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ABSTRACT

This curriculum focuses on providing students in grades 7 through 9 with information on the prevention of disabilities. Introductory material describes the curriculum's development; its overall goals; and its four elements (awareness, knowledge, application of knowledge, and life-style and behavior patterns). The introduction also provides background information covering definitions, prevalence, causes of disabilities, effects of disabilities, and prevention. A checklist provides a listing of key concepts and grade levels in which they are covered. Each of the three grade-level modules contains three units: one with general information; one aimed at attitudes and social inclusion; and one presenting methods for preventing disabilities. Lesson plans include one or more goals, specific objectives, suggested activities, evaluation options, and suggested resources. Each module also contains a section of teaching notes, which provides background information including facts, statistics, and charts, and a section of resources, which provides many of the teaching materials needed for the suggested activities as well as lists of suggested videotapes, sources for printed materials and brochures, and lists of organizations. A glossary is also provided. (Contains 48 references.) (DB)

RESEARCH IN BRIEF

The Prevention of Disabilities Program for Grades 7 - 8 - 9

SSTA RESEARCH CENTRE REPORT: #94-07b DATE: Oct 1994

This report and ***Prevention of Disabilities*** (#94-07a) was developed for the SSTA Research Centre by Florence Lalonde as a summary of her graduate student project entitled ***Prevention of Disabilities: A Grade 7-9 Program to Encourage the Prevention and Amelioration of Disabling Conditions.*** This work is distributed in two parts:

#94-07a ***Prevention of Disabilities*** (background paper)
#94-07b ***Prevention of Disabilities Program for Grades 7-8-9***

The purpose of this study was to examine disabilities and their prevention. The importance of prevention was demonstrated through examination of the causes and effects of disabilities and through study of the cost of services required by people with disabilities and their families. Current prevention efforts were studied and public education was found to be an effective way to prevent the occurrence of disabling or handicapping conditions and lesson the effects of existing handicaps. No instructional program was found that was devoted to teaching the general population of young adults about disabilities and their prevention. Therefore, a program is offered to instruct students in grades seven to nine about prevention and amelioration of handicaps.

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Two organizations made it possible for me to attend the University of Saskatchewan this year. I wish to thank the Prince Albert Early Childhood Intervention Program for granting me educational leave. Sincere thanks also go to Saskatchewan Health, whose support made it possible for me to attend university full-time.

Many people from across the country have helped me gather materials for this project. I want to extend special thanks to the Saskatchewan Institute on Prevention of Handicaps and to the staff at the Saskatchewan Association for Community Living. Thanks also go to the other organizations and associations involved in the areas of exceptionality that provided information and materials for me. In addition, I want to express my gratitude to those people in every province of Canada, and all parts of the United States, who responded so generously to my requests for information about programs similar to this one.

Last, but not least, I want to thank my family, Jean, Leslie, and Anne for their support, encouragement and help. I couldn't have done it without you, guys.

Table of Contents

TABLE OF CONTENTS

(detailed)

Credits

Credit is acknowledged for the following:

Grade 7, Unit 1	Illustrations pages 47-49 by Denise Wait, used with the artist's permission.
Grade 7, Unit 1	Activity pages 52 and 53 adapted from Plumridge & Hylton, 1989.
Grade 7, Unit 3	Activity page 77 adapted from Plumridge & Hylton, 1989.
Grade 7 P.O.D.	Self-evaluation page 78 adapted from Thomas & Balanoff, 1987.
Grade 8 P.O.D.	Self-evaluation page 136 adapted from Thomas & Balanoff, 1987.
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Grade 9 P.O.D.	Self-evaluation page 198 adapted from Thomas & Balanoff, 1987.
Print Resources	Brochures on pages 229-234 used with the permission of the Saskatchewan Hearing Aid Plan. Permission to copy has been granted.

Introduction

Disabilities affect the personal, social, and economic lives of more than 127,000 people in Saskatchewan (Statistics Canada, 1990). These disabilities exact both a humanitarian and a financial cost. Disabled individuals and their families often experience emotional turmoil, and may be further stressed by social stigma and discrimination. Millions of dollars are spent each year for services to preserve a reasonable quality of life for people with disabilities. In many cases this heartbreak and expense could have been avoided by preventing the disability.

Public education is widely accepted as an excellent way to prevent disabilities. It is especially important that young people receive information on the prevention of disabilities before they make harmful life-style choices, and before they reach parenthood. These two considerations make the school the most appropriate place to provide education about the prevention of disabilities. Many of the prevention concepts are incorporated into the curriculum, but there is no program dedicated to the prevention of disabilities offered in Saskatchewan. The Prevention of Disabilities Program addresses this need and provides a curriculum for disability awareness and prevention for students in grade seven, eight and nine.

The Prevention of Disabilities Program offers a teaching module for each grade. Each module includes an overview of the program, unit outlines, lesson plans, suggested activities, and instructional materials. The first unit of each grade module contains general information about disabilities and disability prevention. The second unit is devoted to developing positive attitudes and facilitating social inclusion within the community. This unit was included because people who have disabilities say

that their biggest disability is the attitudes of those around them (Frank, 1988), and it is essential that we, as a society, change these attitudes. The third unit for each grade addresses a particular area of disability prevention: the prevention of disabilities resulting from injury is the focus for grade seven; grade eight considers child rearing and the prevention of disabilities caused by factors in the social environment; the grade nine unit deals with various prevention strategies concerning pregnancy, childbirth, and infancy.

Educating the young people of today about the prevention of disabilities can safeguard both this generation and the next, doubling the effectiveness of the effort expended. The Prevention of Disabilities Program is designed to perform this function. It is my hope that teachers will find it useful and that this work will result in a reduced incidence of disability in our province.

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Program Goals

The Prevention of Disabilities program has two major goals:

* to reduce the incidence of preventable disabilities by
    1) encouraging young people to make healthy life style choices,
    2) educating young people about the methods of prevention,
    3) motivating young people to **use** these prevention methods.

* to reduce the severity of existing disabilities by
    1) educating young people about disabilities and their effects on the lives of those who have them,
    2) encouraging young people to become involved with people who are disabled,
    3) teaching young people how to interact with people who have disabilities,
    4) encouraging young people to advocate for equal rights for people with disabilities.

Elements of the Program

There are four elements in this program. They are:

awareness,

knowledge,

application of knowledge,

development of life-style and behavior patterns.

Awareness

In order to decide to help in the effort to prevent disabilities, people must know **why** such a decision should be made. They need to be aware that disabilities can afflict anyone, at any time of life. They must also be aware of the effects that disabilities can have, not only on the lives of those who have them, but also on the friends and families of people with disabilities.

Knowledge

In order to reduce the incidence of disability, people must know **what to do** and **when to do it.** They must understand the techniques, the behavior patterns, and the life-style choices which decrease the risk of disability for individuals and their descendants.

Application of Knowledge

Once people know how to prevent the occurrence of disabilities and how to reduce the severity of disabilities already existent, they must apply this knowledge. Good decision-making skills, planning skills, and determination, are needed for the prevention of disabilities. In order to reduce the effects of disabilities, social inclusion and personal involvement are essential.

Establishment of Good Habits

Many effective ways to reduce the incidence of preventable disability involve the establishment of healthy life-styles and positive behavior patterns. These are difficult to teach as each person must make these choices on an individual level repeatedly in order for good habits to become established, and there are many negative influences along the way. The Prevention of Disabilities program attempts to provide motivation for individuals to work toward establishing good habits.

The Prevention of Disabilities program provides materials to help increase students' awareness of issues concerning disability and their knowledge of prevention strategies. Suggestions are given for opportunities that allow students to interact with people who are disabled. An effort has been made to foster student decision-making, and planning skills through the use of group tasks and cooperative assignments.

Background Information

This section of the Prevention of Disabilities Program (P.O.D. Program) is intended to provide teachers with information concerning disabilities, and disability prevention. The prevalence, causes, and effects of disabilities are discussed first, then prevention possibilities and methods are examined. There are some controversial aspects to the prevention of disabilities which will be discussed in this section also.

Those who wish to do more reading on the topics of disability and disability prevention are referred to the research paper which accompanies the Prevention of Disabilities Program. There is a section included in that paper which lists suggested selections for further reading.

Definitions

Disability is not a single condition, but a continuum that stretches from mild to severe. According to the American Committee on a National Agenda for the Prevention of Disabilities (Pope & Tarlov, 1990), this continuum starts with a **pathology**, a diagnosed condition which may weaken or damage the patient's structures or functions resulting in an **impairment**. An impairment that interferes with a person's ability to perform normal activities is labelled a **functional limitation**. A functional limitation, combined with a community situation that restricts the person's ability to lead a normal life, produces a **disability** or **handicap**. The word "handicap" is equivalent to "disability", but, since people who are disabled feel that "handicap" has negative connotations, it's use is discouraged (Pope, 1992). Throughout this program, I tried to comply with this preference.

The disabilities considered in the P.O.D. Program include physical and sensory disabilities, and mental retardation. Definitions of many terms are

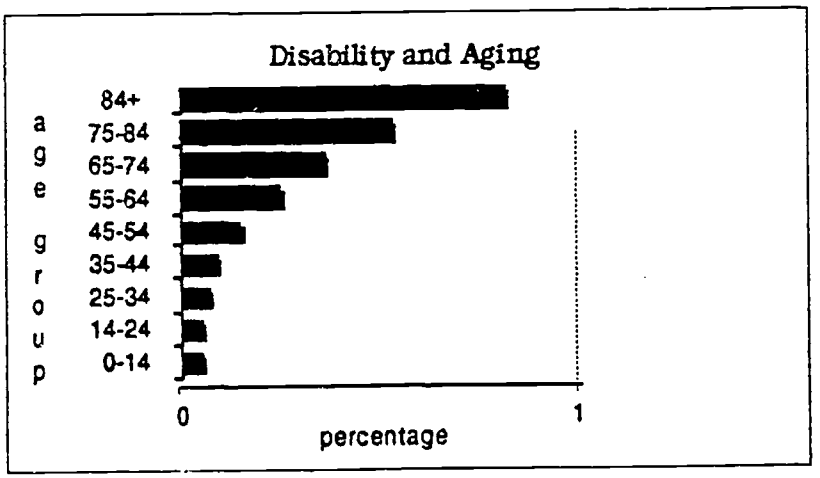
given in the Glossary, but use of the term "mental retardation" must be specifically explained. **Mental retardation** has very negative connotations, but it is difficult to find an equivalent that is as universally understood. Throughout the program, I have used the term mental retardation, but I have also used the phrase **intellectual impairment**, because it has the virtue of corresponding with the designations used to describe sensory and physical disabilities.

Prevalence

Prevalence and **incidence** both measure the size of a specific group within the general population. Incidence refers to the number of new cases which occur within a given period of time. Prevalence describes the total number of affected individuals within the population. For example, the incidence of Fetal Alcohol Syndrome (FAS) and Fetal Alcohol Effect (FAE) in Canada is estimated at 1 to 2 per 1000 births, but the estimated prevalence is "tens of thousands of Canadian adults" (Donovan, 1992, page 1).

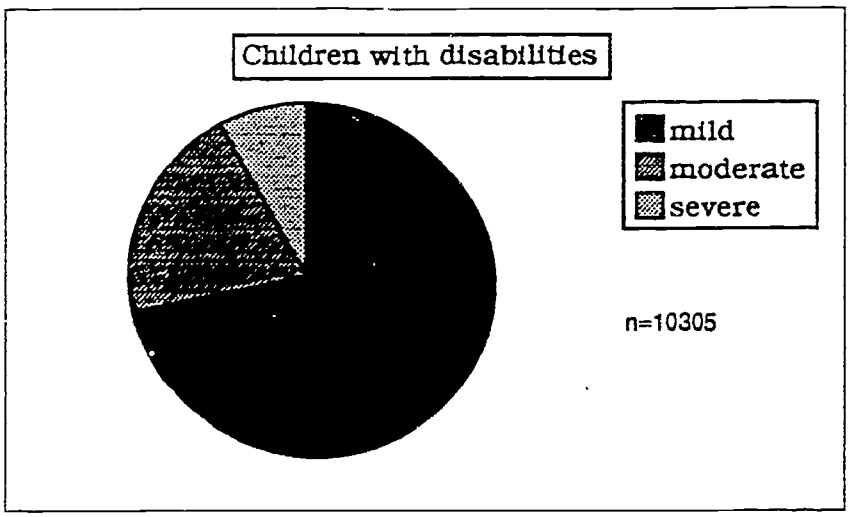
The prevalence of disability in Canada is about 13%. More than 127,000 people living in this province have some type of disability (Statistics Canada, 1990). The prevalence of disability varies with age as shown in the chart below (Nessner, 1990, page 3).

Figure 1



There were over 10,000 children with disabilities in Saskatchewan in 1988 (Statistics Canada, 1990). The comparative severity of disability is shown in the chart below (based on Statistics Canada, 1990).

Figure 2



Causes of Disabilities

Though there are thousands of known causes of disabilities (March of Dimes, 1987), there are many disabling conditions for which there is no identified cause. It is important to know the cause of a disability in order to treat the condition, and to help prevent future occurrences.

There are two main categories of causes for disability: those within the body of the person and those caused by external conditions. Internal causes are referred to as **biomedical**, or **constitutional** ones; those which are external are referred to as **sociocultural** or **environmental** causes.

Causes classified in the two categories interact closely with each other, and are often difficult to separate. For example, congenital causes of disability are categorized as constitutional causes, even though many birth defects are caused by toxins or infections which affect the fetus before or during birth, so the organic damage has, technically, been done by the prenatal environment.

Constitutional factors are involved in most severe and multiply handicapping conditions. Prenatal causes include genetic or chromosomal conditions as well as conditions of the prenatal environment such as trauma, infections, toxins, and the mother's health, and nutrition. Perinatal causes of disability occur around the time of birth, such as prematurity, low birth-weight, oxygen deprivation, or infections.

Sociocultural/environmental causes of disability include those which stem from the individual's physical, social, or cultural environment, and those associated with the person's life style and behavior. Harmful environmental conditions do not always result in a disability, though several may combine and produce very limiting effects. Environmental conditions increase a person's chance of being disabled, or having a disabled child. For this reason, environmental causes of disability are referred to as **risk factors**, and children who are exposed to them are referred to as being **at risk**.

Disabilities can originate at any stage of life. The risks in childhood include: injury; disease; environmental factors such as malnutrition, poverty, cultural difference; the lack of social interaction; limited experience with language; and lack of opportunity to acquire a broad base of general knowledge. During adolescence and early adulthood, injury is the most common cause of disability (Pope & Tarlov, 1991). In late adulthood and old age, degenerative conditions affecting the senses and physical mobility become most common.

Effects of Disabilities

Disabilities can affect all aspects of a person's life: emotional, social, educational, economic, and professional. In addition, disabilities deeply affect the lives of other family members.

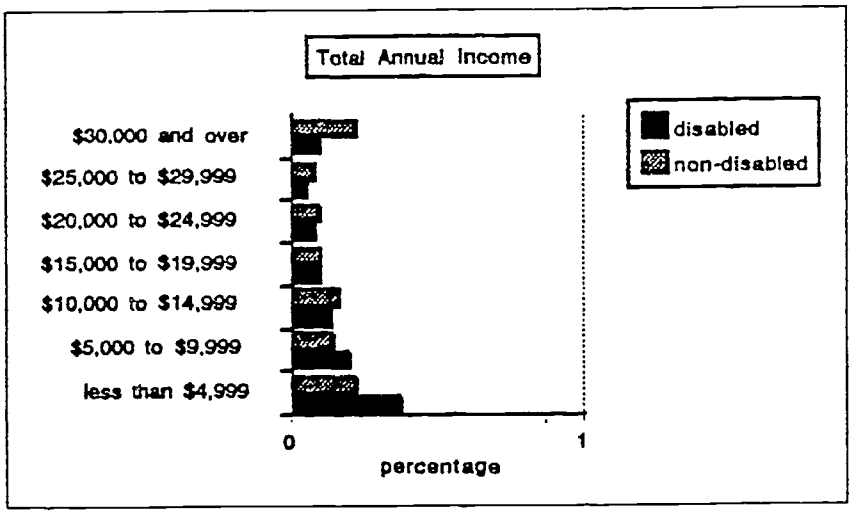
The emotional adjustment required by both the individual and his or her family is always difficult, though the stresses may vary depending upon

the stage of life when the disability occurs and whether the onset is slow or abrupt (Nagler, 1990).

The social life of a person with a disability is often greatly affected by the condition. In fact, many disabled people believe that the attitudes of other people are the greatest problem that people with disabilities have to face. Stereotypes, discrimination, and ignorance may interfere when disabled people meet new acquaintances or try to establish close relationships. Sexuality, love, marriage, and parenting may all be more difficult for people with disabilities because of public reactions.

Financial stresses are often greater for people with disabilities than for the non-disabled. There are extra expenses associated with medical care, assistive devices, and adaptations for daily living. It is more difficult for a person who is disabled to obtain and hold a good job, which affects his/her income level (see figure 4, adapted from Statistics Canada, 1990)

Figure 4



The education level of people with disabilities is often affected. More disabled people have grade nine education or less compared to the general population (29% compared to 11%), and fewer (5% compared to 11%) have

college degrees (Nessner, 1990).

In summary, disabilities interfere with quality of life in a multitude of ways. Daily living skills pose severe difficulties. Leisure activities and community participation are limited. Educational achievement may be restricted. Employment is more difficult to find than it is for non-disabled people. Social stereotypes and discrimination affect every aspect of life.

Prevention of Disabilities

Efforts to lessen the effects of disabilities and to reduce the number of people affected are essential. Prevention programs not only reduce the human cost of handicaps, but also decrease the financial burden imposed by the service requirements of people with disabilities. Money devoted to preventive efforts is a good investment in both the ethical and the practical sense.

There are three types of prevention: primary, secondary, and tertiary. Primary prevention reduces the incidence of disabilities by preventing the risk factors which cause impairment. If primary prevention efforts succeed, they completely eliminate any possibility that disability will occur. Primary prevention efforts are aimed at the general population. The Prevention of Disabilities Program is a primary prevention effort.

Secondary prevention is aimed at a specific group and targets an existing risk factor. When secondary prevention is successful, the disability will not occur. Reading Recovery Programs are an example of secondary prevention in an educational setting.

Tertiary prevention is aimed at a target group who already have a specific condition. Tertiary prevention "promotes adjustment to irremediable conditions and minimizes further complications or loss of function" (Scott & Curran, 1987, page 801).

If we accept Pope and Tarlov's (1991) definition of disability as the

interaction of a person's "physical or mental limitations with social and environmental factors" (page 1), then **most** disabilities are preventable. For example, Drash (1992) believes that 80 - 85% of all cases of mental retardation could be prevented. However, this is an idealistic goal since improved social attitudes, better community accessibility, environmental clean-up, and the total elimination of poverty would all be required for its attainment.

Disabilities caused by injury are also, theoretically, completely preventable. The reality is that some accidents will happen, no matter how careful, or how well-informed the population. It is more reasonable to attempt to reduce the number of such injuries, to lessen the severity of those which do occur, and to minimize the impairments that result from injury. Accident related injuries are a major target area for preventive efforts.

The goal of total prevention of disabilities raises a major ethical question: to what extremes are we, as a society, willing to go to prevent handicaps? Enforced sterilization for anyone believed to carry defective genes would lower the incidence of congenital handicaps, but would it be ethically acceptable? Prenatal diagnosis of some conditions such as Down Syndrome is now possible. Should this evaluation be mandatory, and abortions performed whenever an affected fetus is found? Some people seriously advocate these approaches to prevention (Pueschel, 1991).

Total prevention of ethically preventable disability will never be attained for three reasons: lack of knowledge, lack of individual effort, and lack of social commitment. The P.O.D. program attempts to remedy the first lack and provide motivation to reduce the second.

Many prevention programs already exist. These include prepregnancy efforts such as family planning, genetic counselling, and medical evaluation. Other medical prevention programs such as prenatal and obstetrical care,

and immunizations are familiar to Saskatchewan residents. Some educational prevention efforts include courses on health, safety, parenting skills, and sex education. The Saskatchewan Institute for the Prevention of Handicaps does an immense amount of preventive work and will provide print and video materials on request. Social and economic programs also help prevent disability by alleviating the worst effects of poverty. Legislation requiring the use of seatbelts and car seats specially designed for infants and children are examples of legal measures to prevent disability.

In spite of all the efforts described above, the continued incidence of preventable disabilities proves that more still needs to be done. Methods for the prevention of disabilities are either not known or not consistently applied in Saskatchewan. The Prevention of Disabilities Program can help the education system to spread information about the prevention of disabilities on a provincial scale.

Program Rationale

Education is primarily the concern of the school system, and schools do a great deal to prevent disabilities by integrating many concepts of disability prevention into the general curriculum, but there is no program focused on this area. Educating the young people of today about disabilities and their prevention can be doubly effective. Such an educational effort can safeguard this generation and, by increasing their chances of having healthy children, protect the next generation as well. For this reason, the P.O.D. Program targets adolescents.

Grade seven, eight, and nine students are the ideal target group for instructions about disabilities and disability prevention for the following reasons:

They are the parents of the future, and the information on prevention may reduce the incidence of disabling conditions in both this generation and the next.

They are mature enough for the prevention information to carry over into their adult lives.

They have responsibilities, such as babysitting jobs and driver's licences, that affect the lives and safety of others, so they can apply the information concerning the prevention of disabling injuries.

Many teenagers experiment with such aspects of adult life as the use of alcohol and tobacco, and sexual relationships. This makes them a key group for education on life-style choices which may prevent disabilities.

They are generally 16 years old or younger and subject to mandatory schooling, therefore, a large percentage of the group can still be reached through the school system.

The Prevention of Disabilities program is intended not only to reduce the incidence of disabilities within the province, but also to increase social acceptance and understanding of people with disabilities. The P.O.D. program will be of value only if it is in use. It is my dearest wish that this work be found valuable by the education system, and that it fulfil its ultimate objective to help prevent the occurrence of disabilities.

Program Details

How Does the Prevention of Disabilities Program Fit In?

The P.O.D. program is a resource to help teachers focus on the prevention and amelioration of disabilities. It meshes with the Family Life Curriculum, because many of the topics, concerns, and life-style/behavior goals are the same. The combination of health issues, and social and emotional concerns is also similar.

Initial Considerations

It is important that teachers consider what information the students already have concerning disabilities and disability prevention. To help in the evaluation of this background knowledge, a preinstruction questionnaire is included in the resources section of each module.

It is essential that teachers be sensitive to the feelings of students who are disabled, or who have family members with disabilities. Research (Makas, 1988/1990) shows that the best way to interact with people who are disabled is to be respectful, honest and open, to ask questions if there is need, and to otherwise treat them as you would anyone else, without "helping" and without giving them any unfair advantages. It has also shown that people with disabilities generally appreciate efforts to advocate on their

behalf, and to increase their chances for equality.

Since disability is affected by the services available in the community and their accessibility, a strong local component is necessary, and must be the responsibility of the teacher. Resources may be available locally which are much more pertinent than those suggested in the P.O.D. program. Unit 2 of each module is especially open to local influence.

Lesson Format

Each lesson has a title bar which identifies the grade level, unit number, and lesson number. The lessons contain the goals and objectives, suggested activities, options for evaluation, suggested resources, vocabulary words from the glossary which are related to the lesson are listed, along with references to the teacher notes for further information about the key concepts. Prepared teaching aids such as stories and reproducible materials, are contained in the resources section of the module.

Evaluation

Many of the goals of the P.O.D. program are subjective and experiential, so the evaluation suggestions emphasize participation, cooperation, contribution to group effort, and individual incentive and project work. Some suggestions for assignments, or individual adaptations for assignments are included.

There is no "test" provided, though a preinstruction questionnaire to help teachers gauge what needs to be taught is included. The final evaluation is subjective and simply asks students what they feel they have learned in each of the areas addressed.

Checklist of Key Concepts	Gr. 7	Gr. 8	Gr. 9
General Information about Disabilities	✓		
Disabilities are individual characteristics which limit a person's ability to live a normal life.	✓		
A disability may affect a person's ability to move, speak, hear, see, or think.	✓		
A disability can affect the person's physical, emotional, social, and economic well-being.	✓		
The family and friends of a person with a disability are also affected by it.	✓		
About one in every 10 people has a disability.	✓		
Some disabilities can be prevented, others cannot.	✓	✓	✓
Causes of disability may lie within the body, or outside it .		✓	✓
Factors that make a person more likely to have a disability are called "risk factors".		✓	✓
People with disabilities require special services to improve their quality of life.		✓	
Disabilities caused by injury, life-style factors, and lack of nurturance are preventable.		✓	✓
Good medical care can help prevent disabilities.			✓
Pregnancy is a key time for the prevention of disabilities.			✓
Many disabilities can be prevented during infancy.			✓
Promoting Positive Attitudes and Fostering Social Inclusion			
Everyone has personal limitations.	✓		
Personal limitations should be understood and respected.	✓		
People with disabilities have more serious limitations than most other people.	✓		
The limitations of disability affect all aspects of a person's life.	✓	✓	
People with disabilities are much like everyone else and want to be treated that way.	✓	✓	✓
The physical and social aspects of the community can intensify or alleviate a disability.		✓	✓
Everyone can help make the community more accepting of people with disabilities.		✓	✓
Political pressure is sometimes needed to obtain equality for people with disabilities.			✓
Political pressure may be needed to obtain services for disabled people and their families.			✓

Checklist of Key Concepts	Gr. 7	Gr. 8	Gr. 9
Prevention of Disabilities	✓		
Injuries can cause disabilities.	✓		
Head and spinal cord injuries are especially dangerous.	✓		
Unless it's essential, never move a person who may have an injured head, neck, or back.	✓		
Use your seatbelt.	✓		
Wear protective equipment for sports, work, or boating activities.	✓		
You have a responsibility for your own safety.	✓		
You may be responsible for the safety of others.	✓		
When babysitting, pay careful attention to safety considerations.	✓		
Young folk can help ensure the safety of grandparents and other elderly people.	✓		
Many disabilities occur in infancy and childhood.		✓	
Many disabilities are identified early in life.		✓	
There is a specific pattern of child development which everyone should know.		✓	
If a child is not developing normally, there are people who can help.		✓	
Young children develop better if people play with them, talk to them, and read to them.		✓	
Young children need a variety of experiences to help them develop normally.		✓	
The prevention of disability starts before pregnancy.			✓
Family planning, genetic counselling, and healthy life-style are all good prevention.			✓
It is a good idea to see a doctor or nurse for prenatal care at the beginning of pregnancy.			✓
Good nutrition during pregnancy is necessary to build a healthy baby.			✓
Alcohol and pregnancy do NOT mix and can have tragic consequences.			✓
During pregnancy, do not take drugs without the express permission of a doctor .			✓
It's a good idea not to smoke during pregnancy.			✓
Controversial Issues			
Some people advocate the abortion of fetuses diagnosed as having a disabling condition.			✓
Some people advocate the sterilization of people with severe handicaps.			✓
Some people believe that genetic counselling should be mandatory for "high risk" groups.			✓

The

Grade Seven

Prevention of Disabilities

(P.O.D.)

Program Module

Overview

Basic concepts

Details of Module

Unit 1: General Information

- Terms and statistics.
- What effects can a disability have on a person's life?
- Assignment options.

Unit 2: Community Connections

- Everyone has limitations, some more than others.
- How does it feel to be disabled?
- How can a person act without giving offence?
- Project options.

Unit 3: Prevention of Disability

- Disabilities caused by injury
- Personal safety and the prevention of disabilities
- Individual responsibilities for oneself and others
- Evaluation Suggestions

Teaching Notes

Resources

Basic Concepts

The grade seven module for the Prevention of Handicaps program introduces two basic concepts about disabilities:

1. *Some people in our society have problems that require the use of special services, but these people are otherwise just like everyone else, with the same needs, wants, hopes, and dreams.*

2. *Disabilities can often be prevented or made less serious for those who are affected.*

    a) *Whenever ethically possible, disabilities should be prevented or their severity reduced.*

    b) *Everyone can help prevent disabilities.*

Details of Module

There are three units in the Grade 7 P.O.D. module: one with general information, one aimed at attitudes and social inclusion, and one with methods for preventing handicaps.

Unit one contains an introduction to the topic of disabilities. It includes definitions, incidence and prevalence information, and it invites the students to consider the effects that a disability can have on a person's life, or the lives of others in the family.

Unit two encourages students to consider their own limitations and those of others. Through simulations they gain insight into how it feels to be disabled. Students are encouraged to develop interaction skills that would be appreciated by people with disabilities.

Unit three presents strategies for the prevention of disabilities. People in grade seven can be disabled by injury, therefore, personal safety measures are an important part of prevention. Students in Grade 7 often babysit, and they may visit grandparents or other elderly people, so the safety of others is included here.

The **Teaching Notes** contain background information pertinent to the lessons. This includes facts, statistics, and charts which the teacher may find useful.

The **Resources** section of the module contains many of the teaching materials needed for the suggested activities. Lists of the videotapes suggested, sources for printed materials and brochures, and lists of organizations which might supply guest speakers to address specific topics are included in the Program Resources.

Goal:

To develop students' awareness of what disabilities are, how common they are, and how they can affect people's lives.

Objectives:

The student will be able to:

1. explain what constitutes a disability.
2. define common terms for physical, sensory, and intellectual impairment.
3. explain how disabilities affect the lives of individuals and their families.

Suggested Activities:

1. Administer the preinstruction questionnaire from page 43.
2. Divide the class into groups of three and have each group read a set of the reproducible stories (pages 47 to 49). Use the accompanying worksheet to guide a class discussion. Try to arrive at a definition of disability and the other terms in the vocabul ry list.
4. Use the class activity sheets on page 52 and 53 to develop student awareness of how disabilities affect the lives of both the disabled person and the family.
5. Use one of the videos listed in the materials section on page 26.

Evaluation Options:

Students may be evaluated on their participation in the discussion, or pages 52 and 53 could be assigned as independent work, and assessed.

Vocabulary:

impairment	functional limitation
disability	handicap
blind	visual impairment
deaf	hearing impairment
mobility impairment	intellectual impairment

mental retardation/handicap/disability/challenged

Suggested Resources:

Teacher's Notes (page 36 to 39)

Questionnaire (page 43)

Story/discussion paper sets from the resource section (pages 47 - 51)

Activity sheets (pages 52 - 53)

Vdeos chosen from those listed below: (See the Program Resources for sources.)

- As I Am
- And Then Came John
- Our Family
- Labeling Blues
- There's Always Belinda

Program Glossary

Goal #1

To increase the student's understanding and acceptance of personal limitations.

Goal #2

To increase the student's awareness of the limitations imposed by a disability.

Objectives:

The student will be able to:

1. identify personal limitations.
2. experience, through simulations, an approximation of what it is like to have a disability.

Suggested Activities:

1. Use clippings from newspapers and magazines, or excerpts from books to give examples of exceptional ability in various fields. Develop the idea of personal limitations, and identify disabilities as severe limitations affecting ordinary people.

