<table>
<thead>
<tr>
<th>RETA Curriculum</th>
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<tbody>
<tr>
<td>Change</td>
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</table>

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CHANGE:
How does it affect us?

Introduction
Through the use of various technological tools and interviewing activities, learners explore how their community affects individual identities. Learners also explore past, current and future community factors.

There are seven centers in the Elementary component, which cover different subject areas. Technology is integrated in a thematic approach through the driving question: "How does our community and its changes affect us?"

What do middle school students know and think about the world they face? What are the changes they and their friends are going through; and how are these changes affecting their lives? Students search for answers to these questions in the Middle School component.

The Secondary component, "Our Community, Our Business" allows students to explore the history of business and industry in their community and compare it to another community of their choice. In addition, students investigate the employment patterns and availability of jobs in their community. The driving question is: "How have the changes in business and industry in our community changed the types of jobs and careers available to us?"

Note: The activities can be completed in a classroom over several class periods. For professional development, we suggested that these activities be completed during one in-service session.

Summary
Below are the anticipated outcomes of the Change lessons. They are based on the New Mexico's Standards and Benchmarks, the National Educational Technology Standards, and the New Mexico Teacher Competencies.

Elementary Level

National Educational Technology Standards
- Basic operations and concepts
- Social, ethical, and human issues
- Technology productivity tools
- Technology communications tools
- Technology research tools

New Mexico's Standards and Benchmarks

Art
- 2) Students will use dance, music, theater/drama, and visual art to express ideas.
- 3) Students will integrate understanding of visual and performing art by seeking connections and parallels among art disciplines as well as all other content areas.
- 4) Students will demonstrate an understanding of the dynamics of the creative process.
- 6) Students will show increased awareness of diverse peoples and cultures through visual and performing art
Social Studies
- 1) Students will use knowledge and cultural understanding to explain how the world's people cope with ever-changing conditions, examine issues from multiple perspectives, and respond to individual and cultural diversity.
- 6) Students will know and understand how personal and group identities are shaped by culture, physical environment, individuals, groups and institutions.

Language Arts
- 2) Students will understand and use Language Arts as a learning tool.
- 4) Students will use a variety of listening and reading strategies appropriately.
- 5) Students will speak clearly and write effectively for a variety of audiences and purposes.
- 6) Students will speak and write clearly, effectively, and correctly.
- 7) Students will respond personally, analytically, and critically to written and spoken language, and other media.
- 8) Students will appreciate the respect their own language, culture, and literature will learn about the language, culture, and literature and will learn about the language, cultures, and literature of others.
- 9) Students will use language and literature to gain insight into their own and others' lives, and to build understanding of the moral and aesthetic dimensions of human experience.
- 10) Students will use state-of-the-art computer and other technology to gather, use and synthesize information, and to create and communicate knowledge.

Science
- 3) Students will use form and function to organize and understand the physical world.
- 5) Students will acquire the abilities to do scientific inquiry.
- 6) Students will understand the process of scientific inquiry.
- 14) Students will know and understand the impact between science and technology in society.
- 16) Students will know and understand the relationship between natural hazards and environmental risks for organisms.

Health
- 4) Students will analyze the influence of culture, media, technology, and other factors on health.
- 5) Students will demonstrate the ability to use interpersonal communication skills to enhance health.

Career Readiness
- 1) Students will identify career interests and aptitude to develop an educational plan which supports personal goals.
- 3) Students will demonstrate the technological knowledge and skills required for future careers.
- 4) Students will develop and demonstrate responsible and ethical workplace behaviors.
- 5) Students will develop effective leadership, interpersonal, and team skills.
Secondary Level

National Education Technology Standards
1) Basic operations
2) Social, ethical and human issues
3) Technology productivity issues
4) Technology communications tools
5) Technology research tools
6) Technology problem solving and decision-making tools

New Mexico Standards and Benchmarks

Social Studies
- 1) Students will use knowledge and cultural understanding to explain how the world's people cope with ever-changing conditions, examine issues from multiple perspectives, and respond to individual and cultural diversity.
- 2) Students will know and understand how personal and group identities are shaped by culture, physical environment, individuals, groups and institutions.
- 4) Students will know and understand the ways in which human beings view themselves and others over time.
- 11) Students will know and understand the diverse, dynamic, and ever-changing nature of culture.
- 13) Students will know and understand the impact of science and technology on societies.

