECIATE VARIED **AESTHETIC** EXPERIENCES.

Selected Indicator: **Valuing**

Work judged **Grade One Level** shows that students:

- use art to clarify or express meaning
- use color to demonstrate creativity
- show pride in work
- express positive or negative comments about aesthetic experiences (I love, I like, I didn't like)
- compliment or critique their own artwork, storywriting, patterns, or the work of others (descriptive words)
- see reason for doing work (my work helps me learn) or make certain aesthetic choices

Selected Indicator: **Expressing**

Work judged **Grade One Level** shows that students:

- use a variety of colors or media in drawing or painting
- express knowledge, feelings, and ideas through (art) work (draw and color with pattern, illustrate a story).
- give attention to detail in color and drawing
- attempt appropriate scale and perspective in drawings

Note: If you have questions, or suggestions for change, please contact Rick Johnson (498-8706) or Carol Anne Inglis (429-8648), Student Assessment.

EVALUATION: ACHIEVEMENT CRITERIA
(Graded By Selected Indicators - Grade Two)

Judgements, at grade level, are to be based on a holistic impression of the student's work and the criteria demonstrated.

ESSENTIAL LEARNING OUTCOME: STUDENTS DEVELOP AND USE EFFECTIVE FORMS OF **COMMUNICATION** IN VARIED SITUATIONS.

Selected Indicator: **Reading**

Work judged **Grade Two Level** shows that students:

- select a book and give a simple reason for choice (read before, nice pictures, fun)
- identify the type of pattern in the book (the words rhymed, problem and solution)
- provide a summary sentence to describe what the selection was about
- locate or tell about specific information in the text or illustrations to support personal thoughts and feelings
- retell events from selection in random order
- personalize remarks with own thoughts about the literature selection
- refer to the author
- search through a book to locate information for sharing
- include direct wording from the book in retelling i.e., "when it says..."
- answer direct questions about the selection
- compare self and personal experiences to characters or events in the selection
- retell page by page

Selected Indicator: **Writing**

Work judged **Grade Two Level** shows that students:

- use standard spelling for commonly used words
- use capital letters at the beginning of sentences
- draw from personal experience for story events
- choose words to meet their own purposes
- personalize thoughts and ideas
- use punctuation to indicate the end of a sentence
- organize ideas sequentially
- show auditory and visual consistencies in misspellings
- use form, size, and spacing of letters consistently
- make page layout visually appealing
- use connecting words in sentences (and, and then, but, so)
- demonstrate awareness of time in a story sequence (one evening, the next day, in the morning)
- vary sentence beginnings
- present a problem and explain with a simplistic solution
- include dialogue, usually unpunctuated
- vary print for emphasis (using all capital letters)
- foreshadow tone of story in title
- use and sustain a pattern from literature, or daily life
- use long sentences to develop thoughts and ideas
- use opening and closing sentences or signals (once upon a time, and ever since, happily ever after, the end)

ESSENTIAL LEARNING OUTCOME: STUDENTS PARTICIPATE RESPONSIBLY IN THEIR LOCAL, NATIONAL, AND WORLD COMMUNITIES.

Selected Indicator: **Participating**

Work judged **Grade Two Level** shows that students:

- demonstrate persistence in completing a task
- enjoy being part of a group activity and discussion
- identify that "more" and "good" ideas come from class discussions
- work and play with friends
- express eagerness to participate (discuss, brainstorm)
- show confidence by being unique in approach to tasks
- recognize that more people leads to more ideas ("there are more people here than at home to talk to")
- show readiness to self-evaluate relative to expectations
- work with a partner
- work in group activities (classroom publishing group)
- evaluate the effectiveness of class discussions ("the best thing about our class discussion was the way the group decisions ended up")

Selected Indicator: **Cooperating**

Work judged **Grade Two Level** shows that students:

- value working with others ("The best thing about class discussion was sharing.")
- use and acknowledge the help of adults and other students in completing work
- recognize that decisions can result from group effort
- talk eagerly about a piece of work
- come to agreements to make a group decision
- incorporate other people's ideas ("hitchhike on other people's ideas")
- accept help from others
- compliment and comment on other people's work

Selected Indicator: **Providing Service**

Work judged **Grade Two Level** shows that students:

- recognize that others can be helped (show concern for others, my most important contribution was "help my friends")
- help others (help clean up, look after a family pet)
- risk sharing or giving to others
- recognize who to approach for help ("told the principal")
- like to assist others
- recognize own ability to assist others ("drew pictures for other students")
- identify examples of providing service in literature and drama ("the Mission of the Enterprise is to help people")
- recognize possibility for helping others (illustration of a traveller asking for directions)

ESSENTIAL LEARNING OUTCOME: STUDENTS UNDERSTAND, APPRECIATE, AND USE THE SKILLS NECESSARY TO MAINTAIN AND BE RESPONSIBLE FOR THEIR **WELL-BEING.**

Selected Indicator: **Making Choices**

Work judged **Grade Two Level** shows that students:

- take risks in order to share ideas (use invented spelling)
- make a choice that reflects a certain impact or effect (selection of colours in their drawing or painting, selection of shish-kebob items by taste)
- use personally-developed criteria for explaining their choices (pictures, colourful, funny, read it before)
- express an opinion and give specific reasons to justify the opinion ("I like this story because Harry forces Smarty Pants into the wall.", "I like the author.", "I like the shapes,", "I choose the clock because the hours repeat over and over again.")
- adapt someone else's ideas to meet their own purposes
- use phrase "I think" to explain reasons for choices

Selected Indicator: **Exhibiting Positive Life Habits**

Work judged **Grade Two Level** shows that students:

- set out to do work in a particular way and of a particular quality ("make it look nice,", "I wish I could change some of the colour")
- show enthusiasm for work and play (enjoy hands-on activities)
- recognize behaviours that create success ("I *tried* to make it my best." My most important contribution was "*my hard work*" or "I *tried*." The best thing about our class discussion was "I can *talk about what I want to.*")
- volunteer answers and ideas
- demonstrate sense of humour
- identify healthy habits ("eat lunch, brush teeth, go to bed")
- express feelings
- use a strategy to compensate for a weakness or problem (show the reader they are unsure of the spelling of word (*side* (?) for *said*)
- demonstrate an optimistic outlook (in writing state "me and my family lived happily ever after")
- value own products and contributions
- incorporate positive belief system into own beliefs and actions ("I got up to play the piano because a promise is a promise.")

ESSENTIAL LEARNING OUTCOME: STUDENTS PROCESS AND UNDERSTAND THE INFORMATION ACQUIRED THROUGH COURSES OF STUDY AND OTHER SCHOOL EXPERIENCES AND APPLY THIS **KNOWLEDGE** MEANINGFULLY.

Selected Indicator: **Applying**

Work judged **Grade Two Level** shows that students:

- represent and label a pattern or diagram with precision (with objects and colours and words and letters and numerals)
- symbolize a pattern using numerals or letters
- perceive and represent characteristics of living things realistically (cat, person)
- use previous experience to draw and label mathematical devices (hundreds chart, linking cubes, clock face)
- use previous knowledge of numbers to demonstrate an understanding of patterns and numbers
- borrow an artistic style to create or enhance a painting or drawing (use black line to frame parts of a painting, blend primary colours to create "new" colours, use bright colour highlights on a dark background)
- create a structure for themselves by applying what they know from previous experiences (use a beginning, middle, and ending in narrative writing; create a fruit kebob with nutrition in mind; use knowledge of solar system or daily routine in pattern story)
- use knowledge of sound/symbol relationships to invent or predict spellings (*makeing* for *making*)
- quote past experience in order to explain a decision ("I chose this book because I read it before and I knew what it was like", "like a good story")
- incorporate knowledge in creating their own writing or stories (about seeds, plants, butterflies)
- apply past problem-solving strategy to a story problem
- recognize and use literature features or traditions ("...and me and my family lived happily ever after.")
- demonstrate knowledge of language in writing (use <u>two</u>, <u>to</u>, <u>too</u> correctly; use capitalization and punctuation correctly)
- use invented words or symbols as appropriate placeholders in context (*hbyo* for *house*)
- relate a colour pattern to a real life experience (a black and white pattern is titled "jail colours")
- use a clock for personal purposes ("It tells me when to come to school and go home." "I need it for bus times. Buses come at certain times.")

Selected Indicator: **Calculating**

Work judged **Grade Two Level** shows that students:

- ensure accuracy of drawing or diagram by tracing or copying
- use odd and even numbers
- recognize the circularity of pattern in measuring time ("if it is 1:00 [now], in 24 hours it will be 1:00 again; "7 days in a week repeat", "a clock keeps going around forever.")
- show patterns on hundreds chart, calendar, clock
- recognize and describe numeric patterns ("numbers on clock count by fives", "numbers on a clock are 1 - 12", "a pattern repeats")
- identify a numeric pattern from paper folding (old: 1, 2, 3, 4, 5, 6, new 2, 4, 8, 16)
- show relationship between a wide range of numbers (10, 6, 10, 6)
- count by 4's
- comment on the similarities of patterns ("10, 20, 30, or 100, 200, 300 is like 1, 2, 3." "when counting by 100's the 0's keep repeating.")
- record a pattern showing operations (1 + 1 = 2, 2 + 2 = 4, 4 + 4 = 8, 8 + 8 = 16; 1 + 8 = 9, 1 + 9 = 10, 1 + 10 = 11)

Patterns (Pilot Year) May 1991
Edmonton Public Schools

ESSENTIAL LEARNING OUTCOME: STUDENTS DEVELOP **INQUIRY** STRATEGIES TO ENHANCE LEARNING THROUGHOUT LIFE.

