

## Self Exploration and Decision Making

*William Shiver*

### **Academic Setting**

I teach in the gifted program at Valley High School. All students who qualify as gifted in New Mexico must score 130 or above on an IQ test and must qualify in at least one of the following areas (as assessed by a qualified diagnostician): academics, creativity, or critical thinking. Valley is a magnet school, so we have a large out of district population, particularly from the South Valley and the West Side. Our student population is primarily Anglo and Hispanic, with small but significant Native American, Black, and Asian representation.

### **Rationale: Narrative**

All adolescents need to feel accepted, understand themselves, feel in control of their lives, make decisions somewhat independently, and set goals for the future. They need to function in a highly complicated world and find satisfaction, self fulfillment, and a sense of purpose. Gifted adolescents, because of their unique combination of intellectual and social/emotional characteristics, have a more difficult time with these tasks than their typical peers. For them, defining a personal identity is complicated by their giftedness (Berger, 1998).

The self exploration unit that follows acknowledges that gifted students are often troubled by their differences, by difficulties they have exploring these differences, and by making course selection, college and career choices among many appealing options. The true purpose of this curriculum is to guide them toward activities and goals that reflect their values, interests and needs, not just the teacher's.

Because the single distinguishing factor for our students is IQ, high achievement is a natural expectation. However, for many reasons, including poor choices on the part of the students, underachievement is quite common. Some characteristics of underachievement are poor work habits, frequently unfinished work, and inattentiveness to task at hand. Aggressive underachievers display continual rejection of set work and an absence of self-direction in decision making. Examples of poor choices include taking non-challenging courses, not performing in the courses they do take, ditching classes, and indulging in drug use and making other lifestyle choices which negatively impact their performance in school.

This tends to be particularly true of gifted divergent thinkers, students who make leaps in their thinking, but can't retrace their steps. They are perceived as innovative but undisciplined; they take risks, intellectual as well as social, but often don't evaluate the consequences. They may be academically unsuccessful in highly structured classes because they haven't learned to document their work within a set structure. They may win academic contests, but fail courses in the same area due to lack of attention to detail. These students should be aware that both high school and colleges have rigid course requirements that may not be compatible with this thinking style.

Convergent thinkers, on the other hand, tend to look for "the right answer", but may lose sight of the big picture or goal of an assignment or course. They are uncomfortable with open-ended assignments and may not perform well in this area ( essay questions, creative problem solving, etc.). These students tend to be unable to take risks, even when necessary for academic and social success. Useful strategies include encouraging faster risk taking and group cooperation and collaboration. Convergent thinkers should also benefit from listing as many alternatives as possible (whether they be choices [for course work, etc.], time use decisions, problem solving strategies, or for any decision that may involve multiple paths), and sketch decision trees for several of the alternatives. Decision trees help illustrate many possible outcomes from a given starting point. They will be discussed in greater detail below.

Both types of thinkers, but especially convergent thinkers, may be plagued by perfectionism. If a student feels that what he creates must be perfect, it's very unlikely that what he produces will ever quite match up to their mental image of what he would like to produce. This can lead to dissonance and a self-rejection of what the student has created eventually leading to lack of willingness to produce and failure.

Both types of gifted thinkers may discount or devalue the future, tending to put off working hard or planning

ahead. One bad decision alone has little cost or consequence, many made sequentially are costly. Students may think they can kick back now but will work hard next year or the year after, but this may be an incorrect prediction of how they'll value the costs and benefits of the same situation in the future.

Despite the problem of underachievement, most of our students pursue post-secondary education of some kind, primarily in four-year colleges. We work with them to help plan their course work from ninth through twelve grades, and provide mentorship opportunities with professionals in a variety of fields, with the goal of college preparation in mind.

Many students make rational choices about their behavior, both socially and academically, while in high school and in preparation for life after high school. My goal is to help those who usually make good choices make even better ones, particularly concerning course work and college selection. Also, I wish to get those who chronically make irrational or self-defeating choices to examine their decisions and how they make them, not just so they can make better decisions, but to help keep them from feeling constantly victimized by or detached from their own choices.

In a study for the U.S. Department of Education, Will Jordan and Stephen Plank, researchers at John Hopkins, found that many top achieving students, particularly those from low income environments, do not attend college. This seems to have less to do with family income than lack of advice from guidance counselors or other adults. They don't start looking until second semester senior year, they haven't taken entrance exams (SAT's, ACT's) and have made poor choices in course selections.

"In the study, Plank and Jordan found a direct correlation between early (at least tenth grade) and consistent talks about college between adults and students and college entrance rates regardless of student's socioeconomic backgrounds" (*Talent Loss...*, 1999).

Due to overloaded counselors at large, urban, at risk schools, initiating these talks falls on the student. Jordan suggests that teachers take on the role of college advisors, at least to some degree.

Jordan said, "The most important thing is to have someone say early on to the student things like, 'Don't take that basket weaving course, you need to take this biology course', or 'This college looks interesting, why don't you go visit it?' That kind of simple, practical advice can make a difference for the rest of that student's life" (*Talent Loss...*, 1999).

