

**Being a Responsible Adult:
A Curriculum Unit Emphasizing
Mathematical Concepts**

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Academic Setting

McKinley is a Middle School located near the heart of Albuquerque in the Northeast quadrant. Approximately 850 students attend Mckinley with their socioeconomic backgrounds ranging from low to upper middle class. The ethnic breakdown of the school is as follows: 50% Hispanic, 35% Anglo, 7% Native American, 1% Asian, and 1% "other." The students at Mckinley are often a tight knit group, but as happens in a Middle School setting, differences between peers begin to appear and personalities begin to clash. As the students begin to become more aware of their own niche in life, they begin to feel the pressures of their environment and the demands that will soon be made of them. The fortunate students have a strong family base to turn to for guidance and plentiful role models after whom to model their own young, adult behavior. On the other hand, many of McKinley's student body have not been so blessed. Just using my own case load as an example, of the 19 students on my docket only one is listed as living with both their original mother and father. Most lived within a single parent setting or a step-parent environment. These students are in dire need of positive influences and role models in their lives. They need to have grown-ups in their day-to-day routine who can give them mature, adult advice and who will then follow up to see if it was followed, or who at least will discover which path was chosen. It has been my experience working with these young people that simply giving advice is not enough. They may not outwardly express it, but having someone listen with interest is very important.

I try to pay a lot of attention to the role models of my middle school students. I do this for a couple of reasons. First, it always helps to have a rapport with the students whom you are trying to reach. If I can bring in an example during one of my lessons using a popular singer or actor it can only help to heighten interest. By keeping a gap between yourself and your students it can only help to strengthen an "us and them" attitude instead of an "us versus our teacher" type of relationship. I want my students to feel comfortable coming to me with questions other than those math related. Secondly, it helps to understand what *kind* of people your students are admiring. Many of these individuals are leading the kind of careless lives that only an

endless supply of money could provide. The "live for the day" philosophy that is so predominant among rap artists and young stars teaches nothing about the everyday survival of the caregivers of the McKinley students. What does it mean to have a fixed income? What does planning a budget have to do with my life? Is it possible that one day I won't be able to afford everything that I want? The answers to these questions cannot be found on the MTV news. The students at Mckinley need to be taught that being a responsible adult means more than calling an agent or hanging with the homies.

Classroom Setting

This curriculum unit is designed for B level special education students. I have 35 students in my math class who come from grade levels 6-8th. The students in this class are very well behaved and have a tremendous will to learn. Many of these students get pulled away from their friends in the general ed. population and are placed in this classroom environment with peers with whom they are unfamiliar. There are never more than 12 students in any class during the day, which allows for a great deal of teacher feedback and guidance. It is very easy for me to tell when a concept is being misunderstood or when a principle is being used incorrectly. I try to remain aware of the progress each student is making; I try not to assign much homework, or at least give them ample time to complete a significant portion of the work in class. It has been my experience that if I do assign homework I am lucky if I get a fifty percent completion rate. The reasons for this turnout are plentiful, and I am aware the number one cause is sheer laziness but there are always exceptions. After a few weeks passed during the past year I noticed that a young lady in my fifth period class was turning in little to no homework up to that point. I found out later from meetings and calls that this girl was basically raising three young children herself, while her single mother worked countless hours to keep the refrigerator stocked and the power on. The students in my math classes are full of stories like this as are most of the students at Mckinley. Therefore, I try to keep some parents happy with a couple of homework assignments here and there but never more than three a week

All of my students have a specific learning disability in the area of mathematics. They may be very bright in most other classes but just need the added attention that a smaller classroom environment can provide. Many could easily keep up with the regular ed. math speed and curriculum but would get lost and frustrated in a class of thirty students. The only student whom I had that did not meet the special education requirement under the area of learning disabled was a girl who came to me as having a traumatic brain injury. She was a very

nice and social girl who seemed to have many friends and no adverse effects from her terrible ordeal. In fact, she ultimately became my best student and ended up winning the award as my highest achieving math student. She was a testament to the perseverance of my students and their drive. The last I heard she made the cheerleading squad at Albuquerque High and is looking forward to a great freshman year.

Since the size of my math classes is so small I tend to treat the class as one cooperative unit. I allow for work in partners or small groups on a limited basis because I like to gauge the level of each student on an individual basis. If they are allowed to work with someone else it is hard to attain just who is doing the work and who is simply copying the answers. These students can be quite clever even when there is a limited amount of pupils in the room. In the curriculum unit I will be limiting the amount of time students will be working directly with others to time spent researching and sharing. I will have plenty of time for class discussion during the unit, and many ideas will be shared and learned.