Selected Indicator: **Hypothesizing**

Work judged **Grade Two Level** shows that students:

- explore and describe the effects of using different colours and techniques in a painting or drawing (splatter painting)
- identify aspects of a pattern that are the significant features of the pattern
- make "I wonder" statements ("why are 0's in the number?" "If there was a gigantic number pattern how would you count it?")

Selected Indicator: **Researching**

Work judged **Grade Two Level** shows that students:

- draw upon many sources (teachers, charts, friends, books)
- search through a book to find a picture that represents their understanding of the task
- use books and charts for information (to spell words)
- list sources used for gathering information ("The pictures are fun, kind of like comics, but comics are more better.")
- recognize and describe how information is unusual ("e is for whale because a whale is enormous is an example of how the letters stand for something about the animal, not the first letter of the animal.")

Selected Indicator: **Decision Making**

Work judged **Grade Two Level** shows that students:

- express thoughts and opinions using "because"
- select a picture from a book to illustrate their work
- identify and state a personal point of view
- make a choice that meets requirements of task (select items for shish kebob)
- choose and try a particular style of presentation (oral presentation style on video, arrangement of items on the shish kebob stick)
- evaluate their own achievement, performance, and growth ("I made a big improvement." "This book was hard for me to read. I would rather read it with somebody." "I think it was the story that I did my best work."
- evaluate the effectiveness of activities ("Last year's wasn't as fun but this year is fun.")
- tell what they would do in the future in a similar situation ("I would choose this book again because...", "I always choose... because...")
- recognize and state two points of view about a situation (good and bad things about summer)
- see alternatives and try them ("Rajiv likes to experiment and try his own ideas.")
- defend using a particular technique ("She insisted this was just what she had wanted to happen." "Black is beautiful because it stand out."

ESSENTIAL LEARNING OUTCOME: STUDENTS APPRECIATE VARIED AESTHETIC EXPERIENCES.

Selected Indicator: **Valuing**

Work judged **Grade Two Level** shows that students:

- express positive or negative comments about aesthetic experiences ("I love", "I didn't like.")
- compliment or critique their own work
- identify the distinctive features and techniques which are the basis of their appreciation ("I like the shapes [in other people's patterns]." "I like red"; like the effect of overlapping or layering shapes and colours. "I like the bright colours especially the yellow little fish.")
- recognize the usefulness of a variety of learning activities and experiences within the classroom ("class discussion is good for getting more ideas; making group decisions," "I like patterns. They help me learn.")
- comment on literature features or traditions that reflect personal preferences ("I like the books by Mercer Mayer." "I like the cover. I always choose a book when I like the picture." "I chose this book because it's so colourful and I like the pictures.")
- use descriptive words that convey the impact of their work on themselves and others ("I like using colours-how I can make something lovely."
- identify a specific reason for pride in their work ("The clouds are moving smoothly across the sky. I feel proud of my picture.")
- state personal feelings about an aspect of literature ("It is just like the house is living-I like that.")
- recognize the bridge between the visual impact and other senses ("I like it because it looks tasty.")

Selected Indicator: **Expressing**

Work judged **Grade Two Level** shows that students:

- use all of the space on a page, including blank spaces, to create a pleasing effect.
- arrange the parts of their illustration to create a pleasing overall effect.
- convey what they intended to do in their painting or drawing ("I wanted to make a colourful picture." "I wanted to make a beautiful picture." "...make them bright." "make it look real." "I put them [colours] in layers because I knew I couldn't fit all the colours.")
- use both colour and careful drawing to illustrate character or plot (footprints in the sand, coloured sunglasses, facial expressions)
- include all details when recreating a product (retelling a story, representing a pattern, recounting a routine)
- elicit a feeling response in viewer or reader ("I said Mom are you mad at me and she said no and I said I love you and then she said I love you too." "The next morning I woke up. I felt sad.")
- experiment with colour, texture, technique, and new vocabulary (red dominates products, descriptive words to convey feelings)
- write a description of a picture that matches the visual elements
- describe the ideas and feelings communicated through a visual presentation ("The wind is blowing and the rain is falling." "Everything moving made me think of pictures in my mind.")
- use and adapt techniques of other writers and artists ("Darn! that Cat!")
- describe a technique they have used ("I tipped my page a bit so the colours would make different colours.")

Note: If you have any questions, or suggestions for change, please contact Rick Johnson (498-8706) or Carol Anne Inglis (429-8648), Student Assessment.

EVALUATION: ACHIEVEMENT CRITERIA
(Grades One to Twelve for Selected Indicator: Writing)

Selected Indicator: **Writing**
Work judged **Grade One Level** shows that students:

- use a personal point of view to communicate a message
- express personal feelings and understandings through words
- tell information in a simple straightforward manner
- recall and retell events
- formulate and record ideas
- copy work from a model provided
- use drawing to complement written work
- connect ideas together by using a sequence such as: beginning, middle, ending, a pattern, a writing form
- print along a line (left to right), with spacing between words
- use descriptive words
- use approximate spellings* (*strar* for *straw*; *horese* for *horse*) [*use graphophonic relationships to spell words that are unknown]
- use punctuation
- use capitalization (in titles, to begin a sentence)

Selected Indicator: **Writing**
Work judged **Grade Two Level** shows that students:

- draw from personal experience for story events
- personalize thoughts and ideas
- foreshadow tone of story in title
- vary print for emphasis (using all capital letters)
- demonstrate awareness of time in a story sequence (one evening, the next day, in the morning)
- present a problem and explain with a simplistic solution
- provide supportive details about some of the information
- use and sustain a pattern from literature, or daily life
- organize ideas sequentially
- make page layout visually appealing
- use opening and closing sentences or signals (once upon a time, and ever since, happily ever after, the end)
- use long sentences to develop thoughts and ideas
- use connecting words in sentences (and, and then, but, so)
- vary sentence beginnings
- choose words to meet their own purposes
- use standard spelling for commonly used words
- show auditory and visual consistencies in misspellings e.g. allwas for always, forist for forest
- use punctuation to indicate the end of a sentence
- include dialogue, usually unpunctuated
- use capital letters at the beginning of sentences
- use form, size, and spacing of letters consistently

Please add criteria that you think should have been included.

(Pilot)
Nov. 25, 1992

Selected Indicator: **Writing**
Work judged **Grade Three Level** shows that students:

- communicate a message so that the reader understands the writer's intent
- appeal to the reader's interest in selection of content and details
- support the intent of the writing with descriptive details
- order information in a coherent sequence
- provide closure for the message
- attempt a variety of sentence types and lengths for effect
- show general control of subject and verb agreement
- use specific words and expressions to add clarity and interest to the writing (strong nouns)
- show general control of spelling, punctuation, and capitalization (errors present usually do not affect the clarity of communication)

Selected Indicator: **Writing**
Work judged **Grade Four Level** shows that students:

- use the point of view of another participant as well as personal point of view
- communicate a clear message to the reader (focus on a topic, theme or concept)
- develop and connect beginnings and endings
- use simple, compound, and complex sentence structures
- use correct verb tenses consistently
- vary sentence beginnings by using phrases
- choose nouns, verbs, conjunctions, and phrases to achieve particular effects
- use generally correct spelling, capitalization, and punctuation

Selected Indicator: **Writing**
Work judged **Grade Five Level** shows that students:

- use clear style or voice
- use adjectives to create mood
- use dialogue to develop characters and enhance plot
- organize writing using techniques such as paragraphing
- organize writing for conventional formats (letters, reports, books)
- sequence ideas
- combine sentences effectively
- use precise and descriptive vocabulary appropriate to topic and style
- use variety of punctuation appropriately
- use essentially correct capitalization, punctuation, and spelling

Selected Indicator: **Writing**
Work judged **Grade Six Level** shows that students:

- select details to illustrate an idea
- use a tone which is appropriate for the form
- relate what they know to new information and ideas
- develop ideas that flow (link ideas using strategies such as compare and contrast, cause and effect, problem and solution)
- explain a point of view
- use variety in sentence type and length
- use vocabulary appropriate to a specific form and purpose: entertain (humor), persuade (argue), inform, explain, reflect
- use essentially correct capitalization, punctuation, spelling, and grammar
- use strategies for editing independently

Please add criteria that you think should have been included.

Selected Indicator: **Writing**
Work judged **Grade Seven Level** shows that students:

- write, from a single point of view, clearly and effectively to support a position
- emphasize direct experience and background as sources of information for writing
- use various methods of developing a piece of writing, such as reasons, examples, sequence of events, time order, space order, dialogue, opinions, or comparisons
- able to write in a variety of styles and forms
- use vocabulary appropriate to chosen style (support an argument, develop an opinion, explain events)
- unify writing by using related ideas in the appropriate order
- compose writing that is essentially free from errors in punctuation, spelling and grammar

Selected Indicator: **Writing**
Work judged **Grade Eight Level** shows that students:

- write, from more than one point of view, clearly and effectively to support a position
- select details carefully to create a dominant impression
- use direct experience and imagination as sources of information for writing
- use transitional words and phrases to link ideas
- compose writing that is essentially free from errors in punctuation, spelling and grammar
- show evidence of proofreading for punctuation and grammar

Selected indicator: **Writing**
Work judged **Grade Nine Level** shows that students:

- write from several points of view, and with sensitivity to more than one perspective
- present information in a logical step-by-step manner by using subtle transitional devices such as synonyms or repetition
- use forms and techniques that suit the purpose of the assignment
- compose writing that is essentially free from errors in punctuation, spelling and grammar
- use dictionary, thesaurus, and writers' handbook independently to solve specific problems with conventions

Selected Indicator: **Writing**
Work judged **Grade Ten Level** shows that students:

- include an introduction, body, and conclusion in a piece of writing
- create a dominant mood
- limit the content of the composition to pertinent details
- develop a thesis statement which gives an overview of the information
- use generally accurate vocabulary to develop thesis idea
- use images and figures of speech effectively
- compose writing that is essentially free from errors in punctuation, spelling, grammar and usage

Please add criteria that you think should have been included.

