Adolescent Perception Of Fun In Learning Decision Making Skills

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Abstract

This qualitative research project examined the relevance of fun, as perceived by thirteen and fourteen year-old male and female grade eight studentts, in learning about decision making. The students were taught about decision making using three methods: direct teaching of the Look, Think, Decide model for decision making; the 18-disc decision making game; and through role play. A questionnaire was used to gather information about whether the students were more likely to recall and use a decision making process if it was experienced as fun. The Look, Think Decide model was identified as the most effective method in helping adolescents learn about making decisions. The majority of students selected learning about decision making through role play as being most fun. Information collected suggests that fun is not the most relevant factor to consider when choosing the most effective strategy for teaching grade eight adolescent students about decision making.

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Introduction

I am a great believer in the power of fun. When we perceive an event or activity as fun, our complicated world becomes simpler, learning feels easy, and challenges are possible (Hill, 2001). Through this orientation to the possible, one becomes capable of exploring or imagining a range of potential futures (Singer, 1990). The selection of one future path as being superior over another is part of a decision-making process that permeates our daily activities. This decision making process begins with choice. From the moment we wake up and decide what kind of mood we are in, to the final choice we make of whether or not to floss our teeth at night, we are all making decisions, all the time (James, 2002). Each choice we make has a related consequence and many experts believe that children need to see the relationship between what they choose to do and the consequences of that choice before they learn self-discipline (Langlois, 1999). Providing children with choices, even small ones, demonstrates respect for them and confirms the belief that they are able to be responsible for themselves and their decisions (Orlick, 1982). As we grow older this personal responsibility gets more complicated as many of our decisions increase in complexity.

The British Columbia Ministry of Education recognizes this complexity by incorporating decision making and problem solving into their new Health and Career Education 8 resource (Ministry of Education, 2005). One goal of this curriculum specifies that "students will become informed decision makers, able to understand the effects of their choices on themselves and others." The intent of the curriculum is to provide students with the knowledge, skills, and attitudes that will assist them in making informed decisions related to their health, their education, and their future careers. It is worth noting that,

although decision making constitutes only one of six curricular aspects of this program, it is intended that decision making skills are applied and practiced within each of the content areas.

One prescribed learning outcome of this resource proposes that youth learn a variety of strategies for making healthy choices. The resource provides a general overview of the steps involved in making choices or decisions. However, it also suggests individual teachers determine the various strategies to use in teaching students about making decisions. Ideally, the choice of strategy considers student learning needs and optimizes student learning abilities (Gurian & Ballew, 2003).

To understand the learning preferences of this age group, the literature review defines adolescence and looks at the difficulty adolescents may have in making rational decisions (Siegler, 1997; Wallis, 2004). Along with this difficulty in making decisions is a natural tendency to experiment and take risks (Langlois, 1999; White, 2004). Decision making is examined from this adolescent perspective and in consideration of where they might access support with making decisions (Bednar & Fisher, 2003; Ungar, 2000). Along with provision of support, Drummond (2001) and Jensen (1998) encourage considering the relevance of emotion as it pertains to the process of adolescent decision making. Many decision making models exist and a few are compared in the literature review. The comparison explores these common elements: use of an acronym; presentation of a clear process for decision making; and recognition of a possible element of creativity within the decision making process (Giangreco et al., 2002; Harper & Dale, 2003; James, 2002; Torrance & Torrance, 1978). Furness (1976) and Hawley (1975) advocate for using role play as being relevant and fun for teaching the process of decision making. The literature

review examines this relevance and concludes with a discussion about the importance of the element of fun in learning (Hill, 2001).

If, as Hill suggests, fun is an important element of learning, then there is the problem of determining how to incorporate fun into teaching the decision making process. Also, will students effectively learn to make good decisions through a process they perceive as fun? Fun is considered in the choice of strategies used for teaching decision making to the grade eight students participating in this project. The three strategies used are the Look, Think, Decide decision making process (Harper & Dale, 2003), role play, and the 18 Disc Decision Making game (Lewis, 2005). The Look, Think, Decide process is a formal decision making model with specific criteria to follow for making decisions. *Look* asks for a clear definition of the problem. *Think* lists all the possible choices and potential physical, emotional, social and/or intellectual consequences or benefits for each. *Decide* assesses the choices for one with the most positive and least negative results. This is similar to role play which presents a scenario also requiring a decision with the most positive and least negative results. The 18 Disc Decision Making game aims to encourage decision making at various points on a continuum of any decision making scenario. The game involves two players taking turns to remove 18 discs from the table. Each player can remove only one or two discs at each turn. The player removing the last disc(s) from the table, loses. Throughout the game each player must make decisions about whether to remove one or two discs based on the number of discs remaining. These strategies and the procedure for their delivery are described in detail in the methodology section of this project. The results section provides the details of how students responded to these strategies.

This project examines this research question: "Will grade eight, adolescent students

be more likely to recall, and adopt for use, a decision making strategy perceived as fun?" The project explores the qualities inherent in each of the three decision making strategies and attempts to determine whether the element of fun factors into the likelihood of students preferring to use one decision making strategy over another. These additional questions will guide the focus of this project: Will grade eight students identify role play and game play as being fun? Will these students also view role play and game play as effective in teaching them about decision making? While the data and results acquired in this project aim to answer the specified research questions, they also reveal project limitations which segue into recommendations for future research.

The rationale for assessing the relevance of fun in teaching decision making relates to the effectiveness of chosen teaching strategies. If adolescent learners are more likely to be engaged and learn a process for making positive decisions when they are having fun, then it seems logical for their teachers to include the element of fun when teaching decision making strategies.

We are free up to the point of choice,

then the choice controls the chooser.

Mary Crowley (Lewis, 1998, p 28)

Literature Review

Adolescence

"Adolescence" defines the developmental journey that transforms a child to an adult (Siegler, 1997). Siegler refers to adolescence as the "psychological space" between what is considered childhood and adult life; approximately the time between ages twelve to nineteen. It is a time of rapid growth and change. Carrell (1993) and Langlois (1999) describe the changes and developmental tasks faced by the adolescent as being as profound as the changes in the first five years of life. Additionally, Carrell's description of this change draws a parallel between "the terrible twos" and "the terrible teens." More specifically, adolescent change may be described through both psychological and physiological markers (Siegler).

Physiological changes begin with the onset of puberty, when the release of growth and sex hormones is triggered by the central nervous system (Langlois, 1999). Pubertal changes may begin as early as age eight and continue for many years, possibly extending even into the twenties or thirties (Siegler, 1997). Within a span of approximately three to six years (Jaffe, 1998) girls and boys will experience a "growth spurt" whereby genetic inheritance, mediated by nutrition and physical exercise, will determine their adult body type, height and weight (Langlois). Typically, gradual growth continues throughout the teen years and sometimes into the early twenties (Jaffe; Langlois). In addition to the increase in height and weight, bodily changes which support the reproductive process are also occuring as boys and girl mature sexually (Jaffe). While my description of this developmental process may seem to indicate that boys and girls progress through in concert, this is certainly not the case. The age of onset of puberty, for both boys and girls, as well as the

duration, occurs on an individual basis, thus creating an individual experience for each adolescent (Moore, 1999; Siegler, 1997). With bodies that are changing and unpredictable, many adolescents struggle with their developing sexuality and its expression (Mitchell, 1992). In her article on sexuality in adolescence, Moore elaborates on the specific details of this struggle and suggests that coping with sexuality is a central task of the adolescent transition to adulthood. She goes on to review several cross-cultural studies which suggest a variety of factors influencing the efficacy of coping for an adolescent. Some of these factors include societal and cultural norms, peer pressure, parental expectations, homosexual attraction, and even menstruation. Several aspects of successful coping, Moore states, hinge on the adolescent's ability to make personal decisions about their sexual expression.

The psychological expression of adolescence, also individualistic, is described by Siegler (1997) and Wallis (2004) as unpredictable and erratic. They characterize the journey through adolescence as like being on an emotional rollercoaster with many ups and downs. The main purpose of this journey, as first formulated by Erik Erikson, is the development and formation of a coherent self-identity (Larsen & Larsen, 2004). The coherence comes from knowing who you are and how you fit into the rest of society. Finding this fit begins with a need to separate from parental control and establish individuality through experiencing and developing a personal identity. Inherent in the concept of personal identity is the task of developing greater personal autonomy and maturity (Rollin et al., 2000). Growth of maturity and autonomy is often associated with increased independence from parents, responsibility for self and self-control. Siegler separates the tasks of adolescent growth into five categories or tasks.

The first task she identifies as *separating from old ties.* The separation she refers to

is away from parental influence and control. Jaffe (1999) expresses this separation as being a combination of the adolescent pushing for autonomy and the parent(s) gradually relinquishing their role as protector and nurturer. He uses a direct quote from an adolescent to illustrate the nature of this separation: "Just leave me alone and help me." Adolescents push to become independent but are often still reliant on parental support when faced with tough decisions (Jaffe).