Goals and Objectives

Theme One

1. Students will choose and research a career
2. Students will estimate a yearly salary and research actual salary
3. Students will estimate monthly earnings
4. Students will brainstorm monthly expenditures
5. Students will work within monetary limits to create a monthly budget
6. Given the salary of an average New Mexico resident, students will create a monthly budget

Theme Two

1. Students will analyze crime statistics from New Mexico and compare those statistics with national trends
2. Students will convert crime statistics into decimals and averages
3. Students will compare and order decimals
4. Students will compare place values by comparing NM and national crime statistics
5. Students will identify economic and social causes for crime
6. Students will compare the economic statistics of NM with those of the US
7. Students will add and subtract decimals

Theme Three

1. Students will identify what it means to be a responsible adult
2. Students will estimate how much money it takes to support inmates
3. Students will discover the burden of welfare recipients
4. Students will explore the cost of child rearing and how expenditures will change as the child gets older
5. Students will multiply decimals
6. Students will read and analyze graphs and charts
7. Students will convert percentages into fractions and decimals

Rationale

According to former Secretary of Labor Ray Marshall, America has the worst school-to-work transition process of any industrialized nation. This problem, unfortunately, is magnified in regards to the socioeconomic backgrounds of my students. The transition from school-to-work has reached a crisis level in inner-city schools, and although McKinley would not be considered an inner-city school as such, many of my students face the same harsh realities that, say, a child from East St. Louis would face (Schorr 292). Our society is now demanding that are be a college graduate in order to attain an occupation through which a family could be provided for and if one simply has a high school diploma the options afforded to that individual are severely limited (292). In this regard, times have surely changed. Gone are the days when a man could simply receive his high school diploma, marry his high school sweetheart and then look forward to a long prosperous life filled with beautiful, law abiding children (244). The importance of education needs to be emphasized within the classroom and not just in terms of a teacher saying, "Hey, you'll need this information in the future if you want to have a successful life." What is a successful life to some children? Is a good day not being abused by your father? Is a successful afternoon just simply making it back to ones house free from injury? In the ganglands of Los Angeles, Miami, or even Albuquerque where does the concept of success begin and end? In the life of Sanyika Shakur, aka Monster Kody Scott, a notorious leader of the Crip gang in LA a successful life meant killing as many of the enemy (rival Bloods) as you could, not squealing on you fellow gangbangers, and simply staying alive (Shakur). These are the types of realities that the big city teacher must face and hope to overcome.

I cannot pretend to understand the problems that are faced by some of my students on a day-to-day basis. I grew up in an upper middle class

family in an affluent section of Palm Beach County Florida. I have, for the most part, bright clothes and name brand shirts and pants. Most of the time I don't wear socks. How is a student who just got done dodging return fire on his way to school going to relate to me? I understand this and I try to keep away from absolutes when it comes to these students. I had one student in particular this year who decided he was going to create his own gang with a bunch of his friends at school. He went ahead and gave his self-created gang a name, a symbol, and an attitude. He brought all of that to school and naturally became very popular wearing that front. It is the popularity of these students that can be the most distracting aspect of it all. Just the appearance of being gang related can be enough to swoon the girls and get the admiration of the guys, and this can have an effect on a classroom. After a while however, it came to my attention just what was transpiring, and I had a sit-down with this student and the campus officer about what the ramifications of this activity could be. We had to explain to this boy that if he gets seen giving his gang symbol even in the neighboring streets of McKinley, he has a chance of getting harmed or even killed. But to him this was a chance to be somebody, be a success. I realized that it is not enough to just throw out words and advice. He has to be shown that there is another way and that there are consequences to that type of behavior. There are more productive avenues to the land of successful adulthood.

In my curriculum unit I want to show my students an alternative to delinquency. I want them to discover that being a burden to society takes on many roles. I want them to see that being a responsible adult means being self-sufficient, on favorable terms, and not at the cost of harming others. Being a responsible adult means taking care of your dependents and enhancing the life of those who care about you. They need to be made aware that our society **does** place a tremendous amount of weight on being educated, and that only through education can self-sufficiency be attained. Recent statistics show that by the age of 15, youths are already at risk of reaching adulthood being incapable of facing the responsibilities of adulthood, and as many as one in four adolescents are open to high risk behaviors and in danger of failing school (Hersch 12). In the end, of course it comes down to individuals making the right decisions; but if they are educated decisions, and consequences for irresponsible behavior are realized, then a huge step towards becoming a responsible adult is taken.