The self exploration unit I will lead my students through will help them explore values, academics, creativity, individual, small group and large group decision making, and college and career choices. My approach tends to be more or less mechanical. I would like to make it more reflective. I wish to help students evaluate the data they acquire in this unit as it affects their present and in helping to guide their future pursuits.

I'm trying to teach students to use the information they garner from each step in the exploration process and apply it to assessing the validity and worth of information gathered or revealed in future steps. Ultimately, I would like for them to use this information to create or revise their four year high school plan of studies and to begin making preliminary decisions about college and career.

The decision to pursue post secondary education may be furthered by examining statistical correlations between amount of education and income. The difference between the earning potential of high school graduates and college graduates is significant: "data for recent years show that college graduates actually earned about 75% more than otherwise comparable high school graduates" (Miller, 1999).

I realize this is very early for some students, but I think this unit encourages students to get in the habit of thinking about optimizing their resource budgets; that is, getting the most bang for whatever bucks they have at their disposal: their material assets, whatever they may be, and their skills, experiences (past, present and future), desires and human resources, (family, friends, colleagues, etc.).

## Economics

These are precisely the issues addressed by economics, therefore several concepts will be borrowed from economics that will be useful in helping to guide student's thinking and decision making throughout the self-exploration unit, particularly in the latter stages when decisions are made about four year high school

planning, mentorship selection and use of time in the computer lab when using the Choices Career Ware software.

### *Incremental Decision Making*

One of these is incremental decision making. In using this technique, the students gather all the information they can from the various surveys, inventories, and tests and analyze it. Then, they make decisions based on that information that are as incrementally small, or marginal, as possible. This way, a bad decision can be reversed without losing much, or a good decision can be repeated or expanded. For example, if a student finds he has a high value for aesthetics and an unexpectedly high score in visual/spatial intelligence on the Multiple Intelligences profile, he may not want to drop his science and accelerated math classes and take only art electives. He may, instead, give Art I a try the next year and see how that goes.

By thinking on the margin, by adopting the attitude that, based on all the information at my disposal, the next thing is what matters, students can avoid certain fallacies that may prevent them from making the decision that makes them better off. One of these is sunk cost. A sunk cost is one that has already been paid or invested and you'll never get back, so it shouldn't be a factor in a current decision. For instance, if a student already took one year of German but hated it, switching to Spanish, even though two years will be needed, may lead to the greatest degree of satisfaction. (provided the student has the credits available). The German class is a sunk cost. Another bad thinking habit that thinking on the margin may counter is path dependence, or the need to continue on a certain line of thinking, behavior or choice making regardless of its current value to the student. For example, a student who has always felt English is his weakest subject may want to continue to take regular English despite the fact that his current English teacher has recommended him for honors or enriched and his latest Gates reading scores are in the honors range. Or, consider the stellar science student who rejects taking Premed at the Career Enrichment Center because no one in her family has ever gone into the profession. If these students consider where they are at this very moment, and which choice will make them better off, their decisions may change.

### *Law of Diminishing Marginal Returns*

Another important concept is the law of diminishing marginal returns. Every item we encounter has a use value. Economists call this utility or satisfaction. The law of diminishing marginal returns states that the more and more of a particular item we encounter, the less positive return we get from it each successive time. We become satiated. A gifted student might be good at science and want to take one or two science classes every year. In her Junior and Senior year, she may plan to take the remaining science courses at her own high school and go to the Career Enrichment Center for additional science in the second and third session, even if the courses are near repeats of courses already taken. This student may be fast approaching the point of diminishing returns and may be better off reconsidering her plan. Perfectionists could also benefit from knowledge of this concept; when continuing to spend time perfecting an already near perfect paper or project, the last few hours may result in minimal improvement at the cost of spending that time on another activity. This may be particularly salient or of great importance to the many gifted students who tend to be involved in many activities

### *Opportunity Cost*

Probably the most relevant idea is that of opportunity cost. What is the student forfeiting by doing what he proposes to do, and what are the costs and consequences of that forfeiture? For instance, a student of means may want to attend UNM instead of a much more expensive out of state college. UNM is cheaper, closer, the student has knowledge of cheap housing or can continue living at home. UNM offers pretty good courses in his major field. He is surrounded by familiar sights and old friends. Another motivation for staying home is the endowment effect, similar to the proverbial bird in the hand. The student may feel that UNM is in the bag, and shouldn't be given up for a choice possibly fraught with risk; to go away and come back for whatever reason may damage one's reputation and self esteem. The out-of-state school has higher tuition, and housing and transportation costs to visit home are high and the student misses precollege friends. However, the student will probably have fewer distractions, and gains privacy and a much better resume when looking at post graduate schools or career posts. Income potential may be greater, especially in the short term. When determining the opportunity cost of a choice, it should be compared to the next best alternative. This way, the true total cost, the opportunity cost, becomes clear.