Siegler's (1997) second task of adolescent growth, *creating new support attachments* is part of their expanding independence and reduced dependence on parents and family. As the adolescent's world view expands, a fierce need to belong to their peer group emerges (Giannetti & Sagarese, 2001). Even more important than their sense of self is the need to be accepted by their peers. Their friends are their flattering mirrors (Mitchell, 1992) who confirm their sociability and provide them with a group identity. According to Siegler, the attachments made within their social groups will teach adolescents about relationships and commitments. Langlois (1999) states that adolescents want close friends with whom they can share their fears, hope, dreams and secrets; who will provide encouragement and reassurance if they fail, will stand by them against any personal attacks and will not betray their confidences. Above all, loyalty seems to be one of the more important characteristics of friendships.

Establishing a mature sexual identity and a mature sexual life characterizes the third developmental task described by Siegler (1997). The idea of self as a sexual being, Siegler says, slowly develops, throughout adolescence, into a certain sexual identity. There is a possibility that media today exerts a powerful influence on sexual identity. Jaffe (1999) points out that sexual content often predominates television programming and presents a

smorgasbord of ideas related to sexuality. He describes other possible influences on sexual identity as being cultural and family values, pressure from peers, and adolescents using sex as a replacement for other emotional needs such as loneliness. Despite outside influences, sexual experimentation at this stage becomes a potent source of knowledge helping to satisfy the formation of sexual identity. Siegler reports this experimentation as not usually being accompanied by deep emotional feelings, but rather as conducted through curiosity or challenge. Through time and practice, the adolescent learns to integrate their physical capacity with emotional depth within a relationship.

Siegler's (1997) fourth identified task of adolescence consists of *formulating new ideas and new ideals.* For many adolescents, establishing new ideas starts with putting physical distance between them and their childhood identity as they work to consolidate a new persona. Both Siegler and Langlois (1999) describe the physical distancing as an increased need for privacy and a decreased interest in family activities. Langlois additionally indicates that the decreased interest in family activities often accompanies an increased fascination with peer interactions. As parental values are questioned, there is often an increase in family conflict as adolescents show interest in experimenting with new behaviours, ideas, and beliefs (Langlois; Mitchell, 1992; Siegler). Siegler explains the adolescent need to challenge the status quo set by parents as a necessary component in helping them to consolidate their independent characters. Langlois makes a point of clarification about the importance of parents maintaining a connection with their adolescents throughout any conflict or challenge. She points out that most adolescents arrive at their new ideals through incorporating new ideas and revising old beliefs. Through this process of incorporation they come to Siegler's (1997) fifth task of adolescence, *consolidating*

character. This character, Siegler states, reflects their beliefs and values as it influences the many decisions they will make.

The flood of hormones previously mentioned as influencing physiological adolescent development has immense influence on psychological development as well (Langlois, 1999). Both Langlois and Siegler (1997) give recognition to the role of emotion in adolescent developmental tasks. According to Langlois, Thompson (2005) and Wallis (2004), the emotional system of an adolescent is immature and may be characterized by extreme mood swings. These emotional highs and lows, the researchers state, indicate the development of more independent judgement as the adolescent child's brain matures. Recent brain research using high-powered magnetic resonance imaging (MRI) has helped to clarify the construct of an adolescent mind set (Wallis). Wallis explains how, prior to MRI studies, most scientists believed the human brain had completed its development by age twelve. MRI research now proves that the brain of an adolescent is far from mature, with both white and gray matter undergoing changes and refinements (Langlois; Wallis). According to the researchers, these changes, in concert with the surge of hormones, may explain many behaviors typically associated with adolescence such as the emotional outbursts, reckless risk taking and sensation seeking. The parts of the brain responsible for *executive functions* - planning, setting priorities, organization, impulse control and decision making - are still developing and these researchers feel this is reflected in many behaviors associated with adolescence.

> *Adolescents may be, almost simultaneously, overconfident and riddled with fear. They are afraid of their overpowering feelings, of losing control, of helplessness, of failure. Sometimes they act bold, to counteract their imperious yearnings to remain*

children. They are impulsive, impetuous, moody, disagreeable, overdemanding, underappreciative. If you don't understand them, remember, they don't understand themselves most of the time.

Stella Chess; Jane Whitbread (1996).

Decision Making

Much of what is written about teaching children to make decisions and solve problems advises parents to begin giving children choices and responsibilities when they are young (Langlois, 1999; Severe, 2000; Wooding, 2003). The minor consequences of choosing a shirt in a certain colour, or ordering a new flavour of pizza help to prepare the child for dealing with the consequences of more difficult decisions as they get older and enter adolescence. Difficult decisions may arise for adolescents if they begin to experiment with risky behaviors (Werner-Wilson, 2000). They may not see the same types of behaviors as risky as do adults (Rolison & Scherman, 2002). Many teens have difficulty understanding risk in the abstract, and they may have an unshakeable belief in their own invincibility (Langlois). An inaccurate assessment of risk associated with an activity may then lead to faulty decision-making around that event. Adults tend to rely heavily on past experience in making judgements about levels of risk whereas Siegler (1997) suggests that teens tend to live more in the present. This present focus, says Siegler, compromises their ability to make decisions as they deal with factors such as pressure from peers, lack of information, unreliable information, lack of self-confidence, and internal or external conflicts. The resulting behaviors may be reckless, impulsive or dangerous. Langlois and White (2004) feel that behaviors such as these are all part of an adolescent's natural tendency to experiment and take risks. They link this "risk taking tendency" with an

intense desire to fit in with their peers, and a lack of judgement and self control. Mann and Friedman (1999) elaborate on how deficits in judgement might impact adolescent decision making around difficult decisions. They describe the following characteristics of difficult decisions: confusion about implications of one choice over others; conflicting advice from people with different viewpoints and perhaps with vested interests; pressure to make a firm decision; the consequence of having to admit to, and possibly apologize for, a poor decision; dealing with criticism from others who might be disappointed with the choice made; being responsible for how the choice impacts others; and defending difficult decisions. They suggest that maneuvering through these characteristics of difficult decisions requires some ability to make judgements. Bednar and Fisher (2003) and Ungar (2000) indicate, through their research, an adolescent tendency to reference peers, parents and other adults for guidance and support around judgements regarding decision making. They found that, during early adolescence, peers were most often referred to for help with making short-term, day-to-day decisions, mostly concerning social and friendship situations. Their findings indicated that adolescents tended to trust parental judgement on decisions that were more long-term and concerning values and ethics. Other adults outside the family, say Bednar and Fisher, were more often referenced as expert sources for informational decisions. Reliance on others gradually diminishes as adolescents approach young adulthood and assume more responsibility for all types of decisions (Smetana, Campione-Barr & Daddis, 2004).

A further consideration is the role of emotion in adolescent decision making. Wallis (2004, p) references Dr. R. Dahl (2004), who states that "adolescents tend to seek out situations where they can allow their emotions and passions to run wild - they are actively

looking for experiences to create intense feelings." Drummond (2001) and Jensen (1998) intimate that most decisions are driven by emotion. Jensen equates emotion with the reasoning behind decisions and claims that emotions help to speed up the decision making process as we base decisions on feelings. It is our values, according to Jensen, that shape our emotional or feeling states and influence the meanings we attribute to people, objects and events. As an example of this, Jensen describes how possessing a value of honesty could cause one to feel badly when deciding to behave dishonestly. The more intensely we feel our values, the more meaning we attach to emotionally laden events. Jensen refers to brain research which reveals that emotional events are processed preferentially and are more likely to be remembered since emotions have been shown to have their own memory pathways in the brain. The extreme emotionality of adolescence is well documented (Jaffe, 1998; Langlois, 1999; Siegler, 1997; Wallis, 2004; Wooding, 2003). According to Wallis, the flood of hormones occurring in adolescence serves to create intense feelings and promote exploration and sensation seeking. She describes how adolescents look for, or attempt to create, emotional experiences invoking intense feelings. In what seems like contradictory development, Wallis and Langlois describe how the last part of the adolescent brain to "grow up" is the part responsible for decision making. This apparent contradiction seems to indicate a logical rationale for teaching adolescents how to make decisions.

Learning how to make decisions can help to reduce errors and develop the key skills of critical thinking, self-confidence and assertiveness leading to healthy and positive adolescent development and learning (Harper & Dale, 2003). Confidence with decision making also helps to alleviate depressive symptoms and much of the stress associated with tough choices (Okwumabua, Wong & Duryea, 2003; Rollin et al., 2000). Building this

confidence begins when discipline and responsibility are implemented by parents in an attempt to instill self-discipline (Friel & Friel, 1999; Langlois, 1999; Severe, 2000; Wooding, 2003). Although Wooding contends that most teens recognize the value of responsibilities and discipline, they do not always reflect this in their actions. In an incongruous attempt to become more independent, many shirk responsibility and rebel against discipline. They seem unable to connect imposed guidelines as helpful in building the self-discipline that will eventually help them with decision-making. Okwumabua et al. (2003) call attention to the idea that the ability to make positive decisions contributes to enhanced levels of self-esteem and mental health. Increasing decision making competence, suggest these researchers and Rollin et al., is key to improving the ability to make effective and positive decisions, resulting in more confidence for the adolescent.