2. Brainstorm with the students a list of "bests", or "greats" that are local or school-oriented. Discuss their ability to match these records and develop the concept that we all have personal limitations because we can't all be the best at everything. Use this basis to develop the idea of disabilities as simply more severe limitations affecting people who are otherwise very similar to themselves.
3. Have students take part in simulation activities such as the following:

(Discussion guides are available on page 74)

Motor impairment simulations: (page 54)

Wheelchair excursion.

Sock hands.

Sensory impairment simulations: (page 56)

Blind lunch.

Deaf dance.

Intellectual impairment simulations: (page 60)

Warren-Garlie Counterbalanced Intelligence Test.

Foreign language directions.

Forced learning of another form of written language.

4. Play an audiocassette showing the effect of a hearing impairment. Discuss how this would interfere with a person's normal daily activities.
5. Invite a guest speaker from the Canadian National Institute for the Blind or from the Saskatchewan Hearing Aid Plan to your class.

Evaluation Options:

1. Students could be evaluated on their participation in the activities, and/or in the class discussions.
2. A take-home assignment asking students to reflect on positive attitudes toward people with disabilities could provide evaluation as well as bridging to the next lesson. A sample assignment is included on page 75 of the resource section.

Suggested Resources:

Teacher's Notes (page 40)

Audiocassette depicting the levels of hearing impairment

(These can be borrowed from the Saskatchewan Hearing Aid Plan.)

Mobility impairment simulations (page 54)

Sensory impairment simulations (page 56)

Warren-Garlie Counterbalanced Intelligence test (page 60)

Foreign language lesson plan (page 66)

Activity sheets for learning a new form of written language (page 69)

Discussion sheets for simulation activities (page 74)

Sample take-home assignment (page 75)

Books from the list in Program Resources

Goal:

To give students an opportunity to interact with someone who is disabled.

Objectives:

The student will be able to:

1. become acquainted with someone who has a disability.
2. practice the helping techniques they developed in Lesson 1.

Suggested Activities:

1. Start a friendship circle for a teenage student with disabilities who is socially isolated.
2. Provide suggestions for personal involvement projects and award extra marks, or some other prize (a free lunch?) for those who participate. Some possibilities are:
   * Local organizations that provide services for disabled people may value teen volunteers eg.. *Special Olympics. HOPE for Autism* .
   * Senior citizens who have vision or hearing impairments, or limited mobility may enjoy a visit with some of the students.
   * Special needs students in younger grades may enjoy having a "reading buddy", or a "playground pal", and benefit from it as well.

3. Find people with disabilities in your community who are willing to come to your class and talk to the students. Your community's chapter of *The Voice of the Handicapped* may be able to suggest someone.
4. Show the students one of the videos listed in the Suggested Resources.

Evaluation Options:

For this lesson, students should be evaluated on their participation and involvement. If desired, they could write a description of an activity they shared with their new acquaintance.

Suggested Resources:

Teacher's Notes page 40.

Videos chosen from those listed below:

(See Program Resources for sources.)

As I Am

And Then Came John

Our Family

There's Always Belinda

Books from the list in Program Resources

Goal:

To develop students' awareness of the importance of personal safety measures: injury can cause disability.

Objectives:

The student will be able to:

1. explain how injury can cause physical, mental, and sensory disabilities.
2. identify safety measures to ensure his or her own safety.

Suggested Activities:

1. Collect cartoons depicting accidents and show them to the students. Then have class or group discussions on the following topics:
   * the possible effects of such an accident.
   * ways to prevent such accidents.
   * what they should do if such accidents occurred.
2. Use the overheads from the Resources section (page 77) and have students brainstorm to name accidents that could occur in the places listed, and the type of disability that might result.
3. Use some of the audio-visual materials from the suggested resources.
4. Send for accident prevention posters or pamphlets and discuss them. See the Program Resources for suggestions and suppliers.

Evaluation Options:

This lesson could be evaluated by assigning one of the tasks listed below, or by offering students a choice of assignments.

1. Choose one accident from each category in the list brainstormed earlier, then list all the ways you can think of to prevent those accidents.
2. Alone, or with a group, role-play the occurrence of an accident, its results, and its prevention.
3. Draw a cartoon or poster advocating accident prevention.
4. Write a story describing an accident and its immediate and long-term effects.
5. Tell the class about an injury you have suffered. Explain how it could have been prevented.

Suggested Resources:

Teacher's Notes page 41.

Listed sources for posters and brochures (Program Resources)

Videos chosen from those listed below:

(See Program Resources for sources.)

Smart Hockey with Mike Bossy

Sudden Impact

Bicycle Safety Camp

Learn Not To Burn Curriculum Part 3 (Program Resources)

Goal:

To develop students' awareness of their obligation to ensure the safety of others

Objectives:

The student will be able to:

1. identify circumstances under which he/she has a responsibility for the safety of others.
2. explain what he/she can do to ensure the safety of these people in the circumstances described.

Suggested Activities:

1. Use the story and discussion sheet set, and activity sheet pages 80 - 83.
2. Brainstorm occasions when students had a responsibility to care for someone else's safety e.g., babysitting, sick parents, elderly relatives, Sunday School class, reading buddy, friends, team members.
3. Encourage students to participate in a Babysitter Course. There is a program available through the Red Cross which may be taught by any concerned individual.
4. For students 12 years of age or older, the Red Cross offers an Emergency First Aid Course which includes: initial assessment; artificial respiration; choking; bleeding; shock; poisons; and secondary assessment.

Evaluation Options:

The evaluation of this lesson may include any or all of the following:

1. Student participation in a program such as the Babysitter's Course or the Emergency First Aid Course described above.
2. Student participation in class discussions.
3. The discussion questions from activity 1 could be assigned as written work and the answers evaluated.
4. The activity sheet from activity 1 could be used to evaluate this lesson.

The evaluation of this unit could include any or all of the following:

1. Teacher observations.
2. Anecdotal records.
3. Student participation.
4. Evaluation of projects and written work.
5. Student self-evaluation sheet (page 84).

Suggested Resources:

Story/discussion paper sets from the resource section (pages 80 - 82)

Activity sheet (page 83)

Self-evaluation sheet (page 84)

Videos chosen from those listed below: (See Program Resources for sources.)

Smart Hockey with Mike Bossy

Toys

Teacher's Notes

Unit One: General Information

Definitions.

Disability is a continuum that stretches from mild to severe. This continuum starts with a **pathology**, a diagnosed condition which may weaken or damage the patient's structures or functions resulting in an **impairment**. An impairment that interferes with a person's ability to perform normal activities is called a **functional limitation**. A functional limitation, combined with a community situation that restricts the person's ability to lead a normal life, produces a **disability** or **handicap** (Pope & Tarlov, 1990). The word "handicap" is equivalent to "disability", but, since people who are disabled feel that "handicap" has negative connotations, it's use is discouraged (Pope, 1992).

Mental retardation has very negative connotations, but it is difficult to find an equivalent that is as universally understood. I have used the term mental retardation, but I have also used the phrases **intellectual impairment**, and **mental disability** because they have the virtue of corresponding with the designations used to describe sensory and physical disabilities.

Prevalence

The prevalence of disability in Canada is about 13%. More than 127,000 people living in this province have some type of disability (Statistics Canada, 1990).

Disabilities can originate at any stage of life. During adolescence and early adulthood, injury is the most common cause of disability (Pope & Tarlov, 1991).

Effects of Disabilities

Disabilities can affect all aspects of a person's life: emotional, social, educational, economic, and professional. Disabilities also affect the lives of other members of the family.

The emotional adjustment required by both the individual and his or her family is always difficult, especially when the disability is severe and occurs abruptly as it does in many cases of disabilities caused by injury (Nagler, 1990).

A person's social life is greatly affected if they become disabled. Many disabled people believe that the attitudes of other people are the greatest problem that people with disabilities have to face (Makas, 1988/1990; Smith, 1983). Stereotypes, discrimination, and ignorance interfere when disabled people meet new acquaintances. Sexuality, love, marriage, and parenting may be more difficult for people with disabilities because the public often reacts in disparaging ways (Corbett, Klien & Bregante, 1987).

People with disabilities are more likely to have financial problems than the non-disabled. There are extra expenses associated with medical care, assistive devices, and adaptations for daily living. In addition, it is more difficult for people who are disabled to obtain and hold a good job, which affects their income level. Many people with disabilities have a lower level of education than their non-disabled peers, which puts them at a greater disadvantage when job hunting.

Parents of a child with a disability must face emotional turmoil, increased expenses, and a prolonged period of time when they must support their child. Raising a child with disabilities can be physically, mentally, and emotionally draining.

Disabilities interfere with quality of life in a multitude of ways. Daily living skills pose difficulties. Leisure activities and community participation

may be limited. Educational achievement may be restricted. Employment is more difficult to find than it is for non-disabled people. Social stereotypes and discrimination affect every aspect of life.

For those of us who have not experienced severe disability, it is difficult to understand how pervasive the effects can be. To get a feeling for the attitudes expressed by individuals with disabilities, consider the following excerpts from the Government of Canada's publication, Surmounting Obstacles, (Smith, 1983):

> I find that people have some very funny myths about disabled people. For one thing, they think that we are fragile. I find just the opposite ...
>
> Disabled people are constantly adjusting on a daily basis to difficulties that many people face only in a crisis. So who are the sheltered people in our society?
>
> The strangest thing about disabled people is that we usually think, feel and react like 'normal' people, yet people expect us to react differently.
>
> Joan Green

> For a long time I was miserable about my condition, but now I'm getting used to it. I try my best to be happy all the time. There are so many things I can't do because the money isn't there. I can't even afford a phone and I need one badly... Before they design another (nursing home), they should talk to handicapped people about their needs. The bathrooms are built for skinny guys, you can't even get in there with a wheelchair.
>
> Julius Hager

There was a lot of blatant discrimination by the other kids, but I think that children are really innocent. They become programmed by their parent's attitudes. It's crucial that disabled children get into a normal school setting as early as possible so that they can get used to being with normal kids early in life. It's also crucial because then normal kids can get used to physical disabilities, and start educating their parents.

Canada is basically a materialistic society which is very hung up with money, and with visual beauty. Persons with a physical disability are automatically excluded from so-called "normal" activities simply because we are visibly different from other people. And because we are physically different, it is assumed that it changes our sex life, that we become asexual, that we become sick persons.

Len Seaby

Unit Two: Community Connections

Even though children with special needs are being served within the regular classroom, often they are not included in the social interaction. Unit 2 addresses this issue through the use of simulations, discussions, and an opportunity for direct interaction with people who have disabilities.

People who have disabilities, and people who do not, have very different opinions about what constitutes a positive attitude. Makas (1988) studied this difference by comparing the reactions of the two groups of people. People without disabilities saw two types of "positive" attitudes which bothered the individuals with disabilities. Makas described these as follows:

...the "Give the Disabled Person a Break" cluster and the "Disabled Saint" cluster. Items that comprise the Give the Disabled Person a Break cluster involve special concessions made for disabled individuals. Disabled respondents rejected this notion. They indicated that they neither want nor expect special treatment because of their disabilities.

Items in the Disabled Saint cluster represent positive characteristics frequently attributed to persons with disabilities. Disabled respondents ... rejected these attributes as defining persons with disabilities (page 29).

When the non-disabled group were told to respond in an exceptionally positive manner, the number of responses that irritated those with disabilities increased. Therefore, the unfortunate situation exists that when we are trying hardest to be nice, we are being most offensive.

People with disabilities want to be treated as PEOPLE. Interactions improve as people without disabilities talk to and work with those who are disabled. Ask questions, don't be shy, but do be respectful, and polite.

Unit Three: Prevention of Disability

Injury is the most common cause of disabilities that originate during adolescence and early adulthood (Pope & Tarlov, 1991). Some of these injuries are work related, and usually occur because of lack of protective equipment such as safety glasses, ear protectors, steel toed boots, or hard hats.

Many injuries are related to sports and recreation. These include hockey injuries, cold-related injuries, and injuries related to water sports such as diving, fishing, and boating.

We can see the magnitude of the problem by looking at the Canadian statistics (Avard & Hanvey, 1989). During 1983, over 17,000 children age 1-4 were hospitalized because of injuries. Of the causes listed, 29% were due to falls, 22% from poisoning, and 7% from burns. At the same time,

more than 36,000 children from 5 - 14 years old went to hospital because of injuries due to falls, motor vehicle accidents, bicycling accidents, and other causes. In 1985, injuries killed over 700 children. The most common causes of fatal injuries were motor vehicle accidents, drowning, burns, and suffocation.

When we consider the statistics given above, it bacomes obvious that one very important way to prevent disability is through accident prevention. This requires knowledge of safety measures and their application.

Grade 7 students have already taken a lot of accident prevention methods in health classes at different grade levels. However, they should be made aware of the serious consequenses that can result fom accidental injury. They need to be aware that they have a responsibility for their own safety. It is important to remind them of the necessary safety precautions during leisure activities such as sports, and outdoor activities, especially those related to water, recreational vehicles, bicycles, and hunting. Grade 7 students are often helping in work activities around home as well, and they need to be aware of such safety precautions as wearing boots when they mow the lawn, and wearing safety glasses when they hammer nails. Students in rural areas who are helping with farm work need to be aware of safety precautions around farm machinery.

Adolescents may be responsible for the safety of others as well as for themselves. They are often called upon to care for younger children, either informally at home, or as a paid babysitter. Accident prevention is an extremely important part of child care as well and must be emphasized. A seventh grade student may have the responsibility of caring for a sick parent, or ensuring that an elderly person's sidewalk is free of snow and ice. The importance of this sort of responsibility should be emphasized.

Resources

What do you know about disabilities?

According to Statistics Canada (1990), thousands of people in Saskatchewan have some kind of disability. Public knowledge about methods of preventing disabilities can reduce the numbers of people who become disabled in the future. How much do you know about disabilities?

Please indicate your answer by making a checkmark on the short line in front of it.

a) A disability is

--- not being able to do things as well as other people.

--- not being able to do, in the usual way, things people normally do.

--- not being able to work.

b) Mark the sentence that best describes your personal familiarity with disabilities. You may mark more than one if they apply to you.

--- I have a disability.

--- A member of my family has a disability.

--- I have a friend who is disabled.

--- There are students in the school who are disabled, but I don't know them well.

--- There are people in the community who are disabled, but I don't know them well.

--- I don't know anyone who is disabled.

c) If you think that the disabilities described below could have been prevented, circle the "yes" beside the sentence. If you don't think they could have been, circle "no".

Yes No Grandma has difficulty walking because of her arthritis.

Yes No A baby is born blind because his mother had measles when she was pregnant.

Yes No A young man is paralyzed because his neck was broken when he was checked from behind in a hockey game.

Yes No A little girl cannot run and play because she was born with severe heart problems.

Yes No A teenager has allergies so severe that he cannot go outdoors in the spring because of the pollen from the trees, or in the fall because of the dust from the harvest.

Yes No A grade 2 student has a very hard time learning because she has Fetal Alcohol Syndrome.

Yes No Joey was helping his dad and got his hand caught in the grain auger. Now he uses an artificial hand, but he has trouble writing

Yes No Sally has Down Syndrome. She can't learn as fast as the other kids in her class.

d) Disabilities may occur at any time in a person's life, from before birth to old age. There are methods of preventing disabilities at all these stages. Please read the list of prevention methods below, and indicate the time of life when you think they would be **most** useful. Write the age group from the list below on the line to show your answer.

prenatal (before birth)

0 - 2 (baby)

2 - 9 (child)

10 - 16 (adolescent)

17 + (adult)

anytime

_____ Be sure that all small objects and poisons are out of reach.

_____ Attend sex education classes.

_____ Visit a doctor regularly and follow the advice given.

_____ Use a car seat that faces toward the back of the seat it rests on.

_____ Wear safety equipment such as goggles and ear protectors when working with power tools.

_____ Visit a geneticist to be sure that you and your partner have no abnormal genes.

_____ Stop drinking alcoh5.1

e) Choose the best answer by putting a checkmark on the line in front of it.

* If a pregnant woman gets German Measles (Rubella), her baby can be born with sensory and mental disabilities. This can be prevented by:

--- medication to treat the disease.

--- treatment of the baby after birth.

--- immunizing all teenagers against Rubella.

--- going to the hospital whenever you're sick.

* Head and spinal cord injuries are major causes of disability in adolescents and young adults. This can sometimes be prevented by:

--- wearing a helmet when bicycling.

--- wearing your seatbelt.

--- wearing a hardhat in a construction area.

--- all of the above.

* Fetal Alcohol Syndrome (FAS) affects some children at birth. It **always**

--- has mental and physical effects on the child.

--- occurs if pregnant women drink any alcohol at all.

--- proves that the mother is an alcoholic.

--- means that the parents are poor.

* Children need certain things in order to develop well. Which of the following are NOT developmentally important for a child?

--- a healthy balanced diet.

--- new clothes.

--- being talked to and read books to.

--- being loved.

Story #1

Ann hurried away right after class. She never had time to chat with her pals any more, she had to pick up Jane from the sitter's before 4 o'clock. She couldn't afford to annoy the woman, or she might refuse to keep Jane. It was hard to find a sitter for her little girl, even harder than for an ordinary kid. After all, how many people who could actually *use* sign language had nothing better to do than look after someone else's kids?

As she headed down the street, she remembered how excited she'd been when she found out she was pregnant. She'd thought Dan would marry her and they'd have a lovely life together, being a real family, hah! It sure hadn't turned out like that. Dan cleared out so fast you couldn't see him for dust, and her mom sure hadn't wanted her back, especially not when she was pregnant. Oh well, that couldn't be helped now.

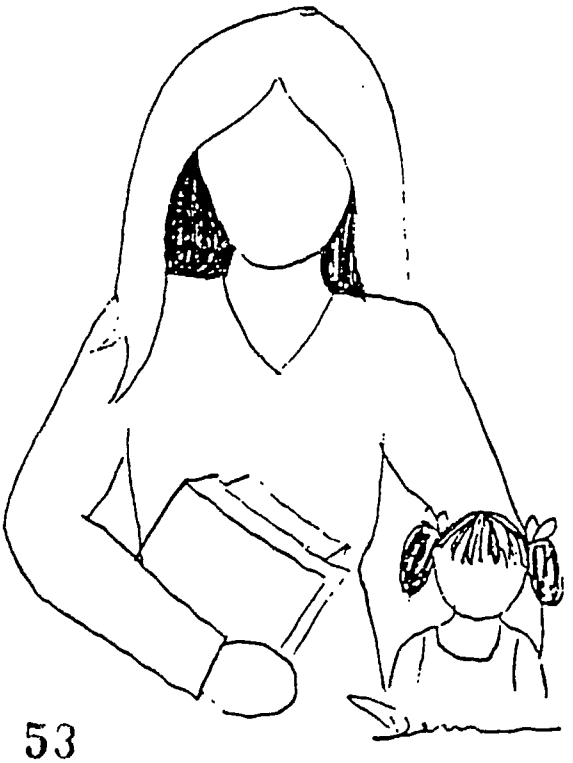
Ann tossed her head. She was doing OK. She was almost finished her grade 12, then she'd either work, or get social services to put her in a training course. They were really trying to help because Jane had a "disability".

That was the nice way of putting it, other people asked why her baby was "handicapped", and tried to tell her what to do about it. Ann knew that "handicapped" and "disabled" meant the same thing, but the feeling she got from them sure wasn't the same.

It was even worse when Mom said it was too bad "the kid wasn't right"! That always made Ann mad. Jane was perfectly "right" thank you! The only problem was that she didn't hear too good.

The doctor told her that Jane was "hearing impaired", so she wasn't completely deaf. She sure had trouble understanding when you talked to her, though, so both of them were learning sign language.

Knowing how to sign might even help her get a job later on, especially if she got that training she wanted as a nurse's aide.



Story #2

Stella stood by the side of the bed and stared at Susan, lying there with her curly brown hair spread out over the pillow. It was Susan, allright, but she sure wasn't acting like Susan. She just lay there, and her eyes were open a little bit. A string of drool ran down from the side of her mouth, but she didn't seem to notice. She didn't even move when Mom wiped it away.

Mom glanced at Stella, then walked over and gave her a hug. "C'mon, punkin," she said, "I think we need to talk." She led the way to the cafeteria and got each of them a coke.

Stella sipped her drink, then looked up at her mother. "Mom," she asked, "what's the matter with Susan? How come she just lies there like that?"

"Stella, honey, I'm not sure that I can make it really clear, but I'll try. " Mom coughed a bit and wiped her eyes. "You remember when the snow house fell in, don't you?"

Stella remembered all right. It had been a beautiful day. She and Susan had played outside, digging a two room snow house in the big drift beside the fence.

Stella had to get dry mitts, so Susan had gone into the snow house alone to wait for her. When she came back out, the roof of the snow house had fallen down and Susan was nowhere to be found.

Stella had run into the house to get help. Dad came outside and dug around in the snow. He finally found Susan, but she was as limp as a rag doll. Dad had done that breathing they show on *Rescue 911* and Susan started to gasp, but she didn't wake up. Dad took her into the house, then he and Mom took Susan to the hospital. She was still here.

Stella nodded, and Mom continued talking. "Well, dear, Susan was under the snow for quite a while, and she couldn't breathe all that time. Her brain couldn't get the oxygen it needed, and that caused brain damage. We don't know yet how bad the damage is. Susan might be able to do most of the things she used to do, or she may not be able to even walk, or talk, only time will tell. She's likely to have a disability called mental retardation."

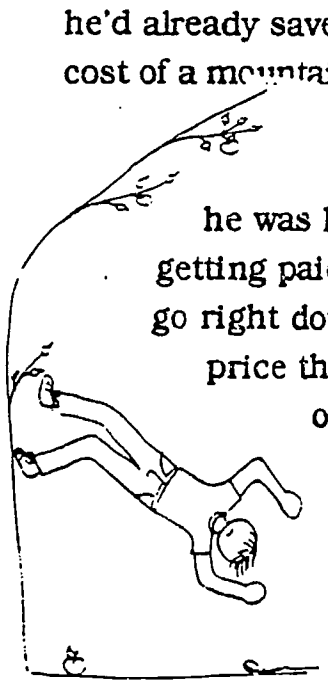
Stella thought about Susan, and how much fun they had together. What would it be like if Susan couldn't ever walk or talk again? She began to cry. So did Mom.

Story #3

Joey lay very still. He tried not to move at all because he was afraid he wouldn't be able to. Right now, he couldn't feel anything at all; nothing hurt, nothing even prickled. That scared him. What if he was paralyzed?

He'd fallen out of trees before, and had the wind knocked out of him. This didn't feel the same. He'd asked the doctor what was wrong, but the guy didn't say much, just patted his leg and said, "Don't worry, just get some sleep." Yeah, right, not worry, when he might be disabled, might never walk again!

His mind ran around in circles replaying the accident. He'd been pleased when he got the job helping Tom pick apples. It didn't pay much, but the money, added to what he'd already saved, would cover the cost of a mountain bike.



They were almost done, and he was looking forward to getting paid. He was going to go right down to the store to price the bikes and think over his options. There were just a few apples left, right up at the top of the tree. Mr. Smith, the owner, had told them to use a ladder from the shed, but it would take a while to drag that big heavy thing down here and then take it back again. He figured he could climb up there, grab those last few apples and be done.

Tom had tried to stop him, but he'd swung up into the branches of the apple tree without really listening to Tom's lecture about doing things right and following directions. Now, oh how he wished that he'd listened, and taken the time to go for that ladder!

Tom had still been talking when the branch Joey'd grabbed had broken, and he'd tumbled out of the tree. Mr. Smith had seen him fall and come running. The two of them had done everything right, Joey knew that from his first aid course. They'd checked him over, covered him up and kept him quiet until the ambulance came. The paramedics had been impressed.

Unfortunately, none of their expertise helped. He, Joey, the enthusiastic cyclist, was still lying here flat in bed, scared out of his mind that he'd never move again. All he could do was pray that he'd have a chance to ride that new bike now that he'd come to such grief earning the money for it.

Discussion Guide

1. How would you answer the following questions from story # 1?

*What is wrong with Ann's little girl, Jane?

*How long will this condition last?

*What effect does Jane's disability have on Ann's life now?

*What effects will it have on Ann's life in the future?

*What effects will it have on Jane's future life in terms of:

her ability to learn?

her ability to take care of herself?

her ability to earn her own living?

and her ability to live independently?

*What do you know about the cause of Jane's condition and whether it could, or could not, be prevented?

2. How would you answer the following questions from story #2?

*What is wrong with Susan?

*How long will this condition last?

*What are the future possibilities for Susan?

*How would these possibilities affect Susan's future life in terms of:

her ability to learn?

her ability to take care of herself?

her ability to earn her own living?

and her ability to live independently?

*How would these possibilities affect the lives of the various members of her family?

*What do you know about the cause of Susan's condition and whether it could, or could not, be prevented?

3. How would you answer the following questions from story #3?

*What is wrong with Joey?

*How long will this condition last?

*What effect does his present condition have on him?

*What are the future possibilities for Joey?

*How would these possibilities affect Joey's future life in terms of:

his ability to learn?

his ability to take care of himself?

his ability to earn his own living?

and his ability to live independently?

*What do you know about the cause of Joey's condition and whether it could, or could not, be prevented?

4. True or False?

T F **Disability** is a term used to indicate that a person's ability to live a normal life is limited by a physical or intellectual impairment.

T F A disability is always present from the time a person is born.

T F Disabilities may affect a person's physical mobility, their vision, hearing, or mental ability.

T F Being **deaf** and being **hearing impaired** is the same thing.

T F People involved prefer the term **disabled**, even though it means the same thing as **handicapped.**

T F A disability only affects the person who has it, no one else.

Class Activity

(Adapted from Plumridge & Hylton, 1989)

Most people expect to be parents some day. They picture what their lives will be like at that time, and imagine what their baby will be like. People who are actually considering having a child may dream of the child's future, what they will be like as an adult. They may even pick out names for their child. This exercise asks you to do that sort of imagining.

Directions

Think about the child you may eventually have. Will it be a girl or a boy? What will you teach your child? What will his or her childhood be like? What kind of adulthood will he or she look forward to? Pick a name for your imaginary baby. Then read the chart on the next page and check the first column beside the things that you expect for your child.

Now, label the second column HI (hearing impaired) and think about the changes that condition would make in your expectations for your child. Check off the items that you would expect for your child.

Label the third column MI (mobility impaired) and imagine what effects there would be if your child was confined to a wheelchair. Check the items in the same way as before, but taking into consideration this additional impairment.

The fourth column is to be labelled MR (mentally retarded). How would your expectations change if your child was very slow to learn things as well?

Most people never consider that their eventual children might be anything less than perfect, you have now had a chance to think about this possibility. Compare the differences that the different disabilities made on your expectations for your imaginary child. Discuss with your classmates how having a child with a disability could affect your life.

Child's Name	HI	+MI	+MR
Sing lullabies to my baby.			
Read and tell stories to my child.			
Help my child learn to ride a bicycle.			
Play ball with my child.			
Help my child with homework.			
Cheer while my child plays ball or hockey.			
Take my child fishing or camping.			
Have my child take piano or guitar lessons.			
My child will complete grade school. My child will complete high school. My child will go to college.			
My child will be independent and not need my help or financial support by age (Write your answer in the box.)			

My child will work in a job such as

(Place your answer on the line by the column #.)

1._____

2._____

3._____

4._____

Motor Inpairment Simulations

1. Wheelchair excursion (mobility impairment):

This simulation can be done individually over the course of a couple of days to allow everyone to take part despite a limited number of wheelchairs.

a) Materials:

- at least one wheelchair

(possible sources are nursing stations, hospitals or health centres, or ambulance companies).

- a set of index cards each describing a goal or task to be performed

b) Method:

- each student, in turn, pulls a card and while confined to the wheelchair accomplishes the task described.
- when all students have experienced the simulation, discuss it.

(a discussion guide is provided on page 74)

c) Task suggestions:

Students can be asked to get material, deliver notes, or rendezvous with someone else. If time is limited, they can meet another class member somewhere, and switch places so that the second student returns to class via wheelchair.

Assign destinations which require students to navigate through doorways, up ramps, and around obstacles. If the weather is pleasant, outdoor journeys could be considered, otherwise, trips to such goals as the gym, the principal's office, or the cafeteria provide enough challenge.

2. Sock hands (fine motor impairment):

The materials for this activity are readily available, and students can bring them from home.

a) Materials:

- enough heavy socks to provide a pair for each student
- materials for fine motor tasks, some examples are given below:
  - * wallets, purses, change purses with pennies in them

    (Kindergarten or primary classrooms often have play money if you wish to borrow it.)
  - * needles and thread
  - * beads and string
  - * shoes to be laced
  - * clothing or costumes with fine zippers, buttons, and snaps
  - * unsliced bread, serrated knife, margarine, butter knife

b) Method:

- each student wears a pair of socks on their hands and attempts to accomplish daily living tasks using the materials provided.
- when all students have experienced the simulation, discuss it.

(a discussion guide is provided on page 74)

c) Notes:

- If desired, various tasks using different materials can be described on index cards. Each student then draws a card and attempts to accomplish that task. This gives variety and may add to the interests of the students and the shared insights acquired during the follow-up discussion.

Sensory Impairment Simulations

1. **Visual impairment simulation:**

a) Materials:

- a collection of old eyeglasses

(These may be obtained either by requesting donations locally, or from thrift shops, or church groups who collect used clothing for the poor.)

- materials for fine motor tasks, some examples are given below:
    * needles and thread
    * beads and string
- materials for tasks which require reading of directions for example:
    * making jelly or instant pudding
    * doing an origami project
    * assembling an appliance, toy, or model
    * assembling a craft activity

b) Method:

- students wear a pair of inappropriate glasses and attempt an assigned task.
- when all students have experienced the simulation, discuss it.

(a discussion guide is provided on page 74)

c) Notes:

- If desired, various tasks using different materials can be described on index cards. Each student then draws a card and attempts to accomplish that task. This gives variety and may add to the interests of the students and the shared insights acquired during the follow-up discussion.

2. Blind Lunch:

a) Materials:

- blindfolds for everyone except the teacher and a few helpers
- place settings for each person: plate, knife, fork, glass
- enough of the following food items for each person:

buns partially sliced	butter or margarine
ham	lettuce
tomato slices	mustard

- pitchers of juice (preferably pitchers with lids and pour spouts)

b) Setting:

Ideally, the students start off, blindfolded, in their classroom and navigate to a room with tables and chairs, where places are set for lunch. However, a "blind lunch" can be served in the classroom by setting up groups of desks for lunch groups before the students don their blindfolds.

There should be one helper for each table or group. It is the responsibility of this person to ensure that there is no major accident or "spill".

c) Method:

- students are blindfolded.
- students must find their way to a table and sit at a place setting.
- pitchers of juice, and the sandwich materials are passed around.
- each person must make and eat a sandwich, and pour and drink a glass of juice.
- when lunch is finished, discuss the experience.

d) Task suggestions:

A description of each thing passed around is provided by the teacher. The materials are not named. A bun could be described as a "round, brown thing" for example, and mustard as "yellow stuff".