### *Law of Comparative Advantage*

Another useful tool for guiding our decision making is The Law of Comparative Advantage which states that if a nation (or person) can produce a product relatively more efficiently or at a lower opportunity cost than other countries or people, that entity has a comparative advantage in the production of that product. This concept can be applied to human attributes such as intelligence, preferences, and values, and their relation to career goals. If, for example, a student highly values helping others, has a high degree of interpersonal intelligence and is an extroverted, intuitive, feeling and perceiving type, she has a definite comparative advantage over others for being successful in social work or counseling. This idea of employing your comparative advantage is simply another way of saying, "go with your strengths."

*Law of Supply and Demand*

There will be a greater demand for any given product at a cheaper price than a higher price (law of demand), but suppliers of the product will supply more at a higher price (law of supply). When the amount supplied equals the amount demanded, economists call this a market equilibrium.

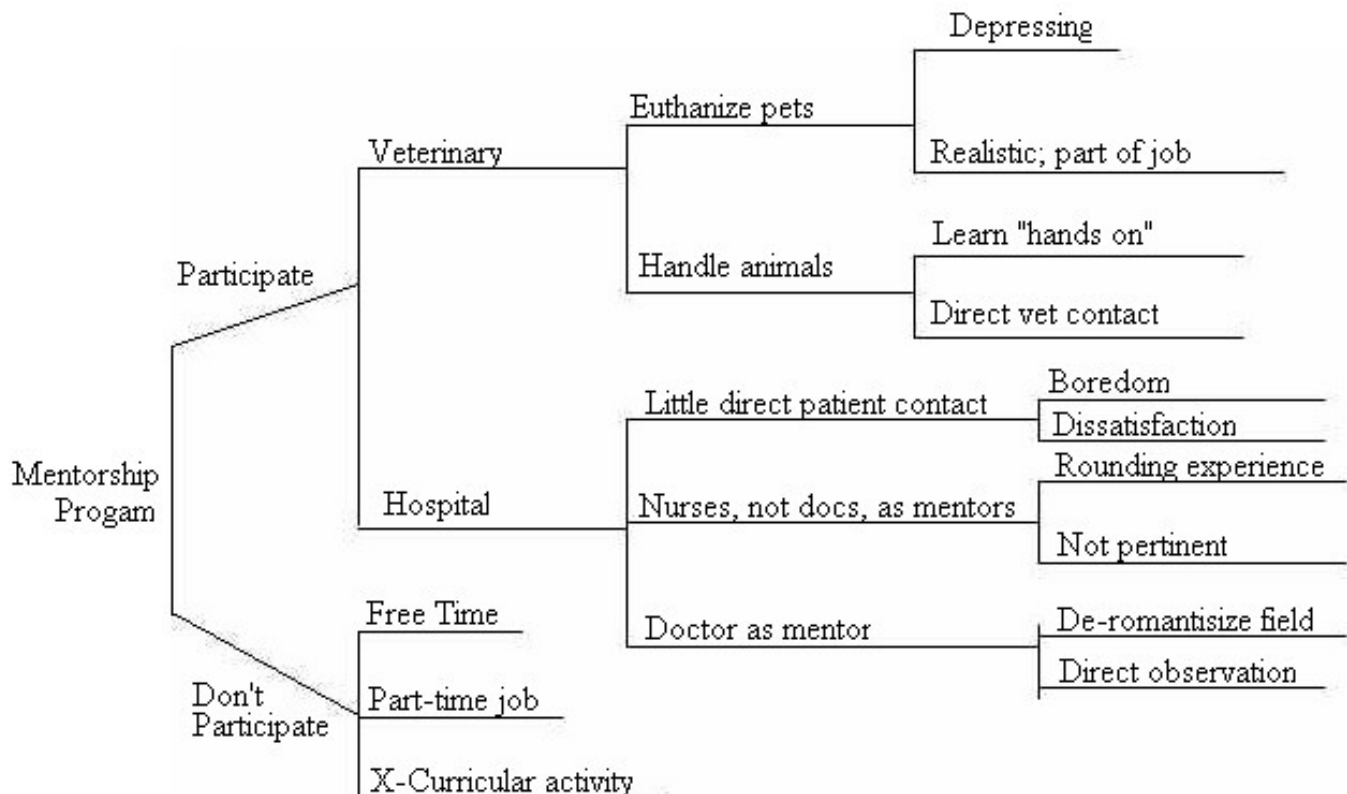
However, if a product or service that is in high demand exists in short supply, its value will probably increase. Conversely, an item in high supply but low demand will probably drop in value.

This applies in career areas as well. If a student is equally interested in two different career paths, it would benefit him to take the one that is projected to have a high demand for workers when he enters the field. If the supply is projected to be low, all the better for his employability and earning potential. A good source for career supply and demand information is the Occupational Outlook Handbook.

Students searching for a post secondary school are also subject to this law. When the demand for admission to a particularly desirable school (number of applicants) far exceeds the supply of spaces, those spaces become much more precious in the eyes of the applicants. Conversely, the applicants may be regarded as cheap and easily purchased by the school in question.