Drummond (2001) contends that choosing whatever course of action promises long-term, maximum benefit for all involved is an effective approach to decision making. As decisions vary in complexity, the most beneficial choice may not immediately be clear and one is left to rely on imagination to provide a potential picture of end results. Although an adolescent imagination draws on limited past experience, there is opportunity to use peers, parents and other adults as sources of information (Bednar & Fisher, 2003). Reliance on others gradually diminishes as adolescents approach young adulthood, assuming more responsibility for all types of decisions (Smetana et al.,2004). According to Sizer and Sizer (1999), adolescents consistently show that they are able to identify and make effective decisions. The process they follow to make their decisions may mirror an established decision making model or may use certain elements of an established model.

Many models for teaching decision making have been formulated (Giangreco et al.,

2002; Harper & Dale, 2003; James, 2002; Torrance & Torrance, 1978). Comparison of some of these models highlights similarities between them. One example of a similarity is the use of acronyms for the name of the strategy (Drug Abuse Resistance Education [D.A.R.E.],1996; Harper & Dale; 2003). Remembering the acronym helps the user to recall the steps in the decision making process. James (2002) promotes the acronym of IDEAL: Identify the problem; Describe possible solutions or alternatives; Evaluate the ideas; Act out a plan; Learn for the future. The D.A.R.E. program uses its name as the acronym for making decisions against drug abuse: define problem; assess situation; respond to people; evaluate myself. The LTD model used in this project stands for: Look, Think, Decide (Harper & Dale).

A second similarity between many decision making models is a clear process for making decisions. This process usually includes a step for clearly identifying and defining the problem or decision; a step for evaluating ideas and assessing pros and cons; and a final step for choosing the best possible decision (D.A.R.E., 1996; Giangreco et al., 2002; Harper & Dale, 2003; James, 2002; Torrance & Torrance, 1978). Giangreco et al. recognize a third similarity between models for decision making. They suggest there is an element of creativity within each decision making process. This sentiment is echoed by Hammond, Keeney & Raiffa, 1999 and by Torrance & Torrance (1978) as they recognize the role of flexible thinking in working through the elements of making decisions.

> *Problem solving means weeding out all the things that don't work until you find something that does. Mistakes need not be failures, they can be steps toward finding solutions.*
>
> *Barbara A. Lewis* (1998, p 184)

Role Play

Blatner (2002) calls attention to flexibility of thought in the activity of role play. He advocates for the use of role play as a tool for solving emotional problems. Role play, he states, helps to build a deeper understanding of situations through an experiential type of learning. As a role is played, Blatner contends, there is a development of empathy for the experience of another person. Taking on the role of another person offers an expanded capacity for viewing a situation and imagining actions from a different point of view (Leff, Thousand, Nevin & Quiocho (2002). Ladousse (1987) emphasizes "play" in her definition of role play. She equates the play component to an indication that, with role play, students bring invention and playfulness to a safe environment. Additionally, Ladousse states that the use of role play indicates that participants are experimenting with what they know of the world and learning about how to interact with others in a relatively risk free environment. It is the interaction with others that appeals to adolescents and their need to form peer attachments (Langlois, 1999; Neufeld & Mate, 2004). For Ladousse the appeal comes in the descriptors: simple, brief and flexible, which she uses in reference to role play. Schaefer (1993) and Kottman (2001) both recognize role play as a valuable venue for enabling youth to acquire new behaviors through practicing what it might feel like to behave a certain way, interact with others, and constructively solve interpersonal problems. Furness (1976) echoes this use of role play for practicing "real life" behaviors and for offering the advantage of integrating intellectual, motor, social and emotional skills for problem solving. She emphasizes that role play incorporates feelings and examines values - both qualities which factor into adolescent decision making (Jensen, 1998). Hawley (1975) directs the main focus of his book to the link between role play and values and comments on how role play

spotlights human interaction and the values implicit in behaviors. He notes that the involvement of each individual playing a role, as well as each observer, will be unique in what is observed and discovered. For Hawley, role play is a common and natural human activity offering many benefits, including a means to make decisions, seek alternatives and examine consequences. As an additional benefit, an assigned role provides an element of safety while allowing enough freedom for creative expression (Langlois; Neufeld & Mate; Siegler, 1997). Hawley alludes to this creativity as he describes how both observer and participant are helped in making decisions through the individual perspective they bring to the experience as they relate to the role being played. Individual perspective, states Hawley, is based on the values one references.

In addition to clarifying personal values, Hawley (1975), identifies how role play helps youth realize the consequences of their decisions. He feels that the effects of one's choices become more visually apparent through role play, thus creating a greater awareness of consequences. It is through experiencing the consequences of our actions, suggests Coleman (1971), that we learn best. Using role play also allows us to "piggy-back" on the learning of others as our observations of their choices expands our own decision making options (Furness, 1976; Hawley). Hawley also mentions how role play may help individuals identify factors which might influence their decision making - factors such as peer pressure or cultural and family expectations.

Finally, it is the expectation of fun, according to Furness (1976) and Ladousse (1987), considered as most influential in support for the use of role play. Both researchers refer to this element of fun and Furness describes the atmosphere in role play as being friendly, relaxed and filled with fun. Indeed, many might associate the word *play* in "role

play" with an implication that fun is certainly a component of this activity. Although Hellendoorn et al. (1994) stress the fact that play is not always fun, they also, along with Christie (1994) and Schaefer (1993) describe the pleasure of play.

All the world is a stage, and all the men and women merely players.

They have their exits and entrances; each man in his time plays many parts.

William Shakespeare (Wells & Taylor, 1998, p 638)

Play / Fun

Ackerman (1999) suggests that our brain's favorite way of learning and maneuvering is through play, typically approached with enthusiasm. Singer (1990) and Christie (1994) make note of the positive emotions of joy, surprise and laughter, consistently evident in play. Children play because it is fun; they usually do not need to be bribed to play, says Schaefer (1993). Rather, one chooses to play say Ackerman and Christie and there is an implied freedom with choice. That freedom is also extended through knowing that play is not real and that one's actions determine the outcome of the play says Mook (1994). Bruner, Jolly and Sylva (1976) indicate there is a "low risk" nature associated with play and this also helps to facilitate that freedom. In another article, Sylva, Bruner and Genova (1974) describe how the risk of failure seems reduced in play. Perhaps this feeling of reduced risk can be attributed to the "practice theory" of play, advanced by Dutch philosopher Karl Groos (1901) when he stated that play gives children the opportunity to practice and develop skills needed for the future (Schaefer). Sylva et al. echo this sentiment in stating that play simulates non-play sequences. They feel that players are invited into possibilities inherent in things and events. One possibility suggested by Coleman (1967) is that play has an attention-focusing quality. He sees game play

specifically as an effective means of teaching students about consequences for their actions. Game play, characterized by rules informing players about roles, limits and expectations for actions, develops naturally as a tool for dealing with real problems (Schaefer & Reid, 1986). Problem-solving or strategy games provide players with opportunities to minimize consequences of their actions and to try behavior combinations that might never be tried in reality (Cattanach, 1992). Many of these games depend on cognitive skills, logical decision making, and involve varying degrees of complexity (Schaefer & Reid). Most importantly, they retain the basic game element of pleasure. Much of this pleasure, say Schaefer and Reid, is derived from the social aspect of game play, where, to play effectively, players must agree on rules, fair play, taking turns, and graciously winning or losing. Their agreement creates an environment which each player feels is in their control and still allows them to express themselves while interacting socially with peers (Landreth, 1993; Schaefer & Reid). This sense of personal control enables the players to solve many problems and helps them learn to make decisions for themselves (Orlick, 1982). Coleman feels that when a game simulates aspects of a student's present or future life, they begin to see how their future depends on their present actions and gives meaning to them. In other words, the possible impact of their decisions becomes much more apparent.

Role play, says Sutton-Smith (1997) is categorized as performance play allowing for the exploration of many possibilities. For Christie (1994) this category is labeled as a *sociodramatic play intervention* and he claims results show success with the use of role play for enhancing academic learning. As Singer (1990) points out, pretend play or make-believe continues in private thought throughout the life cycle. If pretending is commonplace, as Singer suggests, then using role play for learning a specific skill, such as decision making,

seems to be a natural extension.

It is Sutton-Smith (1997) who looks at the ambiguity in clearly defining play. He points out contradictions for many of the defining characteristics of play discussed here. Fun and levels of risk, he says, are dependent on the type of play and the people playing. Interestingly, even the value of using play for learning a variety of skills is questioned by Sutton-Smith, although he does recognize that there is evidence that learning through play occurs in many situations.