If it is possible to videotape some of this exercise it makes a good basis for a class discussion concerning behavior which may make people with disabilities appear "odd". Peculiar behavior patterns develop quickly among "normal people" as they try to identify the food items and orient themselves under these circumstances.

The follow-up discussion could include:

* the difficulties they encountered
* the methods they used to locate and identify things
* if there is a video-tape, discuss any unusual behavior, why the person used it, what else they could have done
* what effect a permanent disability of this kind would have on their lives, now, and in the future
* what help would have made things easier for them
* what kind of responses would they NOT have wanted from people around them

3. Deaf dance:

This simulation can be included as part of a class party, or as a novelty at a teen dance.

a) Materials:

- two ear plugs for each student
- appropriate dance music
- a tape recorder, CD player, or record player to produce the music

b) Method:

- students insert the earplugs and attempt to dance to the rhythm
- if it will not disturb others, the volume may be slowly increased until they **can** dance to the music, then the ear plugs removed
- when all students have experienced the simulation, discuss it.

(a discussion guide is provided on page 74)

c) Notes:

If desired, this activity can easily be adapted for singing, choral speaking, or watching a television program rather than dancing. The purpose of the exercise is for the students to realise that a hearing impairment affects leisure activities as well as work situations.

Intellectual impairment simulations:

1. Foreign language directions.

This simulation requires the cooperation of an older student or adult who is fluent in a language which is completely foreign to the students.

a) Materials:

- a simple lesson plan involving a craft or a paper and pencil task
- a person willing to teach the lesson in a foreign language

b) Method:

- the instructor teaches the lesson quickly
- no questions are allowed during the actual lesson
- the lesson is followed by a class discussion

Sample Lesson

Objective

The student will be able to follow directions and make a small paper candy dish.

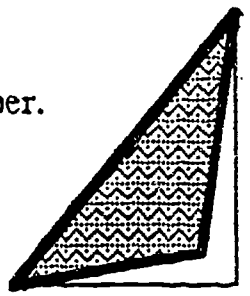
Materials

20 - 25 cm squares of strong white paper.

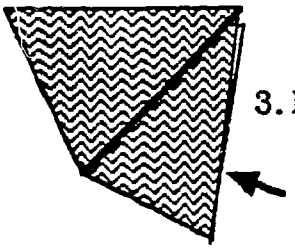
Crayons or coloured pencils.

Method

1. Students make a simple design on one side of the paper.

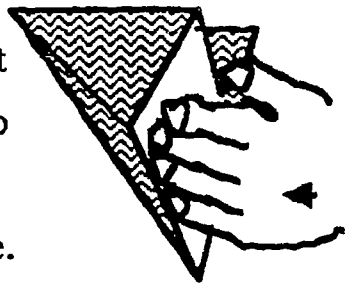


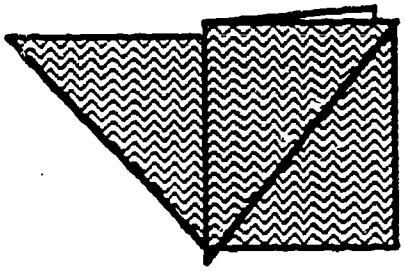
2. Fold the paper from corner to corner to make a triangular shape.



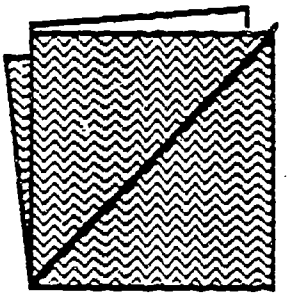
3. Fold the paper from corner to corner again, producing a smaller triangle.

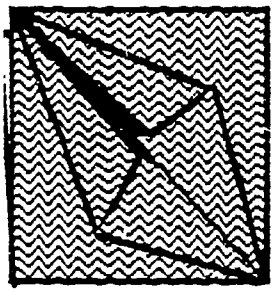
4. Slip your hand inside one of the triangles and open it up. Press the upper crease of the triangle down onto the lower fold line. This makes a square shape on top of the triangle.



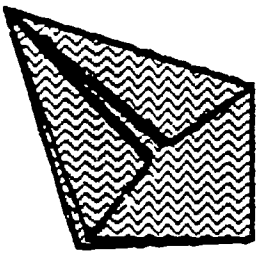


5. Repeat the fold described above, opening up the other triangle. This produces a multi-layer square with one corner completely open, the two adjacent ones with one open side and one folded side, and the opposite one completely enclosed by folded sides.



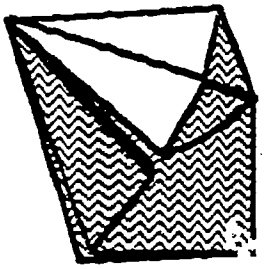


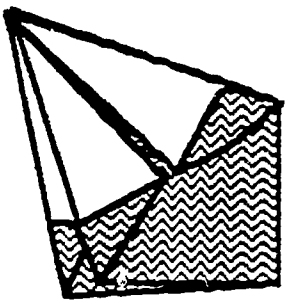
6. With the open corner away from you, fold each side of the top square in and line it up with the centre crease line. This makes an upside-down kite shape.



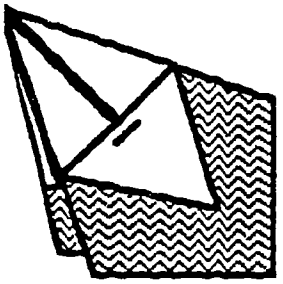
7. Repeat this fold on the other side.

8. Open each fold that you made in Step 7, and press it down so that it forms a sharp crease lining up with the original side of the kite.



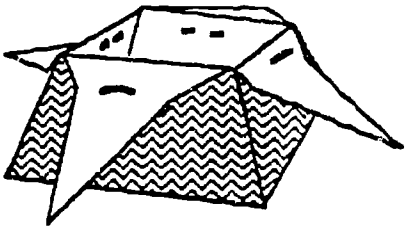


9. Fold the outer flap of each kite into the centre space to the side of it. This creates four identical kite shapes, with the narrow point open.



10. Fold each point downward separately and staple them.

11. Carefully open up the dish.



2. Forced learning of another form of written language.

a) Materials:

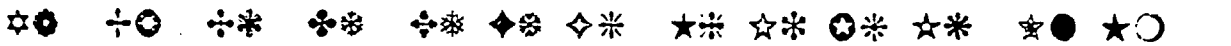
- a selection of familiar text written in different form such as:
    * braille
    * the Greek alphabet or other systems available on computer font options
- questions on the selection
    * for your convenience there is a set of lesson material, page 70.

b) Method:

- review the alternate system you are using as though you expect it to be familiar to the students
- give the assignment, but limit the time to about five minutes
- offer limited, impatient assistance if students are having difficulty
- discuss the activity, emphasizing that the frustration they felt is a common experience for many people who have trouble learning

Remember your alphabet?

A a B b C c D d E e F f G g H h I i J j K k L l M m



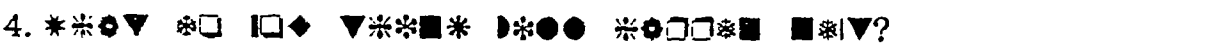
N n O o P p Q q R r S s T t U u V v W w X x Y y Z z

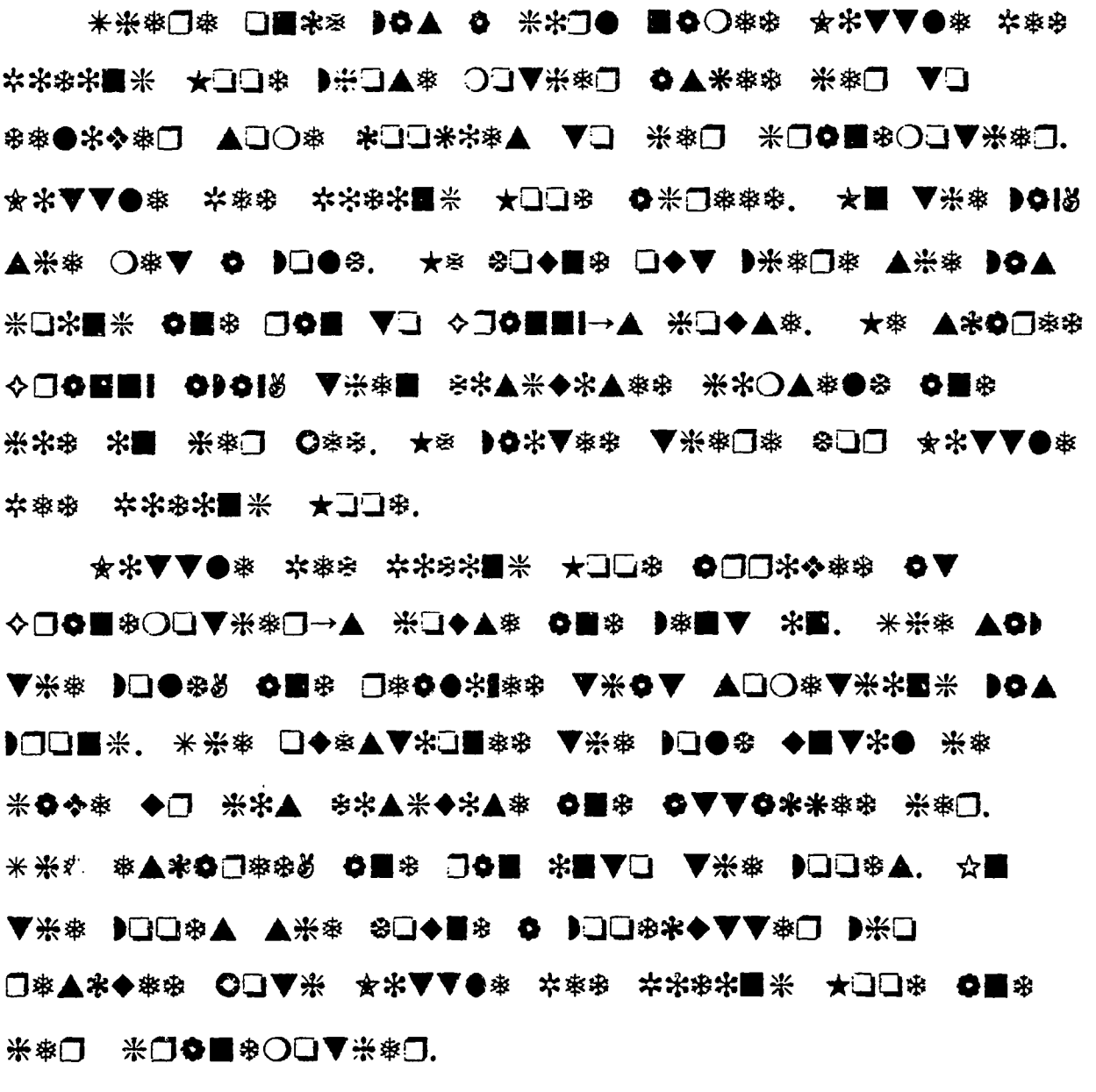
Now read the story on the next page and answer the following questions:

1. 

2. 

3. 

4. 



It's Greek to ME!

A a B b C c D d E e F f G g H h I i J j K k L l M m

Α α Β β Χ χ Δ δ Ε ε Φ φ Γ γ Η η Ι ι ϑ φ Κ κ Λ λ Μ μ

N n O o P p Q q R r S s T t U u V v W w X x Y y Z z
Ν ν Ο ο Π π Θ θ Ρ ρ Σ σ Τ τ Υ υ ς ῶ Ω ω Ξ ξ Ψ ψ Ζ ζ

Τηε Σηιελδ

Ονχε, λονγ αγο, τωο κνιγητσ μετ ατ α χροσσροαδσ μαρκεδ βψ α σιγν ιν τηε σηαπε οφ α σηιελδ. Τηεψ σταρτεδ το χηατ ιν α φριενδλψ φασηιον. Τηεν ονε μαν μεντιονεδ τηε ιντερεστινγ γολδεν σηιελδ τηατ ωασ τηε σιγν. Τηε οτηερ μαν αγρεεδ τηατ ιτ ωασ αττραχτιῶε, βυτ χλαιμεδ τηε σηιελδ ωασ σιλῶερ. Τηε τωο μεν βεγαν το αργυε, τηεν βοτη δρεω τηειρ σωορδσ ανδ τηεψ φουγητ ιν εαρνεστ.

Φιναλλψ, βοτη μεν λαψ μορταλλψ ωουνδεδ ον τηε γρουνδ, ανδ εαχη λοοκεδ υπ ατ τηε σιγν τηατ ωασ τηε χαυσε οφ τηειρ υνδοινγ. Ιτ σο ηαππενεδ τηατ τηε μαν ωηο ηαδ φιρστ γαζεδ ον τηε γολδεν σηιελδ ηαδ φαλλεν το τηε γρουνδ ον τηε οτηερ σιδε. Ηε ωασ τοταλλψ αμαζεδ το σεε τηατ τηε σηιελδ, φρομ τηισ σιδε ωασ, τρυλψ σιλῶερ, ασ ηισ οππονεντ ηαδ χλαιμεδ. Τηε σεχονδ κνιγητ ωασ αλσο αστουνδεδ το σεε τηατ τηε σηιελδ ωασ γολδ ον τηε σιδε τηατ τηε φιρστ μαν ηαδ φαχεδ ωηεν τηειρ αργυμεντ βεγαν. Βοτη μεν διεδ κνοωινγ τηατ τηεψ ηαδ φουγητ οῶερ νοτηινγ.

Τηε μοραλ οφ τηε στορψ ισ, δονΠτ αργυε υντιλ ψουΠῶε λοοκεδ ατ τηινγσ φρομ τηε οτηερ φελλοωΠσ ποιντ οφ ῶιεω. Νοω, ρεωριτε τηε στορψ, γιῶινγ ιτ α ηαππψ ενδινγ.

Teacher's Copy

This is an English transcription of the stories and questions on pages 71 & 72.

Little Red Riding Hood

There once was a girl named Little Red Riding Hood whose mother asked her deliver some cookies to her grandmother. Little Red Riding Hood agreed. On the way, she met a wolf. He found out where she was going and ran to Granny's house. He scared Granny away, then disguised himself and hid in her bed. He waited there for Little Red Riding Hood.

Little Red Riding Hood arrived at Grandmother's house and went in. She saw the wolf, and realized that something was wrong. She questioned the wolf until he gave up his disguise and attacked her. She escaped, and ran into the woods. In the woods she found a woodcutter who rescued both Little Red Riding Hood and her grandmother.

1. Who is the main character of the story?
2. Who is the villain?
3. Who is the hero?
4. What do you think will happen next?

The Shield

Once, long ago, two knights met at a crossroads marked by a sign in the shape of a shield. They started to chat in a friendly fashion. Then one man mentioned the interesting golden shield that was the sign. The other man agreed that it was attractive, but claimed the shield was silver. The two men began to argue, then both drew their swords and they fought in earnest.

Finally, both men lay mortally wounded on the ground, and each looked up at the sign that was the cause of their undoing. It so happened that the man who had first gazed on the golden shield had fallen to the ground on the other side. He was totally amazed to see that the shield, from this side was, truly silver, as his opponent had claimed. The second knight was also astounded to see that the shield was gold on the side that the first man had faced when their argument began. Both men died knowing that they had fought over nothing.

The moral of the story is, don't argue until you've looked at things from the other fellow's point of view.

Now, rewrite the story, giving it a happy ending.

Discussion Questions

You have recently experienced some imposed limitations and simulated disabilities. Answer the questions below, then discuss your answers with your classmates.

1. What effect would permanent functional limitations, have on a person's social life?

2. How would a person's education be affected?

3. What are the future effects on the person's adult earning ability, and his or her ability to be an independent adult?

4. When you were temporarily disabled, what help would you have appreciated receiving from other people?

5. What reactions from others might have seemed annoying or insulting?

6. Many people who take part in simulations like these, find that they feel angry, frustrated, or embarrassed. What effect do you think these feelings would have on a person who was permanently disabled?

7. You have had a taste of what it is like to have a disability. From your experience, list some suggestions for ways people could help someone who is disabled, without embarrassing, or annoying them.

Take-home Assignment

Read the two situations below. Then write a paragraph for each telling what you think would be the right thing to do.

Situation #1

Sam had received a new game for his birthday. He took it to school and showed it to his friends. They thought it was great and met to play with it at noon hour.

While they were playing, another boy came along and wanted to play too. This fellow had a hearing impairment and couldn't talk very well. This made it difficult to teach him the rules of games. He often got angry because he thought the other people playing were cheating.

Sam knew that his friends would soon leave if he let the other boy play. There might even be a fight. Unfortunately, Sam's folks were friends with this boy's parents and they wanted him to be nice.

What do you think Sam should do?

How can he "be nice" and still get to finish the game with his friends?

How would the other boy feel about your solution to Sam's problem?

Situation #2

Violet and her sister, Lily, were walking down the street near a grocery store when they saw an old woman with a white cane and a bag of groceries. She was standing by the street, looking rather lost.

"Hey, Lily," Violet said, "let's see if that old lady wants some help to cross the street. See the cane? That means she's blind. I bet she needs some help."

"Sure. " Lily responded enthusiastically.

Violet had forgotten how impulsive Lily was. Lily ran up to the lady, grabbed her by the arm and started to drag her across the street. The lady pulled back, and hit at Lily with her purse. Her bag of groceries fell to the ground.

"Help!" shouted the old woman. "I'm being mugged"

Lily dropped the woman's arm. She stared. Her eyes got big and she yelled back.

"I was NOT mugging you! I was helping you across the street, you stupid old lady!" Lily started to cry with anger and embarrassment. She turned around and raced off down the street leaving the lady standing in the middle of the street with her groceries all around her feet

What should Violet do?

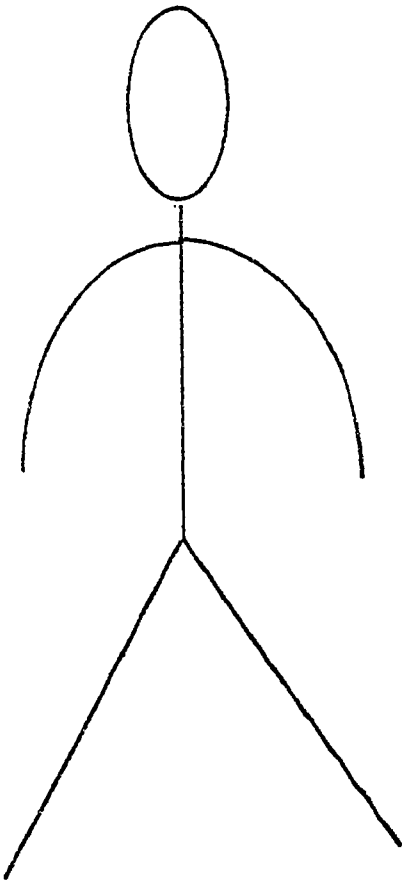
Lily was trying to be helpful. Why did her efforts fail so badly?

How should a person offer to help someone who is blind?

Accidents

Travel

School



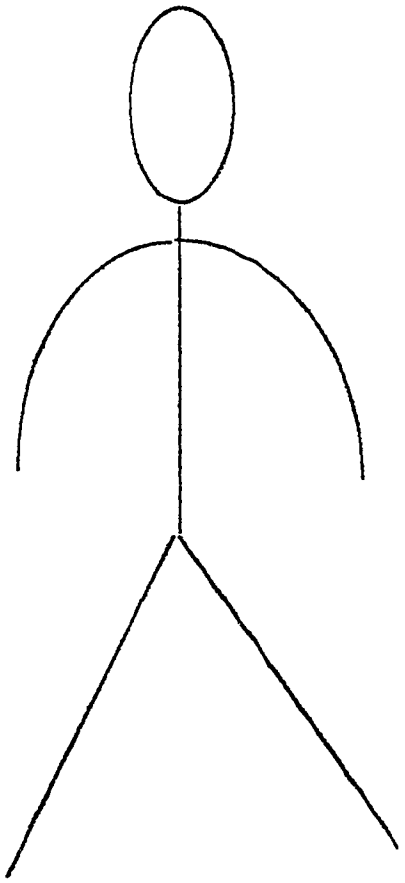
Home

Work

Sporting Accidents

Winter

Summer



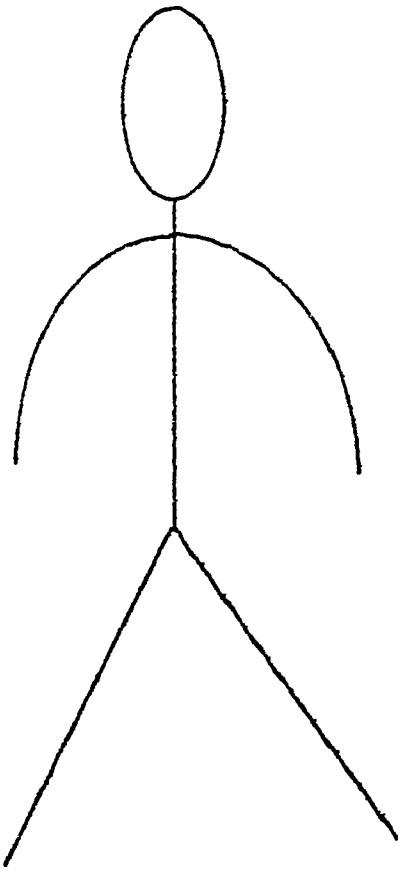
Local

Distant

Disabilities

Sensory

Mental



Physical

Story # 1

Grandmother was busy making cookies. Her daughter's family was coming home for a visit. She had cleaned the house already, moved the crib down from the attic, and asked George to clean up the old high chair and bring it in from the garage.

The baby, Judith, was just a year old, so Granny had moved all the breakable ornaments and the cleaning supplies up into cupboards that were too high for such a little person to reach.

The older children didn't really need that kind of care any more. Angie was five, and Randy seven, so they knew enough not to break things in the house.

. . . .

The visit went well. The children had been good as gold and they'd had a lot of time to visit with Lila and her husband, Sam. Now, it was almost time for them to leave. Granny and Grandpa had enjoyed having them visit, but they were a little tired of the noise and fuss, too.

Things were quiet right now. The baby was napping upstairs, and George and Sam were outside by the garage checking over the car. Lila had a cup of hot tea and a plate of cookies beside her on the telephone stand while she talked to her old girlfriend.

. . . .

All the adults were happy and sure the children were all right.

Upstairs Judith had climbed out of the old crib and was heading toward the stairs.

Angie had seen the cookies, and she thought they looked awfully good.

Out by the garage, Randy was bored. Dad and Grandpa were busy, and they'd told him he couldn't help. Maybe there was something interesting in the garage. Grandpa had a lot of tools, and he made really neat things. Randy thought he could too, now that he had a chance.

Story #2

"You be a good girl and play in the sandbox, while I get supper on, okay , lovey?" Mom's voice was warm and happy as she hugged Leslie.

"Sure, Mom," Leslie said as she hugged back.

Mom went into the house, and Leslie started to make sand pies. She pretended that she was making supper, too. It was sort of fun, but the pies wouldn't stay together. She needed some water to make them stick, or some mud. Yes, mud would be better, and there was lots down by the creek.

Leslie thought about it. Mom had told her to NEVER go near the creek.

Leslie knew that it was dangerous for children to play in the water when there were no adults around, but she wasn't going to play in the water, she just needed some mud. She could climb down the bank with her sandpail and get some of that great sticky mud for her pies, and never go near the water.

The bank was higher than Leslie had expected, and the mud was **very** slippery. Leslie held on tight to the branch of a willow tree with one hand and her pail with the other. It was only another step...

Story # 3

Betts glowered out the window. No smokes! She wanted a cigarette **so** badly, but the kid was sleeping and she didn't want to wake him up.

Craig had been miserable all day, whining and crying because he didn't feel good, and because he couldn't have all the cough drops at once. Doggone kid! What a nuisance, and now she couldn't even go get her smokes because of him.

Betts walked to the bedroom. Craig was sound asleep, curled up under the covers sucking his thumb. "Aw", she thought," he's kinda cute. He sure is sleeping hard. Maybe I could run out to the confectionery and be back before he wakes up. It only takes a minute."

Discussion Guide

1. How would you answer the following questions from story #1?
   - *What accidents could happen in the next few minutes?
   - *Which of these accidents could result in disabling injuries?
   - *How could they be prevented?

2. How would you answer the following questions from story #2?
   - *What accident might happen in the next few minutes?
   - *What disabling injury might result from this accident? How might it affect the rest of Leslie's life?
   - *Leslie deliberately decided to disobey her mother. How would the little girl's accident affect her mother's life?

3. How would you answer the following questions from story #3?
   - *What accident might happen in the next few minutes?
   - *What disabling injury might result from this accident? How might it affect the rest of Craig's life?
   - *If Betts decides to go to the store, leaving her son home alone, and something happens to him, what effect will it have on her?
   - *What other way could Betts get cigarettes?

Accidents

This activity can help you to identify situations that may lead to accidents in your home. There are three sections.

* First talk to your parents about the most frightening experience they have had in which you, or one of your brothers or sisters, were involved in an accident or near accident.

  This may be something you don't wish to discuss in class, if so, simply say so. You have a right to privacy, but if you are willing to share your story, it may help others to learn how to avoid a potentially dangerous situation.

* Second, pretend someone with a young child is coming to visit at your house. Take a note book or sheet of paper and go through the house listing all the things you can think of that would need to be changed to make it safe for a small child. Don't forget the upstairs, the bathrooms, or the basement.

* Third fill in the form below and post it near your telephone:

EMERGENCY PHONE NUMBERS:

Police _____	Poison Control Centre_____
Fire Department_____	Doctor_____
Mother at work_____	Hospital_____
Father at work_____	Ambulance_____
Neighbor_____	

Adapted from Plumridge & Hylton, 1989.

Self-Evaluation

(adapted from Thomas & Balanoff, 1987)

The format for most of this evaluation is a rating scale. Please read the statement and circle the number that best tells how you feel about the lessons you have had concerning disability.

	a lot		some		nothing
	1	2	3	4	5

I learned about the effects of disabilities.

	a lot		some		nothing
	1	2	3	4	5

I learned about preventing injuries that may result in disabilities.

	a lot		some		nothing
	1	2	3	4	5

I learned about what it might feel like to be disabled.

	a lot		some		nothing
	1	2	3	4	5

I learned about how to treat someone who has a disability.

What was the **most** interesting thing about these lessons?

What was the **least** interesting thing about the lessons?

The

Grade Eight

Prevention of Disabilities

(P.O.D.)

Program Module

Overview

Basic concepts

Details of Module

Unit 1: General Information

- Some disabilities are preventable, some are not.
- Some of the causes of disability.
- Services for people with disabilities.
- Assignment options.

Unit 2: Community Connections

- Disabilities can limit a person's life-style options.
- Community factors which contribute to disability.
- Community factors which alleviate disability.
- Project options.

Unit 3: Prevention of Disability

- Child development milestones.
- Disabilities which occur in infancy and childhood.
- Child nurturance.
- Evaluation Suggestions

Teaching Notes

Resources

Basic Concepts

The grade eight module for the Prevention of Handicaps program reinforces two basic concepts about disabilities:

1. Some people in our society have problems that require the use of special services, but these people are otherwise just like everyone else, with the same needs, wants, hopes, and dreams.

2. Disabilities can often be prevented or made less serious for those who are affected.

a) Whenever ethically possible, disabilities should be prevented or their severity reduced.

b) Everyone can help prevent disabilities.

Details of Module

There are three units in the Grade 8 P.O.D. module: one with general information, one aimed at attitudes and social inclusion, and one with methods for preventing handicaps.

Unit one contains information about the constitutional and sociocultural causes of disability and introduces the concept of **risk factors.** It is emphasized that, while some disabilities cannot be prevented, others are completely preventable. This unit also deals with the special services that are needed by people with disabilities.

Unit two encourages students to consider the limitations caused by impairments, and how the community can intensify, or lessen the disabling effects of these limitations. Personal involvement with people who are disabled is encouraged.

Unit three presents strategies for the prevention of disabilities. People in grade eight are often in charge of younger children, so child development and nurturance is the theme for this unit.

The **Teaching Notes** contain background information pertinent to the lessons. This includes facts, statistics, and charts that the teacher may find useful.

The **Resources** section of the module contains the printed materials needed for the suggested activities. The Program Resources section of the entire P.O.D. program contains lists of sources for the videotapes, printed materials, and brochures that are suggested, and lists of organizations which might supply guest speakers to address specific topics.

Goal #1

To make students aware of some of the causes of disability, and some of the risk factors that increase one's chances of being disabled, or having a child with a disability.

Goal #2

To make students aware that some disabilities are preventable, but others are not, at least at the present time.

Objectives:

The student will be able to:

1. explain the difference between **constitutional** and **environmental** causes of disability, and give examples of each.
2. explain what a **risk factor** is.
3. explain why some disabilities are preventable and some are not.

Suggested Activities:

1. Administer the preinstruction questionnaire from page 108 of the Resources section of the module.

2. Use the information sheets (page 112) to explain the classifications of causes and risk factors. These sheets can be used as overheads if desired.
3. Get an assortment of fact sheets and brochures about different causes of disability. Sort these in groups according to the classifications of constitutional vs. environmental, and preventable vs. non-preventable.
4. Use the Anecdote Activity from page 120.
5. Assign students the task of finding a story, clipping, or video dealing with some type of disability. They should report back to the class summarizing the content: giving the cause of the disability; and explaining how it could have been prevented, or if it could not have been, why not?

Evaluation Options:

1. Students could be evaluated on their participation in the activities, and/or in the class discussions.
2. The assignment described in the fourth activity suggestion could be evaluated.

Vocabulary

constitutional causes of disability	biomedical causes of disability
environmental causes of disability	behavioral causes of disability
genetic	chromosomal
Down Syndrome	Tay Sachs Disease
colour blindness	malnutrition
poverty	risk factors
infections	lack of nurturance

Suggested Resources:

Teacher Notes (page 94)

Questionnaire (page 108)

Information sheets (pages 112 - 119)

Anecdote Activity (pages 120 - 122)

Brochures and fact sheets

(See Program Resources section for sources.)

Glossary

Goal #1

To help students realize what services are needed by people with disabilities, and why this need should be supplied.

Goal #2

To make students aware of the government's investment in these services, and the job opportunities involved in providing them.

Objectives:

The student will be able to:

1. list three types of services which may be needed by people with disabilities.
2. describe these services and tell who provides them in Saskatchewan.
3. explain what jobs are involved in one of these services.
4. discuss what traits might be needed by a person working in such a job.

Suggested Activities:

1. Use the case study and discussion sheets (page 123)
2. Use the video suggested on page 87.

3. Invite the parents of a child with a disability to come to your class and talk about what their child needs, who provides these services, and how hard they are to get.
4. Invite people from various service organizations to come to the class and describe what services they provide, who the recipients are, and how the program is funded.