*Decision Trees*

For mentorship selections, four year plans, and possible career and college selection, using decision trees would be helpful. They are useful when any sequence of decisions is to be made, or to illustrate to students that one decision usually leads to another and yet another.



When constructing a decision tree, as in the example above, students need to be careful not to rely heavily on

anecdotal information about the alternatives, but on probabilities of what is likely to occur by following a particular branch.

Time inconsistency issues may be hurdles to achieving a favorite final outcome. For example, impatience may keep students from persisting in a situation that doesn't lead them to the desired outcome quickly. Procrastination may prevent students from even getting started due to missing deadlines. Consistency and commitment are necessary when engaging not only in mentorships, but course selection, course work, and college preparation as well.

A main strategy to use with decision trees is to look ahead and reason back, also referred to as backward induction. So, after mapping out the possible outcomes of their decision on the tree, students would reason back and do what it took to achieve a perceived possible outcome, or change their decision to avoid a negative result.

### Decision Making Models

For the teacher, it may be sufficient to keep three basic questions from economics in mind about decision making. These are:

- 1) Who's making the decision?
- 2) What are their goals?
- 3) What hurdles must they overcome?

Asking these questions will help us understand our own and other's decision making. Many times, however, a more formal model may be useful.

#### *Risk-Taking through Decision Making*

This model was developed by Loretta A. Serna, Ph.D., and Jo-Anne Lau-Smith, M. Ed. at the University of Hawaii. Risk implies that something may be lost, particularly when making a decision or choice about the future when we do not know the outcomes of our decisions and may have a hard time predicting them.

The skill of Risk Taking through decision making requires one to:

- 1) Identify the decision to be made.
- 2) Determine the options available.
- 3) Gather information about each option. (of course, students should assess the validity by seeking multiple sources, and the credibility by considering whether the sources may be biased or have a vested interest).
- 4) Evaluate each option according to most benefits and least losses (cost benefit analysis).
- 5) Evaluate each option according to benefits and losses for others that may be involved.
- 6) Evaluate each option according to moral, ethical and legal value.
- 7) Make a decision offering the most benefits and highest ethical value.
- 8) Determine degree of risk involved. If too high (the uncertainty of not knowing the outcome or the possible losses of possessions, situations, or people too great), another option may be chosen.
- 9) Develop a plan to implement decision.

This method may be used anytime one is uncertain about the future, as in making career choices, going to a certain school, or taking classes. The risk determination component may encourage risk-averse students to accept a certain degree of risk, and be a mitigating factor for high risk-taking students.

There are some reasoning fallacies that students may apply in assessing uncertain outcomes. The first is saliency or vividness. Particularly vivid and probably anecdotal accounts may be given of the potential dangers or losses involved in pursuing an option. For instance: "If you go to Texas A&M, logs might fall on you." Or "My brother took Honors Geometry and it ruined his GPA." These statements may carry more weight than the fact that A&M students were unhurt or most Honors Geometry students do fine.

Secondly, students may overweigh information because it matches with their preconceived notions: "I like chemistry, but I'd never be a chemist, all they do is produce carcinogens and pollutants." In the case of both

saliency and overweighing, students should consider the counter-factual or alternate information which counters their fallacious ideas. They should ask "What else can I find out about Texas A&M (or chemists or whatever)?"

Last of all, risk aversion or loss aversion (the need to avoid any potential risk or loss) will affect judgments about risk or loss, and may prevent a student from pursuing an otherwise viable or even highly desirable option. All of these reasoning pitfalls may be a factor in the evaluation stages of the above model, but may be most problematic when determining the riskiness of an option.

This method may prove to be somewhat laborious for some students, and involves the use of several worksheets. However, its thorough nature should help in making decisions that are acceptable to all affected parties.

### Self Exploration - Curriculum Elements

The following is a brief description of each part of the curriculum, along with references to the economics tools and concepts that come into play.

#### *What's So Important About Knowing Yourself ?*

This short essay ends by saying "Knowing yourself - knowing your personal style - can help you shape your own future, choose your own direction, make your own decisions, and follow your own dreams." This is a call to arms, an encouragement to join the chase. Students will be made aware that economics as well as psychological and education concepts all come into play.

#### *Values Survey*

This survey asks students what values are important to them today; it creates awareness that values can change. This is a 104 question survey in 13 categories including family, adventure, knowledge, power, moral judgment and personal consistency, money, friendship and companionship, recognition, aesthetics, creativity, helping others, independence and security.

These values will be particularly helpful as criteria for evaluating decisions charted out on decision trees or in a decision making model.

#### *Learning Styles Inventory*

Students are told to think of the ways they learn best generally and when trying something new. Students are asked to rate themselves on how much they identify with thirty sets of opposites such as doing/watching and feeling/thinking. They chart the results on a learning styles grid and discover their preferred style: Enthusiastic, Imaginative, Practical, or Logical.

This instrument provides a beginning of the awareness of risk as an element in performance and decision making.