(Pilot)
Nov. 25, 1992

Selected Indicator: **Writing**
Work judged **Grade Eleven Level** shows that students:

- use writing to explore ideas and emotions
- use various methods of development such as deductive and inductive reasoning, analogy, definition, dialogue, examples, descriptive details, and illustrations
- select vocabulary appropriate to the chosen method of development
- demonstrate effective word choices for form, purpose, audience
- write an introduction which engages and focuses the reader's attention
- compose writing that is essentially free from errors in grammar, usage, punctuation, and spelling

Selected Indicator: **Writing**
Work judged **Grade Twelve Level** shows that students:

- use literature selections or researched information to support or reinforce a theme or point of view
- use specific examples from various genres
- include an introduction which establishes the mood and tone of a piece of writing
- write multiple paragraph compositions u g appropriate techniques for introducing, developing, and concluding a topic
- use words and sentence structures effectively
- choose words for connotative value
- synthesize information into a thoughtful response
- compose writing that is essentially free from errors in grammar, usage, punctuation, and spelling

Please add criteria that you think should have been included.

(Pilot)
Nov. 25, 1992

TASK TITLE: TRAFFIC FLOW

PURPOSE:

Students will identify, investigate, and make recommendations for a solution to a traffic flow problem in their school.

This task is a series of activities designed to provide information about all six essential learning outcomes.

TARGET STUDENT AUDIENCE:

Years in school 1 to 6

PROCESS MODEL:

The process model used in the design of this task is from the Social Studies Program of Studies, Alberta Education (1990). The model used is a model for decision-making.

- understand the issues
- develop research questions and procedures
- gather, organize, and interpret information
- think of alternatives
- make a choice
- take action (if feasible and desirable)

Inquiry strategies, such as decision making, help students answer questions, solve problems, and make decisions, using process, communication, and participation skills. Critical and creative thinking may be encouraged by using a decision-making model such as the one outlined above.

TRAFFIC FLOW

This task consists of six steps. Times for each step are suggested only and may be carried out over a few days by doing more than one step in one day; or, over several days by doing one step per day. Students may work together in pairs, small groups, or as a whole class during the activities, but 8-12 individual student products need to be obtained from each student for his/her portfolio.

OUTLINE OF STEPS AND ACTIVITIES

STEP ONE:	Explore the concept of traffic flow.	30 - 45 minutes
STEP TWO:	Identify and select a problem associated with traffic flow in/around school.	15 - 30 minutes
STEP THREE:	Develop a plan to solve a selected problem.	30 minutes
STEP FOUR:	Gather, organize and interpret data collected; recommend a solution	1 hour
STEP FIVE:	Prepare oral presentation to lobby for change. Prepare poster to support recommendation.	1 hour
STEP SIX:	Present recommendations to a panel	5 - 10 minutes (per student)

Time Required: 4 - 6 hours

Classroom Materials Needed:

Map of a classroom or neighbourhood (generic or actual)
Red pens
Chart paper
Logbooks
Retrieval charts
Data collection sheet
8 1/2 X 11" paper
Pro and con chart
Materials for making a poster
Video equipment

Alternate Topics, Directions and Resources:

- changing traffic lights
- installing a crosswalk or a 4 way stop
- developing a new playground or recreation facility
- cleaning up the community
- exploring a local environmental issue

Curricular Relevance

Indicate major focus(es) of the task with a solid circle [•] and minor focus(es) with an open circle [o]

	COMMUNICAT	INQUIRY	RESP CITIZ	WELL BEING	KNOWLEDGE	AESTHETICS
Language Arts/ English	•		o			•
Social Studies & Soc. Sciences	•	•	•	•	•	
Mathematics	•	•			•	
Science		•			o	
Physical Education						
Health and CALM			•	•		
Fine Arts	•					•
Business Education						
Home Economics						
Industrial Education						
Other _____						

Essential Learning Outcomes & Selected Indicators

COMMUNICATION Students develop and use effective forms of communication in varied situations.

Indicators: reading
writing

RESPONSIBLE CITIZENSHIP Students participate responsibly i. their local, national, and world communities.

Indicators: participating
cooperating
providing service

WELL-BEING Students understand, appreciate, and use the skills necessary to maintain and be responsible for their well-being.

Indicators: making choices
exhibiting positive life habits

KNOWLEDGE Students process and understand the information acquired through courses of study and other school experiences and apply this knowledge meaningfully.

Indicators: applying
calculating

INQUIRY Students develop inquiry strategies to enhance learning thorughout life.

Indicators: hypothesizing
researching
decision making

AESTHETIC APPRECIATION Students appreciate varied aesthetic experiences.

Indicators: valuing
expressing

STUDENT DEMONSTRATIONS OF ESSENTIAL LEARNING OUTCOMES

Some of the student demonstrations listed below will result in evidence used to evaluate student achievement in this task.

Communication

- prepare a written response to a problem with an identified solution in the form of a letter (writing)
- read letter and/or proposal to a panel (reading).

Citizenship

- participate in all activities (participating)
- co-operate with the other members of their small group and with their teacher (co-operating.
- identify a problem associated with traffic flow in the school and develop a plan to solve the problem (providing service)

Well-being

- reflect on the choices they have made (making choices)
- identify a problem which effects the student body and create a plan to solve it (exhibiting positive life habits)

Knowledge

- gather, record, and organize data (calculating)
- interpret data (calculating)
- construct, discuss, extend, and share ideas (applying)

Inquiry

- work on tasks to solve a problem (hypothesizing/researching)
- make decisions on development of a plan for change to solve the problem; make decisions on necessary changes to the plan (decision making)

Aesthetic

- apply judgement and give opinions in all activities (valuing)
- express feelings and meaning through painting, drawing, and writing (expressing)

CURRICULAR RELEVANCE: OUTCOMES AND EXPECTATIONS

The activities in this task will reflect outcomes and expectations from language arts, social studies, mathematics, science, health, and art.

Achievement criteria were developed from the following expectations and from student products.

LANGUAGE ARTS

Outcome 5

Students apply knowledge of written and spoken language in a variety of situations.

Expectations

Students are expected to:

- participate in the roles of reader-writer, viewer-presenter, and speaker-listener as required by the situation (Grade 6)
- vary oral and written language to suit a variety of situations and purposes (Grade 3)

Outcome 8

Students organize and evaluate new experiences and ideas in written and spoken language.

Expectations

Students are expected to:

- evaluate experience using external criteria rather than relying on personal reaction (Grade 6)
- respond to ideas using oral or written communication (Grade 3)
- select a form to suit a particular purpose and audience (Grade 6)

SOCIAL STUDIES

Outcome 2

Students demonstrate an ability to apply critical and creative thinking skills to decision making and social inquiry in the examination of issues and questions of public and personal concern.

Expectations

Students are expected to:

- interpret the facts gathered (Grade 3)
- formulate conclusions based on information gathered (Grade 6)
- identify new ways of doing things (Grade 6)
- consider and assess a variety of alternatives before forming an opinion or making a decision (Grade 6)
- identify issues of personal or public concern in their community (Grade 6)

MATHEMATICS

Outcome 2

Students apply mathematical skills and knowledge to real world situations.

Expectations

Students are expected to:

- use mathematical skills to quantify and illustrate ideas in science, art, and social studies (Grade 3)

SCIENCE

Outcome 1

Students demonstrate the ability to interpret the natural and man-made worlds through processes of independent thought and inquiry.

Expectations

Students are expected to:

- generalize data gathered by self and others (grade 6)
- State an interpretation of data that has been gathered by self (Grade 3)
- distinguish between interpretation and fact (Grade 6)

HEALTH

Outcome 4

Students exhibit responsible decision-making skills.

Expectations

Students are expected to:

- apply the steps of a decision-making model (Grade 6)
- identify important traits necessary for co-operation in both classroom and school (Grade 3)