When the fun goes out of play, most often so does the learning.

Joanne E. Oppenheim (1984)

Methodology

Participants

The subjects for this project were 13 grade eight students, aged thirteen and fourteen. Six of the students were girls, and seven were boys. All were Caucasian except for one Aboriginal boy. The sample group was nearly representational of the total 39 grade eight students with regards to Aboriginal and Caucasian students. The entire grade eight class consisted of three Aboriginal boys, 19 Caucasian boys and 15 Caucasian girls. Two Indo-Canadian girls in the class were not represented in the survey group.

The students attend a small high school of approximately 265 students. The high school is located in a small, resource based community in north-western British Columbia. All thirty-nine students in grade eight received the same instruction on decision making during their first semester. In groups of thirteen, the grade eight students rotated through a six-week, forty-two hour Health & Career class in which instruction on decision making is a required part of the curriculum. All students in grade eight were given equal opportunity to

participate in the survey (Appendix 1) for this project. Survey participation was solicited through a letter of request (Appendix 2) mailed to each student at their home. Response was requested through a parental consent form and a stamped, school-addressed envelope was included. Consent responses were received from thirteen families representing the 13 students. Student participants also provided individual consent for their survey results to be used in this project (Appendix 3).

One male and one female student completed the survey four weeks after learning about decision making. Three male and two female students completed the survey twelve weeks after learning about decision making and three male and two female students completed the survey eighteen weeks after learning about decision making. At the time they completed the survey, all but four of these students were living in two-parent families. All students in dual parent families had both parents working; all students in single parent families had that parent working.

Procedure

During the second week of their six week Health and Career class, students were introduced to four different types of decisions: impulse decisions, habit decisions, default decisions and thoughtful decisions (Harper & Dale, 2003) (Appendix 4). Focus on thoughtful decision making continued throughout the remaining five weeks of the Health and Career class. Students practiced making thoughtful decisions using three different decision making strategies: the Look, Think, Decide model; the 18-disc decision making game; and through role play.

Look, Think, Decide Model

The formal, decision-making model, *Look, Think, Decide* (LTD) was introduced

during the second week of the Health and Career class, after students had learned about different types of decisions. Worksheets included in the Harper & Dale (2003) health promotion resource package (Appendices 5 and 6) were used to work through the LTD model. The worksheets clearly define a process for making decisions and also provide a framework for identifying possible choices and potential consequences. Students were provided with three different scenarios requiring thoughtful decision making (Appendix 7). The content of the scenarios is considered to be relevant to young adolescents and involved decisions around the topics of healthy living, healthy relationships, safety and injury prevention, substance misuse and prevention, and education and careers. Working in groups of three or four, the students discussed decisions and consequences applicable to each scenario. They worked each scenario through the Look, Think, Decide model to determine the best possible decision for each scenario. The best possible decision was defined as the decision with the most positive consequences and the fewest negative consequences for all involved (Drummond, 2001; Hammond, Keeney & Raiffa, 1999; Harper & Dale). Choice options, possible consequences and the final decision were recorded on the provided worksheet. Each student group took turns presenting their decisions to the entire class. Class feedback and discussion was prompted through both teacher and student questioning. This work process occurred over three separate one hour and 50 minute class sessions. During a single class session, each group worked through the same scenario. Group members were changed for each new class session. These changes were facilitated by the teacher and were based on how effectively students interacted and worked together.

18 Disc Decision Making Game

The 18 Disc Decision Making game (Lewis, 2005) was introduced and played during

one class session of one hour and fifty minutes. Each student played the game an average of eight times, each time with a different partner. After game play, a class discussion was conducted attempting to relate the game to real-life, decision making situations, using two different scenarios (Appendix 7). Each scenario was discussed within the context of a game and defined through a maximum of eighteen, or a minimum of nine decisions to match the possible number of moves in a game. Discussion and comparative questions included: At what point did you need to make some decisions? At each stage of the game, what decision might be important, given the situation described? What impacted your decisions? What needed to happen for you to win the game? How does this game relate to real life?

Role Play

For practicing decision making through role play, students were randomly assigned to groups of four or five and were provided with a minimum of five scenarios (Appendix 7) requiring thoughtful decision making. Different scenarios were assigned to each group. Students were instructed to role play through each scenario with intent to determine and portray the best possible decision for each scenario. As with the Look, Think, Decide model, the best possible decision was defined as the decision with the most positive consequences and the fewest negative consequences for all involved (Drummond, 2001; Hammond, Keeney & Raiffa, 1999; Harper & Dale, 2003). Students were given ten to fifteen minute practice times to create and rehearse their role play. They then presented their role play in front of the class. Each role play varied in length, from approximately three minutes to five minutes, as student groups were responsible for scripting the positive outcome of each scenario. After each presentation, all students in the class were debriefed with the following questions: Do you feel this was a realistic resolution of the

issue? Why or why not? What are some alternative decisions that might resolve the situation? What results might you have seen with another decision? Students watching the role plays also had the opportunity to ask questions regarding decisions played. During a one hour and fifty minute class session, each student group had time to create, practice, present and discuss one role play scenario. Decision making through role play was practiced during five different class sessions.

Data Collection and Analysis

A qualitative / quantitative survey (Appendix 1), was administered approximately six weeks after class completion to those students whose parents had granted permission for participation. The survey began with a reminder about the Health & Career class focus on decision making. The three activities used for this teaching: 18-Disc Decision Making Game; Look, Think, Decide process; and role plays, were listed. Students were asked to identify which of the three activities they considered most fun, and which activity they felt best helped them learn about making decisions. These initial selections were then either confirmed or refuted as students were asked to evaluate each decision making process according to whether it was easy to learn, relevant, fun, easy to use and made sense to them. Although not related to the research rationale of this project, the survey also asked three questions aimed at providing some background information to the teacher. Students were asked to describe how they made decisions prior to using the three activities listed and to tell when and where they might have learned about making decisions. A ten-point Likert scale was used for rating the importance of learning a process for making decisions. On the scale, one represented *not at all important,* and ten represented *extremely important.* A ten-point Likert scale was also used for rating the usefulness of the decision making model each

student identified as best helping them learn about decision making. On the scale, one represented *useless, will never use it,* and ten represented *extremely useful, will use it a lot.* Finally, the survey provided students with the opportunity to provide any related comments. Students were given approximately twenty minutes to complete the survey. The teacher provided guidance with survey completion by reading the instructions and explaining the meaning or intent of each survey question. Any questions students had while completing the survey were answered immediately by the teacher.

Survey results were analyzed with regards to total responses for each selection and also analyzed with respect to looking at boys and girls responses separately. Due to the small number of responses, coding of response comments was not deemed necessary. Survey results were compiled and presented, along with all comments, in Table 1.

Results

The majority of the boys and girls identified the decision making activities of game and role play as being fun (Table 1). Five of the six girls and three of the seven boys chose role play as being most fun while three of the boys chose the game as most fun. Only one boy said the Look, Think, Decide process was most fun. More boys and girls identified the Look, Think, Decide decision making process as being most effective for helping them learn about making decisions. Four of the six girls made this choice and three of the seven boys made the same choice. Three boys chose a category of "other" as the process they found superior for helping them make decisions. The boys did not say what this other was.

Responses were varied for both girls and boys when identifying qualities applying to role plays, the 18-Disc game, and the Look, Think, Decide process. More girls than boys (4 - 3) felt the 18 Disc game was easy to learn, was relevant (5 - 1) and was fun, (2 – 0)

Table 1 - Decision Making Survey Results

		18-Disc Decision Making Game	**Look, Think, Decide Process**	**Role Plays**	**Other**
#	Question	Girls / Boys	Girls / Boys	Girls / Boys	Girls / Boys
1	Which activity was most fun?	1 3	0 1	5 3	0 0
2	Which activity best helped you learn about decision making?	1 1	4 3	1 0	0 3
3	Qualities that apply for each decision making process.	Easy to Learn 4 3 Relevant 5 1 Fun 2 0 Easy to Use 3 3 Makes sense to me 3 3	Easy to Learn 5 5 Relevant 3 2 Fun 2 1 Easy to Use 4 2 Makes sense to me 5 1	Easy to Learn 4 4 Relevant 4 2 Fun 6 4 Easy to Use 5 3 Makes sense to me 5 3	
		Girls	Boys		
4	How did you make decisions before learning the activities listed above? What process did you use?	* Use common sense or get help from a friend * I thought of how this would affect me and if I would feel guilty afterwards * Flip a coin or common sense * Common sense * Common sense and thought about what the other choices were * Thought about all the consequences, good and bad, and picked from that	* Common sense * Just do it * I throw myself blindly into situations sometimes * I thought what my mum would do if I did something stupid * Common sense * I think my decisions before this class were okay but I think they're better after the class * I used common sense		