#### *Multiple Intelligences Profile Indicator*

Howard Gardner (1982) proposed that each of us possesses at least seven entirely different ways to understand the world and to express ourselves: verbal/linguistic, visual/spatial, musical/rhythmic, logical/mathematical, body/kinesthetic, and two kinds of social intelligence, intrapersonal (knowledge of self), and interpersonal (knowledge of others). Each intelligence has its own means and modes for learning and expression.

Students respond to forty-two questions about their learning behavior and use their answers to graph their relative degree of the seven intelligences, indicating primary strengths, supporting strengths and less developed areas. Many supporting and extension activities exist for exploring multiple intelligences.

This is an appropriate place to introduce the Law of Comparative Advantage in terms of using one's highest rated intelligences in problem solving and decision making.

#### *Myers Briggs Type Indicator or Kiersey Temperament Sorter*

These assessments, based on Jung's theory of psychological types, report preferences on four scales:

- Extroversion/Introversion - How attention is focused
- Sensing/Intuition - How information is acquired
- Thinking/feeling - How decisions are made
- Judgment/Perception - How one orients to the outside world

Students fill out a questionnaire, and their type is determined from their answers. There are sixteen types that correspond to all the possible combinations of the four scales. The MBTI is usually interpreted by a professional, and the Kiersey can be self scored.

The personality types are explained in terms of their characteristics, effects of each preference in work situations, and the ten most and ten least chosen careers for each type.

This information can be helpful as criteria in decision trees and decision making models. This is also a good place to reemphasize Comparative Advantage.

### *Choices Careerware*

"Choices" is career exploration software that attempts to provide information about student interests, occupations, post secondary schools, occupation/interests matching and other important job related factors, schools that offer specific programs or majors and meet location, cost and other requirements, and financial aid opportunities and eligibility.

This is an opportune time to introduce concepts such as incremental decision making, diminishing returns, opportunity cost, and the laws of supply and demand, particularly prior to student's writing of a career plan.

### *My Career Plan*

Using the results of the MBTI or Kiersey Temperament Sorter and the Choices Careerware search, as well as Occupational Outlook Handbook, Career Information Center series, and the Encyclopedia of Careers and Vocational Guidance, students will write a paper evaluating and planning a career they may be currently considering.

Students should employ concepts introduced during the Choices search as well as decision trees.

### *Prepare for your College Search*

This is a step by step schedule for approaching a college search. It starts by extolling the virtues of taking the most challenging courses a student can handle to set themselves up for admission into a college of their choice. Next is a schedule of what to do in the Junior and Senior years. It's an extensive but concise schedule dealing with applications, campus visits, testing, portfolio, recommendations, counseling, essay writing, financial aid, etc. Also included is a checklist for evaluating colleges and a list of most frequently asked questions about college admissions and answers to these questions. Great resource.

Not all students will find all of the information useful, and some may realize that, for them, the opportunity cost of following the entire schedule would be prohibitive. Students can use all their economics tools and decision making models both in assessing the usefulness of the search instrument and in implementing as much of it as they deem beneficial.

### *Four Year High School Planning*

Using a four year planning form that lists minimum and college preparatory requirements and a home school course catalog, a CEC course catalog, summer school schedule and correspondence catalog, and keeping in mind their career and college plans and intelligence profile, students will map out the remainder of their high school course work. Particular attention should be paid to appropriate sequencing and difficulty level of courses. Students may need some advice about under or over commitment at this time. The teacher should take the time to examine student choices and help them to evaluate the overall course load and specific courses in terms of opportunity costs and both short and long term goals. Students sometimes hurry through this step, failing to consider all the possibilities. Be diligent as an advisor and have the students think this through thoroughly.

The best advice to students at this time may be to make decisions on the margin, based on where they are NOW, but to plan ahead knowing their decisions are not cast in stone. Students should employ as many

economics tools, and avoid as many pitfalls as possible at this stage.

### *Resumé Writing*

Students start by reading articles that stress the importance of a good resume and give advice about dos and don'ts. Students are given a couple of different sample resumes and a work sheet for filling in the pertinent information from the current year and preceding several years (usually three). Students are advised to keep the resumes to one page.

The resume may be submitted with the mentorship or internship application for students so enrolled, can be used for after school or summer job applications, and provides good practice for writing subsequent college and job search resumes.

Students must decide how they want to represent themselves.

### *Mentorship Selection and Application*

All Albuquerque Public Schools high schools in conjunction with the APS Career Enrichment Center (CEC) offer mentorships in a wide variety of career fields to all gifted students. There are approximately 200 offerings in careers ranging alphabetically from architecture to zoology. The arts, entertainment and communication fields, writing and journalism, engineering and science, law, medicine, education and many other fields are represented in the mentorship list.

Students must apply early in the spring and must, after having searched through the mentorship book, submit an application listing their three top choices along with related interests and skills. They must also submit a copy of their transcript, a resume, and two teacher recommendations.