Evaluation Options:

1. Students could be evaluated on their participation.
2. Activity # 1 could be assigned as an independent task and evaluated.

Vocabulary

respite care	group homes
independent living	job coaches
sheltered workshop	Braille
vocational training	support services
competitive employment	custodial care

Suggested Resources:

Teacher Notes (page 94)

Case study and discussion sheets (page 123)

Guest speakers from organizations

(See Program Resources section for possible sources.)

Glossary

Goal #1

To review life-style limitations caused by disabilities.

Goal #2

To develop awareness of community factors which may intensify or alleviate disability.

Objectives:

The student will be able to:

1. explain how a sensory, physical or mental disability limits a person's life-style options.
2. explain how community factors can lessen the effects of a disability, and give local examples.
3. explain how community factors can increase the effects of a disability, and give local examples.

Suggested Activities:

1. Divide the class into groups of three or four. The group chooses a destination (with teacher approval). Each member picks a different type of disability to think about during the excursion. They

person

must imagine the problems they would have if they experienced the disability they chose. When they return, have the group draw a map of their outing, marking on it each problem spotted by the group members.

2. Do the activity outlined above, but strictly from their imaginations. The teacher could even provide maps and destinations and require the students to identify the problems.
3. Have the students volunteer to take a person with a disability on an outing. Possibilities include escorting a younger student to a school sports event, or helping an elderly person do their shopping.
4. Using the problems identified in any of the above activities, have the students discuss community adaptations that would solve them.
5. Worksheet: What I Did Today (page 126).

Evaluation Options:

For this lesson, students could be evaluated on their:

* participation in the discussions.
* group participation.
* willingness to take part in activity #3.
* written work for activity #5.

Suggested Resources:

Worksheet (page 126)

Teacher Notes from the Grade 7 module (page 37)

Goal #1

To make students aware that childrens' development follows a definite pattern, and that delays or changes in this pattern may indicate a disability.

Goal #2

To make students aware that many disabilities occur in infancy and early childhood.

Objectives:

The student will be able to:

1. name some disabilities that occur in infancy and early childhood.
2. tell what the major child development milestones are and approximately when they should occur.
3. explain how sensory, physical, or intellectual impairment can be identified in early childhood.
4. explain where a person can go to get help if they think that their child may have a disability.
5. describe what information a family member could offer that would help a doctor, nurse, or psychologist tell whether or not the child has a disability.

Suggested Activities:

1. Invite mothers with infants or preschool children to attend your class, show off their little ones and tell about their children's development.
2. Invite a nurse from Public Health, or an Early Childhood Interventionist to speak to the class about child development.
3. Use the time line from the Resources section (page 126) to summarize the major milestones of infancy and early childhood.

Evaluation Options:

An evaluation activity is included in the Resource section (page 128).

Suggested Resources:

Teacher Notes (page 94)

Time line (page 127)

Evaluation activity (page 128)

Saskatchewan Public Health Nurse

Early Childhood Interventionist

(See the Program Resources section for lists of organizations which may provide speakers.)

Goal #1

To increase students' awareness of the importance of good child rearing practices.

Goal #2

To increase the students' knowledge of what constitutes good child care.

Objectives:

The student will be able to:

1. explain why social interaction is important for infants and young children.
2. explain the importance of language experiences.
3. suggest ways that he or she could involve a child of different ages in language experiences and social interactions.

Suggested Activities:

1. Use the video listed on page 93.
2. Invite a guest speaker.
3. Use the overheads (page 129). These explain the importance of language and social interaction, and describe different ways of reading to children.

4. Go on a field trip to a day care centre or preschool to give the students an opportunity to interact with small children.
5. Set up a "Reading Buddies" system with the kindergarten class.
6. Encourage students to participate in a Babysitter Course. There is a program available through the Red Cross which may be taught by any concerned individual.

Evaluation Options:

To evaluate this lesson, the teacher could use the quiz from page 134.

Unit evaluation could include any or all of the following.

1. Teacher observations.
2. Anecdotal records.
3. Student participation.
4. Evaluation of projects and written work.
5. Student self-evaluation sheet (page 136).

Suggested Resources:

Teacher Notes (page 94)

Overheads (page 129)

Evaluation activity (page 134)

Guest speakers (See the Program Resources section for lists of organizations.)

Video (See Program Resources for sources.)

Infant Communication

Self-evaluation (page 136)

Teacher's Notes

Unit One: General Information

Causes of Disability

Though there are thousands of known causes of disabilities (Ince, 1987), there are many disabling conditions for which no cause has been identified. It is important to know the cause of a disability in order to treat the condition, and to help in the discovery of prevention methods.

There are two main categories of causes for disability: those within the body of the person and those caused by external conditions. Internal causes are referred to as **biomedical**, or **constitutional** ones; those which are external are referred to as **sociocultural** or **environmental** causes.

Causes classified in the two categories interact closely with each other, and are often difficult to separate. For example, congenital causes of disability are categorized as constitutional causes (Nagler, 1990), even though many birth defects are caused by toxins or infections which affect the fetus before or during birth, so the organic damage has, technically, been done by the prenatal environment.

Constitutional causes of disability.

Constitutional factors are involved in most severe and multiply handicapping conditions. Prenatal causes include genetic or chromosomal conditions as well as conditions of the prenatal environment such as trauma, infections, toxins, and the mother's health, and nutrition. Perinatal causes of disability occur around the time of birth, e.g., prematurity, oxygen deprivation, or infections.

Examples of constitutional causes of disability.

Genetic causes:

* Tay-Sachs Disease, which causes retardation and death
* colour blindness
* hemophilia

Chromosomal abnormalities:

* Down syndrome is the most common one

Prenatal infections:

* maternal Rubella
* Sexually transmitted diseases i.e., gonorrhoea can cause blindness in the infant; syphilis may result in bone malformations.
* AIDS

Drugs and medications taken by the mother:

* cocaine can cause miscarriages, and possibly birth defects.

Maternal consumption of alcohol:

* Fetal Alcohol Syndrome
* Alcohol Related Birth Defects (Fetal Alcohol Effect)

Mother's smoking:

* low birth weight babies

Toxins

* mercury or lead in the environment can cause birth defects

Environmental Causes of Disability

Sociocultural/environmental causes of disability include those which stem from the individual's physical, social, or cultural environment, and those associated with the person's life style and behavior. Environmental conditions do not always result in a disability, but they increase a person's chances of being disabled, or having a disabled child. For this reason, environmental causes of disability are referred to as **risk factors**, and children who are exposed to them are referred to as being **at risk**.

Examples of environmental risk factors

poverty:

There is a correlation between poverty and mental retardation; the lower a family's socioeconomic class, the greater the risk that the children will be intellectually impaired. Poverty often includes risk factors such as malnutrition and increased chance of disease or injury (Kopp & Kaler, 1989).

malnutrition:

Malnutrition decreases a child's responsiveness to the environment, learning is more difficult, and permanent disability can result (Crump, 1984; Galler, 1984).

infections:

Illness interferes with one's ability to concentrate and to learn from the environment. Severe illnesses can produce disabilities.

cultural differences:

Cultural differences become risk factors because teachers and others do not always recognize the effect of cultural differences on a child's behavior. Inappropriate services may be provided if a child's behavior is not recognised as being culturally different rather than abnormal (Lynch & Hanson, 1992).

linguistic differences:

Differences between the language used at home and that used in the surrounding community, may interfere with a child's ability to learn.

discrimination:

Discrimination is a risk factor because it is often associated with poverty, limited experiences, and inappropriate services.

lack of nurturance:

Lack of nurturance may include a lack of basic necessities, but it can also mean lack of social interaction, lack of shared experiences, and lack of linguistic experiences. All these things impact on a child's ability to learn language, and academic and social skills.

Life-style and Behavioral Causes

Environmental factors include the individual's choice of life style, and his/her behavior patterns. The choices that individuals make can affect their children as well. Some choices that can result in disability or death are: poor diet, lack of exercise, smoking, alcohol consumption, drug use, and having unprotected sex.

Prevention of disabilities.

Some disabilities can be prevented, others cannot. Sometimes the cause of the disability is not known, and there is no prevention method that works. Even when the cause is known, there may be no known way to prevent the disability from occurring. Sometimes there is a known method of prevention, but it wasn't used, or was not effective.

There are three types of prevention: primary, secondary, and tertiary. Primary prevention reduces the incidence of disabilities by preventing the risk factors which cause them. If primary prevention succeeds, there is no risk that disability will occur. Primary prevention efforts are aimed at the general population.

Secondary prevention is aimed at a specific group and targets an existing risk factor. When secondary prevention is successful, the disability will not occur, or will be less severe than it might have been.

Tertiary prevention is aimed at a target group who already have a specific condition. Tertiary prevention "promotes adjustment to irremediable conditions and minimizes further complications or loss of function" (Scott & Curran, 1987, page 801).

Considering Pope and Tarlov's (1991) definition of disability as the combination of a person's "physical or mental limitations with social and environmental factors" (page 1), **most** disabilities are preventable. However, this is unlikely since improved social attitudes, better community accessibility, environmental clean-up, and the total elimination of poverty would all be required.

Disabilities caused by injury are preventable, but accidents will happen, no matter how careful or how well-informed people are. Accident related injuries are a major target area for preventive efforts.

The goal of total prevention of disabilities raises a major ethical question: to what extremes are we, as a society, willing to go to prevent handicaps? Enforced sterilization for anyone believed to carry defective genes would lower the incidence of congenital handicaps, but would it be ethically acceptable? Prenatal diagnosis of some conditions such as Down Syndrome is now possible. Should this evaluation be mandatory, and abortions performed whenever an affected fetus is found? Some people seriously advocate these approaches to prevention (Pueschel, 1991).

Many prevention programs already exist. These include prepregnancy efforts such as family planning, genetic counselling, and medical evaluation. Other medical prevention programs such as prenatal and obstetrical care, and immunizations are familiar to Saskatchewan residents. Some educational prevention efforts include courses on health, safety, parenting skills, and sex education. The Saskatchewan Institute for the Prevention of Handicaps does an immense amount of preventive work and will provide print and video materials on request. Social and economic programs also help prevent disability by alleviating the worst effects of poverty. Legislation requiring the use of seatbelts and car seats specially designed for infants and children are examples of legal measures to prevent disability.

Service requirements.

The quality of life for people with disabilities depends on the availability of services. These services can include residential, custodial, therapeutic, medical, vocational, educational, and developmental provisions. Not all people with disabilities require the same services, or the same intensity of services.

Families with disabled children require a wide variety of services to

meet their changing needs. Health needs may include specialised medical care, assistive devices, personal care, and drug therapy. Physical and occupational therapy may be required. Educational needs may include Early Childhood Intervention Programs during the preschool years. Braille instructors, mobility and personal orientation instructors, sign language tutors, and speech and language pathologists may be needed during the school years. Adaptive skills training and vocational training may be needed during adolescence. Daily care of a handicapped child can be exhausting, and parents may need a break: respite services provide this.

Disabled adults often need services also. They may require special telephone and television services. Residential options must be available. Some should be designed for an individual with a high level of independence while other options should be available which offer complete personal care. Job support services are often needed, either for training, or to help people find jobs.

Saskatchewan offers many of these services through the provincial departments of Health, Education and Social Services. Because of the size of the province, and the low population, services are not always readily available to all who need them. The cost of these services is significant. The government already spends millions of dollars each year to provide the currently available services. (See the Program Resources for a list of service organizations.)

Unit Three: Prevention of Disability

Sequence of child development.

Any list showing the sequence of child development is a guideline only, and is based on what is "average". These lists do not accurately describe the development of any individual child, but they are useful as an indication of the order in which children acquire skills, and as an approximation of what can be expected from a child of a given age. It is only when there is a significant delay, or when delay is evidenced in only one area that it becomes advisable to get a professional assessment.

If families are concerned about their child's development, they can get professional advice from many places. Pediatricians are able to answer many of a parent's questions. Saskatchewan Public Health is another excellent resource. Their nurses, early childhood psychologists, or speech and language pathologists may offer help. A doctor may refer families to the Kinsmen Children's Centre in Saskatoon, or to the Wascana Rehabilitation Centre in Regina for complete developmental assessments. The Early Childh od Intervention Programs will provide services on parental referral.

The charts on pages 102 and 103 contain some of the developmental milestones for children from birth to 5 years of age. These are for teacher information only, because some students may be upset if their little brother or sister is not performing exactly on schedule. There is a time-line suitable for the students in the resources section of the module.

Families should be aware of the approximate times when children reach certain milestones, so that they are reassured that everything is fine, or so that they can get their child assessed. Self-diagnosis is not advised.

Child development chart

Age group	Motor Development	Language Development	Social Development
newborn	reflexes	cries	cries
	holds head erect for a few seconds	makes vowel-type sounds	startle response
	lifts chin when lying on stomach		
+/- 3 mo.	grasps objects	responds to sounds	smiles
	holds head steady when held upright	vocal play	recognises familiar people
+/- 6 mo.	plays with objects	responds to his/her own name	shows preferences for some people
	sits with support	recognises some words	interacts with parents in a playful way
	rolls over	uses sounds to socialize	
	can use 2 objects	uses sounds to get things done	
+/- 9 mo.	sits without support	babbles	trust
	crawls, belly down	appropriate eye contact	attachment
	stands holding furniture	stops momentarily when told "no"	fear of strangers
	puts objects in container	responds to music	
+/- 12 mo	pulls to stand	first true words	peer interaction
	first independent steps	jargon	
	creeps on hands and knees		
	can build a tower of blocks		
	creeps up and down stairs		

Child development chart.

Age group	Motor Development	Language Development	Social Development
+/- 24 mo	scribbles	follows 2 step directions	imaginative play
	walks up and down stairs	identifies pictures	
	turns doorknobs		
2-3 years	kicks a ball	understands numbers	communicate through language
	walks on tiptoe	speech 50% understood by a stranger	initiate interaction
	climbs	sentences up to 4 words long	
	unbuttons large buttons		
	unscrews lids		
3-4 years	pedals a tricycle	wants to know "why?" and "how?"	takes turns
	catches a ball	speech 95% understood by a stranger	experiences are very important
	swings	50 - 70% of consonants mastered	attachment is still important
	uses scissors		
	does simple puzzles		
4-5 years	walks a balance beam	understands time references	tolerates delay in response
	jumps forward	90% of speech sounds mastered	begins role-taking
	hops	1500+ word vocabulary	friendships with peers
	bounces and catches a ball	begins to understand rhyming words	
	holds a pencil with a mature grasp		

Child care.

Experts on child development (Campbell & Ramey, 1990; Gesell, Ilg & Ames,1974;Piaget, 1948; Robinson, 1987) believe that good child care can have a positive influence on the development of a child. Patterns of family life that seem to stimulate development include "flexibility, abundant interaction, and child centeredness" (Robinson, 1987, p. 163). Gesell believed that "enriching the child's development and providing him with the fullest opportunities possible permits him to express himself at his very best" (Gesell, et. al., 1974, p. 15).

There are innumerable books on the market concerning child rearing, so the teacher has a multitude of resources at his or her disposal. The following points should be emphasized with the students:

1. Basic needs must be met i.e., food, warmth, safety, affection.
2. Language is a necessity for normal living, and children learn language through exposure to it. They should listen to all kinds of spoken language: conversation, instruction, persuasion, poetry, song, story, chants, rhymes. They should be listened to with courtesy. They should see people around them reading and writing all sorts of things. They should be read to from the time they are tiny until they are adolescents because listening skills develop much earlier than do reading skills.
3. Much enjoyment in life comes from personal relationships. As children, we learn how to interact with other people by watching others and by practicing with those around us. It is important that children have the opportunity to interact with others through conversation, games, and shared activities. Social interaction is not learned by watching television.

Activities for small children.

Newborn infants require only that their physical needs be met and that they be cuddled and comforted if they are upset.

Older infants notice people and things around them and they like to be entertained. Games of peek-a-boo, and funny noises are well received. They like singing and are wonderfully uncritical audiences. They should be smiled at, talked to, and read to.

Children 2-3 years old may play ball, climb and slide down a slide, play running games, and dance to music. As they get a bit older they learn to throw and catch a ball, and enjoy this sort of activity. They learn to pedal a tricycle and love to be outdoors. Three year olds may love to swing or use other play ground equipment. Babysitters should check with parents, and, if allowed, take their charges outside for some active play.

Toys.

Children between the ages of 1 and 2 like all sorts of manipulative toys. They are ready to begin using big crayons or washable markers, though they are likely to simply scribble. As they get more competent their ability to play imaginatively, to take turns, and to manipulate objects, increases. By age 3-4, they are able to enjoy puzzles, building toys, and simple games. Older children are good playmates for them, and teens who are babysitting should interact with their charges, not just provide custodial care while the child watches television.

There are appropriate toys for all age groups. For infants, any toy must be safe to chew on with no sharp edges, no small pieces that might come off, non-toxic paint, and sturdy materials. Babies about 6 months old like rattles and noise makers, mobiles, and teething rings. Infants of about 9

months can taps blocks together, move objects from hand to hand, and pick up small objects. By one year of age, posting boxes and pounding boards, pop-up toys and stacking toys are appropriate.

Reading to small children.

Reading to infants is not a word-by-word thing, rather it's a sharing time, with a focus of mutual interest as you quickly show the child simple picture books with big, bright pictures. The sessions should be very short, 2 or 3 minutes is generally enough.

By the age of 2 years, children are able to sit and look at books for a longer period of time. It is appropriate to talk about the pictures, and what is going on in the story, though word-by-word reading may still take too long for them to enjoy.

Between the ages of 2 and 5, children become much more competent. Their concentration improves as well as their skills. They now enjoy being read to now, and may want to hear the same book over and over again until the reader is heartily sick of it. They will often know a story by heart, and they should be encouraged to help in the reading. Ask the 5 year old questions about what will happen next and why things happened as they did in the story. These children can also understand emotional reactions and need to be led to think about the characters' emotions.

At all ages, the key concept is that children need to experience social contact, and language use. The students should be aware that these needs are second only to the basic requirements of food, warmth, safety and love.

Resources

What do you know about disabilities?

According to Statistics Canada (1990), thousands of people in Saskatchewan have some kind of disability. Public knowledge about methods of preventing disabilities can reduce the numbers of people who become disabled in the future. How much do you know about disabilities?

Please indicate your answer by making a checkmark on the short line in front of it.

a) A disability is

--- not being able to do things as well as other people.

--- not being able to do, in the usual way, things people normally do.

--- not being able to work.

b) Mark the sentence that best describes your personal familiarity with disabilities. You may mark more than one if they apply to you.

--- I have a disability.

--- A member of my family has a disability.

--- I have a friend who is disabled.

--- There are students in the school who are disabled, but I don't know them well.

--- There are people in the community who are disabled, but I don't know them well.

--- I don't know anyone who is disabled.

c) If you think that the disabilities described below could have been prevented. circle the "yes" beside the sentence. If you don't think they could have been, circle "no".

Yes No John is blind in one eye because he got a piece of metal in it when he was hammering nails.

Yes No George is colour blind.

Yes No Judy's left leg was amputated because she had cancer.

Yes No Sally has Fetal Alcohol Syndrome.

Yes No Harvey cannot do any strenuous physical activity because he has a heart condition.

Yes No Jay can talk, but people find it hard to understand him because he has cerebral palsy.

Yes No The butcher has only three fingers on one hand because he cut the others off with a meat cleaver .

Yes No Joy has been deaf all her life.

d) Disabilities may occur, and may be prevented at any time in a person's life, from conception to old age. Please read the list of prevention methods below and indicate the time of life when you think they would be most useful. Write the age group from the list below on the line to show

your answer. You may want to use more than one age group, if so, go ahead.

prenatal (before birth)

0 - 2 (baby)

2 - 9 (child)

10 - 16 (adolescent)

17 + (adult)

anytime

_____ Check toys for small pieces that might come off.

_____ Wear a life jacket when boating.

_____ Take a course on parenting.

_____ Wear safety equipment such as goggles and ear protectors when working with power tools.

_____ Visit an obstetrician and follow his or her instructions carefully.

_____ Wear a bicycle helmet.

_____ Visit the public health nurse and get immunized against diphtheria, whooping cough, tetanus and polio.

e) Choose the best answer by putting a checkmark on the line in front of it.

* If a pregnant woman drinks heavily
  --- her baby may be mentally retarded.
  --- her baby may be very small.
  --- her baby may have certain facial characteristics.
  --- all of the above.

* Head and spinal cord injuries are major causes of disability in adolescents and young adults. This can sometimes be prevented by:
  --- checking out the swimming area before jumping in.
  --- never exercising.
  --- wearing a life jacket when boating.
  --- being sure the smoke alarms in your house are working properly.

* People with disabilities want to be
  --- treated as though they were special.
  --- treated politely, just like anyone else.
  --- treated as though they were fragile
  --- given special privileges.

* Children need certain things in order to develop well. Which of the following are NOT important for a child's growth and development?
  --- food warmth and protection.
  --- birthday presents.
  --- language experiences.
  --- affection.

Causes of Disability

There are thousands of known causes of disability (March of Dimes, 1987).

There are many disabilities for which the cause is still unknown.

It is important to understand the cause of a disability so that:

1. it can be treated effectively.

2. prevention methods can be found.

Constitutional Causes of Disability

Some causes of disability are based within the body of the individual and affect his or her constitution. These are **biomedical** or **constitutional causes of disability**. Congenital disabilities, or birth defects, are conditions that a person is born with. These are considered to be due to constitutional causes.

Constitutional causes of disability include those which are **genetic** or **chromosomal**.

- Down Syndrome
- colour blindness.

Constitutional causes also include those resulting from the prenatal environment.

- Fetal Alcohol Syndrome
- disabilities caused by drugs
- disabilities caused by maternal illnesses

Environmental Causes of Disability

Environmental causes of disability include those in the individual's physical, social, and cultural environment. They also include voluntary risks associated with the individual's life-style and behavior.

Environmental factors do not always result in disability, but they increase a person's chances of becoming disabled. Therefore, they are often referred to as **risk factors,** and people who may be affected by them are considered to be **at risk**.

Environmental risk factors can cause, or intensify, disability.

Examples of Environmental Risk Factors

poverty

malnutrition

infections

toxins

cultural differences

linguistic differences

discrimination

neglect

lack of nurturance

123

Life-style and Behavioral Causes

Environmental factors include the individual's choice of life style, and his/her behavior patterns. Some choices that can result in disability or death are:

poor diet
lack of exercise
smoking
alcohol consumption
drug use
unprotected sex

The choices that individuals make can affect their children as well.

Fetal Alcohol Syndrome
"Crack" babies
babies born with AIDS

Identification of Disabilities

Before a person with a disability can be helped to overcome it, the disability must be identified.

* Congenital disabilities may be apparent at birth, or may not be diagnosed until later in life.
* Severe disabilities or multiple disabilities are usually identified shortly after birth.
* Developmental disabilities may not be apparent until age 3 or 4, when language delays are noticed.
* Learning disabilities are generally not identified until a child is in school.

Early identification leads to early treatment.

Families can help with this by being aware of child development and observant of a child's skills and behavior.

Prevention of Disabilities

Some disabilities can be prevented, others cannot.

Sometimes the cause is not known, and there is no prevention method that works.

Even when the cause of a disability is known, there may be no known way to prevent it from occurring.

Sometimes there is a method of prevention, but it wasn't used, or did not work.

- Fetal Alcohol Syndrome
- accidental injury

People may not use prevention measures because:

- they don't know them,
- the methods are costly, or unappealing.

Prevention Methods

Some disabilities can be prevented before birth by medical procedures, good prenatal care, or healthy life-style choices.

Disabilities caused by environmental factors can occur, or can be prevented, at any time of life.

It is very important to prevent the occurrence of disability during infancy and early childhood since

*the effects are lifelong,

*they can interfere with skill development.

Many of the disabilities that occur during childhood can be prevented by removing or reducing the environmental risk factors. All of us can help with this prevention.

127

Classifications of the Causes of Disability

This activity has of three pages:

this page of directions and discussion questions,

a page with 10 short anecdotes,

and a page with a classification grid.

Directions:

1. Read the anecdotes.
2. Think about the causes of the disabilities described in each one.
3. Classify them as **constitutional causes**, or **environmental causes**.
4. Consider whether or not these disabilities could have been prevented.
5. Write the name of the character in the section of the classification sheet where you think the cause of that person's disability belongs.
6. For each of those that you have written in the **preventable** side, give a brief description of the method of prevention.
7. For each of those that you consider to be **non-preventable**, give a brief explanation of why you believe this.

Discussion:

1. What are the advantages and disadvantages of immunization programs?
2. How can people be convinced to adopt healthy life-styles and behavior patterns which will not contribute to disabilities?

Anecdote #1

John was born with peculiar facial features. He's always been very small, but his head is small even in comparison to his tiny body. He has an intellectual impairment that makes learning difficult for him. The doctors say he has Fetal Alcohol Syndrome because his mother drank alcohol while she was pregnant.

Anecdote #2

Angela has difficulty learning. She grew up in a very poor family. There was never enough to eat, and when there was food, it was generally potatoes, oatmeal, and macaroni. She was always tired, and often sick with colds, or the flu. She often missed school, and found it hard to pay attention when she was there.

Anecdote #3

Jennie was born with Down Syndrome. She is a slow learner, and has some health problems.

Anecdote #4

Rick is colourblind. He sometimes wears one green sock and one red one. He says they look the same to him.

Anecdote #5

Sara uses a wheelchair to get around. She went swimming with her friends one warm day, and jumped into the water without checking to see if it was safe. She hit a big log and broke her back, so now she can't walk.

Anecdote #6

Bill was born with only one arm, and it doesn't have a normal looking hand. He has learned to write, play games, and use the computer very well, but there are many things he will never be able to do. His mother feels guilty because the medicine she took when she was pregnant caused Bill's disability.

Anecdote #7

Faye has only one good arm, too. Her right arm is paralyzed because she had polio when she was little. At that time, they could not immunize people against polio, and epidemics of the disease affected a lot of people.

Anecdote #8

Eric and his friend Sam are disabled. They have brain damage from sniffing gasoline when they were young. The gasoline had lead in it, and lead is very toxic. It affects the nervous system and does a lot of damage.

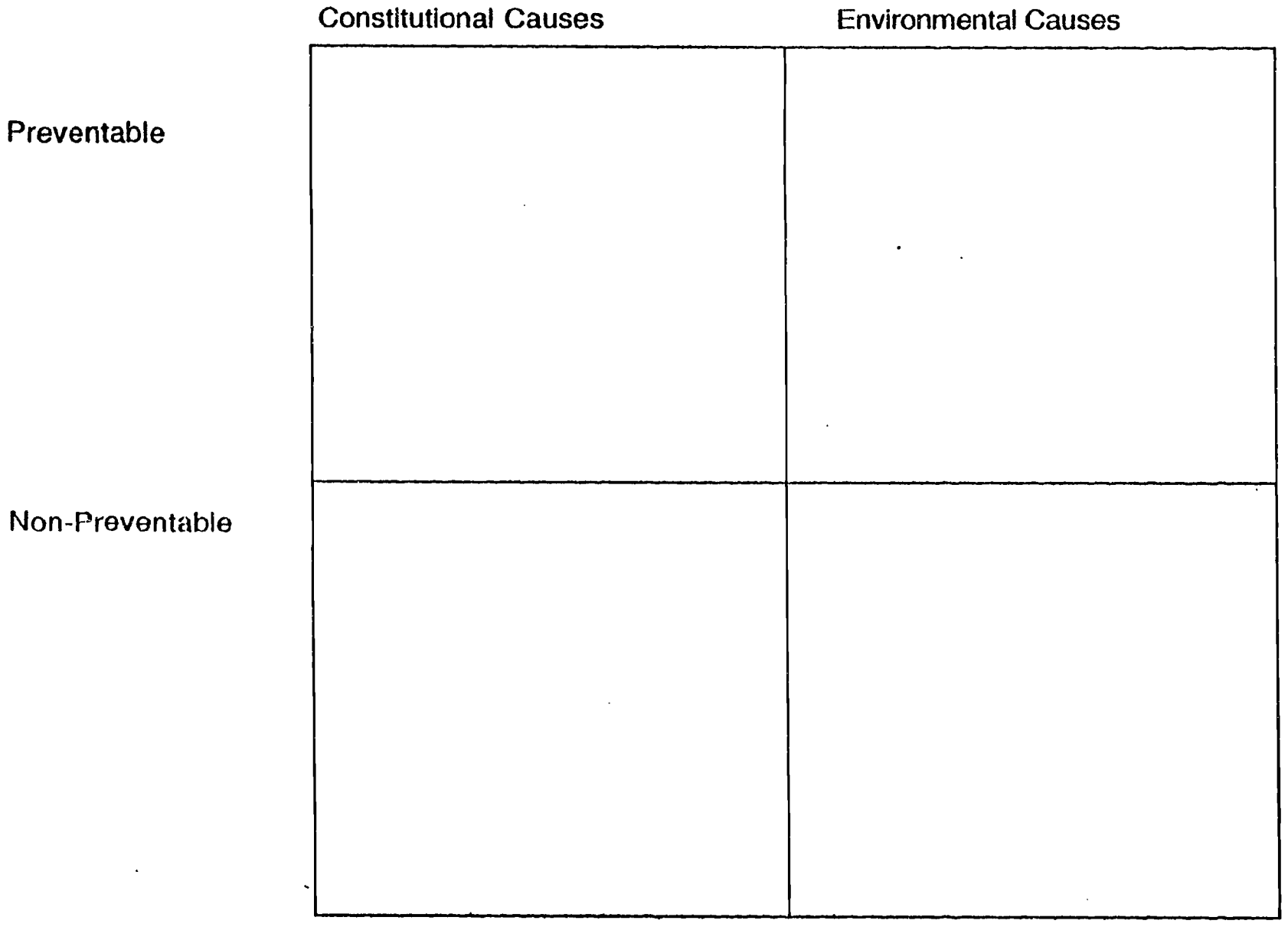
Anecdote #9

Helen is blind and hearing impaired. She is also mentally retarded. Her disabilities were caused when her mother caught rubella, or German measles before she was born.

Anecdote #10

Peter's parents were always busy. They didn't have time to talk to him, or play with him. They didn't even notice he had a problem until he was four, and still not talking.

Classifications



130

131

Case Study

On pages 130 - 131, there is a partial case study which is entirely fictional. The subject, Tommy, has had a lot of problems, and has received a lot of services. In the chart below, fill in the problems that he has had, or will have, and name the services which provide assistance for Tommy and his family.

Age	Problems	Services
infant		
2 - 5		
5 - 13		
13 - 19		
adult		

Now, pick any two of those services. For each of the services you have chosen describe a job which would be involved. What would the job entail? What kind of person would be good at it?

Name: *Tommy Chase*

Birthdate: *June 17, 1989*

Chronological Age: *4 years 9 months*

Report Date: *March 17, 1994*

Parent(s) or Guardian(s): *Thomas and Tomasina Chase*

Address: *Box 1234*

Tiny Town, Sask.