ART

Outcome 1

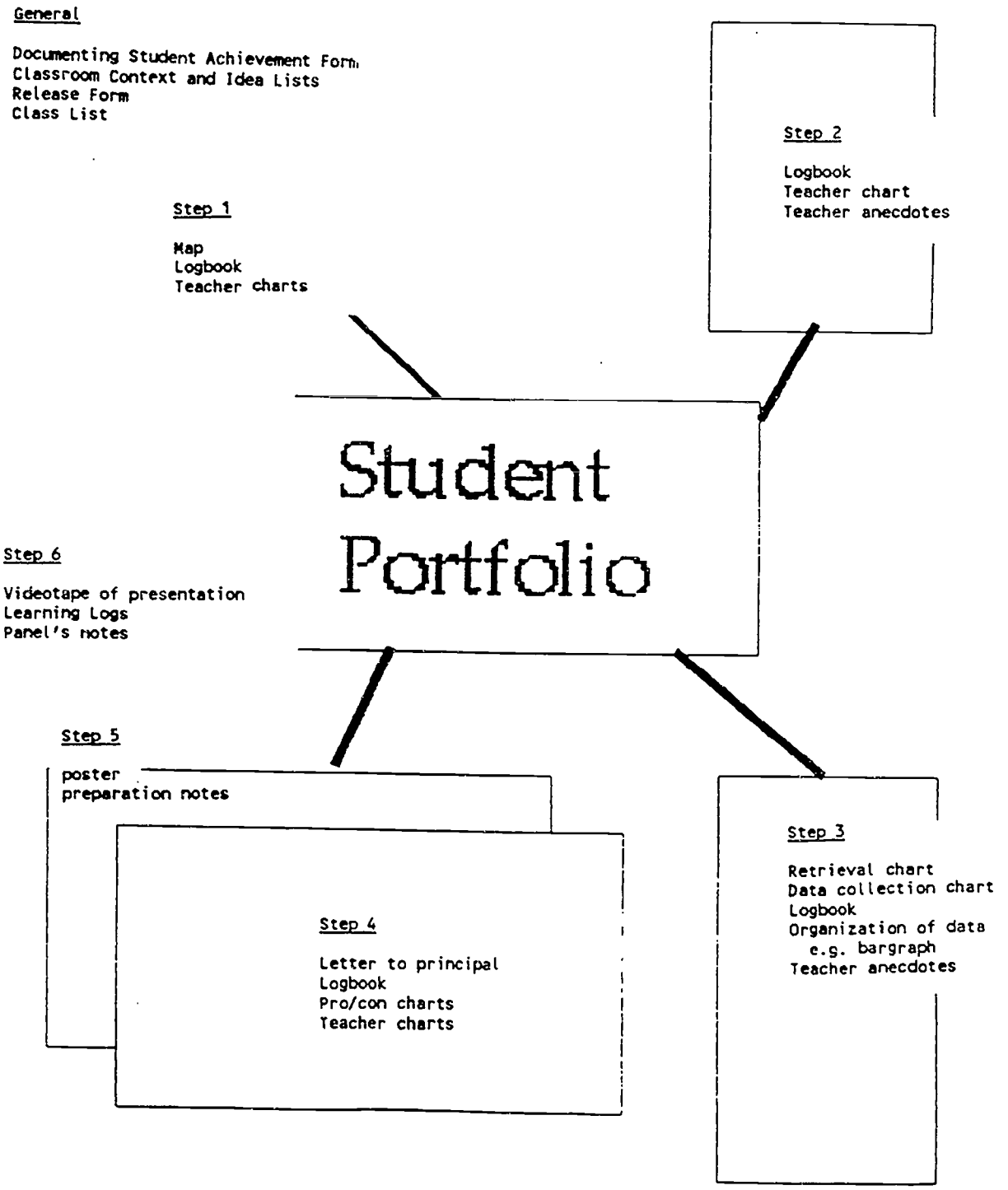
Students express themselves through the arts

Expectations

Students are expected to:

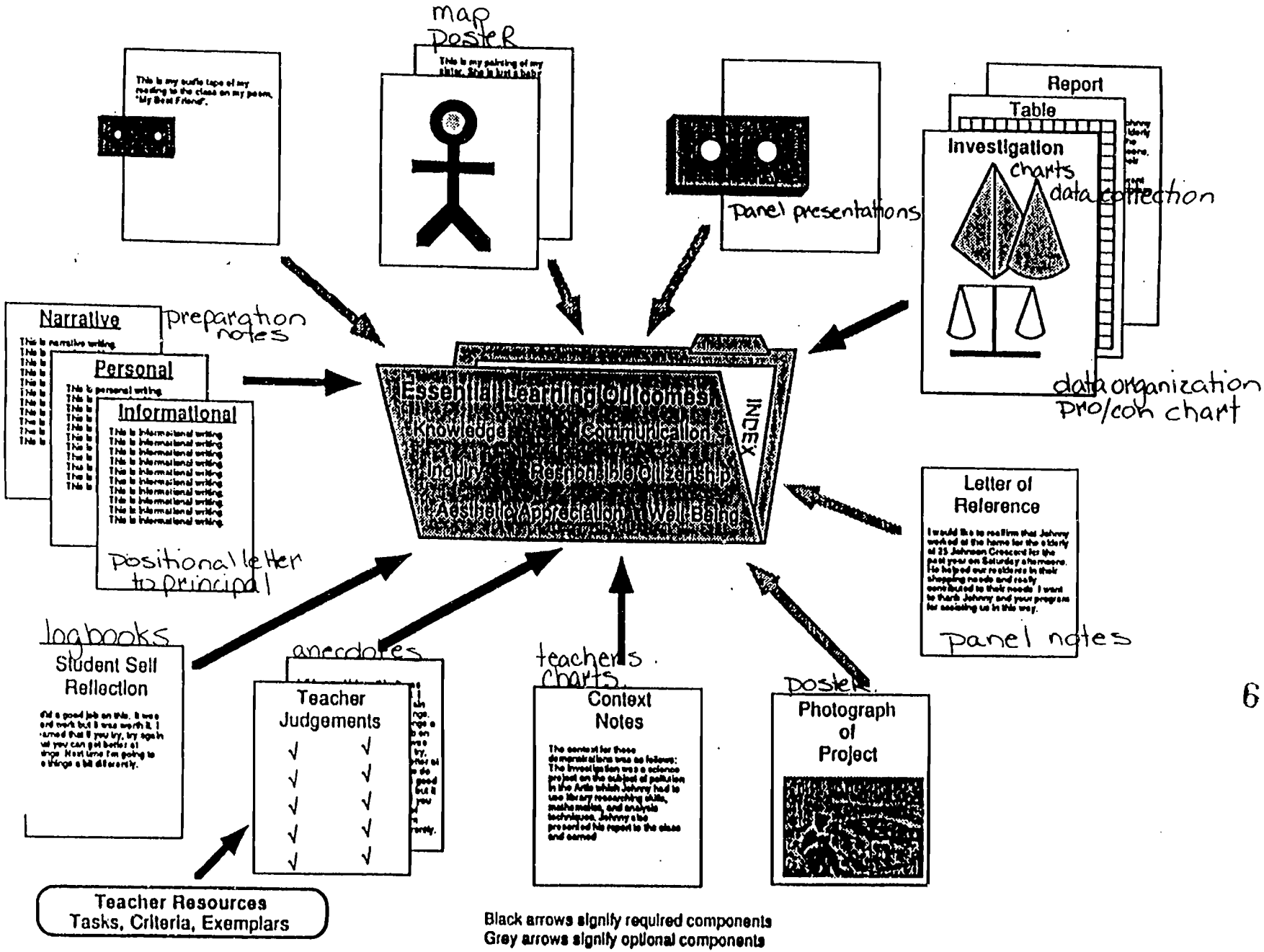
- recognize and generate an artistic problem, plan the solution and execute the plan (Grade 3)

Products to Result from this Task



Traffic Flow

DRAFT



Traffic Flow

GUIDELINES FOR PRODUCT SELECTION

1. The collection of student products will demonstrate essential learning outcomes.
2. A variety of student demonstrations will be represented in the collection, for example, writing, photographs, drawings, oral presentations, teacher-notes, student reflections.
3. Some products will be collected annually and used for longitudinal comparison purposes.
4. Provision will be made for appropriate involvement of students, teachers, parents, and guardians in selecting products.

DISTRICT INFORMATION FROM PRODUCTS

As a result of collecting student products,

Students will have:

- a measure of their achievement.
- a measure of their growth.
- a collection of products which support the story they would want to tell about their growth.
- concrete products to show others what they can do and are capable of doing.
- evidence of 'hard to score' qualities such as thoughtfulness, perseverance, flexibility, and self-confidence.

District Staff will have:

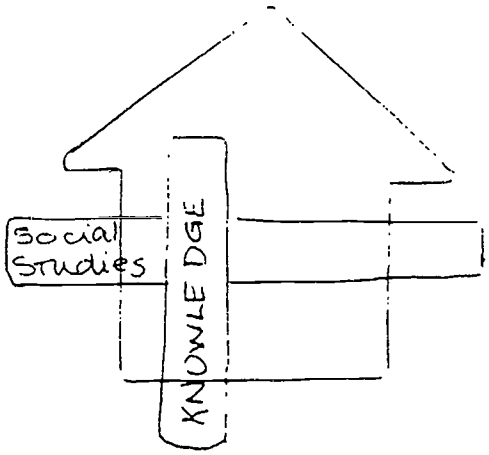
- a device for highlighting what an individual 'can' do in relation to curriculum expectations.
- a student's growth history: their story told with products of their work, judgements made on that work, reasons for selection of work, student's comments on work, student's reflections, and information showing progress towards goals.
- models for achievement of selected indicators.
- tasks and criteria for ensuring accurate and meaningful student demonstrations of expectations, in realistic classroom contexts.
- exemplars of student work at all levels, programs, and sites.

Parents will have:

- a profile which shows the child's achievement and growth over time (a comparison of where a student was to where student is now; peaks and plateaus.)
- concrete products which document the child's achievement and growth.
- achievement criteria to use in questioning and commenting about their child's programming.
- input on selection of products.
- assurance that their child is learning in a manner comparable with their personal growth pattern, as well as district and provincial standards.

Community will have:

- evidence of student achievement and growth in essential learning outcomes and selected indicators for Edmonton Public Schools.



STEP ONE ACTIVITIES

Step One Purpose:	The purpose of this step is to set a context for other steps of the task by exploring the concept of traffic flow. The intent is to explore traffic flow by having students observe evidence of traffic flow in the classroom, school, and grounds. Discussion can be extended to the neighbourhood, city and country. Students hypothesize on why the flow of traffic has developed the way it has.
Assessment Purpose:	Student products will show understanding and application of the concept of traffic flow.
Time Required:	30 - 45 minutes
Materials:	Map of classroom or school or neighbourhood. (generic or actual), red pens, chart paper, logbooks

Activities

1. Use a focus question to begin discussion e.g. make an observation on the wear in the carpet or linoleum. Why would it be wearing (or dirty) here and not here? (e.g. corners)

   Help students to identify the reason is because that's where people walk. Further discussion can expand on concept. e.g. Are there other examples in the classroom. Is there other evidence that tells you this is where a lot of people walk about in the school? (explore other areas such as entrance ways, route to the gym, office doorways). What about in the playground? (explore areas such as worn grass, hard soil). Extend discussion to neighbourhood, such as main streets, side streets; city (to the bridges, downtown area) and the country (highways, secondary roads)

2. Discussion of heavy traffic flow, medium traffic flow, light traffic flow and possible reasons. Relate this to the school. For example, which entrances are used more, which hallways are used more.