Unit Content

My curriculum unit is divided into three themes: Choosing a Career, Crime in NM and the US, and Being a Responsible Adult. I thought that dividing the unit this way would provide a good chance to show

my students a positive path towards being a success, the consequences of making the wrong decisions, and then close with reinforcing the responsibilities of being an adult and a parent. By seeing two paths, the socially respected and rewarded path and the socially unacceptable path, I hope my students can understand which path leads to responsible adulthood.

Choosing a Career

I wanted to start the unit with a topic that could grab my student's attention. Having them choose any career they wanted seemed like the perfect place to begin. There is nothing that will shut down the minds of my students faster than being limited to just one or two topics to discuss. This is a chance for them to not only be creative with their interests but also to think about their future in terms other than buying the next Snoop Dog CD or cruising down Montgomery next Friday night. I want them to begin by brainstorming three occupations that interest them. They will then estimate the yearly and monthly salaries of their occupations, and we will also do other estimating activities to reinforce the concept. Next, we will head over to the library, as a class, to do research on their chosen fields. Our school has made many great improvements in the area of technology, and access to computers with Internet access is not a problem. I have looked up some Internet sites to help them with their research including, but not limited to, Adin.org, explore.cornell.edu, usml.edu, and votech.about.com. They will all have worksheets to fill out on their occupations (see attached) with questions such as average salary, education needed, hours, etc... After filling out the three sheets, the students will be asked to choose the one that looks the best to them and which will be their new career.

After the careers have been chosen we will again partake in a classroom brainstorming activity, this time focusing on just what kind of expenditures adults face over a monthly period of time. We will use the class list to give each item a price, and then compare the price of expenditures with the estimated and found salaries that were computed earlier. Hopefully this can be a wake up call to some and strike further interest in others. We find out who is spending more than they are making and what they need to do to get within the cost of living in their household. I will sum up this theme by giving the class the average salary of a New Mexico resident and asking them to again compare expenditures with income. It is within the boundaries of this New Mexico average salary (\$21,853) that I will ask the students to plan a monthly budget based a household of one, themselves, as we will be discussing the effects of children later in the unit. They will end theme one with a journal topic about what type of

things they would have to give up if they earned the average wage of a New Mexico resident as compared to their chosen occupation.

Crime in NM and the US

Students will be given crime statistics from NM and asked to put the types of crime in order from least frequent to most frequent. This will give the students an opportunity to study tables while learning about a serious topic that hits close to home. During this time we will also begin work with percentages and decimals as we convert crime statistics into both. I will also give the students the crime rates in NM for the past ten years, and we can analyze which crimes have increased the most and predict how many crimes will be committed in the future. In their journals, I also want my students to tell me why they think people are committing these crimes, and limit it to two areas: an economic factor and a social factor. In the area of economics I will lead them into a discussion on poverty in the state and give them a breakdown on the extent of poverty in New Mexico based on statistics supplied by UNM (out of 1,484,339 persons to be determined 305,934 are below the poverty level. Of persons 18 years and over 183,674 out of 1,044,301 are below the poverty level, and out of 156,630 over 65 years of age, 25,839 are considered to be in poverty). In the social realm, I want to lead them into a discussion on the breakup of the family, and I have statistics that give household information for the county of Bernalillo. Using these statistics we will continue our work with percentages including the converting of percentages into fractions and the comparing of fractions and decimals.

Being a Responsible Adult

To sum up the curriculum unit I will use the information learned so far as a stepping-stone into the realm of being a responsible adult. I have limited the discussion of this topic to four very general ideas as a means of keeping it organized and fluid: One, having a job and maintaining it; two, not being a burden to society, three, self-sufficiency; and four, providing for dependents. These topics, of course, simplify the concept greatly, but for the purposes of this class it is a start. I want to stress to my students that being able to provide for oneself and one's family is a big step. Even when they see so many adults doing it, getting to that point is a difficult struggle.

Maintaining a Job

We will review the work we have done in regards to occupations up to this point. The students will write in their journals responses to various questions: Have they reconsidered their chosen career? Why

is it important to keep a good job? How can a person attain a better paying job? Does just having a good job make them a responsible adult? etc....

Contributing to Society

During this discussion we will talk about those who are a burden to society. Specifically we will focus on inmates and welfare recipients. While my students increase their ability to read charts and graphs they will learn how many prisoners are currently in our country's prison system and how much it costs to maintain them. We will also look at the number of welfare recipients and welfare families from state to state and discuss why the United States has the most number of children on welfare in any industrialized nation (Schorr 235). We will discover what percentage of New Mexico is currently on welfare, and discuss reasons why they are there. The students will break down the percentages of other states and try to discover what states have the highest percentage of welfare recipients.