Phone: *555-8900*

Report written by: *F. Lalonde*

Brief Review and Update:

Tommy is a handsome young fellow who is almost five years old. He lives at home with his parents, Thomas and Thomasina, and his two older brothers.

Tommy was diagnosed at birth as having Trisomy 21 (Down syndrome). He had a congenital heart condition that required open heart surgery. He has had repetitive ear infections, and now has tubes in his ears. The audiologist reports that Tommy has a mild to moderate hearing loss in his right ear, and a mild hearing loss in his left one.

On January 21, Tommy was seen by the Early Childhood Psychologist. Test results show a mild overall developmental delay, with a moderate delay in language development.

Motor Skills:

When he was little Tommy was, as his mother puts it, "very floppy".

He received physiotherapy regularly until he was three. Now he no longer sees the physiotherapist, and his motor skills are quite well developed.

At Christmas time, Tommy was given a tricycle. His parents and his brothers have helped him learn to ride it in the basement and he is looking forward to summer jaunts with the family.

Fine motor skills are progressing more slowly. Tommy does not enjoy using pencils, markers, crayons, or paint. When urged to do so, he will make a few scribbles and then go off to do something more exciting.

Language Development:

This is our area of greatest concern. Because of Tommy's hearing loss, his speech delay is evident in both his listening skills and his speech. He had hearing aids moulded to fit into his ears, but he does not like to wear them. Thomas plans to take him to the doctor to make sure that they fit correctly.

Thomasina contacted Public Health and made an appointment with the speech and language pathologist. Tommy's language development will be assessed on April 6. Once the speech and language pathologist has evaluated his skills, and had a chance to plan a therapy program for Tommy, she will be consulted for suggestions about activities that Thomas and Thomasina can do at home to help Tommy.

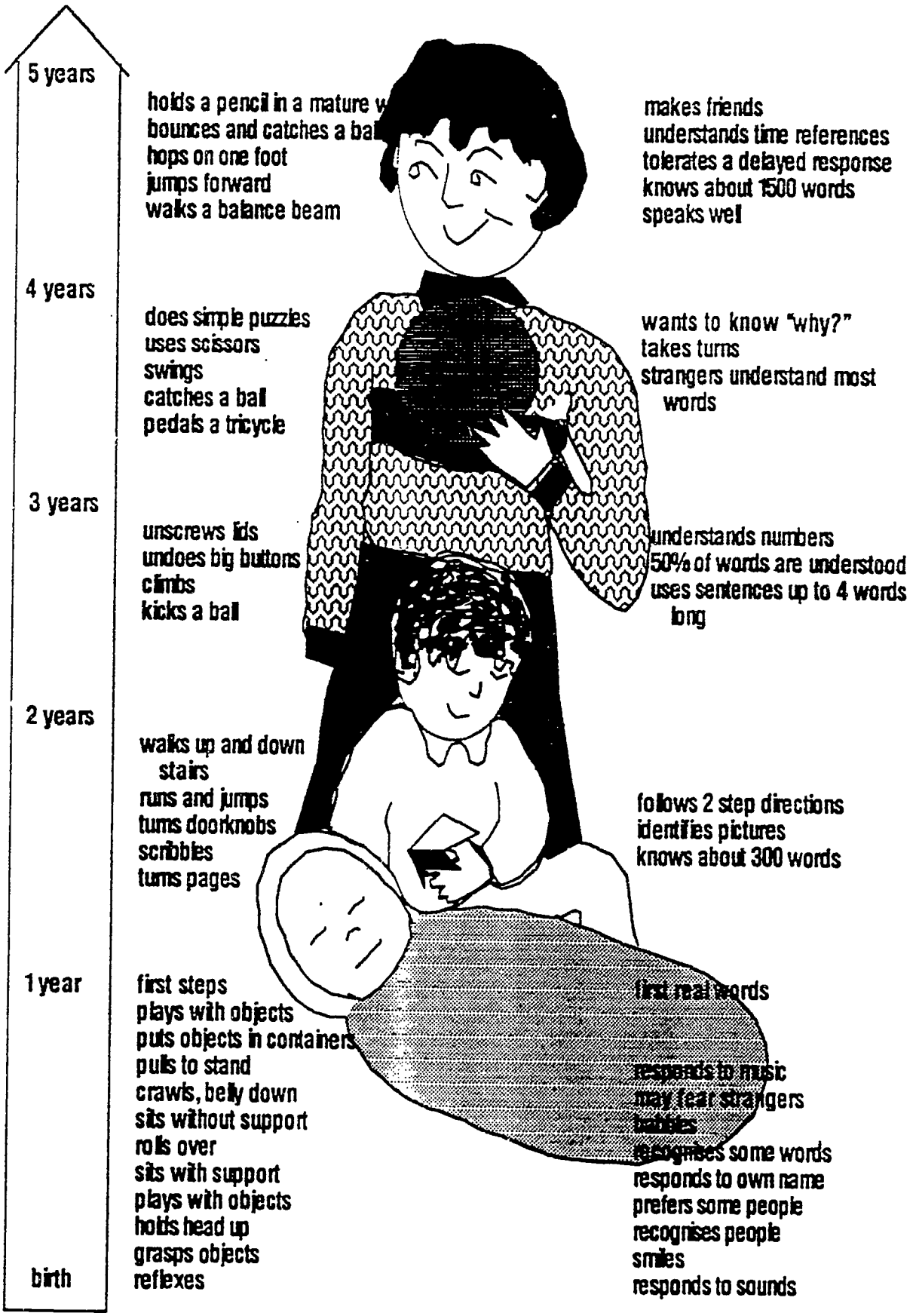
Summary:

Tommy is a happy, active little fellow. His gross motor skills are quite good, but his fine motor skills and language development need work.

What I Did Today

List all your activities for the day, then try to imagine how each of these would have gone if you had a hearing impairment. List these changes beside your original activity in the second column. In the third column list the changes there would be if you were physically disabled instead, and in the last column list the changes that there would be if you had a visual impairment.

My activities	Hearing impaired	Physically disabled	Visually impaired


5 years
holds a pencil in a mature w
bounces and catches a ba
hops on one foot
jumps forward
walks a balance beam
makes friends
understands time references
tolerates a delayed response
knows about 1500 words
speaks well
4 years
does simple puzzles
uses scissors
swings
catches a ball
pedals a tricycle
wants to know "why?"
takes turns
strangers understand most words
3 years
unscrews lids
undoes big buttons
climbs
kicks a ball
understands numbers
50% of words are understood
uses sentences up to 4 words long
2 years
walks up and down stairs
runs and jumps
turns doorknobs
scribbles
turns pages
follows 2 step directions
identifies pictures
knows about 300 words
1 year
first steps
plays with objects
puts objects in containers
pulls to stand
crawls, belly down
sits without support
rolls over
sits with support
plays with objects
holds head up
grasps objects
birth
reflexes
first real words
responds to music
may fear strangers
babbles
recognises some words
responds to own name
prefers some people
recognises people
smiles
responds to sounds

Guess My Age!!

I just took my first steps the other day! Mom and Dad were SO proud of me.

I'm about ---------- old.

I love to draw and colour. I can stay inside the lines very well too. Mom puts my pictures up on the wall for everyone to see.

I'm about ---------- old.

Yesterday I snuck out of the house. Jamie was supposed to be watching me, but he didn't know that I can open the door now. Was he ever surprised!

I'm about ---------- old.

Please push me on the swing. I love to swing, but I'm not very good at making myself go. Don't go too high, I might get scared.

I'm about ---------- old.

Hey, look at me! I can walk all the way to the end of this board, and not fall off!

I'm about ---------- old.

I can smile at you, and you'll likely smile back.

I'm about ---------- old.

I just learned how to roll over. Now I can reach that interesting looking thing over there!

I'm about ---------- old.

Social Interaction

Social interaction includes all sorts of things that we do with other people. Some of these things are:

*correct social distance.

*when to make eye contact.

*how to take turns in conversation & elsewhere.

Small children learn social interaction by watching other people and by experiencing it from others. It is very important that children receive a lot of this experience so that they have the opportunity to learn these things.

You can help any child you look after to learn social interaction by playing with them and talking with them.

Language Experience

Language is a very important skill to master. It is the basis of our knowledge and the tool with which we share information, make requests, and do a multitude of other things.

Language includes

listening

speaking

reading

and writing

Most children learn to talk without special lessons. They learn from experience as they watch the people around them, and notice how they use written and spoken language.

You can help a child learn language by

*talking to them,

*reading to them,

*listening to them,

*singing with them,

*reciting poetry with them,

*or sharing rhymes and chants with them.

Reading to Children

Reading is one of the four forms of language and it is important to expose children to it right from infancy.

Babies 3 - 6 months old will look at pictures, so that is how books are shared. Reading to babies is a time for cuddling, and looking, for just a minute or two, at picture books with big, bright, simple pictures.

Toddlers like books also, but may be rough on them. They may just share pictures, or they may enjoy a quick summary of the story.

Children 3 - 5 like to be read to. They may ask for the same story over and over until they memorize it.

Ask them to help you read the repetitive parts of the story.

Ask them to guess what will happen next in a new story. Then read along to find out.

Ask older children how the characters are feeling, and how they can tell.

You can help a child to learn language by reading with them.

Quiz

1. Read each description and tell whether or not the child described is delayed. Explain why you think so.

a) A girl 5 years old has just learned to walk up and downstairs.

b) A three year old boy can button up his own jacket.

c) A 3 month old baby smiles at her mother.

d) A two year old has just started to talk.

e) A five year old can walk a balance beam.

f) A four year old who knows approximately 300 words.

g) A one year old who has just learned to sit up alone.

h) A five year old who can play ball.

2. Who can parents go to for help and information if they think their child is delayed? What could these people do to help?

3. Below are some of the major motor milestones of child development. Number them in order from the first skill learned by a baby to the last one learned by a child of about 5 years old.

--- rolls over

--- hops on one foot

--- pedals a tricycle

--- takes first independent steps

--- kicks a ball

--- sits alone

--- holds head up

--- turns doorknobs

4. Explain how you can help a child develop language and social skills.

Self-Evaluation

(adapted from Thomas and Balanoff, 1987)

The format for most of this evaluation is a rating scale. Please read the statement and circle the number that best tells how you feel about the lessons you have had concerning disability.

a lot some nothing
1 2 3 4 5

I learned about the causes of disability.

a lot some nothing
1 2 3 4 5

I learned about services for people with disabilities.

a lot some nothing
1 2 3 4 5

I learned about disabilities which occur in infancy and childhood.

a lot some nothing
1 2 3 4 5

I learned about child development.

a lot some nothing
1 2 3 4 5

I learned about how I can help a child develop language and social skills.

What was the **most** interesting thing about these lessons?

What was the **least** interesting thing about the lessons?

The

Grade Nine

Prevention of Disabilities

(P.O.D.)

Program Module

147

Overview

Basic concepts

Details of Module

Unit 1: General Information

Prevention of congenital disabilities

Prenatal development and causes of disability

Assignment options.

Unit 2: Community Connections

Analyze the community: is it an inclusive environment?

Personal involvement in advocacy and community improvement.

Project options.

Unit 3: Prevention of Disability

Prevention of disabilities before pregnancy.

Prevention of disabilities during pregnancy.

Optional: Discussion of controversial issues.

Evaluation options.

Questionnaire on prevention awareness.

Teaching Notes

Resources

Basic Concepts

The grade nine module for the Prevention of Handicaps program reinforces two basic concepts about disabilities:

1. Some people in our society have problems that require the use of special services, but these people are otherwise just like everyone else, with the same needs, wants, hopes, and dreams.

2. Disabilities can often be prevented or made less serious for those who are affected.

a) Whenever ethically possible, disabilities should be prevented or their severity reduced.

b) Everyone can help prevent disabilities.

Details of Module

There are three units in the Grade 9 P.O.D. module: one with general information, one aimed at forging connections between disabled and nondisabled people in the community, and one with methods for preventing handicaps.

Unit one contains information about preventable and non-preventable disabilities. Two key concepts are included. First, that the prevention of disabilities among children starts before pregnancy begins. Second, that the time from conception to birth is a crucial period for disability prevention because of the rapidity and complexity of prenatal growth.

Unit two asks students to consider their community from the viewpoint of a person with a disability, and notice what is good, what is acceptable, and what should be improved. Students are encouraged to advocate for change in one of the areas where they have identified a need for improvement.

Unit three presents strategies for the prevention of disabilities before and during pregnancy. Unfortunately, many girls 15 years of age and younger are sexually active, and each year many of them become pregnant. Pregnant adolescents, when compared to mature mothers, have higher-risk pregnancies, and their infants are often at risk due to low birthweight. Social risk factors are also higher for the children of adolescents. They are more likely to be raised in poor economic circumstances due to the possibility that their parents will have limited education and lack job skills. Young parents often lack parenting skills as well.

Hopefully, the information in this unit will help other teenagers to choose not to risk pregnancy now, and help them to have a healthy, normal baby when they do become pregnant.

It is important that the young men in the class are included in these activities; they not only may become fathers at some point in their lives, but they also influence their girlfriends' behavior immensely.

Unit three of this module contains controversial topics, which should be approved by the local school authorities before being used. Topics dealt with are: family planning, birth control, abortion as a method of preventing disability, and sterilization of the severely and/or multiply handicapped. This material is thought-provoking and pertinent for young people who must cope with these ethical and moral issues.

The **Teaching Notes** contain background information pertinent to the lessons. This includes facts, statistics, and other information which the teacher may find useful.

The **Resources** section of the module contains the materials needed for the suggested activities. The Program Resources section of the entire P.O.D. program contains lists of sources for the videotapes, printed materials, and brochures that are suggested, and lists of organizations which might supply guest speakers to address specific topics.

Goal

To make students aware that many congenital disabilities can be prevented before conception or during pregancy.

Objectives:

The student will be able to:

1. explain the importance of prepregnancy and prenatal prevention.
2. describe 2 methods of preventing disabilities before a child is conceived.
3. describe how congenital disabilities can be prevented during pregnancy.

Suggested Activities:

1. Administer the preinstruction questionnaire from page 168 of the Resources section of the module.
2. Use one of the videos listed on page144.
3. Get an assortment of fact sheets and brochures about different causes of disability which can be prevented before birth. Use them as assigned reading, or to trigger discussions. Sources are listed in the Program Resources section.
4. Invite guests from organizations such as Planned Parenthood, or the Saskatchewan Institute on Prevention of Handicaps.

5. Use the Building Well activity sheets (page 172).

6. Use the research questions (page 176).

7. Use the class activity (page 177) to stimulate class discussion.

Evaluation Options:

1. Students could be evaluated on their participation in the class discussions.

2. Pages 176 and/or 177 could be assigned and evaluated.

Vocabulary

prenatal	birth defect
abortion	prepregnancy
Rh factor	diaphragm
fetus	Rubella
condom	genetic counselling
spina bifida	birth control
ultrasound	toxins
infections	sexually transmitted diseases (STDs)
sickle cell anemia	dwarfing
phenylketonuria	cleft lip or palate
clubfoot	cystic fibrosis

Fetal Alcohol Syndrome/ Fetal Alcohol Effect/ Alcohol Related Birth Defects

Suggested Resources:

Teacher Notes (page 154)

Questionnaire (page 168)

Building Well activity sheets (pages 172 - 175)

Research questions (page 176)

Class activity sheet (page 177)

Brochures and fact sheets

(See Program Resources section for sources.)

Videos such as:

(See Program Resources section for sources.)

- Teen Moms Talking
- A Good Start in Life
- Rockabye
- Playing for Keeps
- Something to Celebrate
- Someday I Might Be a Parent
- Baby Blues

Glossary

Goal #1

To increase students' knowledge of prenatal development.

Goal # 1

To increase students' knowledge of the effects of teratogens such as alcohol on a fetus.

Objectives:

The student will be able to:

1. explain which period of prenatal development is most rapid.
2. put descriptions of different stages of prenatal development into the correct sequence.
3. explain why the prenatal toxins and infections can produce disabilities in an infant.

Suggested Activities:

1. Use the development chart on page 178 to guide discussion.
1. Use the story and its discussion guide (page 179).
2. Use one of the videos listed on page 146.
3. Use an assortment of fact sheets and brochures on prenatal development

to trigger discussions. The March of Dimes has some excellent material.

4. Invite a public health nurse to your class to explain prenatal development, services for pregnant teenagers, and the importance of prenatal care.

Evaluation Options:

1. Students could be evaluated on their class participation.
2. The story and question sheet (page 179) could be assigned and evaluated.
3. The quiz on page 183 could be assigned and evaluated.

Suggested Resources:

Prenatal development and sensitivity chart (page 178)

The Baby in #3 (page 179)

Discussion guide for The Baby in #3 (page 182)

Teacher Notes (page 154)

Quiz (page 183)

Brochures and fact sheets

(See Program Resources section for sources.)

Videos such as:

(See Program Resources section for sources.)

Teen Moms Talking	A Good Start in Life
Rockabye	Playing for Keeps
Something to Celebrate	Someday I Might Be a Parent
Our Genetic Heritage	Drinking, Smoking & Drugs

Glossary

Goal #1

To increase the students' awareness of the positive and negative aspects of their community when it is considered as an inclusive environment for disabled people.

Goal #2

To encourage students to become involved as advocates for the disabled in community issues.

Objectives:

The student will be able to:

1. name features of the community that make it easy for people with disabilities to take part in all aspects of community life.
2. name features of the community that make it difficult for people with disabilities to take part in all aspects of community life.
3. define advocacy.
4. identify issues in which they could become involved as advocates.

Suggested Activities:

1. Invite a guest speaker from an advocacy group to the classroom to explain the origins and purpose of their organization.
2. Do a community awareness project such as that described on page 190.
3. Divide the class into groups. Each group visits an advocacy organization and reports back to class describing the activities and goals of the group visited.
4. Use one of the videos listed below.

Evaluation Options:

Students can be evaluated on their participation in the class activities and projects, or they can be asked to write a paragraph describing their involvement in community issues.

Suggested Resources:

Community Project sheet (page 184)

Teacher Notes (page 159)

Guest speakers from advocacy organizations

(See Program Resources section for sources.)

Videos such as:

(See Program Resources section for sources.)

What Friends Are For

S.A.C.L. Corporate Tape - What We Are, What We Do

Help Us Grow

Just a Chance

Goal

To make students aware that prevention of disability starts before conception, and that this prevention is vitally important.

Objectives:

The student will be able to:

1. explain what a woman can do to prepare for parenthood.
2. explain what a man can do to prepare for parenthood.
3. explain the importance of family planning.
4. describe genetic counselling: what it is, who needs it, and where they would get this service.

Suggested Activities:

1. Use the video listed on page 150.
2. Discuss genetic inheritance using the worksheets (page 185).
3. The March of Dimes has some excellent brochures which can be used as teaching resources.
4. Chapter 2 of Smooth Sailing Into the Next Generation, by Diane Plumridge and Judith Hylton covers preconception prevention well.

Evaluation Options:

The worksheets on heredity and family health history which are provided (page 185, 186) could be used for evaluation purposes, or students can be evaluated on the basis of participation.

Vocabulary:

genetic counselling	genetic errors	neural tube defect
mutagenic	amniocentesis	autosomal dominant
ultrasound	autosomal recessive	hemophilia
chromosomes	chromosome errors	Rh factor
stillbirth	miscarriage	

Suggested Resources:

Smooth Sailing Into the Next Generation, by Diane Plumridge and Judith Hylton

(See the Program Resources for the mailing address of the publisher.)

Teacher Notes (page 158)

Heredity Worksheet (page185)

Family Health History (page 186)

Brochures and fact sheets

(See Program Resources section for sources.)

Videos such as:

(See Program Resources section for sources.)

Our Genetic Heritage

Glossary

Goal

To make students aware that many disabilities can be prevented during pregnancy, and that this prevention is vitally important.

Objectives:

The student will be able to:

1. explain why prenatal care is important.
2. explain the effects of alcohol on a fetus.
3. explain how the pregnant woman's partner can help prevent disabilities from affecting their child.
4. describe positive life-style and behavior choices that are especially important during pregnancy.
5. discuss the effects that the mother's age can have on a pregnancy.

Suggested Activities:

1. Use one or more of the videos listed on page 153 to stimulate discussion.
2. Ask the Saskatchewan Institute on Prevention of Handicaps to make a presentation to your class.
3. If a copy of the program Smooth Sailing Into the Next Generation, by Diane Plumridge and Judith Hylton is available, use Chapters 4 and 5.
4. Assign reading on topics such as genetics and Fetal Alcohol Syndrome.

Evaluation Options:

Worksheets are provided (pages 188 and189) which can be used to evaluate this lesson, or students can be evaluated on the basis of participation.

If you are not using Lesson 3, the unit evaluation can include any or all of the following.

1. Teacher observations.
2. Anecdotal records.
3. Student participation.
4. Evaluation of projects and written work.
5. Student self-evaluation sheet (page 190).

A questionnaire is included in the resources section which provides an overall evaluation of the material covered in the entire program. It can be used to help teachers gauge the effectiveness of the material. Any comments or suggestions would be most welcome. Please contact me at the following address:

F. Lalonde,
P.O. Box 839,
Birch Hills, Sask.
S0J 0G0

Suggested Resources:

Smooth Sailing Into the Next Generation, by Diane Plumridge and Judith Hylton

(See the Program Resources for the mailing address of the publisher.)

Teacher Notes (page 160)

Worksheets (page 188, 189)

Self-evaluation (page 190)

Brochures, fact sheets, and articles

(See Program Resources section for sources.)

Videos such as:

(See Program Resources section for sources.)

- Something to Celebrate
- Someday I Might Be a Parent
- Drinking, Smoking and Drugs
- A Good Start in Life
- It's Up to Me

Post-program questionnaire from Program Resources

Goal

To give students the opportunity to consider controversial issues in the areas of disability and reproduction.

Objectives:

The student will be able to:

1. define birth control, family planning, abortion, and sterilization.
2. explain how the issues of birth control, abortion, and sterilization relate to the prevention of disabilities.
3. take a point of view for or against these issues and argue it in a reasonable fashion.

Suggested Activities:

1. Assign reading of selected articles and brochures to present both sides of these issues. Printed materials and books listed in the Program Resources section that might be appropriate are marked with the number code 9:3:3.
2. Have students write and produce a skit showing people wrestling with one of these issues. This way they do not present a personal point of view, but strive to demonstrate both for the purpose of the production.
3. Use the worksheets from page 191-197.

Evaluation Options:

This lesson should be evaluated only on the basis of awareness of the issues, and student participation. The issues are ethical and moral ones that have a high emotional impact. Each person must resolve these issues according to his/her own personal, moral, and religious beliefs. The students' decisions should not be reflected in the teacher's evaluation of the lesson.

The evaluation for the unit on prevention could include any or all of the following:

1. Teacher observations.
2. Anecdotal records.
3. Student participation.
4. Evaluation of projects and written work.
5. Student self-evaluation sheet (page 198).

A questionnaire is included in the resources section which provides an overall evaluation of the material covered in the entire program. It can be used to help teachers gauge the effectiveness of the material. Any comments or suggestions would be most welcome. Please contact me at the following address:

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S0J 0G0

Suggested Resources:

Teacher Notes (page 163)

Worksheets (page191-197)

Brochures, fact sheets, and articles

(See Program Resources section for sources.)

Student self-evaluation sheet (page 198)

Videos such as:

(See Program Resources section for sources.)

Discussions in Bioethics Compilation: Who Should Decide?

If You Want A GIrl Like Me

Post-program questionnaire from Program Resources

Teacher's Notes

Unit One: General Information

Prevention of congenital disabilities.

Congenital disabilities, or birth defects, are those that a person is born with (Meyen, 1982).

Congenital disabilities can sometimes be prevented before a baby is conceived (Fotheringham, Hambley & Haddad-Curran, 1983; Ince, 1987). One method of prevention requires the parents to adopt a healthy life-style with good nutrition and exercise, and avoid alcohol, cigarettes, and nonprescription medication (Plumridge & Hylton, 1989).

Another prevention method to reduce the risk of having a child with a disability is to get genetic counselling (Ince, 1987). People who have family members with disabilities may want to discover if the condition is inheritable, and what the chances are that they can have an affected child. Genetic counselling can provide this information through blood analysis or pedigree analysis.

Many congenital disabilities can be prevented during the prenatal period (Fotheringham et.al., 1983). Good prenatal care is important from the very first indication that a woman is pregnant. Good health habits are vital. Adequate nutrition is essential because the mother is, literally, eating for two. Exercise makes the woman feel better, and increases the blood flow throughout her body.

Some of the choices that parents make expose their unborn children to the risk of disability. These are considered to be voluntary risks, and are

completely preventable (Plumridge & Hylton, 1989). They include smoking, drinking, and the use of drugs. Smoking is a major cause of low-birth-weight in babies and places extra strain on the baby's heart. Second-hand smoke is also damaging. Drinking alcohol during pregnancy can produce alcohol related birth defects (ARBD) in the infant. These ARBDs can vary from severe cases of Fetal Alcohol Syndrome (FAS) to slight cases of Fetal Alcohol Effect (FAE)(Donovan, 1992). There is no safe time to drink during pregnancy, and no known amount of alcohol that is safe for a pregnant woman to consume. Drugs can have tragic effects on an unborn child, whether they are "street drugs", over-the-counter medication, or prescription drugs. The only drugs that a pregnant woman should take are those prescribed by a physician who knows about the pregnancy(March of Dimes, 1992).

Involuntary dangers include infections, radiation, and pollutants. Some infections can be prevented before conception by ensuring that the mother is immune to such diseases as Rubella (German Measles), diphtheria, and whooping cough. Prenatal examinations will identify and treat other infections such as syphilis and gonorrhea which could affect the baby. Radiation can be dangerous to the fetus; for this reason a mother-to-be should always tell the radiologist that she is pregnant before an X-ray is taken. Then a lead apron can be placed over the abdomen to protect the baby.

Prenatal development.

Some understanding of fetal development helps to explain the effects of teratogens. The embryonic stage, the third week to the eighth week of pregnancy, is an especially delicate time because development is very rapid

at that time. The baby's basic structures are being formed so toxins and infections can have drastic physical effects, such as those caused by the drug, thalidomide. During the second and third trimesters the baby's growth is somewhat less rapid, though the central nervous system continues to develop, and the brain grows larger and more complex. Effects during this time can cause stunting of the limbs, physiological defects, and minor structural abnormalities (Santrock & Yussen, 1989). The closer the baby comes to term without suffering damage, the less severe the damage will be.

Even if a woman has been smoking, drinking, or taking drugs during the early part of her pregnancy, it is not too late for prevention to be beneficial. Though prevention efforts are most effective early in pregnancy, the baby continues to grow and develop all through the prenatal period. At any time during the prenatal period, a mother can reduce the risks to her baby by choosing not to smoke, drink, or take drugs (FAS Symposium, October 14, 1993).

There is an immense amount of information available about prenatal prevention of disability. It is an extremely important area because prevention at this stage of life can avoid a lifetime affected by disability.

Unit Two: Community Connections

Stainback & Stainback (1992) have described an inclusive school environment is one which ensures "that all students, regardless of any individual differences they might have (be they classified disabled, at-risk, homeless, or gifted) are fully included in the mainstream of school life" (page 29). This same definition is true for inclusive communities. A community which is willing to make accommodations to include residents with disabilities, and which has a friendly, accepting attitude, is an inclusive community.

Advocates are people who try to establish or improve services and facilities for those with exceptional needs. Self-advocacy is the term used to describe the efforts of a group or individual to change conditions for themselves (Meyen,1982).

In this unit, students are encouraged to identify situations in their community that need to be changed to improve the opportunity for a better quality of life for residents with disabilities. Students must find a problem, then identify the numbers of people affected. Once they have a project in mind, they should do at least one thing to advocate for the change that they have envisioned.

Prevention before conception.

Preparation for pregnancy starts well before conception. Teen pregnancies, especially those of very young teens, are considered to be "high risk". The infants tend to be smaller, and have a higher chance of being disabled for both biomedical and socio-environmental reasons (March of Dimes,1992). Compared to women in their twenties, teen moms are more likely to be single parents, more likely to raise their children in poverty, and more likely to have numerous, closely spaced pregnancies. Abstinence, or the use of birth control methods, to prevent unwanted teen pregnancy is a way to prevent disability (Kopp & Kaler, 1989).

Even when a couple has established a permanent relationship, they may not want children immediately due to personal preference, or because of practical considerations such as their financial, educational, vocational, or professional situation. Family planning may be an important part of their preparation for pregnancy, with birth control being used to ensure that they do not have children until they are ready.

Once the couple has decided to have children, they should reduce the risks of having a disabled child as much as they can. A trip to the doctor for a complete physical examination and tests for immunization is a good idea (Plumridge & Hylton, 1989). At that time, the physician checks both partners' general health, and tests for Rh blood factor compatibility. An incompatibility where the mother is Rh- and the father is Rh+ can be handled without any difficulty by modern medical procedures, but it needs to be identified. The doctor may suggest genetic counselling if any member of either partner's family is affected by a congenital disability. The

couple may know about some genetic conditions because one of them shows the effects of it. Others may not know that they carry a defective gene until they have a child who has the condition. Some genetic errors can be identified by blood tests. This led to wide scale genetic screening in some parts of the United States (Bennett, 1984). Some genetic conditions are most common among people of distinct racial or ethnic origins i.e., Sickle Cell Disease affects blacks; cystic fibrosis, whites. Genetic counselling may include a pedigree analysis because genetic-conditions follow specific patterns of heredity (Abroms, 1981). Autosomal dominants, or one-gene errors, are conditions caused by a single dominant gene; an affected parent has a 50-50 chance of passing it on to a child. Autosomal recessives, or two-gene errors, require a double dose of an affected gene before the condition is evident. Parents may carry this gene and pass it on to their children without knowing they have it. If both parents are affected, a child has a 25% chance of being free of the gene, a 50% chance of being a carrier like the parents, and a 25% chance of having the condition. These are the patterns that genetic counsellors check for when they examine their clients' family trees. Genetic services are available in Saskatchewan from Department of Medical Genetics, University Hospital, Saskatoon (Saskatchewan Institute on Prevention of Handicaps, 1986).

Once the parents-to-be have a clean bill of health and have decided to have children, the adoption of good health habits is important, as is the reduction of voluntary risk factors. If the partners consume alcohol at all, the mother-to-be should stop before she attempts to become pregnant, because a woman may not be aware that she has conceived until the fifth or sixth week of development. The man can help his mate with this by providing a good example, by offering encouragement, and by supporting her in her decision not to drink.

Prenatal prevention.

When the woman becomes pregnant, the most important preventive measure is good prenatal care (Fotheringham et.al., 1983). She should see a doctor or public health nurse and follow their instructions carefully.

Maintaining a healthy life-style during pregnancy is important. Safety measures remain important for both mother and baby; a baby is fairly safe and secure inside the womb, but injury to the mother's abdomen can affect her child. Good nutrition is essential because it provides the building material for the baby. The avoidance of toxins such as tobacco, alcohol, and drugs is vitally important. As much as possible, the mother should avoid exposure to radiation or industrial pollutants.