3. Draw relationships, for example, between heavy traffic flow and short cuts, between most used entrance; and bus stop or bike rack, and between playing fields and entrances, and traffic flow to and from particular areas of the school, such as the library.

4. Draw relationships in neighbourhood, city, country. For example:
   - feeder streets to connector streets to main streets
   - between traffic flow and bridges
   - between highways and mountain passes
   - safety and traffic flow.

5. Have discussion about how heavy traffic flow is accommodated and controlled. For example:

In City	In school
• wider streets	• designated entrances
• traffic lights	• designated routes to gym, library etc.
• traffic rules	
• more bridges	
• one-way streets	

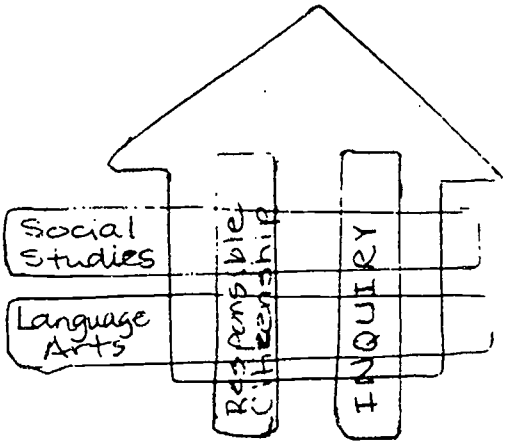
6. Given a map of a classroom or a school or a neighbourhood, students colour with red where they think the heavy traffic flows will occur.

   Discuss with students reasons for their choices.

   Students describe reasons for their choice in their learning log. In the learning log students might complete sentence starters such as:
   - I learned that traffic flow is ...
   - Some areas have more traffic flow than others because...
   - On my map, I chose this route as the heavy traffic flow path because...

   Student ideas may be written by the child, scribed by an adult, or recorded on an audio-cassette.

Products to Result:
map
logbook
teacher charts



STEP TWO ACTIVITIES

Step Two Purpose: The purpose of these activities is to have students identify problems associated with traffic flow. The activities will promote identification of problems associated with traffic flow in the school (or classroom or neighbourhood) and selection of a problem to investigate.

Assessment Purpose: Student products will show participation in discussion, providing service by identification of a school or community problem, willingness to find a solution, and cooperation as a member of a group.

Time Required: 15 - 30 minutes

Materials: Chart paper
Logbooks

Activities:

1. Begin discussion of problems associated with traffic flow with a focus question. For example:
   - What if Edmonton had only one bridge. How would that affect traffic flow?
   - What if the school had only one entrance door?

   Bring discussion to a conclusion that heavy traffic flow causes problems which are solved by making changes or developing rules.

2. In small groups (or whole class) have children brainstorm problems associated with traffic flow that are created when something unusual or different happens. For example:
   - entrance and exit from gym at a school assembly
   - an accident on a bridge
   - ambulance with siren moving down the street
   - fire in the school.

   Discuss how these problems have been solved by the school and or community. Assign one problem to each group to identify solutions.

3. In small groups identify one problem in the school associated with traffic flow that has not been solved and why they see it as a problem. For example:
   - big and little kids using the same entrance
   - not enough entrances
   - too many people in one hallway
   - flower beds being trampled
   - too much congestion at coat rack
   - dirty entrance ways
   - noise level
   - fire exit route is not the quickest

   Small groups decide which problem they would like to investigate. Groups share with the class and tell why they selected this problem to investigate.

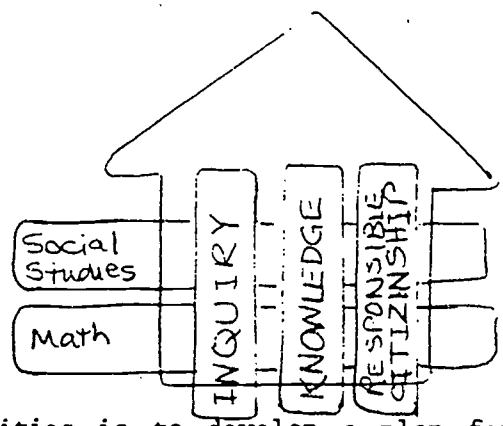
4. Learning Logs
   Describe the problem your group selected to investigate and why you think this is a problem. Student's ideas may be written by the child or scribed by an adult.

5. Students may record in their logbook an insight they have about a particular problem associated with traffic flow in their home or community that has not been discussed. For example:
   - dirty or congested entrance at home
   - worn lawn on corner lot
   - congestion in traffic in front of school at dismissal time.

Student ideas may be written by the child, scribed, or audiotaped.

N.B. Teacher will make anecdotal notes about the student participating and cooperating.

Products to Result:
logbook
teacher charts
teacher anecdotes



STEP THREE ACTIVITIES

Purpose: The purpose of these activities is to develop a plan for solving a problem and to carry out the plan, following which the data will be organized and interpreted.

Assessment Purpose: Student products will show hypothesizing, researching, and analysis and synthesis of data.

Time Required: 30 minutes

Materials: Retrieval chart, 8 1/2 X 11" paper,
Data collection sheet,
Logbooks

Activities:

1. Each small group or the whole class identifies the specific problem they are choosing to solve.

2. Group brainstorm (either whole group or small group) to complete the retrieval chart below.

What We Know	What We Wonder	How We'll Find Out

3. Review "How we'll find out" column and make it into an investigation plan.

4. Members of the group take responsibility for different aspects of the investigation.

5. Students record in learning log the plan they have developed to solve the problem and describe their role. Students record prediction of what their data will show and what they foresee as a possible solution.
Teacher records anecdotal notes of student participation in the group planning process. In particular attention is given to:
   - Does the student give ideas?
   - Does the student listen to and accept the ideas of others?
   - Does the student assume responsibility for his/her share of the task?

   Students ideas may be written by the child, scribed or audiotaped

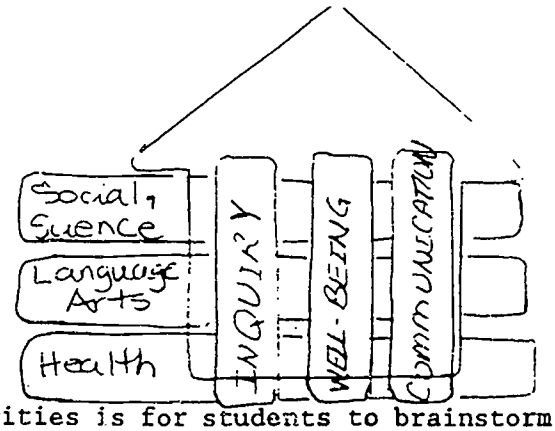
6. Students proceed to gather data. For example,
   - record the number of people using particular entrance way(s) at various times of the day and organize data on a bar graph
   - record the number of year 1 and 2 students, year 3 and 4, and year 5 and 6 students using a particular entrance and organize data in a pictograph
   - select various fire escape routes and record the time it takes classes to exit
   - record the number of students who walk across the flower garden or planted area at various times and organize data on a chart

7. Small groups share the data gathered. Whole group discussion of the various ways the data can be organized.

8. Using any of the data gathered, the students select one way to and organize the data.

N.B. Teacher will make anecdotal notes about the student providing service.

Products to Result:
- retrieval chart
- data collection chart
- organization of data e.g. bar graph
- teacher anecdotal notes
- logbooks



STEP FOUR ACTIVITIES

Purpose: The purpose of these activities is for students to brainstorm all the possible solutions to the problem. Students individually select a solution and develop a plan to implement it.

Assessment Purpose: Student products will show making choices and decisions, and writing.

Time Required: 1 hour

Materials: Chart paper, pro and con chart, logbook, 8 1/2 X 11" paper (e.g. school letterhead)

Activities:

1. In small groups or whole group students examine data gathered. Students share what they found out and why they think this occurred.

2. In small groups or whole group brainstorm all the possible solutions to the problem. Record on chartpaper.

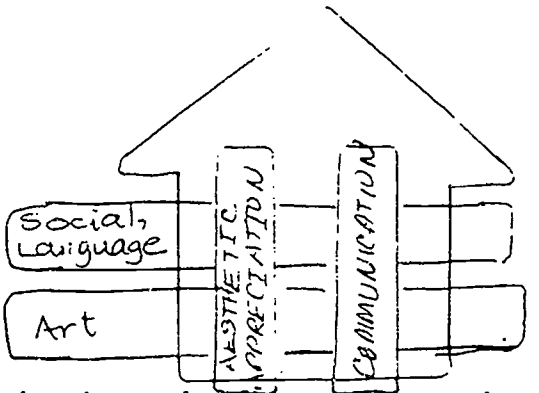
3. Small groups or individuals do a Pro and Con chart for one solution and present their findings to the group.

4. Individually, students select one alternative and record it in their learning log. Students explain why they think this is the best alternative.

5. Students write a letter to the principal identifying the problem, stating why it's a problem, and the alternative they suggest.

   Student ideas may be written by the child, scribed, or audiotaped.

Products to Result:
teacher charts
pro/con charts
letter to principal
logbook



STEP FIVE ACTIVITIES

Purpose: The purpose of these activities is to develop a presentation to a panel proposing their change in order to solve an identified traffic flow problem.

Assessment Purpose: Student products will show expressing through art and communicating through writing.