Students are made aware that their applications are rank ordered, with seniors and juniors having priority over sophomores, and students with higher grade point averages having priority over those with less stellar GPAs.

Very often, students select a mentorship that dovetails with their course work and long term goals. For these students, the mentorship experience may help to confirm their interest in the chosen field. It may, on the other hand, provide a sometimes rude awakening to the day to day realities as opposed to their romantic notions about the career. Either way, the students are well served by the experience, both in and of itself and in furthering or altering career plans.

Other students may have several potential career areas in mind, or may simply be curious about a particular field. These student's eventual career decision-making may also benefit from the "on the job" exposure of the mentorship experience.

Use of decision trees can be very useful here, as well as considering opportunity cost in terms of use of limited time and transportation. Mentorships can be risky and uncertain. Students can help put the risk in perspective by using the Risk Taking through decision making model.

### *Secrets of the SAT*

This is a PBS Frontline video investigation into College Entrance Testing. It deals with the history, current importance and the industry that has grown up around the Scholastic Aptitude Test (SAT). Six students that have applied to UC Berkeley are profiled. At the end of the video, viewers find out their fate. Before this happens, students can simulate the entrance committee and evaluate the applications on their own and decide whether to accept or reject each applicant. Students are told that 50% of acceptances are based on pure numbers (GPA, SAT score and course difficulty level) and the remaining 50% can be admitted considering other factors such as family income, working during high school, and extracurricular activities. The one factor the committee is told not to consider is the race of the applicant. This is a very illustrative and pertinent hands on group decision making activity.

A companion reading traces the history of affirmative action as it relates to college admissions.

### **Implementation:**

Self Exploration - Objectives

Before listing the unit objectives, I will list the applicable standards from the New Mexico State Department

of Education Standards under the Career Readiness content area. The benchmarks are labeled with letters. Then, I will list my objectives; after each objective, I will write the number(s) and letter(s) of the standard and benchmarks that it meets.

#### Career Readiness Content Standard 1:

Students will identify their career interests and aptitudes to develop an educational plan which supports personal career goals.

Student will:

- a) analyze and evaluate personal interest and aptitudes for proper course selection and career choices;
- b) participate in activities to explore the free enterprise system;
- c) write, evaluate, and revise a career plan consistent with career interests, aptitudes, and abilities;
- d) demonstrate job acquisition skills by completing a resume;
- e) demonstrate marketable skills for entry into a post secondary education or training program or a chosen career field;
- f) explain the connection between academic skills and career options by identifying education and training requirements;

#### Career readiness content standard 4:

Student will develop and demonstrate responsible and ethical workplace behaviors.

#### Self Knowledge Objectives

By participating in a self exploration unit, students should increase their self knowledge and be better able to answer questions such as:

- Who am I? What are my values, attitudes and beliefs? (1a)
- What is important to me in my life? Family? A career? Religion? Power? Money? Friends? A social life? (1a)
- What are my preferred learning styles? (1a)
- What intelligences exist other than those most often used in school (logical-mathematical and linguistic)? What are my strengths and weakness in these intelligence areas? (1a)
- Do I tend to be more academic or more creative? Can I develop both? (1a)
- How do I think? Am I more convergent or divergent? (1a)
- Where do I focus my attention? Am I more of an extrovert or an introvert? (1a)
- How do I find out about things; more through my senses or my intuition? (1a)
- How do I make decisions and set goals? Do I rely more on logic and thinking or identifying and feeling? (1a)
- Which career areas best match my values, interests, preferences and intelligences? (1a)

#### Performance Objectives

- Use economic concepts and strategies to help analyze and improve decision making. (1a)
- Use decision trees to map out possible outcomes from a given starting point
- Complete and discuss the results of various surveys and assessments. (1a)
- Engage in follow up activities based on the results of the surveys. (1a)
- Revisit and possibly revise four year high school plan. (1a)
- Explore the relationships between interests, skills, occupations, and post-secondary schools. (1a,f)
- Write a career plan. (1c)
- Decide on a post-secondary school search strategy and implement it. (1a,c)

- Write a resume. (1d)
- Explore gifted mentorship offerings, perhaps apply for and engage in a mentorship in the community. (1b,c,e,f, 4)

## Materials

- Student folders for all paperwork generated during this unit.
- Surveys, charting sheets and interpretation materials for Values, Learning Styles, Multiple Intelligence and MBTI/Kiersey sections
- Multiple Intelligence Book (listed in bibliography)
- Choices Software and access to computers
- Career Planning reference books in school library (computers)
- Sample Resumes and Resume Charting forms (computers)
- Four Year Planning forms
- School Course Catalog, CEC Catalog, Correspondence Catalog, Summer School Schedule
- Preparing for Your College Search
- Mentorship Catalog and application forms
- Secrets of the SAT video, student applications and selection criteria
- (Optional) Various short stories, articles, and essays listed below in the bibliography

## Additional Resource

- Transition Specialist (MBTI and Career Plan)

## Procedure- Lesson Plans

1) Read "What's So Important About Knowing Yourself" -discuss

Optional: read & discuss "The Social Me" by William James.