Preconception and prenatal prevention of disabilities is extremely effective because it lowers the incidence of birth defects. These strategies can decide whether a child will be a normal, healthy baby, or must struggle with some sort of lifelong disability.

Optional lesson on controversial issues.

This lesson addresses some very sensitive issues, ones that tend to rouse emotional reactions in many people which may cause ill-feeling within a community. I suggest you use it only if the local authorities approve.

The intent of the lesson is to present these controversial issues so that students may consider them before they actually encounter any of the situations personally. The issues addressed are:

birth control,

abortion as a method of preventing disability,

sterilization of the severely and/or multiply handicapped.

Over the last couple of decades, sex and sexuality have become open topics of discussion. Sex education is common in Saskatchewan schools. Birth control methods ranging from abstinence to implants are discussed in a variety of settings from churches to television talk shows.

Birth control for teenagers, however, is still a controversial topic among parents. Does it help because it prevents pregnancy, or does it encourage teens to become sexually active? Is it safeguard, or licence? Parents often have a very difficult time admitting that their children may be sexually active. Abstinence is the only form of birth control many parents can condone. Birth control is an emotional issue which is further complicated by the involvement of religious beliefs and moral values. Many communities do not want it discussed in their schools.

It would be nice to be able to believe that all teenagers wait for marriage before becoming sexually active, but facts prove otherwise. Over 1600 teenagers in Saskatchewan had babies in 1992 (Prince Albert Daily Herald, 1993). This is incontrovertible evidence that birth control methods are not being used, and the corollary follows that young people are also placing themselves at risk for contracting sexually transmitted diseases (STDs).

Many methods of birth control, such as "The Pill" and intrauterine devices, do not offer protection against disease. In this day and age, when "AIDS" is a household word, protection is a life-and-death concern. Condoms **do** offer protection and their use is encouraged to the point that some educational facilities have coin-operated dispensers in the washrooms.

From the point of view of prevention of disabilities, birth control is an excellent idea for the sexually active teenager. Teenage girls are more likely to have low-birthweight babies than are more mature mothers. These small babies have a higher risk of being disabled than do more robust infants. In

addition, the social situations that afflict many teenage parents are not conducive to maximum child development (McDonough, 1985). These conditions include an increased likelihood that the girl will not complete her education, that she will be unable to find a well-paying job, that she will become pregnant again, and that she will have to raise her children as a single parent in poor economic circumstances.

Medical science is making great strides in prenatal diagnosis. Through the use of amniocentesis, ultrasound, and other technological advances, some disabilities such as spina bifida and Down syndrome can be diagnosed early in a pregnancy. As science continues to advance, it is likely that some of the students now in ninth grade will eventually be faced with having to decide how to respond to such a prenatal diagnosis.

The purpose of a prenatal diagnosis is to offer the parents a chance to terminate the pregnancy through abortion rather than bringing it to term and being faced with raising a disabled child (Cole, 1986). There have been cases in the United States where people have successfully sued their physicians for "negligent genetic counseling that resulted in the 'wrongful birth' of an affected child" (Fueschel,1991). This puts doctors under pressure to perform the diagnostic procedures and offer parents this choice.

The ethical problem involves not only the question of abortion, but the whole concept of the value of the life of a disabled person. When a fetus is aborted because the baby would have Down syndrome, it is basically because the parents have made a value judgment which indicates that they believe that the quality of life their child would have is not worth living.

Though parents of children with disabilities would never have hoped for anything less than a perfect child, many of them have stated that their child brings them joy, and helps them develop strength of character

(Featherstone, 1980). They love their special children fiercely and would never choose to be without them. It is important that students be aware of this as well as aware of the problems facing parents who must deal with such a situation.

The eugenics movement, a widespread belief in the need to prevent the spread of defective genes by preventing people with disabilities from having children, resulted in mandatory sterilization for many people labelled as having a disability. Such sterilization was a common practice until the 1960s (Taylor & Searle, 1987). There is still an on-going debate about sterilization of the disabled, especially those with severe and multiple handicaps (Ferguson & Ferguson, 1992; Fredricks, 1992; Halle, 1992).

Resources

What do you know about disabilities?

According to Statistics Canada (1990), thousands of people in Saskatchewan have some kind of disability. Public knowledge about methods of preventing disabilities can reduce the numbers of people who become disabled in the future. How much do you know about disabilities?

Please indicate your answer by making a checkmark on the short line in front of it.

a) A disability is

--- not being able to do things as well as other people.

--- not being able to do, in the usual way, things people normally do.

--- not being able to work.

b) Mark the sentence that best describes your personal familiarity with disabilities. You may mark more than one if they apply to you.

--- I have a disability.

--- A member of my family has a disability.

--- I have a friend who is disabled.

--- There are students in the school who are disabled, but I don't know them well.

--- There are people in the community who are disabled, but I don't know them well.

--- I don't know anyone who is disabled.

c) If you think that the disabilities described below could have been prevented, circle the "yes" beside the sentence. If you don't think they could have been, circle "no".

Yes No Tommy has brain damage. When he was little, his father was taking him to town, and they had an accident with the car. Tommy was not in an infant car seat at the time, and he was thrown out of the vehicle and hit his head.

Yes No Yvonne has cerebral palsy and must use a wheel chair.

Yes No Della's baby was born addicted to heroin. He was tiny and too weak to endure the stress of drug withdrawal.

Yes No Bob was born with a clubbed foot.

Yes No Lyle almost drowned when he was two. The people who rescued him used mouth-to-mouth resuscitation to revive him, but lack of oxygen caused brain damage, and he has a mental disability.

Yes No Bonnie was born with a visual impairment. She has trouble focussing on objects because her eyes "wiggle" back and forth very quickly.

Yes No Tanya comes from a very poor family. She finds it hard to learn because she's often tired and hungry.

d) Disabilities may occur at any time in a person's life, from before birth to old age. There are methods of preventing disabilities at all these stages as well. Please read the list of prevention methods below and indicate the time of life when you think they would be most useful. Write the age group from the list below on the line to show your answer. You may want to put more than one age group for your answer, if so, go ahead.

prenatal (before birth)
0 - 2 (baby)
2 - 9 (child)
10 - 16 (adolescent)
17 + (adult)
anytime

_____ Read to them every day.

_____ Shovel the sidewalk and put sand on any icy spots.

_____ Go to prenatal classes.

_____ Wear steel toed boots when working around machinery.

_____ Wear a bicycle helmet.

_____ Go to the doctor for regular checkups.

_____ Become involved in games and sports activities.

e) Choose the best answer by putting a checkmark on the line in front of it.

* It is dangerous for the baby if a pregnant woman

--- smokes.

--- takes drugs without her doctor's approval.

--- drinks alcohol.

--- all of the above.

* Head and spinal cord injuries are major causes of disability in adolescents and young adults. Which of the following could NOT prevent such injuries?

--- wearing a bicycle helmet.

--- wearing a hard hat in a construction area.

--- wearing steel-toed boots around machinery.

--- wearing a helmet when snowmobiling.

* People with disabilities want

--- the same sorts of things everyone else does.

--- to be given special treatment.

--- to be helped and looked after all their lives.

--- to avoid work.

* Anyone who helps look after a child can help that child develop social skills and language ability. Which of the following things would NOT be helpful?

--- read books to them.

--- play games with them.

--- take them to the park to play.

--- tell them to watch television while you talk on the phone.

Building Well

Grandpa was busy in his workshop, putting the finishing touches on the stereo cupboard that was to be a Christmas present for his son and daughter-in-law. His granddaughter came running in the door and perched on the stool by the workbench.

She watched Grandpa's busy fingers for a while, then she asked, "Grandpa, there's a new kid at my school. He's in a wheelchair 'cause his legs don't work right. He can't talk very good either. The other kids say he was born like that. How come that happened? I thought babies always got made right."

Grandpa thought about it for a few minutes. How could he explain. As he thought he sanded the smooth, fine wood of the cupboard. It was 'made right', he thought to himself, what did it take to make something like a baby? Grandpa thought about it a bit more, then he answered her.

"Well, dearie, babies are a lot like this cupboard I'm making," he began. She laughed at the comparison, a soft little baby wasn't much like that big hard wooden thing as far as she could see.

"Yes sirree," Grandpa continued, "they both need the same things to be made right: accurate plans, good building materials, and a protected environment. If the plans I used for this cupboard weren't accurate, then the cupboard would have problems. The shelves might be crooked, or one side might be longer than the other so it couldn't stand up well. There are plans that tell a baby how to grow right, too. Those plans are called 'genes' and they're in eveery cell of your body. Your genes told your body to grow big brown eyes and a dimple in your cheek, just like your mom's. That's because half of the plans that make you came from your mother's genes and

were in the egg cell."

"Oh, yeah, we learned that at school, the egg from the mother, that's the ovum, and the sperm from the father unite to make a baby," his granddaughter said.

"Right! Now the other part of the genetic plan that made **you** came from your Daddy. That's why you have a turned-up nose like a ski hill, just the same as he does." Grandpa tapped her nose and she grinned up at him.

"Grandpa, this isn't answering my question about the new boy in my class. I really want to know."

"Now, just hold on, I'm getting there. You see, sometimes the genetic plans aren't accurate. Then people have problems called birth defects. They may have physical ones, or mental ones, or both. That may be what happened to that boy, I don't know. "

"Or it may have been poor building materials, You see how nice this wood is? It's smooth and fine. This cupboard will be strong as well as beautiful when its done because I used the best wood I could get." Grandpa ran his hands lovingly over the side of the cupboard as he spoke. He loved to make things, and loved the smell and the feel of wood.

"Anyhow," he continued, "sometimes people build things with poor materials. A cupboard made with green wood will twist and warp as the wood dries. It wouldn't be very straight, or very strong. Babies are the same way. They need to have good building materials, too. That means that the mother must eat well all the time the baby is growing inside her. That way there is good nutritional material available to build the baby's body. Maybe that's what happened."

"You know why I make things here in my workshop, not outside in the rain and the sun?" He glanced over at the girl. She shook her head.

"It's because the weather outside could damage even fine wood and spoil the thing I was making. The rain could warp it, and the sun would bleach it. So I protect it by working in here where I can keep it dry and keep the temperature more even. Well, babies need a protective environment before they are born, too."

"That's why they're inside their mother's tummies, isn't it Grandpa?" asked his granddaughter, quite absorbed in the analogy.

"Yep," he responded, "that's exactly why. But some things can damage a baby even inside its mother. If the mother gets sick, sometimes that hurts the baby. If she drinks alcohol, or smokes, that can harm the baby, too. So can drugs, even ones that a doctor prescribes, or ones that the mother might buy at the drug store for a cold, ones you'd never think could hurt anyone. It might have been something in his environment before he was born that hurt the new boy at your school."

"Gee. Grandpa, isn't it wonderful that most people get made right in spite of all those things that could go wrong?"

"It sure is, honey, but you know, most people are just fine, and some are even super-special, like you."

"And you, Grandpa," she said as she slid off the stool and gave him a big hug.

Discussion Guide

Where do the plans for a baby come from?

How does a baby get quality materials for its development?

What can affect the baby's prenatal environment?

Assignment Options

These could be done individually, or as a group:

1. Find out how genetic errors can affect a baby, and report back to class.

2. Find out how the mother's nutrition can affect the baby's development, and report to the class.

3. Pick one of the things mentioned in the story that can affect the prenatal environment. Find out what the effects would be and report back to class.

(Adapted from Plumridge & Hylton, 1987)

Research Questions

Read each statement, then find evidence to prove, or disprove it. Be sure to name the source of your information.

1. Some birth defects can be treated so that they will not have a disabling effect on the person.

2. All birth defects result in mental retardation.

3. Birth defects are the same thing as congenital disabilities.

4. All birth defects can be seen at birth.

5. Birth defects can occur to babies of healthy parents who have had a normal pregnancy.

Class Activity

Look at the chart below. Mark the square with a (+) for each defect that is visible at birth, and that could be repaired or treated. In the last box for each condition tell whether the impairment is physical, mental, or both.

	+ visible - invisible	+ remediable - not remediable	kind of impairment
Cerebral Palsy			
Cleft lip and/ or palate			
Club foot			
Cystic fibrosis			
Down syndrome			
Dwarfing			
Phenylketonuria			
Sickle Cell Anemia			
Spina bifida			

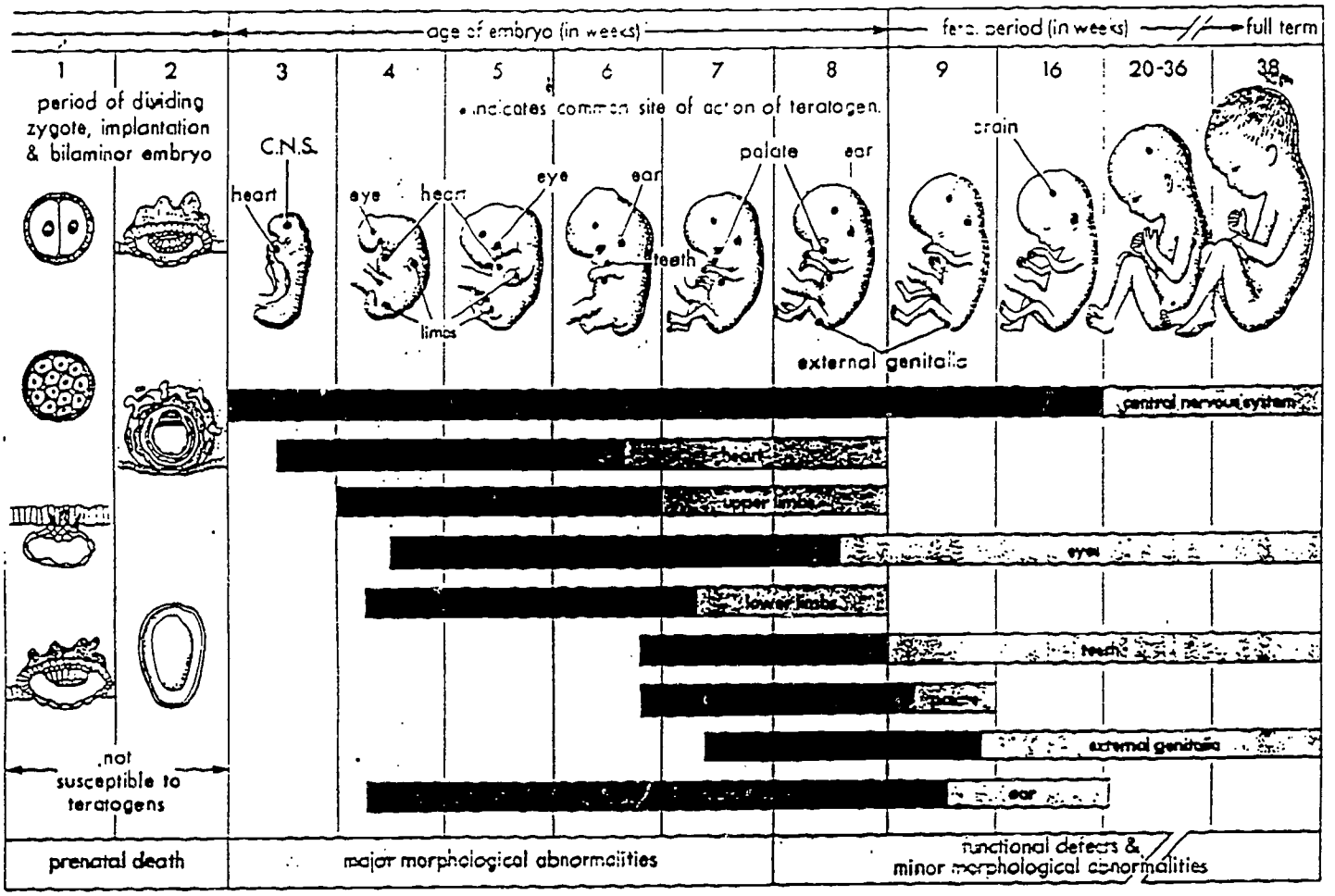
Which of the conditions listed above do you think is the most severe? Why?

Which one of the conditions do you think is the least severe? Why?

187 (Adapted from Plumridge & Hylton, 1987)

Prenatal Development and Sensitivity

(from K.L. Moore, 1993, page 156.)



The type and severity of the disability caused by a teratogen during pregnancy varies with the stage of prenatal development. During the first two weeks, damage may result in the death of the embryo, but is not likely to result in any kind of disabling condition. Dark bars indicate highly sensitive periods; grey ones show stages that are less sensitive to teratogens.

The danger of structural defects is greatest during the embryonic period when the body structures are just beginning to form. Later, during the fetal stage growth may be stunted and there may be problems with organ function.

The Baby in #3

The nurse stood looking down at the baby in incubator #3.

"Poor little guy," she thought. "You really lost out on life already, didn't you?"

The baby was a wizened little fellow whose diaper looked miles too big for him. His head was small, even in comparison to his tiny body, and he had the distinctive features that went with the doctor's diagnosis written on the card in the nurse's hand: Fetal Alcohol Syndrome. He cried weakly and his body shook with the tremors of drug withdrawal.

The doctor had said that he would live, but had added that he would likely be mentally retarded.

The nurse grimaced. It was easy to feel angry at the mother who had damaged this child so badly. However, the nurse shook her head and sighed, that girl had her troubles, and being angry wouldn't help either of them.

As she walked down the hall, the nurse thought about the baby's mother. Her medical chart told a bitter story, too. She was young; her estimated age was about 16.

Malnourished, said the chart. "That's for sure!" thought the nurse. "She's skin and bone. Gah! I hate to touch her for fear she'll break."
Prolonged drug use the chart said. "HOW could one be 16 years old and have a history of prolonged drug use??" the nurse asked herself. "When did she start? Kindergarten?? "

Alcohol dependency: well, that fit, considering the shape the baby in #3 was in. The girl had been brought in by the police when she was already in labour. They'd found her passed out in an alley reeking of cheap booze.

She still wasn't awake, but that was the anesthetic, not the alcohol. They'd had to do a caesarean because she had a major case of syphilis.

The nurse walked into the staffroom and poured a cup of coffee. As she sank wearily into a chair, a policeman came in with a brown envelope.

"Hi, there," he said, "Is Doc around?"

"No, he's gone for the night ... unless there's a major emergency," she replied.

"Nah, no emergency. I just brought over what info we have on that girl we brought in earlier - you know, the street kid in labour."

"Yeah," she nodded. "I know. The doctor did a caesarean; she had major STDs and the baby didn't need that infection on top of everything else. Anyway, let's see what you've got, and I can get our part of the paperwork done."

"Nothing nice," he replied. "She's been on the streets most of a year. Calls herself Ella Evesdotter - "

The nurse interrupted with an unladylike snort.

"Sounds like fantasy to me," she said.

"Yeah, well, we've got some facts, too. Here," he said, handing the envelope to the nurse. She took out the folder and scanned it quickly.

"Oh, Lord!" The nurse's voice sounded thick and teary. "Raped at 12 by her step dad ... ran away at 13 ... in and out of foster care ... on and off the streets. Hooking ... booze ... crack ... then on to mainlining. How'd she support a habit like that??"

"Story is that she's part of a group. They all lived together in a rat warren downtown. They all pitched in, supposedly, to make the rent and get drugs. Some of them hooking, some selling."

"Yikes! So she passed out on the street and you guys picked her up.

Good thing, or she and the baby'd both be dead."

"I guess,"replied the officer. "Poor kid - no kind of a life at home, and not much of one after she ran, either. There's too damn many like that. What the hell can we do for kids in that position?"

"I don't know," replied the nurse. "She had it rough all right, but at least she had a choice. There were other options she could have taken: children's shelters, social services, half-way houses, other foster homes. The baby's the one that gets me - that poor little tyke in #3. He's got so many strikes against him you wouldn't believe it, and HE had no choice at all. His mom's choices ruined his life."

Discussion Guide

1. What choices had Ella made which damaged her child?

2. How did the friends Ella lived with try to help her?

3. What else could her friends have done that might have been more beneficial for her and her baby?

4. Discuss what Ella's options are now. What would be best for her? What would be best for her baby?

5. What services might the baby in #3 incubator need as he grows up?

6. What are his chances of living independently as an adult?

Quiz

1. What is an embryo?

2. What is a fetus?

3. When do toxins such as alcohol have the greatest structural effect on the baby? Why?

4. Below are some brief descriptions of different stages of prenatal development. Number them so that they show the correct sequence.

--- The eyelids begin to part; the fingers have fingerprints; and the fetus weighs about a half a kilogram.

--- The embryo is about 1 cm. long and resembles a tadpole.

--- The baby weighs 2 1/2 to 4 kilograms, and rests head-down low in the mother's abdomen.

--- The baby's heartbeat can be heard for the first time.

--- The fetus looks more like a person, and has ears, ankles, wrists, and eyelids.

Community Project

The purpose of this exercise is to take a critical look at your own community and try to find ways that it could be more inclusive of people with disabilities.

1. Divide into groups of three or four.

2. Now, individually, pick some type of disability to concentrate on. It would be most useful to pick one that you know affect people in your community.

3. As a group, choose an activity that a person might do in your community. A few examples are: going to a movie, going shopping, going to church, or attending some kind of sports activity.

4. Analyze all the steps required to accomplish this activity, from the time the person leaves home to the time he or she returns. List these steps.

5. Individually, think about the problems the person would have if he or she had the disability you picked to concentrate on. List these problems.

6. Take your list back to the group, and discuss all the lists. Try to think of ways to overcome the problems you identified in order to make your community more convenient for people with disabilities.

7. Now pick one problem which you thiunk is especially important and develop a plan to solve it. Include something YOU could do to help.

Heredity

(adapted from Plumridge & Hylton, 1989)

Think about your characteristics and those of your parents and your grandparents. List them in the columns below. This activity is designed to let you take a good look at yourself, and to help you identify some of your own genetic inheritance.

Ways I resemble my family.	Ways I am unique.

Family Health History

(adapted from Plumridge & Hylton, 1989)

There are times when it is important for us to know what health concerns there might be in our families. For example, there might be an inherited genetic error, or a family history of diabetes, heart disease or cancer. Ask your parents to help you fill in the chart on page 193. Enter the following information:

* names and birthdates of your brothers and sisters, your parents, grandparents, aunts, uncles, and cousins;
* the cause of death, if any of these people have died;
* any specific health problems of any family members;
* any known inherited conditions.

Discussion Questions

1. What (or who) were the best sources of information for your family health history?
2. What type of information was most difficult to find? Why?

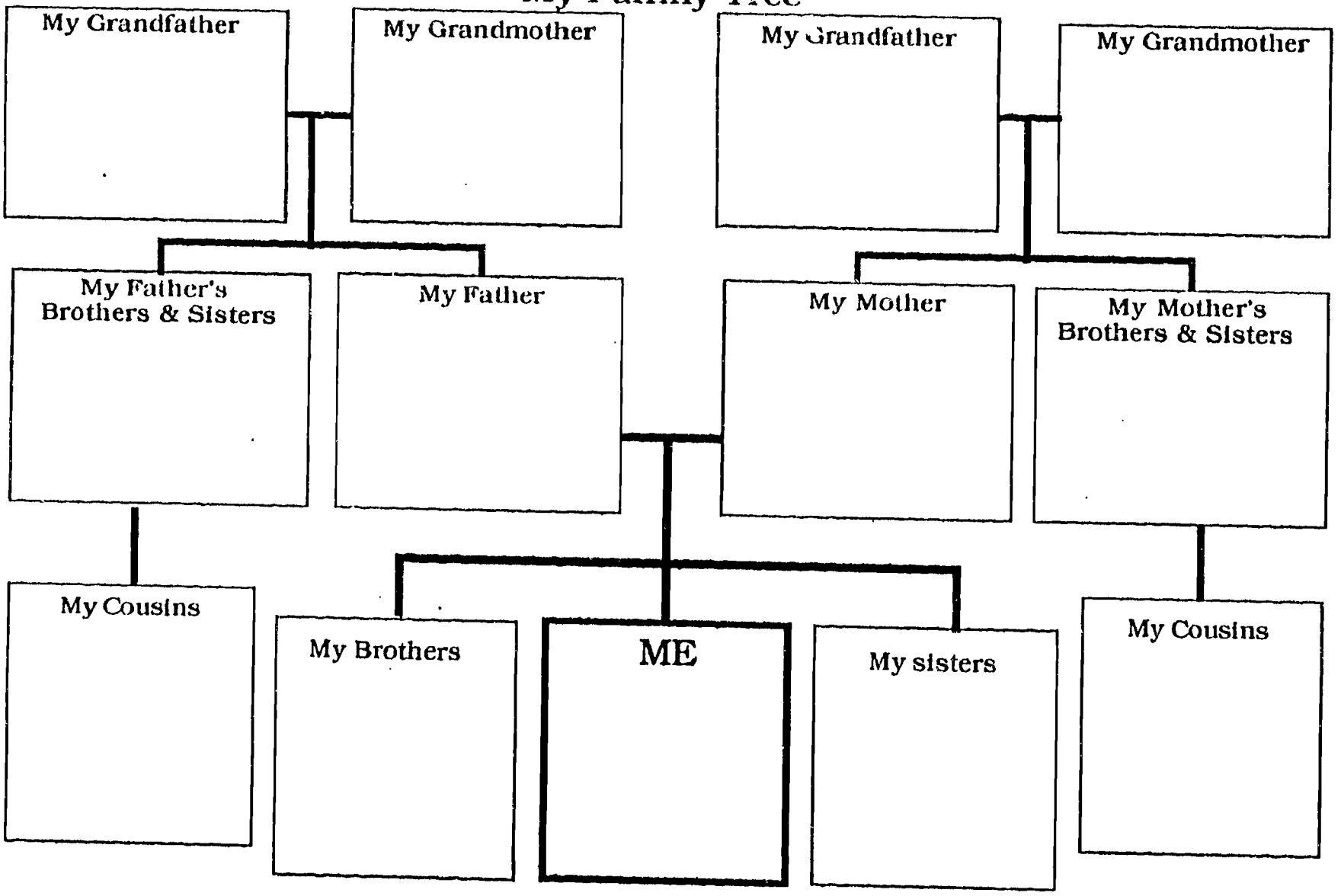
The following questions should be answered to yourself. You may, or may not, wish to share the answers with your class.

3. What similar characteristics run in your family?

4. What health problems run in your family?

5. Is there any family characteristic that might make genetic counselling advisable for you when you want to become a parent?

My Family Tree



Prenatal Prevention of Disability

(adapted from Plumridge & Hylton, 1989)

Discussion Questions

Answer these questions, and be prepared to discuss your answers with your classmates.

1. Why is good nutrition especially important during pregnancy?

2. What is the purpose of prenatal, perinatal, and postnatal care?

3. Why are pregnancies in the early teen years considered to be "high risk"?

4. Your friend tells you that she thinks she is pregnant, and asks you for advice. What would you suggest that she do?

5. Why do physicians recommend a caesarean delivery for babies whose mothers have an active sexually transmitted disease?

6. What is the father's role in the prenatal prevention of disability?

Life-style and Parenthood

(adapted from Plumridge & Hylton, 1989)

This exercise is designed to help you assess whether or not you are currently ready to become a parent. This can, and does, become an issue for many people your age every year. In Saskatchewan, in 1992, over 1600 babies were born to teen mothers (Prince Albert Daily Herald, Sept. 21, 1993).

Read each statement and if the items apply to you today put a checkmark on the line in the column marked **Today**. Now think about yourself in five years. Put a checkmark on the line in the second column beside each item that you think will apply to you at that time. Discuss the differences with your classmates, and the implications of those differences with regard to parenthood.

Today	In 5 years	
_____	_____	You are under 16 years of age.
_____	_____	You have a chronic health condition. .
_____	_____	You are undernourished.
_____	_____	You use tobacco.
_____	_____	You use street drugs.
_____	_____	You use alcohol.
_____	_____	You have never had regular medical care.
_____	_____	You live in poverty.

What are your chances of having, and raising a healthy child right now? In five years?

Self-Evaluation

(Adapted from Thomas & Balanoff, 1987)

The format for most of this evaluation is a rating scale. Please read the statement and circle the number that best tells how you feel about the lessons you have had concerning disability.

I learned (a lot 1 2 3 4 5 nothing) about prenatal causes of disability.

I learned (a lot 1 2 3 4 5 nothing) about ways to prevent disability even before a child is conceived.

I learned (a lot 1 2 3 4 5 nothing) about ways to prevent disability prenatally.

I learned (a lot 1 2 3 4 5 nothing) about prenatal development.

I learned (a lot 1 2 3 4 5 nothing) about the risks of pregnancy during the early teen years.

What was the most interesting thing about these lessons?

What was the least interesting thing about the lessons?

Decisions

You may have already made up your mind how you feel about all of the controversial issues presented here. If so, that's great. However, many people don't think about such problems until they must face them in their own lives. Then the decision-making process is made more complicated by the emotions that are involved in the situation. This activity is intended to help you consider the positives and negatives of these controversial issues.

This activity consists of 3 anecdotes which show situations that involve a difficult ethical decision, and a worksheet for each.

1. Read each anecdote and think about it. Consider all points of view of the situation. Think about practical considerations, and the emotional and social consequences of any decision that the people make. Consider your religious, moral and ethical values.

2. List these considerations in the appropriate box on the accompanying worksheet and show whether they are positive or negative consequences.

3. Then answer the following question for each anecdote:
   What would you do if you were the person who had to make this decision?

Anecdote # 1

Valerie has spina bifida and is confined to a wheelchair. She has a good job. She and Joe, her husband, have a stable marriage, and a secure, comfortable life.

Now Valerie is pregnant, and she and Joe have visited the doctor as part of their standard prenatal care. The doctor has just told them that the baby will have spina bifida also, and may be much more severely disabled than Valerie is.

The doctor has explained that they have the option of having an abortion and trying again for a healthy baby. Apparently the chances are good that another pregnancy would produce a normal child.

Valerie and her husband must make their decision quickly because, if they decide to have an abortion, the doctor wants to do it as soon as possible.

What difficulties would Valerie and her husband face if they have the child?

*Think about the mechanics of daily care for their child as an infant, a preschooler, a student, and an adolescent.

*Think about their financial situation. Would Valerie be able to keep her job? Could they manage on one income if she could not?

*Think about their social and emotional stress in both situations.

*Think about the implications of abortion: is it murder?

Worksheet

Write down in Box 1 all the positive things you can think of about Valerie and Joe having the abortion.

In Box 2, write all the positive things you can think of about Valerie and Joe having the baby.

Use Box 3 to list all the negative things you can think of about Valerie and Joe having an abortion.

In Box 4 list all the negative things you can think of about Valerie and Joe having the baby.

Box 1	Box 2
Box 3	Box 4

Anecdote #2

Jane and Steve have a daughter, Nessa, who is thirteen. She has just started dating, and her parents are worried. They know that Nessa has had sex education classes at school and knows the "facts of life". However, they also know how hard it can be to say "no" when a person is sexually aroused.