Time Required: 1 hour

Materials: 8 1/2 X 11" paper, materials for making a poster

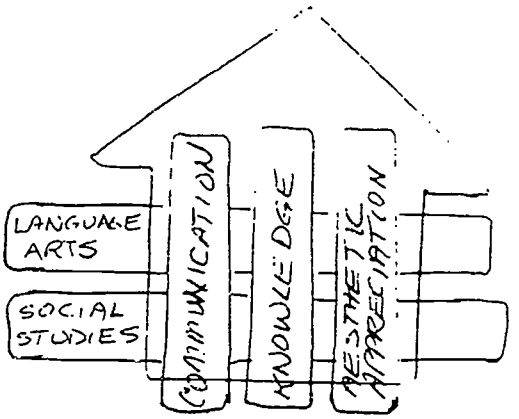
Activities:

1. Individually, students prepare a one to three minute talk to be given to a panel. Panel could include the principal, a custodian, secretary, or teacher. The presentation should include the following:
   - the identified problem
   - why this was seen as a problem
   - the data gathered and what they found out
   - a possible solution

   (Students could choose to read their letter.)

2. Students prepare a poster that will be used to encourage the panel to decide to make the change. The poster should attempt to persuade the viewer.

Products to Result:
• preparation notes (if any)
• poster



STEP SIX ACTIVITIES

Purpose: The purpose of these activities is for students to make an oral presentation to a panel of their proposal for change.

Assessment Purpose: Student products will show communicating through reading, application of knowledge and reflection on the learning that has taken place for them during this task.

Time Required: 5 - 10 minutes per student

Materials: Video equipment, Learning Logs

Activities:

1. Individually, students will make their one to three minute presentation including the use of the poster. Videotape presentation.

2. Panel will ask one or two questions to probe for deeper understanding, highlight possible problems with plan, etc. Videotape interaction.
   Panel makes notes on student responses.

3. In their logbooks students reflect on their plan, responding to any suggestions made by panel. Students state any changes they would make to plan and why.

4. Students respond to questions such as the following in their logbooks. Student ideas may be written by the child, scribed, or audiotaped.
   - In this activity what did you learn?
   - Why is it important to know this?
   - What did you like about doing this activity?
   - How well did you participate in this activity?

   Teachers may list the questions on a board or chart, and discuss them with the students as a group, before they begin writing in their logbooks.

Products to Result:
videotape of presentation
logbooks
panel's notes

TASK TITLE:

All Summer in a Day

PURPOSE:

Students will:

- explore what happens when two cultures meet
- explore the relationship of sunlight to our well-being
- read literature to extend personal experiences and understanding
- communicate new skills, knowledge, and attitudes

This task is designed to provide information about inquiry.

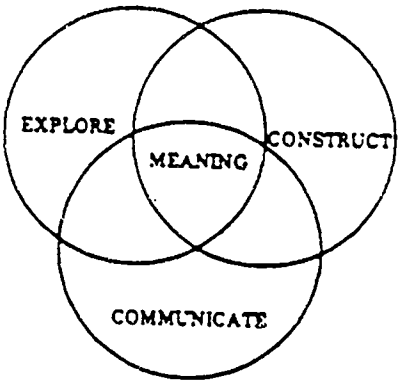
KEY ISSUE:

The meeting of cultures can have positive and negative consequences.

TARGET STUDENT AUDIENCE:

Years in school 7 to 12

PROCESS MODEL:



OUTLINE OF STEPS AND SUGGESTED TIME REQUIRED

This task consists of three steps. Times for each step are suggested times only and may be carried out over a few days, by doing more than one step in one day, or over several days by doing one step per day. Students may work together in pairs, in small groups, or as a whole class during the activities, but individual student products need to be obtained from each student for his or her portfolio.

Classroom Materials Needed:

chart paper
poster paper
felt pens
"Effects Wheel" sheet
All Summer in a Day by Ray Bradbury
reference material on two cultures
video equipment
reference material on the genre of science fiction (optional)
reference material on the atmospheric conditions of Venus (optional)

Time Required: 6 - 14 periods

STEP ONE:

Students predict what a world without sunlight would be like, writing their predictions in their journals. The teacher instructs the class on photosynthesis. The class makes a T-chart of how sunlight effects our culture versus another culture with more or less sunlight. Students illustrate the relationship of the sun to the earth using a visual.

STEP TWO:

Students imagine what it would be like to move to another country and list five things they would need to learn to survive. Students work with a partner to complete an "Effects Wheel" to show the positive and negative consequences of two cultures meeting.

STEP THREE:

Students read *All Summer in a Day* and discuss questions in co-operative learning groups that relate to the story. Following a class discussion, where they report the findings from their groups, students make a video or some other representation of something positive that could result from the situation in the story. Students are encouraged to take social action by reflecting in their journals on how they could help a new student adjust to their school.

Curricular Relevance

Indicate major focus(es) of the task with a solid circle [•] and minor focus(es) with an open cirlce [o]

	COMMUNICAT	INQUIRY	RESP CITIZ	WELL BEING	KNOWLEDGE	AESTHETICS
Language Arts/ English	•	•	o	o	o	o
Social Studies & Soc. Sciences	•	•	•	•	o	o
Mathematics						
Science	o	•	o	o	o	o
Physical Education						
Health and CALM						
Fine Arts						
Business Education						
Home Economics						
Industrial Education						
Other _____						

Essential Learning Outcomes & Selected Indicators

COMMUNICATION Students develop and use effective forms of communication in varied situations.

Indicators: reading
writing

RESPONSIBLE CITIZENSHIP Students participate responsibly in their local, national, and world communities.

Indicators: participating
cooperating
providing service

WELL-BEING Students understand, appreciate, and use the skills necessary to maintain and be responsible for their well-being.

Indicators: making choices
exhibiting positive life habits

KNOWLEDGE Students process and understand the information acquired through courses of study and other school experiences and apply this knowledge meaningfully.

Indicators: applying
calculating

INQUIRY Students develop inquiry strategies to enhance learning thorughout life.

Indicators: hypothesizing
researching
decision making

AESTHETIC APPRECIATION Students appreciate varied aesthetic experiences.

Indicators: valuing
expressing

STUDENT DEMONSTRATIONS OF ESSENTIAL LEARNING OUTCOMES

Some of the student demonstrations listed below will result in evidence used to evaluate student achievement in this task.

Communication

- illustrate the relationship of the sun to the earth by using a visual to organize their thoughts (poster, web, flow chart)
- share five things they would need to learn to survive in a new country with their classmates →
- have class discussions
- work in co-operative learning groups to examine story issues →
- write a dialogue

Citizenship

- share stories of what it's like to start in a new school →
- work in groups
- write a personal reflection about being a new student

Well-Being

- express curiosity about our world
- explore feelings

Knowledge

- lesson about photosynthesis, etc. and the importance of sunlight to our well-being
- use background knowledge about cultures to make an "Effects Wheel" in partners to show positive and negative consequences of two cultures meeting
- discuss about science versus science fiction
- learn about science fiction genre

Inquiry

- predict what a world would be like without sunlight (journals)
- infer the environmental needs of living things by looking at life in the Arctic, the desert, etc. →
- predict what life in a new country would be like →
- speculate about whether or not we accept people from different cultures
- read with a purpose
- explore issues of isolation, segregation →
- predict a positive outcome that could result

Aesthetic

- encourage appreciation of our own culture
- appreciate a sense of "belonging"
- appreciate what we have

N.B. → This activity fits into more than one essential learning outcome category.

CURRICULAR RELEVANCE: OUTCOMES AND EXPECTATIONS

The activities in this task will reflect outcomes and expectations from science, social studies, and language arts.

Achievement criteria were developed from the following expectations and from student products.

SCIENCE

Outcome 1

Students demonstrate the ability to interpret the natural and man-made worlds through processes of independent and co-operative inquiry, problem solving, and decision making.

Expectations

Students are expected to:

- Formulate and express questions about relationships concerning living and non-living worlds. (grade 9)

Outcome 2

Students demonstrate positive attitudes regarding the pursuit of scientific literacy.

Expectations

Students are expected to:

- Show continuing interest and init ative in science topics (nature of science, science and technology, and science, technology, and society). (grade 9)

Outcome 3

Students demonstrate an understanding of the major themes and concepts of science.

Expectations

Students are expected to:

- Demonstrate knowledge of the interdependence of living things and environments. (grade 9)

SOCIAL STUDIES

Outcome 1

Students demonstrate an understanding of peoples, cultures, regions, and nations through inquiry into significant content associated with history, geography, economics, other social sciences, and contemporary events.

Expectations

Students are expected to:

- Express their understanding of quality of life. (grade 9)

Outcome 4

Students demonstrate positive attitudes towards themselves, individuals, groups, and cultures in local, regional, national, and global communities through acceptance, respect, and understanding.

Expectations

Students are expected to:

- Demonstrate appreciation that a variety of cultures co-exist within a community. (grade 3)
- Recognize that individual actions influence the community. (grade 6)
- Respect and appreciate the differences of other community members and recognize that these differences enrich our community. (grade 9)
- Appreciate that different economic and political systems exist that reflect differing ideological, cultural, and historical backgrounds. (grade 12)

LANGUAGE ARTS

Outcome 2

Students read, listen to, view, and compose literature to extend and clarify their own experiences.

Expectations

Students are expected to:

- Understand that literature provides opportunities to explore and think about life. (grade 6)
- Relate the world as revealed in literature to life life experiences. (grade 9)
- Recognize that literature may mirror life experiences and reflect upon how literature relates to their lives. (grade 12) (Eng. 33)

Outcome 7

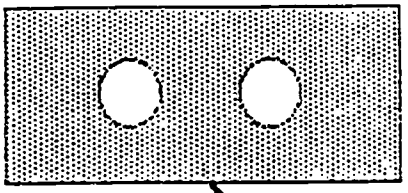
Students express thoughts, feelings, and experiences in written and spoken language and through visual communication.