Self-Sufficiency

Here a journal writing activity will be needed. What does it mean to be self-sufficient? I want my students to realize that a 37-year-old man living "at home," as portrayed in the popular Holiday Inn commercials, is not self-sufficient. A scenario like that can be hilarious in a 30 second spoof, but in the real world to be non-self-sufficient is a burden to society

Providing for Dependents

At this point in the curriculum unit we will discuss the cost of child rearing. By analyzing pie graphs the students will discover which aspects of having a child cost the most, or the least. We will explore what percentage of the household income will go to aspects of child rearing such as clothing, health care, and transportation. We will also discuss how these expenditures will change as the child gets older: While the amount of money out of your pocket may go down for clothing if your child gets a job to help pay for his/her own, will the amount of money you spend on transportation go up as you take them to and from that job?

I want my students to realize that providing for dependents is not always just economic. Many single parents do a fine job providing for the welfare of their children in a monetary sense, but are they providing for them emotionally or mentally? Often children do not get the discipline they need from single parents because the working mom or dad does not want to spend the only time they have with their child

punishing them (Brazelton and Greenspan 154). We will discuss what behaviors need to be modeled to children to make them feel needed and wanted, and what the children can do to help their parents accomplish this.

Implementation

My goal for the implementation of this curriculum unit is one month. I have divided the entire unit into three themes, each of which should take about six or seven days to complete. When it comes to planning with my particular math class, planning too far ahead leads to problems with time management (as I never seem to know what concepts will give my students problems and concerns). The time conditions for my lessons are meant to be taken as approximates and time needs to be given for constant review and understanding.

Theme One

Days one through three will be spent choosing and researching a career. On day one my class will do a brainstorm activity by creating a concept web to help choose a career. I will draw the web on the overhead while the students copy it individually at their desks. We will fill in occupations as we expand the web. After we are done with the concept web, I will ask each student to pick three occupations which look acceptable to them. They will write them down in their notebooks and estimate the yearly salary for each one. The following two days will be spent in the library doing research. For each occupation that the students chose they will be given a handout with ten questions (see attached). The students will have to research their occupations on line and fill out each questionnaire in full. After the students have completed all three handouts, they will need to pick the one career that interests them the most.

Day four procedure: Students will read to the class about the occupation that they have chosen. After all students have had a chance to share their careers, we will brainstorm monthly expenditures that all will have to face as adults.

Day five procedure: I will pass out a worksheet that lists all the expenditures we talked about as a class. I will then ask each student to estimate how much money it will take to meet the needs of each heading. They will have to keep in mind how much money they will be making at their job, and will have to make sure to stay within their budget. The students will then be asked to calculate how much money they will be spending each month. Correct addition will be stressed.

Day six procedure: Students will be asked to present their monthly

budget to the class. When all students have presented, I will hand out a sheet showing the average per capita income for the state of New Mexico. The students will then be asked to redo their budgets based on this new salary. We will then finish up theme one by talking about the differences between their two budgets.

Assessment

Assessment will be done based on completion. All students will be required to submit the three handouts on their chosen occupations with all ten questions answered in complete sentences. Also, two completed monthly budgets will be turned in, with all expenditures calculated.

Extension

Students will engage in a place value game. This game requires that two students draw a game board like this: $_ _ _ _ . _ _$ They will then take turns rolling a spinner or die and place the number they roll or spin in the blank of their choice. The student who can create the highest number wins (Burns 233).

Materials Needed

Sufficient copies of research handout
Calculators
Copies of NM statistics listing per capita income

District Benchmarks and Standards

Strand IV Content standard: The student identifies patterns and special features of data and events of chance through experiences with meaningful mathematical problems that focus on comparing, predicting, representing data, and making decisions to communicate mathematical understanding.

Performance standards: Interpret and make conclusions from data.
Predict sequences and patterns involving varying rates of change.

Theme Two

Day one procedure: I will pass out NM crime statistics, and we will analyze them as a class. Students will be asked to put the crimes in order from least frequent to most frequent, and I will give them the percentage of total crimes each category represents. We will then discuss the writing of percentages by doing labsheets 2c and 2d from the *Math Thematics* teacher resource book

Day two procedure: The class will practice converting percentages

into decimals by reviewing labsheets 2c and 2d, and then working on page 178 in their textbook.

Day three procedure: Students will compare and order decimals using labsheets 5a and 5b from the *Math Thematics* teacher resource book.