Table 1 – Decision Making Survey Results – Part 2

		Girls	Boys
5	When and where did you learn the process for making decision which you described in question 4? (responses from each person listed in same order as for question 4)	* In school, like in grade one almost * I think I learned from my mistakes and I hate feeling guilty * From my older sister in fourth grade * When I was little at home * Elementary school, grades 2-7; family and just by myself by knowing and using my manners * From trial and error, trying to discover the best way to make a good decision	* At home *At home * Bad habits * My parents * My family told me all about it in grade 5 * I learned from year from year * I learned it when I got in a fight in elementary school and my dad told me to use your common sense
		Scale Number of Girls	Scale Number of Boys
6.	Rate the importance of learning a decision making model, on a scale where 1 is *not at all important* and 10 is *extremely important.*	1 - 2 - 3 - 4 - one 5 - 6 - 7 - two 8 - two 9 - 10 - one	1 - 2 - 3 - two 4 - 5 - 6 - three 7 - one 8 - 9 - one 10 -
7	Rate the usefulness of the decision making model identified as best at helping you learn about decision making, on a scale where 1 is *useless-will never use it* and 10 is *extremely useful- will use it a lot.*	1 - 2 - 3 - 4 - 5 - one 6 - one 7 - one 8 - three 9 = 10 =	1 - two 2 - 3 - 4 - 5 - one 6 - one 7 - two 8 - 9 - 10 - one
8	Comments?	No comments provided	No comments provided

(Table 1). Equal numbers of boys and girls (3), rated the game as easy to use, and making sense to them. In rating qualities associated with the Look, Think, Decide process, an equal number of girls and boys (5) said it was easy to learn. More girls than boys, thought this process was relevant (5 - 2), fun (2 - 1), easy to use (4 - 2) and felt it made sense to them (5 - 1). For role plays, an equal number of girls and boys (4 - 4) rated them as easy to learn. More girls felt role plays were relevant (4 - 2), fun (6 - 4), easy to use (5 - 3), and made sense to them (5 - 3).

Comments from girls on the processes they used for making decisions prior to learning the three decision making methods taught in Health and Career class included: using common sense (4x); getting help from a friend; imagining the effect and possible guilty feelings associated with a decision; flipping a coin; thinking about other choices; thinking about consequences before choosing. Comments from the boys included: using common sense (3x); just doing it; throwing oneself blindly into situations; thinking about what a parent might do if something "stupid" was done. One boy commented that he felt he had improved his decision making ability from what he had learned in class. Students also provided comments about when and where they had learned a process for making decisions. Girls' comments about learning included: learning in grade school, almost grade one; learning from mistakes and hating to feel guilty; learning from an older sister in fourth grade; learning at home when little; learning in elementary school, from family and on their own through by knowing and using manners; and learning through trial and error. Boys' comments about when and where they had previously learned a process for decision making were similar to those given by girls. Boys said they had learned about decision making: at home (2x); through bad habits; from parents and family; from year to year; and one boy had

learned about making decisions after his dad told him to use common sense after being in a fight in elementary school.

On the ten-point Likert scale, one girl rated the importance of learning a process for making decisions as being four; two girls rated it as being seven; two girls rated it as being eight and one girl felt it was *extremely important* to learn to make decisions. The boys ratings on the same scale were lower. Two boys rated the importance at two; three boys rated it at six; one boy rated it at seven; and one boy rated it at nine. On the ten-point scale rating usefulness, three of the girl's ratings were similar with one each at five, six and seven. Three girls rated usefulness at eight out of ten. Boys ratings ranged from one to ten, with two boys rating as useless the value of learning a model for decision making. One boy rated at five, one at six, two at seven, and one at ten. No additional comments were provided by either boys or girls.

Discussion

The results obtained with this project indicate that this sample of boys and girls does not require the element of fun for learning about decision making. These students rated the Look, Think Decide model as a more effective process for learning about making decisions. Reasons for the perceived effectiveness and/or usefulness of this model may relate to the clearly defined procedure provided for making decisions, and the perception from most boys and girls that the process was easy to learn. If adolescents have difficulty with organizing thoughts, as Wallis' (2004) article suggests, then the Look, Think, Decide process may provide clarity and organization for supporting learning. The organization inherent in the *start to finish* procedure of the less effective 18-Disc decision making game does not provide a clear indication of how each participant's move might relate specifically to

thoughtful decision making. Adolescent game participants may be inclined to make each move impulsively and without rational thought (Langlois, 1999; Siegler, 1997; Wallis). The post-game discussion relating game play to thoughtful decision making may not have provided participants with sufficient connection for viewing game play as a process for making thoughtful decisions. The least effective, role play, like game play, does not provide a clearly defined procedure for making decisions. The lack of a clearly defined procedure may be responsible for only one participant choosing role play as best for helping learn about decision making. Another consideration is the role of peer pressure (Lashbrook, 2000) as young adolescents may perceive a "risk" factor inherent in performing in front of their peers. Lashbrook suggests that adolescents are sensitive to ridicule, feelings of inadequacy and discomfort from their peers. It may be that
many adolescents feel uncomfortable with the requirements for performing a role play in front of their peers. Participants are required to perform a decision making process and each participant brings their personal preference and experience to the role they play (Furness, 1976). On a positive side, the personal nature of role play may be one reason the majority of girls and several boys viewed role play as a fun activity. Additionally, role play features peer interaction, physical movement and activity, all characteristics preferred by adolescents (Langlois; Siegler; Wallis).

The results indicate that the majority of the boys and girls in this project have some type of strategy for making thoughtful decisions. When asked to describe the process used prior to learning about decision making in their Health and Career course, descriptions provided reveal a discrepancy of understanding in what is meant by "a process." Several of these descriptions seem to equate a single idea (common sense) or action (flip a coin) as a

process. While other students more clearly described some aspects of a process for making decisions, they fell short in providing a complete description of a process. Some students recognize that processes for making decisions involve thinking about the decision and the thinking may include consideration of one or more of pros and cons, options, choices and consequences. Other opinions are also accessed as two survey respondents expressed a willingness to seek a second opinion from a parent or from a friend as part of their decision making process. Bednar and Fisher (2003) and Ungar (2000) provide research confirming that it is common for adolescents to refer to parents or friends for help with making some decisions. Their research indicates that adolescents do seek help: from peers for short-term, social decisions, from parents for more long-term, value decisions, and from perceived *experts* for decisions requiring specialized information.

The decision-making processes that most of the participants in this study report using seem to have been learned prior to entering grade eight. Introduction to a specific decision making model may be viewed as redundant by these students, especially if they feel confident in their ability to make good decisions. Conversely, the practice afforded through working with a model for decision making, using game play and role-play, is viewed by this researcher as an important extension of previous learning, helping to refine and enrich future decision making.

Scale ratings suggest that these young adolescents recognize the importance of having a process to follow for making important decisions. The majority of girls and boys rated learning a decision making model as *important* to *extremely important.* I would suggest that one benefit of teaching adolescents a specific decision-making model is to ensure all students work with a common language. Ambiguities of meaning can be clearly

defined. Students bringing previously learned processes are able to integrate the steps of their process, and establish commonalities, with an introduced model. Students learning about decision making for the first time are able to make comparisons between what they are learning and what other students are already using. In addition, it becomes apparent that most processes for making decisions have common elements and follow similar procedures (D.A.R.E., 1996; Giangreco et al., 2002; Harper & Dale, 2003; James, 2002; Torrance & Torrance, 1978).

In assessing survey results with regard to similarities and differences between girls' and boys' responses, it appears that the majority of girls see more value in learning about decision making through a specific process than do boys. Although boys did not rate highly the importance or usefulness of learning a process for making decisions, several indicated the Look, Think, Decide process was most helpful to them in learning about decision making. The same number also indicated learning about decision making through another process learned elsewhere. I did not determine what type of process is being referred to by boys under the category of *other*.

The three processes used for teaching decision making each have elements that may appeal to different learning styles. Survey results seem to support recent research pertaining to learning preferences of girls and boys. This research, by Gurian and Ballew (2003), indicates that boys prefer to learn through more active, hands on involvement. The element of competition appeals to them. Boys rated game play and role play as being most fun. Both activities required active involvement and game play also provided a competitive aspect. Gurian and Ballew also maintain that girls prefer social interaction as part of their learning. The majority of girls in this study indicated role plays as most fun. Role play

allows for more fun and social interaction (Furness, 1976).

Although this project does not provide conclusive evidence that adolescent students would be more likely to make use of a decision making strategy perceived as fun, it does indicate that both the boys and girls had fun using games and role play. If adolescent learners are more likely to be engaged and learning when they are having fun, as suggested by Ackerman (1999), then it seems logical for their teachers to include the element of fun when teaching decison making strategies. Perhaps, rather than separating each process for teaching decision making, there is more value in using role play and game play to teach and reinforce the learning of the Look, Think, Decide process for making decisions.