Expectations

Students are expected to:

- Use personal language to share their thoughts, feelings, and experiences with a variety of audiences. (grade 3)
- Use personal language as a base to more formally express explanatory and imaginative ideas. (grade 6)
- Use personal language to convey their thoughts and feelings about current interests and concerns. (grade 9)
- Recognize and respond to various levels of language to effectively express personal concerns. (grade 12) (Eng. 33)

Products to Result from this Task



STEP ONE
- visual organizer (web, poster, flow chart) showing the relationship of sunlight to human survival and well-being

Student Portfolio

STEP TWO
- Effects Wheel completed with a partner to show the positive and negative consequences of the meeting of two cultures

STEP THREE
- Journal Entry - personal reflection: How could you make the transition of a new student to your school easier?
- make a video showing how something positive could result from the story
- with a partner write a dialogue between Margot and the children when the door opens

BEST COPY AVAILABLE

GUIDELINES FOR PRODUCT SELECTION

1. The collection of student products will demonstrate essential learning outcomes.
2. A variety of student demonstrations will be represented in the collection, for example, writing, photographs, drawings, oral presentations, teacher notes, student reflections.
3. Some products will be collected annually and used for longitudinal comparison purposes.
4. Provision will be made for appropriate involvement of students, teachers, parents, and guardians in selecting products.

DISTRICT INFORMATION FROM PRODUCTS

As a result of collecting student products,

Students will have:

- a measure of their achievement
- a measure of their growth
- a collection of products which support the story they would want to tell about their growth
- concrete products to show others what they can do and are capable of doing
- evidence of "hard to score" qualities such as thoughtfulness, perseverance, flexibility, and self-confidence

District staff will have:

- a device for highlighting what an individual "can" do in relation to curriculum expectations
- a student's growth history: their story told with products of their work, judgements made on that work, reasons for selection of work, student's comments on work, student's reflections, and information showing progress towards goals
- models for achievement of selected indicators
- tasks and criteria for ensuring accurate and meaningful student demonstrations of expectations, in realistic classroom contexts
- exemplars of student work at all levels, programs, and sites

Parents will have:

- a profile which shows the child's achievement and growth over time (a comparison of where a student was to where a student is now; peaks and plateaus)
- concrete products which document the child's achievement and growth
- achievement criteria to use in questioning and commenting about their child's programming
- input on selection of products
- assurance that their child is learning in a manner comparable with their personal growth pattern, as well as district and provincial standards

Community will have:

- evidence of student achievement and growth in essential learning outcomes and selected indicators for Edmonton Public Schools

STEP ONE ACTIVITIES

Purpose:

The purpose of these activities is to provide students with science background knowledge about the importance of sunlight to the well-being of human beings as a pre-reading focus to *All Summer in a Day* by Ray Bradbury and to introduce the social studies concept that "cultures are a product of the environment."

Assessment Purpose:

Student products must show evidence of hypothesizing and decision making in the area of inquiry.

Time Required: 3 forty-five minute periods

Materials Needed:

- chart paper
- poster paper
- felt pens

Activities:

1. **Teacher:**
   - asks the class to predict what a world would be like without sunlight
   - provides background information on photosynthesis, plant life, the importance of sunlight to our survival and well-being

2. **Students:**
   - brainstorm how lack of sunlight would effect a population, the physical environment, etc. in their journals
   - students infer the environmental needs of living things from their distribution and behaviour by discussing how they imagine life is different in climates with more or less sunlight than our own and making a T-chart (Arctic, desert). The following is an example of a T-chart to answer the question:

Are there similarities/differences between life in Edmonton and life in the Arctic?

same	different

Possible Products

- students illustrate the relationship of the sun to human survival and well-being by using a visual to organize their thoughts. Choice of poster, web, or flow chart.

STEP TWO ACTIVITIES

Purpose:

To introduce the concept that cultures are a product of the environment.

To explore the positive and negative effects of two cultures meeting.

Assessment Purpose:

Student products show evidence of hypothesizing, researching, and decision making.

Time Required: 45 minutes

Materials Needed:

- "Effects Wheel" handouts
- "Marooned" social studies unit (optional) or other reference material from two cultures

Activities:

1. **Teacher:**
   - asks students to imagine what it would be like if they were forced to move to another country where the culture was completely different
   - directs students to think about whether or not we accept people from different cultures

2. **Students:**
   - list five things they would need to learn about the new culture in order to survive. Students share these predictions with the class.
   - share stories of what it is like to start a new school

Possible Products

- with a partner, students use the "Effects Wheel" model to explore the meeting of two cultures to examine positive and negative consequences. N.B. The teacher may choose two specific cultures from those studied in social studies. (Connection to social studies - grade 8 Topics B and C, the historical meeting of Indian and European cultures - or Grade 7 topic about cultural contact with Japan, or use *Marooned* unit as a tie-in.)

STEP THREE ACTIVITIES

Purpose:

To explore science and the genre of science fiction.

To explore the issue of how we treat someone from a different culture.

To reflect on a social action for #2.

Assessment Purpose:

Student products show evidence of hypothesizing, researching, and decision making.

Time Required: 2 to 10 forty-five minute periods

Materials Needed:

- *All in a Day* by Ray Bradbury
- chart paper
- reference material on the atmospheric conditions of Venus (optional)
- reference material on the genre of science fiction (optional)

Activities:

1. Teacher:
   - asks the students to explain the difference between science and fiction. (discussion)
   - directs the students to take notes during the class discussion, for later use

2. Students:
   - read *All Summer in a Day* by Ray Bradbury
   - predict what the story is going to be about from reading the title and jot down predictions in their journals
   - discuss the following questions in co-operative learning groups, reporting the discussion to the class (charts)

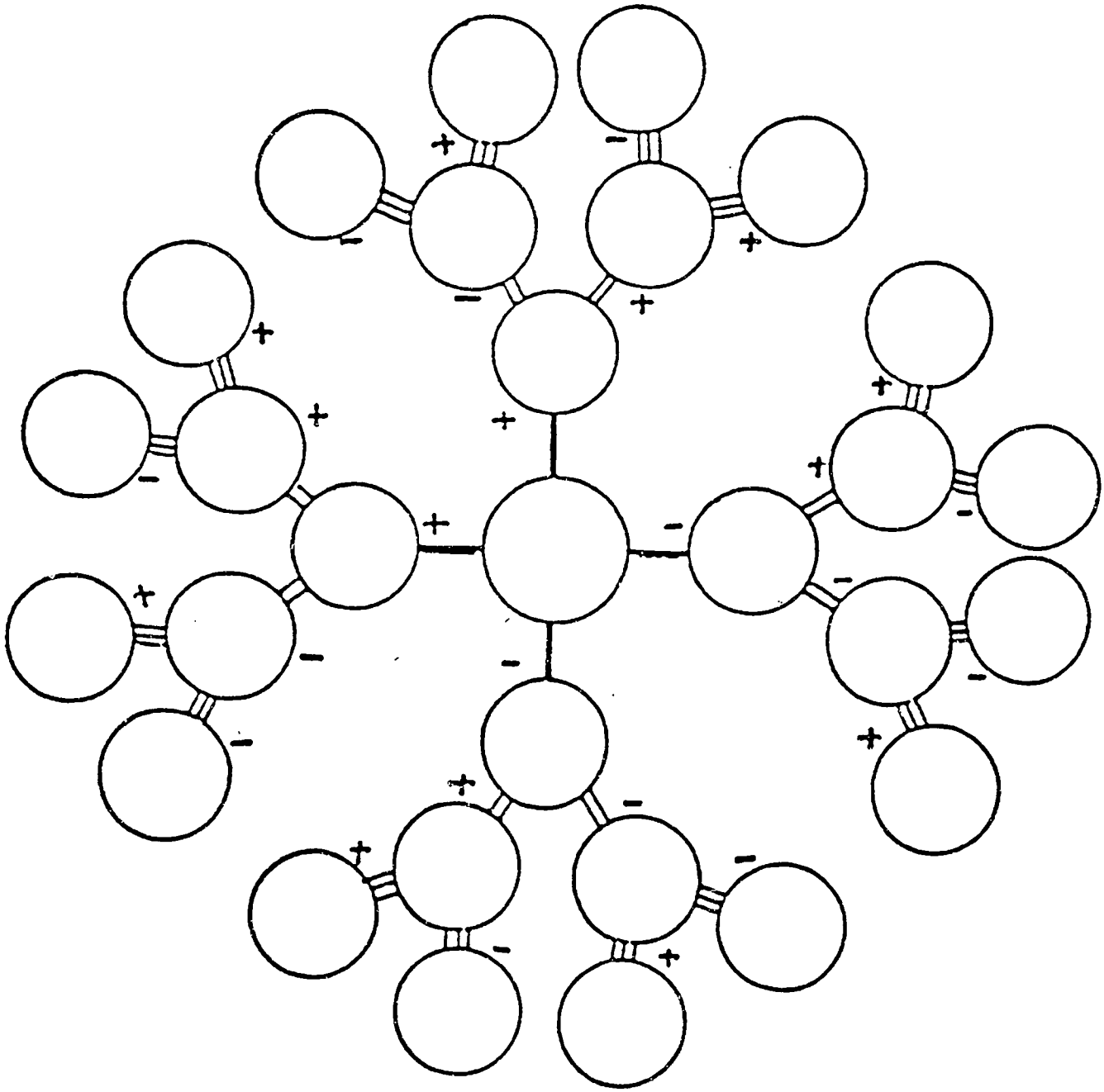
   Questions
   - Ray Bradbury is a well known American science fiction author, recognized for his ability to make stories about the future believable. How believable is this story? Can you imagine this story happening in the future? Why or why not?
   - Discuss the similarities and differences between science and fiction using this story as a reference. What things in this story are based on scientific facts? What things are purely fictional? Is it possible that scientific knowledge has changed since Ray Bradbury wrote this story? Why or why not?

- Predict what you think Margot might say to the children and the teacher after she got out of the closet.
- Why do you think the children locked Margot in the closet?

Possible Products

- with a partner, write a dialogue between Margot and the children when the door opens
- collect the ideas from the class discussion that you think are the most important. Make a video, act out a dramatization, or write a reader's theatre script for a scene to show how something positive could result from this story.
- personal reflection - suppose a new student from a different culture comes to your school. After reading this story, how could you make his or her transition smoother?