2) Fill out, score and discuss values surveys- introduce decision trees

Optional: read "The Kid Nobody Could Handle" by Kurt Vonnegut and create decision trees for each of the main characters.

Optional: read "After the Ball" by Leo Tolstoy- discuss the values of Ivan and of Varenka's father.

3) Introduce learning styles, students complete and score the inventory, check for validity/feedback.

Optional: give students the Meeker. It asks "Which Are You? Creative Or Academic Or Both?" Follow up with a picture or story completion activity that can help illustrate the difference.

4) Introduce multiple intelligences (lots of good readings are available). Students complete multiple intelligences profile.

- students score and graph results
- do a validity/agreement check and discuss

Optional: perform various activities related to each intelligence.

5) Choices- Familiarize yourself with Choices Careerware and arrange for computer lab time. Lead students through the steps. This usually takes 2-3 days of lab time.

6) Career Plan- Check with your librarian for availability of occupational and career reference books- sign up for library time and computer time (if career plan paper is to be word processed).

Optional- Read and discuss parts of "Self Reliance" by Ralph Waldo Emerson.

7) Four Year Planning- Assemble as many of the catalogs listed in the materials section above and have students fill out their four year plan. Plan to have a counselor handy to answer questions.

Optional: Read and discuss "What High School Is" by Theodore Sizer. It is somewhat cynical, but many gifted students relate well to cynicism.

8) Resume Writing- Having good sample resumes and charts for compiling and organizing information is crucial and will avoid a lot of confusion. Students fill in information in class, then take it home; parents may remember activities, awards, etc. that the student may have forgotten. Remember to sign up for computer time.

9) Mentorship Selection and Application- this is a process that should begin in about the middle of February along with four year planning and end with the student's completed application- usually in mid-April. Mentorship interviews and start-ups generally occur at the beginning of the new school year. For more information contact the Albuquerque Public Schools Career Enrichment Center.

10) Secrets of the SAT- you'll need to secure the videotape. It is a Frontline production and can be ordered on the PBS website: [www.pbs.org](http://www.pbs.org) the cost is about twenty dollars.

-watch the video with your students; stop it just before the profiled applicants learn their fate

-give students copies of "Who Was Good Enough" -five UC Berkeley applications, which they evaluate in groups and decide to accept or reject. Download from:

[www.pbs.org/wgbh/pages/frontline/shows/sats/who/](http://www.pbs.org/wgbh/pages/frontline/shows/sats/who/)

-learn their fate (three of the five are in the video) by finishing the video

Optional: read "Quirky Questions in the Quest for College" (in bibliography) with your students.

- students devise a TV pilot written as a skit using guidelines mentioned in article students perform the skits
- videotape if possible
- watch and enjoy

This is a fun activity that requires about three days class time. This is a highly cerebral and reflective unit. Ending it with an entertaining activity helps students unwind and see the unit in a more positive light.

#### Assessment

Many of the curriculum elements are difficult to evaluate on any criteria other than participation and completion. The clear exception is the career plan. A rubric can be devised and shared with the students prior to this activity. There are two other optional methods of assessment:

- Journal - Students keep a journal in which they respond to many of the activities in the unit, either with open-ended responses or with teacher prompts that include questions.
- Career collage - Each student uses magazines, newspapers, and small three-dimensional objects to create an individual career collage which they present and describe to their classmates. the teacher should create a rubric that looks something like this the one below:

### Career Collage Rubric

#### Visual product

Communicates career interests \_\_\_\_\_/ 30

Has eye appeal \_\_\_\_\_/ 20

#### Oral presentation

Includes reference to economic concepts \_\_\_\_\_/ 30

Qualities:

Enunciation \_\_\_\_\_/ 5

Volume \_\_\_\_\_/ 5  
Eye contact \_\_\_\_\_/ 5  
Speed / length \_\_\_\_\_/ 5  
\_\_\_\_\_ / 100

Comments:

### Closing Statement

Teachers can have an enormous impact on the lives of gifted students. Underachieving students have been salvaged by one understanding teacher who took an interest in them. The investment of time and energy in differentiating the curriculum for gifted students, particularly in terms of investing time in a self-exploration unit, can inspire them to have higher aspirations, to win scholarships, to choose demanding careers, and to use their gifts for the betterment of society.

It is important to note that the list of curriculum elements, materials and procedures are presented as a menu. Anyone using the unit may pick and choose or substitute similar or even very different elements and still receive excellent results.

Even though this unit was organized with a gifted student population in mind, none of the elements except the mentorship offerings are designed specifically for that population. (Alternative mentorship programs exist at many high schools.) Therefore, the unit can be useful for any high school teacher interested in doing self and career exploration with their students. In fact, other non-gifted special education students may benefit greatly from exposure to self-exploration. They should know that the interests, values and intelligences traditionally most valued in school are not the only important ones to have, that their individual intelligences, interests and preferences can lead to success and satisfaction if they learn to make decisions in their own best interests.