Limitations

Several limitations came to light during the course of this project. Initially it became apparent that many students had learned some strategies for making thoughtful decisions prior to entering grade eight. The strategies introduced during their Health and Career class may seem redundant to some of these students. The value in teaching new processes for making decisions may come from having students compare similarities and differences between a variety of decision making models. Value might also be enhanced through practicing making decisions, of varying degrees of difficulty, using successful strategies students might already have learned. This practice might consider using role play or game play as a common method for illustrating how decisions might be made within each different process.

A second limitation considers the short time frame available for teaching grade eight students about decision making. In their Health and Career Education 8 resource package, the Ministry of Education, (2005), recommends forty-five hours as the time frame

for delivery of course content. Although the allocated time was close to recommended time, the volume of content to be delivered during the given time frame may compromise time spent learning about making thoughtful decisions. This is addressed somewhat by maintaining the theme of decision making throughout the course. A further consideration for some students is that even minimal student absenteeism may impact the effectiveness of learning a process for making decisions. Regular, on-going and relevant practice making decisions may be of most benefit to all adolescents.

The small sample size of only 13 participants is a third limiting factor of this project. Results obtained from such a small number of students do not allow for generalization to the broad population of adolescents. One cannot say, with certainty, that all adolescents would be likely to provide similar variations and results.

Day to day variations in teaching style and teacher enthusiasm may also limit results. Any impact on student motivation to learn new strategies for decision making has potential to compromise learning and engagement in the process. A possible limiting impact is peer interaction. Students working with classmates that they are friendly with may be more likely to feel comfortable and interact more fully and freely with the material. Conversely, students assigned to work with classmates they do not know well may feel more anxious (Lashbrook, 2000). When we become too anxious we are not as able to gather new information, think clearly about the problem, explore our options, or find creative solutions that consider the needs of all (Lerner, 2005).

This project fails to take into account the emotional element of decision making, especially as it relates to adolescents. According to Drummond (2001), all decisions are driven by emotion and emotion is often removed from in-class practice. Scenarios chosen

for practice may or may not have personal, emotional impact. Additionally, students may be reluctant to admit or share when practice scenarios are impacting them emotionally (Lashbrook, 2000). When emotion is removed there is the question of how closely students connect a process, role play or game play with real-life decision making. How difficult will it be to follow a learned process for making decisions when in the throes of an emotional situation requiring a rational decision? Brain research tells us that the influx of hormones at puberty activates the brain's emotional centre, while the part of the brain making teens more responsible is not yet mature (Wallis, 2004). Perhaps it is more worthwhile to ensure that a process for making decisions is learned at a much earlier age. The adolescent time frame might then be best used for rehearsing and practicing the previously learned skills.

Moore (1999) and Mitchell (1992) place much emphasis on the adolescent struggle with their sexuality. This project is limited in its consideration of this topic for practicing decision making. Only one of the scenarios used deals with boy/girl relationships. More focus on adolescent sexuality may provide increased relevance for a greater number of students. However, this is also a topic which is more controversial from a parental perspective due to wide variations in family values. This topic may best be addressed at the mid to late adolescent stage.

Finally, this project fails to take into account whether cultural differences might influence decison making. Teacher consideraton of how decision making might be approached from the perspective of Aboriginal and Indo-Canadian cultures represented in the class may have facilitated the teaching of different processes for making decisions. The inclusion of more culturally relevant decision making processes may have influenced the degree of student connection with curriculum and may have encouraged more of these

parents to grant consent for their young adolescents to be involved in the survey. Cultural perspective might influence adolescent decision making in a manner not considered here.

Implications For Future Research

Many of the limitations listed above suggest ideas for expansion of research pertaining to adolescent decision making. My survey results indicate that most students have learned processes for making decisions prior to entering grade eight. This learning occurs in elementary school or from family. Future research might explore the decision making strategies students have already learned, their effectiveness and how they have been learned. Consideration might be given to whether adolescents view learning a new decision making process as more or less beneficial than reviewing and/or reinforcing processes learned in earlier years. Providing grade eight students with both a pre and post survey questionnaire about their decision making may reveal more beneficial information about prior learning and the effectiveness of new learning. There may also be value in assessing prior learning through longitudinal research which starts looking at decision making prior to adolescence and then continues through early, mid and late adolescence. This type of research may provide evidence of how developmental changes impact learning of decision making skills as well as the topics for decisions that are being made.

What is fun for one person may not be similarly viewed by another. Researching alternative methods for incorporating fun into decision-making may be worthwhile. Additionally participants might be polled to define how they view fun. This might include having them rate their perception of the level of fun involved in role play as opposed to game play.

With the short, six-week time frame of this project, future research might consider

replicating this project with more time given to practising decision making skills. The relevance of practice in acquiring new skills is another possible avenue to explore. If this project were to be replicated, it would also be important to refine the survey questionnaire. Choice of words introduces some ambiguity to results, while choice of questions directs the type of information acquired. Adding a question about *how* each decision making process teaches decision making is one possible example. In the interest of brevity, students seem to provide very brief descriptors of processes they follow to make decisions. More clarity might be achieved in providing students with a scenario and asking them to describe the process they would follow to come to a decision.

In conclusion, it seems that this sample of young adolescent boys and girls prefer a specific decision making process for most effectively learning about decision making. They have fun participating in role plays and game play but do not view these activities as best for helping them to learn to make decisions. These fun activities may have more value when used for practice and reinforcement of a specific decision making process. We all make decisions throughout our life. Increasing our effectiveness in making these decisions, whether through learning a specific process or through fun activities, is ultimately of most value.

> *Your life is the sum result of all the choices you make, both consciously and unconsciously. If you can control the process of choosing, you can take control of all aspects of your life. You can find the freedom that comes from being in charge of yourself.*
>
> *Robert F. Bennett* (Lewis, 1998, p 30)

References

Ackerman, D. (1999). *Deep play.* New York: Random House.

Bednar, D.E. & Fisher, T.D. (2003). Peer referencing in adolescent decision making as a function of perceived parenting style. *Adolescence, 38*(152), 607-621.

Blatner, A. (2002). Using role playing in teaching empathy. Retrieved January 28, 2007, from http://www.blatner.com/adam/pdntbk/tchempathy.htm

Bruner, J.S., Jolly, A. & Sylva, K. (1976). Play - its role in development and evolution. New York: Basic Books, Inc., Publishers.

Carrell, S. (1993). *Group exercises for adolescents: A manual for therapists.* London: Sage Publications.

Cattenach, A. (1992). *Play therapy with abused children.* London: Jessica Kingsley Publishers Ltd.

Chess, S. & Whitbread, J. (1996). The columbia world of quotations. Retrieved May 16, 2008, from http://www.bartleby.com/66/48/11848.html

Christie, J.F. (1994). Academic play. In J. Hellendoorn, R. van der Kooij, & B. Sutton-Smith (Eds.), *Play and intervention* (pp. 203-213). New York: State University Press.

Coleman, J.S. (1967). Learning through games. In J.S. Bruner, A. Jolly, & K. Sylva (Eds.), *Play - its role in development and evolution* (pp. 460-463). New York: Basic Books, Inc.

Dahl, R. (2004). In C. Wallis, *What makes teens tick. Time,* (May 10). 42-49.

D.A.R.E. America. (1996). Retrieved January 2, 2008, from http://www.dare.com/home/about_dare.asp

Drummond, H. (2001). *The art of decision making: Mirrors of imagination, masks of fate.* West Sussex, UK: John Wiley & Sons, Ltd.

Friel, J. & Friel, L., (1999). *The 7 worst things parents do.* Deerfield Beach, FL: Health Communictions Inc.

Furness, P. (1976). Role play in the elementary school: A handbook for teachers. New York: Hart Publishing Company, Inc.

Giannetti, C. & Sagarese, M. (2001). *Cliques: 8 steps to help your child survive the social jungle.* New York: Broadway Books.

Giangreco, M., Cloninger, C., Dennis, R., & Edelman, S. (2002). Problem-solving methods to facilitate inclusive education. In J. Thousand, R. Villa, & A. Nevin (Eds.), *Creativity & collaborative learning: The practical guide to empowering students, teachers and families* (pp. 111-134). Baltimore, MD: Paul H. Brookes Publishing Co.

Gurian, M. & Ballew.A (2003). *The boys and girls learn differently: Action guide for teachers.* San Francisco: Jossey-Bass.

Hammond, J.S., Keeney, R.L., Raiffa, H. (1999). *Smart choices: A practical guide to making better decisions.* Boston, MA: Harvard Business School Press.

Harper, J. & Dale, N. (2003). *Making decisions: Grade 8: A teacher's manual for substance abuse prevention education.* Vancouver, BC: Alcohol Drug Education Service.

Hawley, R.C.. (1975. *Value exploration through role playing: Practical strategies for use in the classroom.* New York: Hart Publishing Company, Inc.

Hellendoorn, J., Van der Kooij, R., & Sutton-Smith, B. (Eds.). (1994). *Play and Intervention.* New York: State University Press.

Hill, L. D. (2001). *Connecting kids: exploring diversity together.* Duncan, B.C., Canada: New Society Publishers.