Day Four procedure: The class will identify some economic causes for crime. I will then focus on poverty. We will have a class discussion about what poverty is and why it can promote criminal activity. I will then pass out a sheet giving poverty statistics for the state of New Mexico, and students will be asked to answer several questions about poverty in this state using the numerical information they have been given (see attached).

Day Five procedure: We will talk about some social reasons for crime. I will hand out household relationship statistics for NM. I will then give the students percentages for household relationships and we will convert them into decimals.

Day Six procedure: The class will practice adding and subtracting decimals by completing pp. 147-148 in their *Math Thematics* textbook

Assessment

Assessment will be based on the four labsheets and two textbook assignments given during theme two.

Extension

Students will find an article in the newspaper that uses percentages. They will bring the article to class and explain how the percentages are being used. Also, students will find two advertisements from the newspaper that use percentages, and calculate, based on the two advertisements, which consumer would save the most money (Burns, 239).

Materials

Copies of NM crime statistics
Copies of NM economic statistics
Copies of NM household statistics
Labsheets 2c, 2d, 5a, 5b
Textbook

District Benchmarks and Standards

Strand IV Content Standard: See above.

Strand II Content Standard: Student demonstrates number sense through experiences with meaningful mathematical problems that

focus on number meaning, number relationships, place value concepts, relative effects of operations, and multiple representations to communicate sound mathematical thinking.

Performance Standards: Orders a mix of fractions, decimals, and percents. Describes patterns within and among sets of fractions, decimals, and percents. Describes the effect of arithmetic operations with fractions and decimals.

Develops and tests strategies for adding and subtracting decimals.

Theme Three

Day one procedure: I will tell the class four aspects of being a responsible adult, and the students will engage in a journal writing activity. They will be asked to answer the following questions: What are your present feelings toward the occupation you chose at the start of this unit? Why is it important to keep a good job? How can a person attain a good job? Does just having a good job make you a responsible adult? Why? Why not? The students will then be asked to share the main points of their answers with the class.

Day two procedure: We will discuss the second aspect of being a responsible adult, which is contributing to society. We will talk about individuals who do not contribute but take away from society. I will focus on inmates and ask the class to estimate how many inmates we currently have in NM and how much money it takes to support them. I will then pass out actual statistics and have the students round their numbers to the nearest hundredth and thousandth.

Day three procedure: The class will be asked to complete checkpoint 8 on page 44 in their textbook. After we go over the checkpoint as a class, I will assign #'s 1-10 on pp. 51 and 52 involving the rounding of estimates.

Day four procedure: As a class, we will discuss welfare. I will pass out welfare statistics for five states and demonstrate how to find an average by calculating the average number of families on welfare for each of the five states and also the average total number of recipients. I will then give the students five sets of numbers that they will find the averages for. Their assignment will be to complete 1-8 on p. 203 from their textbook.

Day five procedure: The first task we will do will be to grade the assignment from the previous day. After that, the class will be asked to answer the following question in their journal: What does it mean to be self-sufficient? Answers will be shared with the class and details from our unit will be discussed.

Day six procedure: A handout about expenditures for children will be given to the class examining the percentages of a family budget in regards to their children. We will discuss the percentages as a class and then convert these percentages to decimals. The class will then practice multiplying decimals from the board.

Day seven procedure: The class will work on exercises 1-12 on pp. 278 and 279 involving the multiplication of decimals.

Extension

Students will find an article in the newspaper that uses decimals. After reading the article, students will present it to the class, explaining how the decimals are used.

Assessment

Assessment will be based on the completion of all journal writing activities and the four assignments from the students textbook.

Materials

Student Journals

Copies of inmate statistics

Copies of welfare statistics

Copies of "Expenditures on children for the year 2000"

Textbook

District Benchmarks and Standards

Strand IV Content Standard: See above.

Strand II Content Standard: See above.

Performance Standards: Selects and uses the appropriate number form (e.g., fraction, decimal, or percent) in a variety of situations.

Describes patterns within and among sets of fractions, decimals, and percents.

Describes the effects of arithmetic operations with fractions and decimals.

Develops and tests strategies for multiplying decimals.

Statistical Information

How many households are there in New Mexico?

How many households have an income of less than 10,000 dollars?
Less than 20,000?

What is the average household income?_____

How many families are in New Mexico? _____

How many families have an income of less than \$10,000?

How many people are said to be below the poverty level?

How many families are below the poverty level?

What percentage of all persons are below the poverty level?

What percent of persons 18 or over are below the poverty level?

What percent of persons 65 years and over are below the poverty level? _____

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