### Documentation

#### Bibliography and Resources

##### *Teacher Resources and Bibliography*

Berger, Sandra L. *College Planning for Gifted Students*. Reston, VA: The Council for Exceptional Children, 1998

Buescher, Thomas M. and Higham, Sharon. "*Helping Adolescents Adjust to Giftedness*". 1990. Council for Exceptional Children. 17 June 2000. <http://www.ericed.org/digests/e489.htm>

"Decision Theory and Decision Trees". Mind Tools. 6 June 2000. [www.mindtools.com/dectree.html](http://www.mindtools.com/dectree.html)

Delisle, James R. and Berger, Sandra L. "*Underachieving Gifted Students*". 1990. Council for Exceptional Children. 11 June 2000. <http://ericec.org/digests/e478.htm>

Dixit, Avinash K. and Nalebuff Barry J.: *Thinking Strategically: The Competitive Edge in Business, Politics, and Everyday Life*. New York-London: W.W. Norton & Company, 1991  
Decision trees discussed pp 34-44.

Geisbrecht, Martin Gerhard and Clayton, Gary E: *A Guide to Everyday Economic Thinking*. Boston: Irwin McGraw-Hill, 1997  
Chapters 1-3 contain concise descriptions of basic economics concepts.

"*Gifted and Talented - Gifted Underachievers*". 22 Sept. 1997. EDWA. 11 June 2000.  
[www.eddept.wa.edu.au/centoff/gifttal/giftsund.htm](http://www.eddept.wa.edu.au/centoff/gifttal/giftsund.htm)

Hirshleifer, Jack *Price Theory and Applications: Second Edition*. Englewood Cliffs, NJ: Prentice-Hall, 1980

Kiersey, David and Bates, Marilyn: *Please Understand Me : Character and Temperament Types*. Del Mar, CA: Prometheus Nemesis Books, 1984

Marks-Turlow, Terry: *Creativity Inside Out : Learning Through Multiple Intelligences*. Menlo Park, CA: Addison-Wesley Publishing, 1996

Miller, Roger LeRoy, Daniel K. Benjamin, and Douglass C. North. *The Economics of Public Issues*. Reading, MA: Addison-Wesley Education Publishers Inc., 1999

Serna, Loretta A. and Lau-Smith, Jo-anne *Learning With Purpose*. University of Hawaii, 1995

Silverman , Linda Kreger "*Do Gifted Students Have Special Needs?*" . Gifted Development Center, Denver, CO. 11 June 2000. [www.gifteddevelopment.com/Articles/Do%20Gifted%20Students%20Have%20Special](http://www.gifteddevelopment.com/Articles/Do%20Gifted%20Students%20Have%20Special)

"*Talent Loss -Why So Many of the Country's Top-Achieving Low-Income Students Never Go to College*". March 1999. Headlines@Hopkins. 11 June 2000. [www.jhu.edu/news\\_info/news/home99/mar99/talent.html](http://www.jhu.edu/news_info/news/home99/mar99/talent.html)

### Video Resource

"Secrets of the SAT" Frontline. PBS. WGBH, Boston 11 Oct. 1999

### Suggested Teacher and Student Reading

#### Short Stories

Shepherd, Jean: "*The Endless Streetcar Ride into the Night and the Tinfoil Noose*." *Outlooks and Insights*. Ed. Paul Eschholz and Alfred Rosa. New York: St. Martin's Press, 1987. 104-110

The reader is taken along on a not so easily forgotten blind date.

Tolstoy, Leo: "*After the Ball*." *Introduction to Great Books, Second Series*. Chicago: The Great Books Foundation, 1990. 176-189

A young man's life turns on a chance witnessing of a cruel act committed by his amour's father.

Vonnegut, Kurt. "*The Kid Nobody Could Handle*" *Welcome To The Monkey House*. New York: Dell, 1998. 270-283

A troubled boy's life changes when he meets a compassionate teacher.

#### Essays

Emerson, Ralph Waldo: "*Self Reliance*" *Touchstones, Volume II* Annapolis, MD: CZM press, 1988. 73-76  
An exhortation to find fulfillment through being yourself and doing your best.

James, William: "*The Social Me*." *Introduction to Great Books, First Series*. Chicago: The Great Books Foundation, 1990. 38-41

James discusses the social self and how it changes according to circumstances, people present, and one's role in society.

Sizer Theodore: "*What High School Is*." *Rereading America*. Ed. Gary Colombo. Boston: St. Martin's Press. 1995. 20-32

The author contrasts the mythic aims of schooling with the realities of life in American high schools.

#### Articles

Gibbs, Nancy: "*The EQ Factor*." *Time* October 2, 1995: 60

New brain research suggests that emotions, not IQ may be the true measure of human intelligence

Marlantes, Liz: "*Quirky Questions in the Quest for College*". *Christian Science Monitor*, November 9, 1999: 16

Longland, Connie: "*Frontline Documentary Unlocks Secrets of the SAT*" *Albuquerque Tribune*, October 11, 1999