Jaffe, M. L. (1998). *Adolescence.* New York: John Wiley & Sons, Inc.

James, J. (2002, January). *Peer pressure & choices: How to think for yourself (in a world where everybody wants to do it for you),* Do It Now Foundation. Retrieved July 31, 2005, from http://www.doitnow.org/pages/163.html

Jensen, E. (1998). *Teaching with the brain in mind.* Alexandria, VA: Association for Supervision and Curriculum Development.

Kottman, T. (2001). *Play therapy: Basics and beyond.* Alexandria, VA: American Counseling Association.

Ladousse, G. P. (1987). *Role play.* Oxford: Oxford University Press.

Landreth, G. L. (1993). Self-expressive communication. In C. E. Schaefer (Ed.), *The therapeutic powers of play* (pp. 41-80). Northvale, NJ: Jason Aronson Inc.

Langlois, Christine. (Ed.). (1999). *Raising great kids ages 6-12: The complete guide to your child's health and development.* Mississauga, ON: Ballantine Books.

Larsen, D.J. & Larsen, J.E. (2004). "I am a puzzle": Adolescence as reflected in self-metaphors. *Canadian Journal of Counselling, 38*(4), 246-259.

Lashbrook, J.T. (2000). Fitting in: Exploring the emotional dimension of adolescent peer pressure. *Adolescence, 35*(140), 747-757.

Leff, H.L., Thousand, J.S., Nevin, A.I., & Quiocho, A.M.L. (2002). Awareness plans for facilitating creative thinking. In J.S. Thousand, R.A. Villa & A.I. Nevin (Eds.), *Creativity and collaborative learning: The practical guide to empowering students, teachers and families* (pp. 157-173). Baltimore, MD: Paul H. Brookes Publishing Co.

Lerner, H. (2005). *Fear and other uninvited guests: Tackling the anxiety, fear, and shame that keep us from optimal living and loving.* New York: Harper-Collins Publishers.

Lewis, B.A. (1998). *What do you stand for? A kid's guide to building character.* Minneapolis, MN: Free Spirit Publishing, Inc.

Lewis, T. (2005). *18 Disc Game.* Pacific Institute for the Mathematical Science. Galileo www.galileo.org 2005 Galileo Educational Network.

Mann, L. & Friedman, I. (1999). Decision making and coping in adolescence. In E. Frydenberg (Ed.), *Learning to cope: Developing as a person in complex societies* (pp. 225-247). Oxford, NY: Oxford University Press.

Ministry of Education, Province of British Columbia. (2005). *Health and career education 8 and 9: Integrated resource package 2005* (IRP 133). Victoria, BC: Ministry of Education.

Mitchell, J. (1992). *Adolescent struggle for selfhood and identity.* Calgary, AB: Detselig Enterprises Ltd.

Mook, B. (1994). The phenomenon of play. In J. Hellendoorn, R. van der Kooij, & B. Sutton-Smith (Eds.), *Play and Intervention* (pp. 43-48). New York: State University Press.

Moore, S. (1999). Sexuality in adolescence. In E. Frydenberg (Ed.), (1999). *Learning to cope: Developing as a person in complex societies* (pp. 64-80). Oxford, NY: Oxford University Press.

Neufeld, G. & Mate, G. (2004). *Hold on to your kids: Why parents matter.* Toronto, ONT: Alfred A. Knopf Canada.

Okwumabua, J.O., Wong, S.P. & Duryea, E.J. (2003). Depressive symptoms and decision making among african american youth. *Journal of Adolescent Research, 18*(5), 436-453.

Oppenheim, J.E. (1984). Kids and play. Retrieved May 30, 2008, from http://www.deepfun.com/quotes.html

Orlick, T. (1982). *The second cooperative sports & game book.* New York: Pantheon Books.

Rolison, M.R. & Scherman, A. (2002). Factors influencing adolescents' decisions to engage in risk-taking behavior. *Adolescence, 37*(147), 585-596.

Rollin, S., Rubin, R., Shelby, T., Holland-Gorman, J., Kourofsky, H., Allannah, A., et al. (2000). *Coping in Children and Adolescents: Project KICK - A primary prevention model.* Florida State University. (ERIC Document Reproduction Service No. ED 440335)

Schaefer, C. E. (Ed.). (1993). *The therapeutic powers of play.* Northvale, NJ: Jason Aronson Inc.

Schaefer, C.E. (1993). What is play and why is it therapeutic? In C. E. Schaefer (Ed.), *The therapeutic powers of play* (pp. 1-14). Northvale, NJ: Jason Aronson Inc.

Schaefer, C. E., & Reid, S. E. (Eds.). (1986). *Game play: Therapeutic use of childhood games.* New York: John Wiley & Sons, Inc.

Severe, S. (2000). *How to behave so your children will, too!.* New York: Penguin Books.

Siegler, A. (1997). *The essential guide to the new adolescence: How to raise an emotionally healthy teenager.* New York: Penguin Putnam, Inc.

Singer, J. (1990). The scientific foundations of play therapy. In J. Hellendoorn, R. Van der Kooij, & B. Sutton-Smith (Eds.), (1994). *Play and Intervention* (pp. 27-38). New York: State University Press.

Sizer, T.R. & Sizer, N.F. (1999). *The students are watching: Schools and the moral contract.* Boston, MA: Beacon Press.

Smetana, J.G., Campione-Barr, N. & Daddis, C. (2004). Longitudinal development of family decision making: Defining healthy behavioral autonomy for middle-class

african-american adolescents. *Child Development, 75*(5), 1418-1434.

Sutton-Smith, B. (1997). *The ambiguity of play.* Cambridge, MA: Harvard University Press.

Sylva, K., Bruner, J.S. & Genova, P. (1974). The role of play in the problem-solving of children 3-5 years old. In J.S. Bruner, A. Jolly, & K. Sylva (Eds.), (1976). *Play - its role in development and evolution* (pp. 24-27). New York: Basic Books, Inc.

Thompson, M., (2005, August 10). What they won't tell you and why. *Time,* 49.

Torrance, P.E. & Torrance, P.J. (1978). Developing creativity instructional materials according to the osborn-parnes creative problem solving model. In P.E. Torrance (Ed.), *Why fly?* (pp.233-248). Norwood, NJ: Ablex Publishing Corporation.

Ungar, M.T. (2000). The myth of peer pressure. *Adolescence, 35*(137), 167-757.

Wallis, C., (2004, May 10). What makes teens tick. *Time,* 42-49.

Wells, S. & Taylor, G. (1988). *William shakespeare: The complete works.* New York: Oxford University Press, USA.

Werner-Wilson, R.J., & Arbel, O. (2000). Assessment of interpersonal influences on adolescents: The parent and peer influence scale. *The American Journal of Family Therapy, 28,* 265-274.

White, A. (2004). Alcohol and the Adolescent Brain. Retrieved August 7, 2005, from http://www.duke.edu/~amwhite/Adolescence/index.html

Wooding, S. (2003). *Rage, rebellion & rudeness.* Markham, ON: Fitzhenry & Whiteside Ltd.

Appendix 1

Decision Making Survey

Name_____Age_____Birthdate_____

Decision Making Survey

During your Health & Career Education Exploratory session in first semester, several activities and assignments focused on making decisions. This survey asks about your decision-making process when faced with important, and perhaps difficult, decisions. An important and/or difficult decision may have several possible positive and/or negative consequences.

The following activities were used to explain and practice making decisions:

A **18-Disc Decision-Making Game**	B **Look, Think, Decide Process**	C **Skits and Role-Plays**

1. Which of the above activities was most fun? (Circle One)

A **B** **C**

2. Which of the above activities best helped you learn about decision-making? (Circle One)

A **B** **C** **D** (None - I already knew all about making decisions)

3. Identify the qualities that apply for each decision-making activity. (Check all that apply)

A **18-Disc Decision-Making Game**	B **Look, Think, Decide Process**	C **Skits and Role-Plays**
____ Easy to learn	____ Easy to learn	____ Easy to learn
____ Relevant	____ Relevant	____ Relevant
____ Fun	____ Fun	____ Fun
____ Easy to use	____ Easy to use	____ Easy to use
____ Makes sense to me	____ Makes sense to me	____ Makes sense to me

4. How did you make decisions **before** learning the activities listed above? What process did you use?

Appendix 1 – Part 2

Decision Making Survey

5. **When** and **where** did you learn the process for making decisions which you described in question 4?

6. On a scale of 1 - 10, where 1 is *not at all important* and 10 is *extremely important,* rate the importance of learning a decision making model.

1	2	3	4	5	6	7	8	9	10
Not at all Important		Somewhat Important		Important		Very Important			Extremely important

7. On a scale of 1 - 10, where 1 is *useless - will never use it* and 10 is *extremely useful - will use it alot,* rate the usefulness to you of the decision making model you identified in question 2 as best helping you learn about decision making.