Jane had a child when she was 14, and gave it up for adoption. She really does not want this to happen to Nessa.

Steve and Jane are trying to sort out what rules and regulations might help Nessa at this time. They are also trying to decide whether or not to ask their doctor to put Nessa on birth control, just as insurance. They have wrestled with this decision a lot lately, and have not yet reached an agreement. They feel that they should decide soon, because Nessa is dating one boy quite often now and they feel that she is becoming quite involved with him.

What are the benefits and dangers involved when parents provide birth control measures for their teenage children?

*Think about the message given to Nessa about her parents' expectations and their trust in her judgment.

*Think about whether being on "the pill" would make it harder for Nessa to abstain from sexual involvement.

*Think about the possibilities and dangers of teen pregnancy.

*Think about the kind of rules and regulations Steve and Jane might try.

Worksheet

Write down in Box 1 all the positive things you can think of about Nessa being on birth control.

In Box 2, write all the negative things you can think of about Nessa using "the pill".

Use Box 3 to list other rules and regulations that you think Steve and Jane should try. If these things should be used instead of birth control mark them with a (-). If they should be used in addition to birth control, mark them with a (+).

Box 1	Box 2

Box 3

Anecdote #3

Gina and George have a son, Gerry, who is mentally retarded. Gerry has a girlfriend, Gennie, who is also intellectually impaired. This worries Gina and George, even though they are happy that their son has found someone to love, who also loves him.

Gerry and Gennie enjoy a lot of things together. They bowl in the local league, they both love to swim, and they like the same kind of music. They are talking about getting married.

Gina and George think that the marriage could work out. Gerry can do a lot of things around the house, and so can Gennie. With a little help from their parents on money management, the two of them should do all right.

The thing that worries Gina and George most is the idea of grandchildren and whether or not Gerry and Gennie could be good parents. On the other hand, George and Gina do not want Gerry or Gennie to be pressured into sterilization, and they fear that this might happen.

What problems might Gerry and Gennie have if they had a child?

*Think about the mechanics of child care during infancy and the preschool years.

*Think about the child's feeling as he or she realizes that his/her mom and dad are different from everyone else's.

*Think about Gerry and Gennie parenting an adolescent.

*Think about the morality of pressuring someone into agreeing to be sterilized.

*Think about the rights of individuals to control their own lives.

Worksheet

Write down in Box 1 all the positive things you can think of about Gerry and Gennie having children.

In Box 2, write all the positive things you can think of about Gerry or Gennie being sterilized.

Use Box 3 to list all the negative things you can think of about Gerry and Gennie having children.

In Box 4 list all the negative things you can think of about Gerry and/or Gennie being sterilized.

Box 1	Box 2
Box 3	Box 4

Self-Evaluation

(adapted from Thomas & Balanoff, 1987(

The format for most of this evaluation is a rating scale. Please read the statement and circle the number that best tells how you feel about the lessons you have had concerning disability.

I learned a lot 1 2 3 4 5 some nothing about prenatal causes of disability.

I learned a lot 1 2 3 4 5 some nothing about ways to prevent disability even before a child is conceived.

I learned a lot 1 2 3 4 5 some nothing about ways to prevent disability prenatally.

I learned a lot 1 2 3 4 5 some nothing about prenatal development.

I learned a lot 1 2 3 4 5 some nothing about the risks of pregnancy during the early teen years.

I thought a lot 1 2 3 4 5 some nothing about the issue of birth control.

I thought a lot 1 2 3 4 5 some nothing about the issue of abortion as a method of preventing disability.

I thought a lot 1 2 3 4 5 some nothing about the issue of sterilization of people with mental retardation.

What was the most interesting thing about these lessons?

What was the least interesting thing about the lessons?

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Glossary

abortion
the expulsion of an embryo or fetus from the uterus, especially to end a pregnancy. Spontaneous abortions occur naturally. Intentional abortions are generally referred to simply as "abortions".

adolescence
the period of transition from childhood to early adulthood, entered at approximately eleven to thirteen years of age and ending at age eighteen to twenty-two.[1]

advocacy
efforts by parents and professionals to establish and/or improve services for exceptional children and youth. Self-advocacy describes efforts made by the individual who will benefit from the results.[2]

AIDS
acquired immune deficiency syndrome. [1]

alcohol
a colourless, volatile liquid C_2H_5OH; it can be burned as a fuel and is used in industry and medicine; the intoxicating element of whiskey, wine, beer, etc. [3]

alcohol related birth defect (ARBD)
fetal alcohol effects. Birth defects due to maternal use of alcohol during pregnancy.

amniocentesis
a procedure by which cells of the fetus are removed from the amniotic sac to test for the presence of certain chromosomal and metabolic disorders.[1]

at risk
children who are exposed to environmental factors which may cause disability. Such factors are referred to as "risk factors" and children exposed to these are "at risk" for developing disability.

autosomal dominant
a one-gene error. Only one parent has to carry the altered gene for the condition or defect to be present in the baby. The parent may, or may not appear to have the condition.[4]

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[1] Santrock & Yussen, 1989.

[2] Meyen, 1982.

[3] Thomas & Balanoff, 1987

[4] Plumridge & Hlyton, 1987

autosomal recessive
a two-gene error. Both parents have to have one altered gene and one normal gene. Each parent passes on the one altered gene for the condition to be present. If the child receives only one altered gene and one normal gene, it will not have a defect, but will be a carrier like the parents.[4]

biomedical causes of disability
causes of disability which are organic. They originate in the body of the individual, due to inheritance, genetic or chromosomal errors, prenatal influences such as infections and toxins, or perinatal conditions such as lack of oxygen.

birth control
any method that delays or prevents pregnancy[4]

birth defect
an abnormality of structure or function present at birth. A birth defect may not be noticed until later in life[4]

blind
central visual acuity of 20/200 or less in the better eye, with correcting glasses, or central visual acuity of more than 20/200 if the visual field is restricted to less than 20 degrees. [5] For educational purposes someone is blind if they must be taught to read by Braille or taught through auditory means. [4]

Braille
A system of raised dots (six) used to present a code that can be read through the sense of touch[4]

carriers
People who have an autosomal recessive with one normal and one altered gene. They do not have the condition, but their children may if their partner also is a carrier. Normal children of carriers have a 50% chance of also carrying the defective gene.

cerebral palsy (CP)
A defect caused by damage to the area of the brain which controls the body's coordination and movement. It can be acquired before or during birth. CP can result in paralysis, weakness, or lack of coordination. It is frequently accompanied by mental retardation[4]

chromosomal errors
errors in genetic information resulting from too much, too little, altered, or the improper arrangement of chromosomal material[4]

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[5] Nolan, 1982

chromosomes
threadlike structures in each human cell that come in structurally similar pairs (twenty-three pairs in humans).1

cleft lip or palate
conditions in which there is a rift or split in the upper part of the oral cavity or the upper lip.6

clubfoot
a congenital condition in which one or both feet are turned at the wrong angle at the ankle.4

cocaine
widely abused stimulant drug made from the leaves of the coca plant.3

colourblind
an inability to distinguish certain colours.

competitive employment
employment for which the employee must compete. Most jobs fall into this category.

conception
the union of the sperm and egg cells to produce a zygote which will grow into a baby.

condom
a thin rubber sheath worn over the penis during intercourse to prevent conception or infection.

congenital disabilities
those present at birth as differentiated from those acquired after birth.

constitutional causes of disability
a less clinical term for biomedical causes of disability.

cultural differences
behavioral, linguistic, or attitudinal differences between groups of people. They may become risk factors because of discrimination, and lack of professional sensitivity. Inappropriate services may be provided if a child's behavior is not recognised as being culturally different.

cystic fibrosis
a condition caused by a genetic error involving the respiratory and digestive tract. CF causes severe difficulties in breathing and digestive problems, and often results in lifelong illness and early death. It does not cause mental retardation.4

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6 Hallahan & Kauffman, 1982

deaf
a hearing disability which precludes successful processing of linguistic information through audition, with or without a hearing aid. A hearing loss of 90 dB or greater. [6]

developmental milestones
especially important and obvious developmental accomplishments in the pattern of change, growth, and development that starts at conception and continues throughout life. Examples include learning to walk, and saying one's first words.

diphtheria
an infectious disease characterized by high fever and breathing difficulty.

disability
a restriction of a person's ability to lead a normal life due to a functional limitation, combined with a community situation. [7]

discrimination
a distinction made on the basis of a prejudice. Discrimination is a sociocultural risk factor because it helps cause poverty, and social isolation, and restricts people's access to services and employment.

Down's syndrome
a disorder characterized by physical and mental retardation and a rather typical appearance. In the most common cases, individuals have 47 instead of 46 chromosomes, with three rather than two in the twenty-first set. It is also referred to as Trisomy 21.

dwarf
an adult of abnormally small size.

early childhood psychologists
psychologists who assess the development of infants and preschool children.

early interventionist
a person who works for one of the Early Childhood Intervention Programs in Saskatchewan. These programs attempt to maximize the development of infants and preschool children who are delayed or at risk for delay.

embryo
an organism in the earliest stages of development. The embryonic period for humans lasts for about eight weeks after conception.

environmental causes of disability
factors in the social, cultural, or physical environment that can cause disability. Life-style and behavioral choices are included in this category.

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[7] Pope & Tarlov, 1991

Fetal Alcohol Effects
a medical diagnosis which indicates that the person has some of the characteristics of Fetal Alcohol Syndrome, but fewer, or in a milder form.

Fetal Alcohol Syndrome
a medical diagnosis which includes a pattern of mental and physical defects that may occur in some children of mothers who drank alcohol during pregnancy.

fetus
an unborn baby from about eight weeks after conception until birth.

functional limitation
an impairment that interferes with a person's ability to perform normal activities. 7

genes
segments of chromosomes; comprised of DNA.1

genetic counselling
the sharing of recurrence information with a family after reviewing the family's medical health history, medical records, and evaluating the family's health 4

genetic errors
inherited disorders which run in families and can be passed on from parents to their children.3

gonorrhea
a contagious inflammation of the urethra or the vagina. Babies can be infected during birth.

group homes
supervised accommodation for a small number of individuals who need supported residential services.

handicap
equivalent to "disability", but seen as having negative connotations. 8

hearing impairment
a hearing disability that may range from mild to profound. It includes deaf and hard of hearing. 6

hemophilia
a genetic disorder, chiefly in males,characterized by prolonged or excessive bleeding.

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8 Pope, 1992

heroin
a powerful depressant drug made from opium. Continued use of heroin causes dependency.3

impairment
weakness or damage of a person's physical or mental structures or functions. 7

independent living
able to live independently without the need of supervision or help with daily living skills.

infant
a baby. Used in this program to describe a baby who is between 2 months and 24 months old.

infections
illnesses caused by bacteria, viruses, fungi, or parasites. Some infections may be passed from one person to another as communicable diseases. 4

intellectual impairment
impaired intellectual functioning i.e., mental retardation.

job coaches
people who train others to successfully perform a job. This is a service which can enable people with disabilities to move into competitive employment.

lack of nurturance
may include a deficit of basic needs such as food, warmth and safety, but it is used in this program to mean lack of social interaction, lack of shared experiences, and lack of linguistic experiences. All these things impact on a child's ability to learn language, academic skills, and social skills.

lead poisoning
a poisonous metal found in many common products. Lead poisoning can cause harm to children and adults.4

life-style and behavioral causes of disability
choices individuals make which may put them, or their unborn children at risk. These include smoking, drinking, using drugs, health habits, and taking safety precautions when working in dangerous environments.

linguistic differences
differences in the language used. These may be variations on the language, or completely different languages. Linguistic differences become risk factors when they interfere with a person's ability to function in the community, or a child's ability to learn easily at school.

low birthweight infants
infants born after a regular gestation period of 38 to 42 weeks, but who weigh less than five and one-half pounds (about 12.4 kilos).1

malnutrition
inadequate food intake resulting in poor health.

measles (Rubella)
German or three-day measles. Rubella causes mental retardation, blindness and deafness in a child born to a woman who becomes infected during pregnancy.4

mental retardation/handicap/disability
A person's reduced or slower ability to learn mental tasks, develop adaptive behavior, earn a living, and live independently as an adult. 4

mercury
a heavy, silver-white metallic element used in barometers, thermometers, and pharmaceuticals. It can cause neurological damage when ingested in sufficient quantities, as happened in north-western Ontario, when the English-Wabigoon river system was polluted.

miscarriage
spontaneous premature birth occurring before the 28th week of pregnancy.4

mobility impairment
a reduced ability to move about, may include having difficulty walking, or requiring the use of aids such as braces, walkers, crutches, or wheelchairs.

mutagenic
causes changes to occur in chromosomal material e.g., cells produced that are not normal.3

neglect
inadequate supervision or support for a child's safety or well-being. Neglect can be physical or emotional.4

neural tube defect
a defect occurring during formation of the spinal column and brain. The neural tube does not grow and close properly. Such defects often lead to mental retardation.4

obstetrician
a doctor who specializes in the branch of medicine concerned with pregnancy and birth.

occupational therapy
engaging individuals or groups in activities designed to enhance their physical, social, psychological, and cognitive development.4

organogenisis
the first two months of prenatal development when the organ systems are formed; may be adversely affected by environmental events.1

pathology
any deviation from a healthy, normal condition.

pediatricians
doctors who specialize in the branch of medicine concerned with the development, care, and diseases of children.

pedigree analysis
analysis of a family's history covering at least three generations. This is done to try to identify inheritable genetic errors.

perinatal
around the time of birth.

phenylketonuria
an inherited biochemical error leading to mental retardation if not treated with a low-phenyline diet beginning in the early weeks of life.4

physiotherapist
someone who provides physical therapy. Physical therapy addresses the general area of motor performance.

postnatal
the time immediately after birth. Postnatal care is offered the mother and child from the time of delivery until about six weeks after birth.

poverty
a condition in which a person lives without enough money for adequate nutrition, and housing, or good health and good education.4

prepregnancy
before pregnancy; preconception.

preschool
before school age; often used to designate children between the ages of 3 and 5 years.

respite care
a service that offers help with child care for parents of children with disabilities to give them a rest.

Rh blood factor
molecules on the surface of the red blood cell. People with this are said to be Rh positive (Rh+). If a mother without the Rh factor (Rh-) conceives a child who inherits Rh+ factor from the father, Rh blood disease may result where the mother's body produces antibodies which attack the red blood cells of subsequent Rh+ babies.

risk factors
environmental causes of disability are considered to be risk factors that increase the possibility of a person being disabled because there is no direct cause and effect relationship.

sexually transmitted diseases (STDs)
diseases of the genital system caused by infections passed through sexual contact.

sheltered workshop
a facility that provides a structured environment for a handicapped person, in which he/she can learn skills; can be either a transitional placement or a permanent arrangement.5

Sickle Cell Anemia
a severe, chronic blood disease that occurs only in those who inherit the abnormal sickle gene from both parents. 6

speech and language pathologist
specialist who treats speech and language disorders and/or delays.

spina bifida
a birth defect damaging the spine and central nervous system. Commonly referred to as "open spine."4

sterilize
to make incapable of producing offspring.

stillbirth
a baby born dead after 28 weeks of pregnancy.4

support services
any service provided to help people with disabilities and their families.

syphilis
a sexually transmitted disease, which can cause congenital disabilities in the child of an infected mother

Tay-Sachs Disease
an autosomal recessive disorder not apparent at birth; diagnosis usually occurs at about 6 -12 months of age. It produces fatal brain damage.

teratogen
external agents which can harm the unborn baby, such as infectious agents, chemicals, or radiation.4

ultrasound
a procedure in which the unborn baby is seen on a video monitor by the use of sonar. Ultrasound is used to detect twins, examine the head and body size and identify some structural defects such as dwarfism.4

visual impairment
a generic term used to include both the blindness and partial vision.

vocational training
programs designed to prepare individuals for employment.

Program Resources

Audio-Visual Materials

A Good Start in Life

(VID GOO) VHS 16 min. 1986

Produced by the Ontario Association for Community Living

A presentation on pr vention of handicaps which covers much of the same ground as Happy Birth Day but in greater detail and is presented in a more adult format. For high school students and also for adults in general information programs.

(John Dolan Library, 1993, page 7.)

And Then Came John

(VID AND) VHS 36 min. 1990

The story of John McGough - from his birth with Down Syndrome thirty years ago - through his rejection and rebirth as an artist, musician, and personality in a Northern California community. Winner of awards at 12 International Film Festivals. Produced by Telesis Productions International and Cultural and Educational Media, Mendocino, CA.

(John Dolan Library, 1993, page 2.)

As I Am

(VID ASI) VHS 20 min. 1990

produced by the Metropolitan Toronto Association for Community Living, Toronto, Ontario.

It is about people with developmental disabilities. These people are given a chance to speak for themselves. They talk about their lives and some of the problems they face. This videotape was produced for high school students, but can help adults too. Such subjects as community living, relationships, disabilities, employment and marriage is talked about. An excellent video for viewing by siblings, youth groups, advocates and parents.

(John Dolan Library, 1993, page 2.)

Baby Blues

C 9190 071 24 min. 1990

Baby Blues, a fast-paced drama made especially for teenage viewers, is a compelling discussion starter on the topics of sex, responsibility and contraception.

(National Film Board of Canada, 1993, page 17)

Bicycle Safety Camp

(120) VHS 20 min

TIPP (1992)

The rules for safe bicycle riding along with demonstration of these rules is provided. The message that bicycle safety can be fun is emphasized using rap music and dance segments. This video is aimed at youth under 13 years of age.

(Saskatchewan Institute on Prevention of Handicaps, 1993, page 23.)

Discussions in Bioethics Compilation

c 0185 131 8 short segments: parts fit 9:3:3

National Film Board (1985)

Who Should Decide? This film deals with the questions which arise from advances in prenatal diagnosis. When a couple is told that their baby will be born with spina bifida, they must decide whether or not to get an abortion.
If You Want a Girl Like Me This film looks at questions surrounding life-prolonging treatment for disabled newborns.

(National Film Board, 1993b, page 27)

Drinking, Smoking and Drugs

(108) VHS 13 min.

March of Dimes (1987)

Discusses the effects of alcohol, tobacco, and drug use during pregnancy in three short segments. Fetal alcohol syndrome, low birthweight and effects of prescription and street drugs , Effective for use with high school students and the general public.

(Saskatchewan Institute on Prevention of Handicaps, 1993, page 18)

Eugene Levy Discovers Home Safety

C 0187 026 42 min.

National Film Board of Canada (1987)

Eugene Levy Discovers Home Safety is a video designed to inform viewers about everyday hazards they may encounter around the home. Over fifty safety tips are revealed through three animated shorts: *The Old Lady's Camping Trip*, *Hot Stuff*, and *Every Dog's Guide to Complete Home Safety*, as well as live action from Eugene Levy.

(National Film Board, 1993b, page 33)

Every Dog's Guide to the Playground

C 9191 122 11 min.

National Film Board of Canada (1991)

In this animated film our hero, Wally, the Safety Dog, continues to suffer a host of injuries as he instructs his master in the rules of playground safety.

(National Film Board of Canada, 1993b, page 34.)

Everyone's Business

10182035 20 min. 48 sec.

National Film Board (1982)

The Churchill Park Green house Cooperative in Moose Jaw, Saskatchewan, is a small produce business, much like any other trying to survive in a deteriorating economy. What makes it special is that eight out of the nine coop members are handicapped, either mentally or physically.

(National Film Board of Canada)

Happy Birth Day

(VID GOO) VHS 13 min.

Produced by the Ontario Association for Community Living.

An audio visual presentation for junior or intermediate High School classes, presents the prevention message in a youthful, positive manner.

(John Dolan Library, 1993, page 7.)

Help Us Grow

(VID HEL) VHS 8.2 min. 1987

This is the promotional awareness production describing the Saskatchewan Association for the Mentally Retarded (now the SACL) and its goal of community living for people who have challenging needs.

(John Dolan Library, 1993, page 8)

Infant Communication

(084) VHS 13 min.

Saskatchewan Institute on Prevention of Handicaps, 1982

Illustrates that human communication begins before the development of language. It gently, but effectively outlines how parents and others who care for infants can help baby communicate effectively. Suggested audience: parents, students.

(Saskatchewan Institute on Prevention of Handicaps, 1993, page 21)

It's Up to Me

(090) VHS 12 min.

March of Dimes. (1984)

This videoaimed at young pregnant women (including teens) stresses the importance of prenatal care in an upbeat way. Primarily directed at an urban audience, it clearly shows haw a pregnant woman's health habits inpact on the outcome of pregnancy. Two young mothers and an older mother share their views. Suggested audience: pregnant teens.

(Saskatchewan Institute on Prevention of Handicaps, 1993, page 15)

Just a Chance

(VID JUS) VHS 27.5 min. 1990

Produced by the Canadian Down Syndrome Society

This videotape starts with the birth of a child with developmental disabilities. This tape is a positive reflection of the development of people with Down Syndrome.

(John Dolan Library, 1993, page 9)

Labeling Blues

(VID LAB) VHS 5 min. 1991

Gregory Hoskins and the Stickpeople do a "rock video" about people who have disabilities. It is good for students in junior high and high school level. Distributed by the Centre for Integrated Education and Community.

(John Dolan Library, 1993, page 9)

Our Family

(VID FAM) VHS 5 min. 1991

A videotape on the life and family of Tom Henke and his daughter, Amanda who has Down Syndrome. Tom Henke is a major league pitcher for the Toronto Blue Jays. Produced by the Canadian Association for Community Living and distributed by the Saskatchewan Association for Community Living

(John Dolan Library, 1993, page 16)

Our Genetic Heritage

(109) VHS 14 min.

March of Dimes (1988)

Explains the basic patterns of inheritance, emphasizing genetic conditions such as PKU, Huntington disease, and cystic fibrosis. Introduces the role of genetic counselling. Suggested audience: Grade 10-12 health, family life, psychology or biology classes; general public.

(Saskatchewan Institute on Prevention of Handicaps, 1993, page 21)

Playing for Keeps

(115) VHS 45 min.

National Film Board of Canada (1990)

Three young teen mothers tell their stories. The physical, psychological and economic realities of the day to day demands and responsibilities of teen parenthood are clearly presented. The film's message : "it asks tat young women think long and hard about the life-long consequences of teenage motherhood."

(Saskatchewan Institute on Prevention of Handicaps, 1993, page 20)

Rockabye

(110) VHS 16 min.

March of Dimes (1990)

Fast paced "trigger" film to stimulate discussion about teen pregnancy and its implications. Contains a series of dramatizations from the teens' viewpoints. Could be used with teen groups, classes, or with adults concerned about teens. Good discussion guide. Thought provoking

(Saskatchewan Institute on Prevention of Handicaps, 1993, page 20)

S.A.C.L. Corporate Tape - What We Are, What We Do

(VID SAC 1990) VHS 15 min.

This is the promotional awareness production describing the Saskatchewan Association for Community Living and its goal of community living for people who have challenging needs.

(John Dolan Library, 1993, page 18)

Smart Hockey With Mike Bossy

(101) VHS 1988

Canadian Sports Spine and Head Injuries Research Centre. Narrated by hockey star Mike Bossy, this video stresses prevention of head, neck, and spine injuries. Suggested audiences: hockey coaches, players, and parents.

(Saskatchewan Institute on Prevention of Handicaps, 1993, page 22.)

Someday I Might Be a Parent

(095) VHS 14 min.

March of Dimes

Using a series of short vignettes, adolescents learn about the effects of nutrition, environmental factors of the fetus and pregnant women. They also learn about the special risks that adolescent pregnancy presents. Suggested audiences: students exploring alcohol use/abuse, family life and lifestyle issues.

(Saskatchewan Institute on Prevention of Handicaps, 1993, page 16)

Something to Celebrate

(086) VHS 25 min.

Seneca (1984)

A docudrama dealing with the issue of drinking during pregnancy. Actors of aboriginal origin portray a real-life scenario. It is a gentle film, creating positive awareness about fetal alcohol syndrome.

(Saskatchewan Institute on Prevention of Handicaps, 1993, page 17)

Sudden Impact

(119) VHS 20 min. 1992

SportSmart Canada

Through interviews, recreations, and discussion, provides hard-hitting information concerning spinal cord injuries incurred during water sports. It also provides information regarding prevention of these injuries. Aimed at youth up to grade 12.

(Saskatchewan Institute on Prevention of Handicaps, 1993, page 23.)

Teen Moms Talking

(121) VHS 13 min.

Blue Sky (1992)

Various issues surrounding teen pregnancy are explored. The reality of having a baby is emphasized through interviews with teen parents. Aimed at teens, but informative for all ages.

(Saskatchewan Institute on Prevention of Handicaps, 1993, page 20)

The Impossible Takes a Little Longer

C 0186 513 46 min.

National Film Board (1986)

An inspiring documentary of how five resourceful, physically disabled women overcame barriers in their personal and work lives. The film emphasizes the importance of patience, resilience and imagination in adapting the regular tasks of life to special needs.

(National Film Board, 1993, page 24)

There's Always Belinda

(VID THE) VHS 15 min. 1989

Produced by Youth Involvement Ontario and the Ontario Association for Community Living. An excellent, upbeat promotion for friendship circles and supporting peers with challenging needs. For showing to youth groups, school classes, community organizations, teachers, and parents.

(John Dolan Library, 1993, page 23)

Toys

(100) VHS 12 min. 1986

Consumer and Corporate Affairs Canada

Discusses the hazardous product regulations for toys. Provides information on selecting toys appropriate for the age and development of the child. Reviews parents' responsibilities in toy selection, supervision and maintenance. Suggested audiences: parents, child care workers, students.

(Saskatchewan Institute on Prevention of Handicaps, 1993, page 22.)

What Friends Are For

(VID WHA) VHS 10 min. 1988

Created by the Youth in Saskatchewan for Community Living Committee.

Through music and pictures, the friendship and interaction between peers is celebrated. The video is used by members of the YSCL committee when speaking to classes in school, other youth groups and organizations about friendship circles and youth involvement.

(John Dolan Library, 1993, page 24)

Print Materials

Each article listed below has a code beside it; this stands for the grade, unit, and lesson for which the material might be used, e.g., 7:3:1 stands for Grade 7, Unit 3, lesson 1.

The Canadian Red Cross Society has a Resource Handbook that lists all their educational programs and resources. This can be obtained from their provincial office or from your local Red Cross office.

Provincial Office
The Canadian Red Cross Society
Saskatchewan Division
Box 1185, 2571 Broad Street
Regina, SK
S4P 3B4
Phone: 352-4601

Choking	poster	$.75 (7:3:1)

The poster provides a diagram on the lifesaving procedure.

Kids Follow Safety Rules	poster	$.50 (7:3:1)
My Boyfriend's Back	poster	$.50 (7:3:1)

This poster documents some of the injuries that can result from diving in unsafe conditions - paralysis, etc.

Rescue Breathing	diagram	$.75 (7:3:1)
Water Safety Program	pamphlet	$1.75/25 (7:3:1)
Anglers and Hunters	pamphlet	free (7:3:1)

Boating Survival		free (7:3:1)
Cold Water Survival		free (7:3:1)
Get Aboard	pamphlet	free (7:3:1)
Hot Water Thin Ice	pamphlet	free (7:3:1)
Rescue Breathing	pamphlet	free (7:3:1)
Safe Boating Guide		free (7:3:1)
Safe Diving		free (7:3:1)
Small Craft Safety	activity sheet	free (7:3:1)
Water and Alcohol	pamphlet	free (7:3:1)

(from the Resource Handbook, The Canadian Red Cross Society)

Many brochures and fact sheets are available from the Saskatchewan Institute on Prevention of Handicaps. They have a resource catalogue available on request from their office.

Saskatchewan Institute on Prevention of Handicaps
Box 81, Royal University Hospital
Saskatoon, SK
S7N 0X0
Phone: 966-2512

#090 Providing a Safe Environment for Children Fact Sheet. (7:3:1)

#560 Bicycle Helmets .. Protect Your Child's Head Now .. And for the Future (7:3:1)

#817 How to Purchase a Bicycle Helmet (7:3:1)

#013 How Your Baby Grows Brochure (9:1:1)(9:1:2)

#091 Fitness for Two Fact Sheet (9:3:2)

#069 Teenage Pregnancy Fact Sheet (9:1:1)(9:3:1)(9:3:2)

#023 What Everyone Should Know About Fetal Alcohol Effects
Brochure (9:1:1)(9:1:2)(9:3:1)(9:3:2)

#044 For Baby's Sake Don't Drink Brochure (9:1:1)(9:1:2)(9:3:1)(9:3:2)

#045 A Healthy Start Brochure (9:1:1)(9:1:2)(9:3:1)(9:3:2)

#050 Fetal Alcohol Syndrome Prevention Facts
Fact Sheet (9:1:1)(9:1:2)(9:3:1)(9:3:2)

#120 Fetal Alcohol Syndrome Resource Kit (9:1:1)(9:1:2)(9:3:1)(9:3:2)

#005 Your Baby Needs a Smoke-Free Home Right From the Start
Brochure (9:1:1)(9:1:2)(9:3:1)(9:3:2)

#066 Smoking and Pregnancy Fact Sheet (9:1:1)(9:1:2)(9:3:1)(9:3:2)

#122 Smoking and Pregnancy Resource Kit (9:1:1)(9:1:2)(9:3:1)(9:3:2)

#043 About Pregnancy and Drugs Brochure (9:1:1)(9:1:2)(9:3:1)(9:3:2)

#068 Drug Abuse and Pregnancy Fact Sheet (9:1:1)(9:1:2)(9:3:1)(9:3:2)

#098 Cocaine Use During Pregnancy Fact Sheet (9:1:1)(9:1:2)(9:3:1)(9:3:2)

#125 Drug Abuse and Pregnancy Resource Kit (9:1:1)(9:1:2)(9:3:1)(9:3:2)

#060 Low Birthweight Information Sheet (9:1:1)(9:1:2)(9:3:1)(9:3:2)

#057 Rubella Information Sheet (9:1:1)(9:3:1)

#094 Chicken Pox During Pregnancy Fact Sheet (9:1:1)(9:1:2)(9:3:1)(9:3:2)

#026 Sexually Transmitted Diseases Brochure (9:1:2)(9:3:2)

#061 Genital Herpes Information Sheet (9:1:2)(9:3:2)

#067 Congenital AIDS Information Sheet (9:1:2)(9:3:2)

#002 Birth Defects: A Brighter Future Brochure (9:1:1)(9:1:2)(9:3:1)(9:3:2)

#040 Genetic Counselling Brochure (9:1:1)(9:3:1)

#041 Genetic Disease: How It Can Affect Your Family
Fact Sheet (9:1:1)(9:3:1)

#051 Tay Sachs Fact Sheet (9:1:1)(9:3:1)(9:3:3)

#053 Cleft lip & Palate Fact Sheet (9:1:1)

#053 Spina Bifida Fact Sheet (9:1:1)

#055 Club Foot Fact Sheet (9:1:1)

#056 PKU Fact Sheet (9:1:1)

#058 Rh Disease Fact Sheet (9:1:1)

#062 Sickle Cell Anemia Fact Sheet (9:1:1)

#079 Amniocentesis Information Sheet (9:3:3)

The March of Dimes has many brochures and fact sheets available. They may send single copies free of charge, but there is a price list available for larger orders. They can be contacted at the address below:

March of Dimes Birth Defects Foundation, Supply Division
1275 Mamaroneck Avenue
White Plains, New York 10805
Phone: (914) 997-4494

#09-165-00	Alcohol & Pregnancy Make the Right Choice (9:1:2)(9:3:2)	$3.00/50
#09-237-00	Dads It's Your Baby Too Pamphlet (9:1:1)(9:1:2)(9:3:1)(9:3:2)	$3.00/50
#09-174-00	Downs Syndrome Information Sheet (9:1:1)(9:3:1)(9:3:3)	$3.50/50

#09-515-00	Eating for Two Nutrition During Pregnancy (9:1:2)(9:3:2)	$3.50/50
#09-219-00	Eating for Two pamphlet (9:1:2)(9:3:2)	$5.00/50
#09-029-00	Making the Right Choices: The Facts About Drugs and Pregnancy (9:1:2)(9:3:2)	$4.00/50
#09-580-00	Men Have Babies Too Pamphlet (9:1:2)(9:3:2)	$5.00/50
#09-417-00	Preconception Planning Information Sheet (9:1:1)(9:3:1)	$3.50/50
#09-431-00	Teen Talk Sex Pamphlet (9:3:3)	$5.00/50

Pamphlets for Copying

The three pamphlets on the following pages have been provided by the Saskatchewan Hearing Aid Plan with permission to copy them. Pages 229 and 230 make one pamphlet, pages 231 and 232 make the second, while the third is comprised of pages 233 and 234. Each pamphlet should be reproduced as a two-sided document 8.5 X 14 paper. (One enlargement step on a photo-copier produces the correct size.) Each paper is then folded twice to complete the pamphlet.