EFFECTS WHEEL



APPENDIX II

Blackline Master

CLASSROOM CONTEXT

Please describe the context or situation surrounding the administration of the task: room arrangement, type of student-student interactions, and any other information that would help others interpret students' work.

IDEA LIST

STEP 1	STEP 2	STEP 3

STUDENT INPUT TO TASK DESIGN

TASK TITLE_____

CLASS_____

SCHOOL_____

Student comments and suggestions regarding the design and implementation of tasks are welcome. Comments may be submitted from individuals or may be recorded here from group or class discussion.

Forward this page, teacher comments, and student achievement information to Student Assessment through your school key contact teacher.

All Summer in a Day

(6) I think that the children locked Margot in the closet because they were jealous of her, because she was different, like she had [redacted] remembered the sun, and they didn't.

(2) I think this because they got tired of hearing her talk about the sun.

(4) I liked the story because of the science-fiction and the setting on Venus, and I disliked it because it got boring many times, and the ending was very predictable and pointless.

(2) I found the ending to be dumb and pointless. To predictable

(3) I found the story to be unbelievable, because if it rained all the time, the planet, would be under water, and the Venus kid's were like earth kids.

(4) The things in the story based on fact are that it rain a lot there (rainy atmosphere) and that sun rarely shows.

(5) The thing in the story based on pure fiction is that it's been rain for seven years, they'd freeze without sun, no oxygen without sun, the Venus kids are like earthlings, and now someone could travel and live on Venus.

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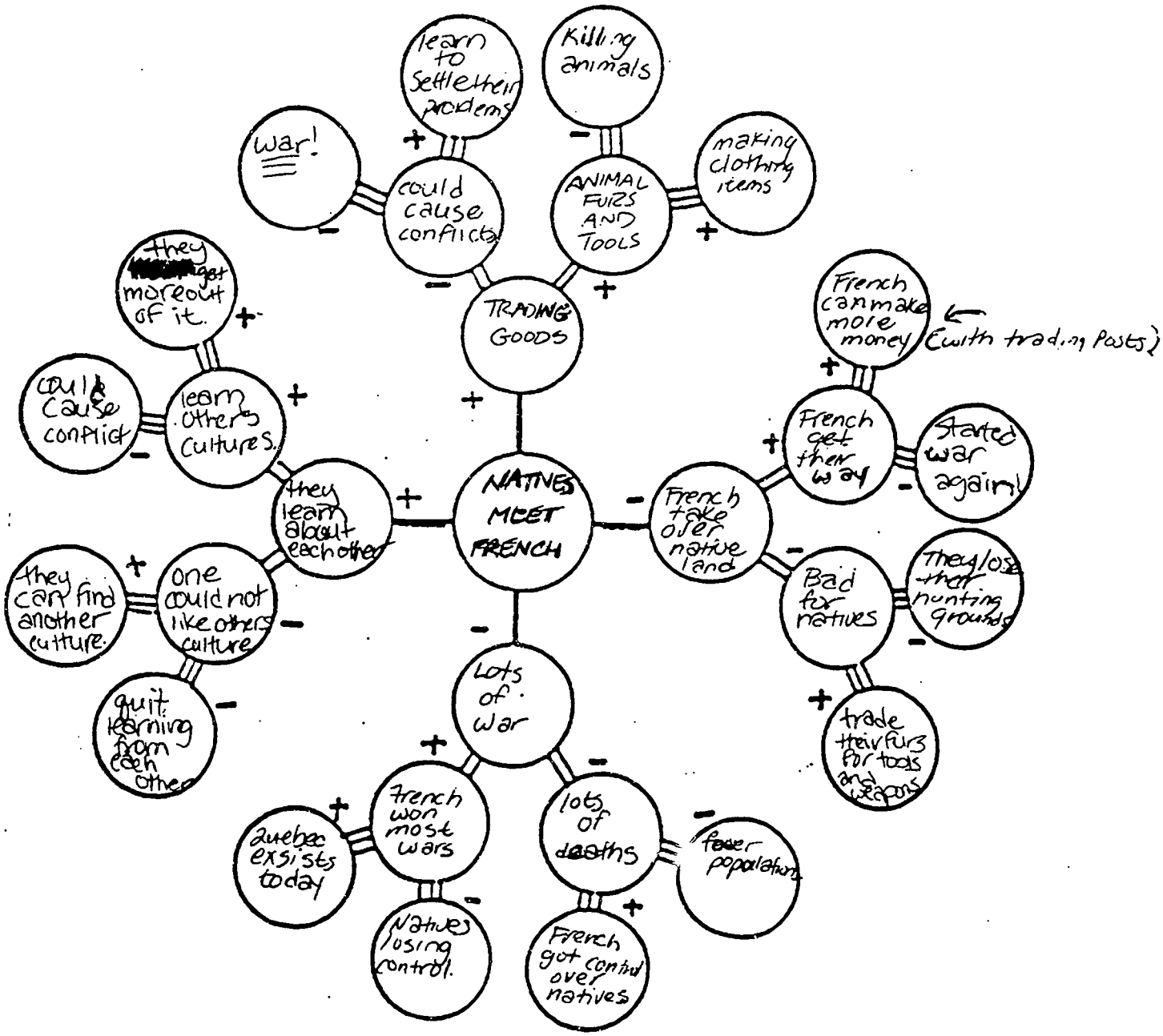
EFFECTS WHEEL



16. *All Summer In A Day*

DRAFT MAY 15, 1992

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The Beginning Of Time

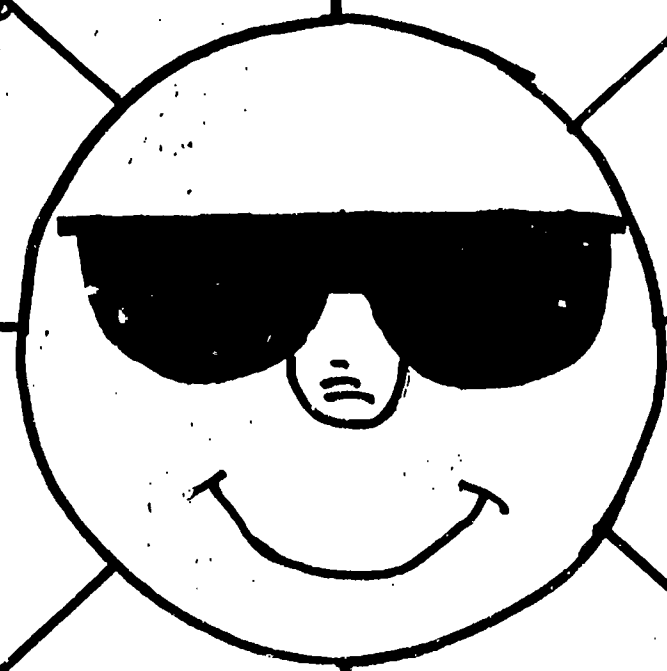
Hi! My name is Eve. I'd like to tell you a story...

Once Upon a time the a planet called Earth. It was always light outside. But one day when I woke up at 6:00 a.m in the morning. There was no light. All day no sunlight And at night there was no moon. It was pitch Black. And stayed like that.

Because of that we couldn't grow food and plants died, because they needed sunlight to live. When it rained it didn't evaporate, because there was no light. Winters were even colder. Even in summer. Then everyone died. And only Adam and I were left. We don't remember much of what happened before the eclipse.

The End

How does Sunlight influence our Culture?



RELIGION

your religion would be different, because in some religions they believe in a sun god. Another religion is based on that. And so your religion would be totally different.

LAW

Where there's no sunlight you would always have to leave on your car headlights all the time instead of just night like here.

HOBBIES

Some hobbies you can't do like suntanning, it's pretty much the same as "Recreation."

HOUSING

your housing would be very different. It would insulated a lot. Because of the cold weather.

FOOD - you can't grow all the crops you want. Because they die without sunlight. And your diet is much different.

CLOTHING

you would dress differently, because it would be colder and you would wear more layers.

RECREATION

you can't play as many sports for example boating, waterskiing, or outdoor swimming.

CUSTOMS & TRADITIONS

you can leave on your Christmas lights on the whole time. Because they would always light.

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(1)

ALL SUMMER IN A DAY

"So, do you think we shout let her out?" asked William. "She's been in there for a day."

So they went to the closet door to find out what she was up to.

"Hey Margot, what's up?" asked William.

"Nothing, but guess what, I have a surprise for you, open this door and you'll see and I guarantee you'll love it," Replied Margot.

"What is it?" Asked William.

"Don't worry, you'll see."

So they slowly opened the door. A strip of the brightest light came shining through the crack of the opened part. Slowly William the rest of the door. Margot came running out.

"It's the sun, look up high see, it's there."

So all the kids ran into the closet, and

then she (Margot) locked the kids in.

But there was another catch, the light wasn't the sun it was a strong light.

So then Margot left the kids in the closet forever.

"See ya later," said Margot. Then she took off back to Earth.

THE END

ALL SUMMER IN A DAY 8-4

"So do you think we should let her out?" said William. "She been in there for a day."

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"Hey Margot, what's up?" asked William.

"Nothing, but guess what, I have a surprise for you, open this door and you'll see and I guarantee you'll love it," Replied Margot.

"What is it?" Asked William.

"You'll see"

So they slowly opened the door. A strip of the bright light came shining through the crack of the opened part. Slowly William opened the door. Margot came running out and there it was the sun. William, Margot and all the other kids could see it. They couldn't tell where it was coming from. The roof didn't seem

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to be there. No rain, but sunshine. It

was unbelievable

But crew was one ... hour ...

an hour. ... wasn't come back for another

year.

The End

2.5

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Alberta
EDUCATION