1	2	3	4	5	6	7	8	9	10
Useless - Will Never Use it		Somewhat Useful - May or May Not Use It		Useful - May Use It		Very Useful - Will Probably Use It			Extremely Useful - Will Use it Alot

8. Comments

Thank you for your participation!

Appendix 2

Parent Letter of Request

(date)

Dear Parent/Guardian:

During first semester your child completed a six-week Exploratory session related to Health and Career Education. One of the key themes in this curriculum is informed decision-making. Students assessed how they made important decisions. A formal decision-making model was then introduced, compared and practiced. Finally, role-play situations and creative problem-solving games were used to practice decision-making.

I am currently working on a project about decision-making. This project examines adolescent decision-making and the features that might influence an adolescent to use one decision-making model or strategy over another. The gathering of such information serves to inform and improve my teaching practice for Health & Career Education 8 & 9.

I am requesting your consent to gather information about how students make decisions, and use this information for my project. This request has been approved by previous SD #54 Superintendent, Mr. Rod Allen. At no time will it be necessary for me to identify either students or school by name. Students will be referred to as *adolescents within a specified age range*. This information will be collected through a one-page questionnaire and classroom discussion which is expected to take approximately 20 minutes during one Exploratory block. All student participants will be informed that they have the right to withdraw from completing the questionnaire at any time. This also includes the option of withdrawing their previously completed questionnaire, if applicable. In addition, student participants have the right to selectively answer only the questions they choose.

The individuals having access to this information include myself, my Project supervisor, and two Project committee members. All survey forms will be stored in a confidential file and shredded when the research project is completed in August, 2008. Research results will be made available to the parent and student participants, upon request, after this date. It is expected that there will be no risks to any individuals participating in this project. The potential benefits of participation in the project include a greater self-awareness of personal decision-making, information concerning the effectiveness of specific decision-making models and, knowledge that information collected has the potential to impact teaching methodology with regards to decision-making.

To provide consent, please sign the attached form and return in the stamped, self-addressed envelope provided. Thank you, in advance, for allowing me to collect and use this information. If you have any questions or concerns, please contact me at 745-7217 or through email: dstanyer@sd54.bc.ca. Any formal complaints about this project may be directed to the Office of Research, UNBC.

Yours truly,

D. Stanyer
Teacher/Counsellor

Cc: L. Ellert, Principal, HSS

Appendix 2 – Part 2

Parent Letter of Request

_____ has my permission to participate in a
(student name) questionnaire and discussion
about decision-making.

_____
(parent signature)

[ ] Yes, I wish to have a copy of the final research results. Please forward to the following address:

_____

_____

_____

Appendix 3

Survey Participant Consent

(date)

Dear Students:

One of the key themes in the Health & Career Education curriculum is informed decision making. This topic area involves students in identifying how they make important decisions and teaches a formal decision making model.

I am currently working on a project about decision-making. This project examines adolescent decision-making and the features that might influence an adolescent to use one decision-making model or strategy over another. The gathering of such information serves to inform and improve my teaching practice for Health & Career Education 8 & 9.

I am requesting your consent to gather information about how you make decisions and to use this information for my project. This request has been approved at the district, school and parental level. The information I intend to gather will not require me to identify either our school or you by name. Instead, all students who participate will be referred to *as adolescents within a certain age range.* The required information will be collected through a one-page questionnaire and classroom discussion which will take approximately thirty minutes to complete. You have the right to refuse to participate in completing any part or all of this questionnaire. In addition, after you have completed the survey, you have the right to withdraw any answers submitted.

The information gathered through the questionnaire will be shared only with my Project supervisor and two Project committee members. All survey forms will be stored in a confidential file and will be shredded when the research project is completed in August, 2008. Research results will be made available to you, upon request, after this date. It is expected that there will be no risks to you as a result of your participation in this project. The potential benefits of participation include a greater self-awareness of personal decision-making, information concerning the effectiveness of specific decision-making models and, knowledge that information collected has the potential to impact teaching methodology with regards to decision making.

To provide consent, please sign this form. Thank you, in advance, for allowing me to collect and use this information.

D. Stanyer
Teacher/Counsellor

Cc: L. Ellert, Principal, HSS

I have read the above letter and consent to participating in the decision-making project.

_____
(student name)

Appendix 4

Kinds of Decision Making

1 ACTIVITY

Kinds of Decision Making

Impulse Decisions: You see something and do it quickly and without thinking.

Habit Decisions: You do the same thing over and over and forget it was ever a choice.

Decisions by Default: You put off making a decision till it is too late. Or, you can't make up your mind so someone else decides for you.

Thoughtful Decisions: You think about the choices you have. You weigh the consequences (results) of each choice before making a choice. After deciding you keep the right to change your mind if new information is learned.

Which type of decider do you most tend to be right now?

At home? _____

_____

_____

With friends? _____

_____

_____

At school? _____

_____

_____

Be prepared to discuss this with other class members.

WORKSHEET

Appendix 5

Look, Think, Decide Process

Look-Think-Decide ACTIVITY 1

WORKSHEET

Read the following before doing the *Choices and Consequences* worksheet:

LTD includes these steps:

LOOK: What is the problem?

Be sure you have enough information and understand just what is the problem or the decision to be made.

THINK: What are the choices you have? List them.

What are the likely and the possible consequences and benefits of each choice? Divide these into physical, emotional, social, and intellectual consequences, and add legal or financial if appropriate.

DECIDE: Which choice seems best?

Choice *(If you feel uncertain, list the reasons why. Then go back to the THINK step again.)*

TIPS:

1. Sometimes we confuse things we want as being things we need. Be careful not to.
2. Emotions (feelings) can be very strong. We may give a choice too much importance because it seems fun at the time. Try thinking about how you will feel about yourself one or two days after the decision.
3. Learn to look ahead. If a consequence seems far away, remember, time passes quickly. Consider the long-term consequences and benefits. These are especially important.
4. Make a decision, and then remember you do not have to remake the decision every day or every week. This simplifies your life.
5. Re-evaluate your decision from time to time. This allows you to adjust your life as situations change.

Appendix 6

Choices and Consequences

1 ACTIVITY

Choices and Consequences

WORKSHEET

Using ONE of the scenarios from the **Takeone** sheet, apply the LTD method to reach a decision.

LOOK:

What is the problem? _____

_____

THINK:

List the possible choices. Identify the potential physical, emotional, social and/or intellectual consequences/benefits for each.

Choice	Cosequences/Benefits
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

DECIDE:

Of the choices, which one gives the most positive and least negative results? _____

_____

Is this the choice you would WANT to make or that is RIGHT for you? If not, why not? Go back and look at the choices and consequences again. Sometimes, after everything else looks positive for the decision, you may get a feeling that you really do not want to do it after all.

Appendix 7

Sample Decision Making Scenarios

Look, Think, Decide Process Scenarios

Scenario 1: Three friends seem to have been spending a lot of time together lately. You have wanted to join them. Finally, they invite you along one day before school. Laughing, one pulls out a joint of marijuana, and this surprises you. They pass the lit joint around, and then to you and try to get you to join in. What do you do?

Scenario 2: It is Christmas time. Your parents are out. An older brother is asleep downstairs. You have a number of friends over and feel really good about it. Your friends seem to be having a good time with videos, goodies, and pizza. Then, one of the friends opens the cupboard where a number of liquor bottles are kept. He shuts it, but then another friend suggests, "We should have eggnog." Ignorantly, you say, "OK." Out come large glasses and the carton of eggnog. Then, the group pours whiskey into the eggnog. What do you do?

Scenario 3: You look old for your age. Someone gives you a fake ID and tells you to go get a case of beer for the party. What do you do?

18 Disc Decision Making Game Scenarios

Scenario 1: Someone steals your jacket. What do you do?

Scenario 2: You are being harassed and threatened by an older kid who has obviously been drinking. What do you do?

Role Play Scenarios

Scenario 1: You spot a student selling drugs. He says to you, "If you know what's good for you, you'll mind your own business." What do you do?

Scenario 2: Calvin, an eighth grader, and his friend Fatima are talking in the hall when Calvin sees another student, Jim, talking to his girlfriend, Naomi. Jim is also an eighth grader and Calvin has seen him talking to Naomi before. Calvin is jealous and angry. He suggests to Fatima that he is going to go over there an kick Jim's butt. Make some decisions which resolve the scenario to the benefit of most, if not all, involved.

Appendix 7 – page 2

Sample Decision Making Scenarios

Scenario 3: One Saturday afternoon you run into a couple of your friends. They're hanging out and walking around the neighborhood looking for something to do. You decide to hang out with them for awhile. One of your friends says that he is bored and wants to do something fun. He decides that he wants to spray-paint words on cars. The other friend thinks this sounds like a great idea. You're not so sure. What do you do?

Scenario 4: Someone comes to you for advice about fighting. What do you do?

Scenario 5: At a dance, someone offers you a pill that is supposed to make you feel really good and energetic. All of your friends have already taken one. They are encouraging you to join them, or else. What do you do?