Pamphlets from S.H.A.P.

MUSIC: How It Affects Your Hearing

This page and page 230 go together to form one pamphlet printed on two sides of the paper. Reproduce them on a photocopier using a one level of enlargement.

Prepared by: Saskatchewan Hearing Aid Plan

3. Musicians should take measurements, using a sound level meter, to find out what noise level they are exposed to and the obtain the appropriate ear protection

4. Turn the Walkman down to a moderate level. Others standing by you should not be able to hear the music. If they do, the Walkman is too loud

5. With stereo headphones, the amplifier may produce full power even at medium settings. If you use headphones a lot, watch out for the alarm signals for hearing loss.

6. Move band members away from the high hat cymbal as it is the most damaging component of the drum set

7. ER-15 Earplugs - for guitar, keyboard, violin, viola, and flute

   ER-25 Earplugs - for drums

Published by the Swiss National Accident Insurance Fund

MUSIC

HOW IT AFFECTS YOUR HEARING

Sound level of music (average values)	Exposure time
95-115 dB(A)	Rock concert in the area of the audience
90-105 dB(A)	Rock and jazz music in a rehearsal room
85-100 dB(A)	Discotheque, on the dance floor
80-100 dB(A)	In the rest of the discotheque
80-110 dB(A)	- Walkmans with headphones
85-120 dB(A)	Stereo set with headphones
70-100 dB(A)	Stereo set with loudspeakers

You may tell the sound level in a room from the degree to which normal conversation is possible. If you have a distance of one metre between speaker and listener the following approximate values may be used:

up to 70 dB sound level at 80 dB sound level:	*normal conversation is possible*
at 90 dB sound level:	*voice conversation is possible with raised voice*
at 100 dB sound level	*conversation difficult even when you shout at each other*
from 101 dB sound level up	*conversation only possible at the top of your voice*
	conversation no longer possible

WHAT IS SOUND?

Sound consists of two factors:

Frequency (pitch) - measured in a unit called Hertz (Hz)

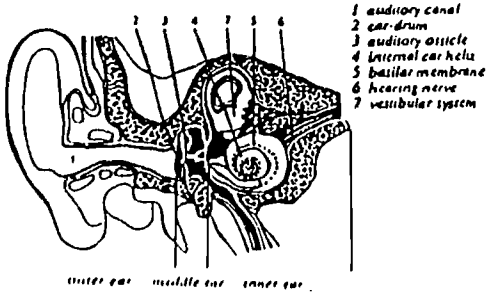
Intensity (loudness) - measure in decibel level (dB)

The human ear can detect a wide range of frequencies - 20Hz to 20,000Hz

The softest level of sound a human ear can detect is 20dB. The pain threshold of the ear is approximately 130 - 140dB

When listening to music under headphones, the small built-in loudspeakers vibrate in response to the music. The number of times the membrane of the loudspeaker moves determines the frequency of the sound.

HOW WE HEAR



Published by the Swiss National Accident Insurance Fund

The eardrum vibrates in response to the sound waves (changes in air pressure) created by a sound source (e.g car horn). This movement is carried to the snail-shaped inner ear (the cochlea) by way of the three small bones (ossicles) in the middle ear.

The inner ear is filled with a fluid and divided along its length by a very thin membrane. Both the liquid and membrane are set in motion. Approximately 20,000 hair-like cells line the membrane and are bent by the motion of the liquid and membrane. This results in electrical signals being sent to the auditory center of the brain along the auditory nerve. These hair cells detect different frequencies depending where they are located along the membrane. High frequencies are detected in the lower end or front of the cochlea and low frequencies at the upper or apical end.

HOW DOES EXCESSIVELY LOUD NOISE DAMAGE THE EAR?

It is possible for a loud, sudden noise close to the ear, such as an explosion, to create a hole in the eardrum.

The damage that is most frequent is to the hair cells in the inner ear. Exposure to extremely loud sound causes them to become less sensitive and are damaged or destroyed

Once these cells are destroyed, they are not replaced Eventually, certain pitches may no longer be heard or must be made much louder to be heard

If exposure to loud music occurs only once in a while (e.g attending a 1 hour concert once a month) the ear has a chance to recover But if you are continually exposed to high levels of music (e.g using the Walkman 3 -5 hours/day or playing in a band every day) the ear never has a chance to fully recover

The loss occurs slowly and without notice at first The high frequencies are the most affected A noise induced hearing loss in these frequencies means you will no longer be able to enjoy high fidelity sound reproductions.

How much damage occurs depends on how loud the sound is and how long your are exposed to it.

In the past ten years, more and more musicians are discovering they have hearing losses and are now wearing ear protection of some form to prevent further damage.

SIGNS OF OVEREXPOSURE TO SOUND

- a 'muffled' sensation
- ringing or buzzing in your ears after exposure
- need to turn music or TV up louder or to adjust the treble for better fidelity of music

HOW TO ENJOY MUSIC MORE SAFELY

1 EAR PROTECTION - Use at rock concerts Ear plugs affect the sound fairly equally at all frequencies so the sound isn't distorted

There are special ear plugs for musicians that are made for different instruments In-ear monitors are available that have mini speakers implanted This eliminates the need for stage monitors It enables a musician to control the loudness of his voice and instruments and balances them in relation to the rest of the band

2 Only go to bars//discotheques where the sound level is comfortable

TYPES OF EAR PROTECTIVE DEVICES

A. PLUGS - disposable or reusable, made of wax, rubber, plastic, or self-expanding foam

B. MUFFS - foam or liquid-filled, can fit over the head, under the chin, behind the head or fastened to the hard hat

C. EARCAPS - muffs fastened to cap with special adaptors

WHICH TYPE IS RIGHT FOR ME?

Which type you should use depends on the level of noise you are exposed to. Comfort must also be taken into account because if it is uncomfortable it won't be worn.

There are two systems that will help you select the appropriate hearing protection.

NRR (NOISE REDUCTION RATING)

NRR values are assigned to ear protection devices and indicate the relative effectiveness with respect to the reduction of noise in dB. Eg. NRR 24 indicates overall noise reduction is 24 dB. However, in the 'real world' the reduction level is up to 50% less than indicated. The Occupational Health and Safety Branch considers 50% of the NRR rating to be the best approximation of the actual effectiveness.

The other system classifies hearing protectors as Class A, B, or C. There is some overlap between the NRR values and Class A and B.

Some manufacturers use this older classification system.

MAXIMUM EQUIVALENT NOISE LEVEL (dB(A))	RECOMMENDED CLASS OF HEARING PROTECTOR
L_{eq} less than 85 dB(A)	No protection required
L_{eq} up to 89 dB(A)	Class C
L_{eq} up to 95 dB(A)	Class B
L_{eq} up to 105 dB(A)	Class A
L_{eq} up to 110 dB(A)	Class A earplug + Class A or Class B earmuff
L_{eq} more than 110 dB(A)	Class A earplug + Class A or Class B earmuff and limited exposure

For work areas in which significant low frequency energy is present, it is recommended that a hearing protector with the suffix 'L' i.e. Class A(L), B(L) be selected.

COTTON BATTING DOESN'T EFFECTIVELY REDUCE NOISE LEVELS AND SHOULDN'T BE USED

SOUND EFFECTS	NOISE LEVEL (dBA)	EFFECTS	EXPOSURE TIME
JET ENGINE	150	THRESHOLD OF PAIN	
SIRENS, BLAST AIR HORN	130	THRESHOLD OF PAIN	WITHOUT EAR PROTECTION
CAR HORN, THUNDERCLAP	120	CAN "FEEL" THE SOUND	100 SECONDS
ROCK MUSIC BAND, PNEUMATIC DRILL	110		1 1/2 MIN
WOODWORK SHOP, GARBAGE TRUCK, HYDRAULIC PRESS	100		15 MIN
LAWNMOWER, MOTORCYCLE, BOILER SHOP	90	INTERFERES	2 1/2 HRS
NOISY RESTAURANT, AVERAGE FACTORY, TRACTOR CAB	80	WITH HEARING SPEECH; ANNOYING	8 HRS
INSIDE A CAR, VACUUM CLEANER	70		
NORMAL SPEECH LEVEL	60		
AIR CONDITIONER	50	NORMAL COMFORTABL LISTENING LEVEL	
AVERAGE HOME	40		
SOFT WHISPER, WATCH TICKING	30	VERY QUIET	
RUSTLING LEAVES	20		
NORMAL BREATHING	10	JUST BARELY AUDIBLE	

NOISE, HEARING LOSS, AND YOU

Prepared by: Saskatchewan Hearing Aid Plan

NOISE, HEARING LOSS, AND YOU

HOW NOISE AFFECTS YOU

Continued and prolonged exposure to high levels of noise can result in permanent hearing loss The effect of noise,not only on the ear, but on the human body in general, depends on loudness (intensity), pitch (frequency) exposure time, age, distance from the source, physical surroundings, and individual sensitivity.

Hair cells located in the inner ear are responsible for detecting various pitches/sounds and transmitting them along the auditory nerve to the brain for decoding. When these hair cells are damaged or destroyed by high levels of noise certain pitches may no longer be heard or must be made much louder to be heard easily.

Once the damage has occurred, the hair cells do not recover and are not replaced.
Noise-induced hearing loss (NIHL) occurs very gradually and subtly. At first, the hearing in the lower pitches is unaffected while the hearing in the high pitches begins to worsen. As exposure to the noise continues, the hearing loss becomes more severe in the high pitches. You can hear but not understand words clearly. Eventually, the hearing loss spreads to the lower pitches as well Words sound garbled or muffled

SIGNS OF NOISE-INDUCED HEARING LOSS

- experience tinnitus i e. ringing or buzzing in your ears
- words sound muffled or garbled
- sounds have to be louder to be heard
- you frequently ask people to repeat themselves
- frequently make wrong and embarrassing replies
- difficulty following conversation in background noise
- need to turn T.V. up louder than others would like it

NIHL can be prevented through hearing conservation measures and proper use of appropriate ear protective devices.

If you suspect you have a hearing loss, first see your doctor or an ENT specialist (treats diseases of the ear, nose, and throat) to determine if the loss can be treated by medical or surgical means If not, see an audiologist for a complete audiological assessment to find out whether or not amplification will be of help to you.
Recent technological developments in hearing aids do benefit most noise-induced hearing losses

HOW DO YOU KNOW IF YOU NEED EAR PROTECTION

Ask yourself these questions

- Do you have ringing in your ears after working for several hours
- Do you have to raise your voice to be heard by someone less than two feet away?
- Are sounds 'muffled' after being exposed to noise for several hours?

If you answer yes to any one of these, dangerous noise levels may be present Your employer should conduct a noise survey and implement a hearing conservation program if necessary.

HEARING CONSERVATION PROGRAM

1. Noise survey of all work areas exposed to high levels of noise.
2. Noise control to reduce hazardous levels (eg quieter machines, noise dampers, sound barriers, rescheduling, etc)
3. Monitoring hearing of employees on a regular basis (should include a pre-employment audiogram)
4. Education program for employees to make them aware of hazards of noise and the need for and proper use of ear protection

EAR PROTECTION

MYTHS

- If you wear ear protection you won't be able to hear and understand speech or warnings

  NO - With less distracting noise, speech and signals are heard more easily

- You won't be able to tell if your machine is operating properly

  WRONG - Only the sound quality changes (which you quickly adjust to) so that any malfunctions will still be noticed

- Wearing ear protection now after all these years won't help.
  WRONG - It will prevent further damage

Your Child's Hearing

This page and page 234 go together to form one pamphlet printed on two sides of the paper. Reproduce them on a photocopier using a one level of enlargement.

SIGNS OF HEARING LOSS IN INFANT

1 Child doesn't startle cry at loud sounds
2 Doesn't look toward sound (e g a speaker, dog barking)
3 Doesn't respond to his or her name or recognize mother's voice
4 Doesn't acknowledge/enjoy noisemakers
5 Doesn't babble and make different sounds, doesn't imitate simple words or sounds
6 Doesn't respond to "bye-bye" or "no"
7 Doesn't awaken at a loud noise
8 Doesn't stop moving and doesn't seem to listen to speech or sound

SIGNS OF HEARING LOSS IN CHILDREN

1 Speech and language problems
2 Poor performance in school (underachieving)
3 Frequently appears unresponsive
4 Often asks for repetition
5 Seems to rely on speaker's face and gestures (visual cues) to understand
6 Frequent earaches/ear infections
7 Commonly mistakes one word for another (e g cat for cap)
8 Complains of not being able to hear well
9 Difficulty in telling where sound is coming from

The above signs don't confirm a hearing loss but rather suggest that the child's hearing should be tested Contact your doctor, public health nurse, or an audiologist

STAGES OF SPEECH AND LANGUAGE DEVELOPMENT

Birth to one month - Will startle to loud sudden sound, your voice comforts baby

3 - 6 months - Makes pleasure sounds (coos and gurgles) and repeats sounds Turns eyes and head to look for sounds

6 - 12 months - Jabbers with rhythm and melody patterns Looks up or turns to sound Responds to name Understands 'no' and 'bye-bye'

1 year - 18 months - Plays with own voice Uses a few single words Names a few objects Points of body parts when asked

18 months - 2 years - Raises pitch of voice of voice to ask questions Uses simple two or three word sentences

2 - 3 years - Has developed 1000 word vocabulary Grammar close to that of an adult Uses complete sentences

YOUR CHILDS' HEARING

Prepared by Saskatchewan Hearing Aid Plan

EAR INFECTIONS

WHAT IS EAR INFECTION?

Middle ear infection, the most common infection, is found behind the eardrum in the middle ear space where the bones of the ear are located and results in fluid filling the space

Most middle ear infections are caused by a virus or bacteria travelling from the nose or throat through the tube that joins the middle ear to the nose and throat (Eustachian tube)

Allergies, colds, sore throats, and upper respiratory infections can lead to middle ear infection.

SIGNS OF EAR INFECTION

1. Fever
2. Fussiness//irritability
3. Pulling on the ears
4. Not alert/inactive
5. Cries when not held
6. Dizziness
7. Vomiting
8. Sore throat
9. Nausea
10. Doesn't hear well

WHO GETS EAR INFECTION

1. Children under six year of age
2. Children with birth defects (such as cleft palate)
3. Children born with skull and facial abnormalities
4. Children born with syndromes (such as Down Syndrome)
5. Children with abnormal immune systems.
6. Children who attend day care (contact with other children).

WHY SHOULD I BE CONCERNED ABOUT AN EAR INFECTION?

HEARING LOSS may result from an untreated ear infection The amount of hearing loss depends on how severe it is The hearing usually returns to normal once the infection is cleared up

If left untreated, the fluid in the middle ear continues to build up. Sounds become muffled and garbled and must be louder to be heard You may find that you have to speak louder for your child to hear

SPEECH AND LANGUAGE PROBLEMS can result from repeated ear infections. A child's first three years (when they are most prone to ear infections) are the most important for learning speech and language Hearing loss caused by repeated infections can interfere with the development of normal speech and language. Therefore, it is important to treat the ear infection as soon as possible.

TREATMENT FOR EAR INFECTION

The doctor may prescribe one or a combination of.

1). decongestants
2). aspirin for pain relief
3) antibiotic

If the antibiotics don't work the child may need to have pressure equalization (PE) tubes. These tubes are inserted into the eardrum to help drain the middle ear fluid and regulate air pressure in the middle ear cavity.

The doctor may refer your child to other specialists such as

1) an audiologist - trained to test children's hearing
2) an ENT specialist - a doctor who specializes in treating the ear, nose, and throat
3) a speech-language pathologist to assess your child's speech and language

HOW TO AVOID EAR INFECTIONS

- Keep your child away from sick children
- Feed your baby when he or she is sitting up - not laying down
- Do not allow your child to use a pacifier after six months of age
- Wean your child from a bottle by the time he or she is one year old Encourage the baby to drink from an infant cup
- Have your child receive a yearly influenza vaccine

(from 'Ounce of Prevention' Lutheran General Health System, Park Ridge, IL)

Programs and Curriculums

Learn Not To Burn Part 3

National Fire Protection Association (1987).

A curriculum guide on fire safety. Designed to be integrated into existing classroom subjects. Three parts: K-2, 3-5, 6-8. Each part contains curriculum, resource book and audio tape of fire safety songs.

(Saskatchewan Institute on Prevention of Handicaps, 1993, page 23.)

Smooth Sailing Into the Next Generation: The Causes and Prevention of Mental Retardation.

Diane Plumridge and Judith Hylton, 1989.

Published by: R&E Publishers,
P.O. Box 2008
Saratoga, California 95070

Single copies cost $19.95 + $2.00 shipping.

Quantity orders 6-25 copies $14.95 each
26 + copies $11.95 each

Shipping $2.00 for the first book and $.25 for each additional copy.

This program is focused on mental disability, but it does a good job of explaining the causes and prevention of birth defects of all kinds. It would be an excellent teaching resource for the Grade 9 module of the P.O.D. program, or for family life classes, or biology classes dealing with human reproduction.

Alcohol and Other Drugs Program

Jo-Anne Crate Thomas & Helen Balanoff

This is a unit of the school health program from the Northwest Territories. It is an excellent program designed for grades 7-9. Lesson 6 of the Grade 8 program is especially pertinent to the P.O.D. Program.

Any community that has a problem with alcohol and/or drugs may wish to take a very close look at this curriculum. It is focused to a certain extent on problems specific to the northern culture, but would be easy to adapt to any area.

The Babysitter Course

The Canadian Red Cross Resource Handbook, page 10

The purpose of *The Babysitter Course* is to teach present and potential babysitters ten years of age and older some of the basics of child care and particularly child safety, and thus to upgrade the standards of babysitting in the community. This course may be taught by any teacher, nurse, or concerned individual.

Teacher manual	$9.00
Student manual	$2.00

Dryland Boating

The Canadian Red Cross Resource Handbook, page 10.

A binder of activities, simulations, and games designed to foster safety practices in boating. Topics covered include safe equipment, attitudes, float plans and emergency preparation. Previous knowledge regarding small craft safety is not required.

$28.00

Organizations

name	Canadian National Institute for the Blind
address	1705 McKercher Dr.
town	Saskatoon
phone	374-4545
area	visual impairment/professional services

name	Community Living Division
address	local branch of Social Services
town	
phone	
area	professional services

name	Early Childhood Intervention Programs
address	local programs in different areas
town	
phone	provincial office 955-3344
area	professional services/birth to age 5

name	People First
address	440 - 2nd Ave. N.
town	Saskatoon
phone	653-0508
area	advocacy/mental retardation

name	Saskatchewan Abilities Council
address	2310 Louise Ave.
town	Saskatoon
phone	374-4448
area	service agency

name	Saskatchewan Association for Community Living
address	3031 Louise Street
town	Saskatoon
phone	955-3344
area	advocacy/ mental retardation

name	Saskatchewan Head Injury Association
address	2310 Louise Street
town	Saskatoon
phone	373-1555
area	advocacy

name	Saskatchewan Hearing Aid Plan
address	122 - 3rd Avenue north
town	Saskatoon
phone	933-5694
area	service agency/ hearing impaired

name	Saskatchewan Institute on Prevention of Handicaps
address	1319 Colony Street
town	Saskatoon
phone	966-2512
area	service agency/advocacy/education

name	Saskatchewan Special Olympics Society
address	510 Cynthia Street
town	Saskatoon
phone	975-0858
area	service agency

name	Saskatoon Society for Autism / H.O.P.E. for Autism
address	202-310 Idylwyld
town	Saskatoon
phone	665-7011
area	professional association/service agency

name	Voice of the Handicapped
address	218 - 28th Street West
town	Saskatoon
phone	934-4645
area	advocacy

Suggested Books for Students

Brown, H. (1976). Yesterday's Child. New York: M. Evans.

Burke, C. & McDaniel, J.B. (1991) A Special Kind of Hero. New York: Doubleday.

Christopher, W. & Christopher, B. (1989) Mixed Blessings. Nashville: Abingdon Press.

Gold, P. (1975). Please Don't Say Hello. New York: Human Services Press.

Hayden, T.L. (1981) Somebody Else's Kids. New York: Putnam & Sons.

Melton, D. (1977). A Boy Called Hopeless. New York: Scholastic Books.

Perske, R. (1984) Show Me No Mercy. Nashville: Abingdon Press.

Schaefer, N. (1982). Does She Know She's There? Toronto: Fitzhenry & Whiteside.

Schwier, K.M. (1990) Speakeasy. Austin, TX: Pro-ED.

Somers-Armstrong, F. (1984). Jeremiah. Winfield, BC: Woodlake Books.

Trainer, M. (1991). Differences in Common. Rockville, MD: Woodline House

Further Reading

The Effects of Disability:

Nagler, M. (Ed.). (1990). Perspectives in Disability. Palo Alto, CA: Health Markets Research.

This book is full of articles dealing with all aspects of disability. It is an excellent resource and a convenient way to obtain an overview of the field without doing extensive individual research.

Featherstone, H. (1980). A Difference in the Family: Life With a Disabled Child. New York: Basic Books.

This is a touching autobiography which explores the effects that having a child with a disability can have on family life and interactions.

The Prevention of Disability:

Abroms, K.I. & Bennett, J.W. (Eds.). (1981). Genetics and Exceptional Children. San Francisco: Jossey-Bass Inc.

Fotheringham, J.B.; Hambley, W.D. & Haddad-Curran, H.W. (1983). Prevention of Intellectual Handicaps. Toronto, ON: The Martin Group.

Plumridge, D. & Hylton, J. (1989). Smooth Sailing Into the Next Generation. Saratoga, CA: R. & E. Publishers.

This is an excellent program on the prevention of mental retardation. Materials would have to be changed to reflect Canadian culture, i.e., the metric system; medicare.

258

Cross-cultural Concerns:

Lynch, E.W. & Hanson, M.J. (1992). Developing Cross-Cultural Competence. Baltimore: Paul H. Brookes.

An excellent book for anyone working with people of different ethnic origins. It includes many of the common cultural groups in the United States. It must be noted that there are many different cultures which can be classified as Native American, and they do not necessarily resemble each other.

Child Development:

Santrock, J.W. & Yussen, S.R. (1989). Child Development: An Introduction. Dubuque, IA: Wm. C. Brown.

This is a comprehensive text which covers child development from conception to adulthood.

Alcohol and Drug Abuse:

Thomas, J.C. & Balanoff, H. (1987) Northwest Territories Alcohol and Other Drugs Program. NWT: author.

This is an excellent program for any community that has a problem with drug and alcohol abuse. It would need some adaptation to reflect the situation in Saskatchewan.

What do you know about disabilities?

Disabilities affect the emotional, social, and economic life of many people. The family and friends of a person with disabilities are affected also. Many people with disabilities require support services to improve their quality of life. These essential services are expensive. For both humanitarian reasons, and economic ones, the prevention of disabilities is important to our society. What do you know about disabilities and disability prevention?

Part One: Read the following descriptions of disabilities. If the disability could have been prevented briefly explain how, and tell whose responsibility it was to perform the prevention. If the disability could not have been prevented, briefly tell why not.

1. A teenager is paralyzed from a neck injury when he was checked from behind in a hockey game.

2. A girl is born with Down syndrome.

3. A man is confined to a wheelchair because he permanently lost his ability to balance after he had a stroke.

4. A teenager has suffered a hearing loss from habitually listening to loud music on her walkman while she was bicycling.

5. A boy comes to school with poor language skills. The psychologist concludes this is due to a lack of language and social interaction.

Part Two: Choose any three of the following questions and answer them in expanded point form. Each answer should be less than a page long.

1. Name three important things to do when you are looking after a small child. Explain why they are important.

2. What can parents do to increase their chances of having a healthy child? Explain things they can do both before conception and during pregnancy.

3. What can you do to reduce your chances of becoming disabled?

4. Explain how the people who look after a child can help prevent that child from becoming disabled.

5. a) What are genetics?

   b) How can genetic counselling help prevent disability?

Part Three: Short answer questions.

1. Match:

fetus	something that increases one's chances of disability.
birth defect	restricted ability to lead a normal life.
teratogen	unborn child from 8 weeks of development to birth.
preconception	abnormality present at birth.
disability	external agent which can harm an unborn child.
risk factor	before a baby is conceived.

2. True or False.

T F Alcohol can create birth defects.

T F Someone who is visually impaired could be blind, or just have limited vision.

T F All people with disabilities will need special vocational training.

T F People with disabilities are all mentally retarded.

T F Venereal disease can cause disability in a infant born to an infected mother.

T F I was born healthy, so I can never have a disability.

T F Reading to children can help prevent disability.

T F Men can help prevent disabilities in their unborn child.

T F Injuries are the most common cause of disability among teens.

T F Most disabilities can't be prevented.

3. List three things in each category that YOU can do to prevent disability.

for yourself, now **for another person, now** **for your baby, eventually**

Answer Key

Answers page 43

a) not being able to do, in the usual way, things people normally do.

b) any		
c) no	d) 0-2	e) 3
yes	10-16	4
yes	anytime	1
no	0-2	2
no	17+; 10-16	
yes	prenatal or 17+	
yes	anytime	
no		

Answers page 51

4) T; F; T; F; T; F

Answers page 108

a) 2		
b) any		
c) yes	d) 0-2	e) 4
no	2-9, 10-16, 17+	1
no	17+	2
yes	17+	2
no	prenatal	
no	2-9, 10-16, 17+	
yes	0-2, 2-9, 10-16, 17+	
no		

Answers page 122

John: Preventable, if mother had not consumed alcohol during pregnancy.

Angela: Preventable: her disability is the outcome of poverty, provision of basic needs is required.

Jennie: Not preventable. This is due to a chromosomal error. The only possible prevention is the abortion of an affected fetus.

Rick: This is an inherited defect and is not preventable.

Sara: Preventable: She should have followed the water safety rules.

Bill: Preventable: pregnant women should take only drugs prescribed by her doctor.

Faye: Non-preventable at the time. Polio is now prevented by immunization.

Eric and Sam: Preventable. "Sniffing" is a voluntary risk.

Helen: Preventable, if the mother is immunized.

Peter: Preventable, or at least, controllable, if the child receives proper nurturance.

Answers page 123

Infant	floppy	physiotherapist
	developmental delay	early interventionist
	health problems	medical specialists
2-5	language delay	speech and language pathologist
	developmental delay	early interventionist
	motor delay	physiotherapist
	fine motor delay	occupational therapist
	balance problems	occupational therapist
	ear infections	medical specialist
	possible hearing loss	audiologist
	psychological assessment	early childhood psychologist
5-13	slow to learn	special educational adaptations
13-21	slow to learn	vocational training program
		adaptive skills program
		independent living program
adult	slow to learn	job support
		supported living program

Answers for page 128

1 year; 3 years (or older); 2 years; 4 years; 5 years; 3 months; 6 months

Answers for page 136

1. a) delayed - skill is appropriate for a child of 2 years
   b) not delayed
   c) not delayed
   d) delayed - children should use their first words at about one year of age.
   e) not delayed
   f) delayed - this behavior is appropriate for a child of 2 to 2 1/2 years.
   g) delayed - this skill is appropriate for a baby of approximately 6-9months.
   h) not delayed
2. pediatrician - diagnose, reassure
   public health nurse - screen, reassure, educate about child development & parenting
   early childhood intervention - advise, provide programming if necessary
   early childhood paychologist - assess for developmental delay
3. 2; 3; 7; 4; 6; 3; 1; 5
4. expose them to all sorts of language experiences: talk, sing, recite poetry & rhymes.

Answers for page 168

a) 2

b) any

c) yes	d) 0-2, 2-9, 10-16	e) 4
no	anytime	3
yes	prenatal	1
no	17+, or 10-16, 17+	4
yes	2-9, 10-16, 17+	
no	anytime	
yes	0-2, 2-9, 10-16, 17+	

	+ visible - invisible	+ remediable - not remediable	kind of impairment
Cerebral Palsy	+	+ - intervention	physical or both mental and physical
Cleft lip and / or palate	+	+	physical
Club foot	+	+	physical
Cystic fibrosis	-	+ -	physical
Down syndrome	+	-	mental &/or physical
Dwarfing	+	+ -	physical
Phenylketonuria	-	+	mental if untreated
Sickle Cell Anemia	-	+ -	physical
Spina bifida	+	+ -	physical or both

Answers for page 183

1. unborn baby in the earliest stages of development (2-8 weeks approximately).
2. unborn baby from 8 weeks until birth.
3. during the embryonic period due to rapid structural development.
4. 4; 1; 5; 3; 2

Program Evaluation

This program was developed in the hope that it would be used and valued by classroom teachers. If you have used the program, or any of the materials, I would be interested in hearing from you. Any comments or suggestions would be most welcome. Please contact me at the following address:

F. Lalonde,

P.O. Box 839,

Birch Hills, Sask.

S0J 0G0

How did you feel about the lessons?

Were they well organized?

Were the suggested activities appropriate?

How did you feel about the materials for the modules?

Were they appropriate for the grade level?

Were they practical and useful?

How did you feel about the program resources provided?

Were they useful to you?

If so, which sections were most useful?

Which sections needed improvement?

What did you think was valuable about the program?

Would you use it again? Why?