Mathematics
- 1) Students will understand and use Mathematics in Problem Solving.
- 2) Students will understand and use Mathematics in Communication
- 3) Students will understand and use concepts in reasoning
- 4) Students will understand and use Mathematical Connections
- 5) Students will understand and use numbers and number relationships.
How are my friends and I changing?  
How does that affect me?

Introduction

The July 1999 TIME Magazine ran an article The Kids are All right. One of their conclusions is quoted below:

"What emerges loud and clear from the study is that kids are very happy to be kids, and they don't view the world as the nasty place their parents perceive it to be. Nine out of 10 say they feel safe in their schools and neighborhoods. While parents list crime, violence and guns as the worst aspects of being a child today, such concerns are way down the list for kids. Their gripes are the timeless laments of childhood: "getting bossed around," homework, chores."

The driving questions for this unit include:
- What do middle school students know and think about the world they face?
- What are the changes they and their friends are going through?
- How are those changes affecting their lives?

(See Planning Matrix and Concept Map)

We are asking middle school students all across the state to investigate what's happening to them and their fellow teens, make some conclusions and recommendations about what they learn, and then to create a presentation that informs middle school students, their parents, and other community members what they've learned and think in an interesting and informative way. (See example presentation: HTML version or PowerPoint® version)

We are looking for the very best projects to publish in our newsletter and include on our web page for teachers and parents interested in Middle School students. We want to show their work to students and teachers in New Mexico and the rest of the country as examples of what motivated students can accomplish using new technologies and strategies.

Investigations. Students investigate the driving question by asking and refining questions, making plans, designing experiments, debating ideas, collecting and analyzing information and data, drawing conclusions and communicating their ideas and findings to others.

Products or Artifacts. As a result of performing these inquiries, students develop a series of artifacts or products that represent their knowledge in a variety of ways. Artifacts must be feasible and cognitively rich and their production must help students understand ideas and issues related to the driving question.
**Learning Communities.** Students, teachers and individuals outside the classroom collaborate to investigate a driving question. Students discuss and try out their ideas and challenge the ideas of others. Students will be able to interact with a wider community of knowledgeable individuals to share information, data, resources and ideas.

**Use of Cognitive Tools.** Computers are used as cognitive tools to help learners represent and share ideas, and to support students' research efforts. Technology helps make the classroom environment more authentic to students by connecting them to primary science resources and to expertise not otherwise available in the classroom. Technology also allows students to manipulate, construct, and revise their own representations easily. Schools and parents have spent much of their tax monies for computers and networking schools in New Mexico.

**Outcomes**
Upon completion of this lesson, the participant will:
- present evidence of the use of critical thinking skills in examination of community experiences from historical, current and future perspectives
- develop a better understanding of how change directly effects them
- be able to research and evaluate materials using web browsers
- demonstrate a the ability to utilize a variety of technology skills

**Technology use**

<table>
<thead>
<tr>
<th>Hardware:</th>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers</td>
<td>Word processing program</td>
</tr>
<tr>
<td>Printers</td>
<td>Internet</td>
</tr>
<tr>
<td>Scanner</td>
<td>Paint/draw program</td>
</tr>
<tr>
<td>Digital camera (optional)</td>
<td>Inspiration®</td>
</tr>
<tr>
<td>Presentation devices</td>
<td>Desktop Publishing program</td>
</tr>
<tr>
<td>Video camera</td>
<td>PowerPoint® or HyperStudio®</td>
</tr>
<tr>
<td>VCR (optional)</td>
<td>Photo editing program</td>
</tr>
<tr>
<td></td>
<td>MS Publisher®</td>
</tr>
</tbody>
</table>

**Resources**

**Online**
- We recommend the following strategies found at The University of Michigan's Middle School Digital Library project.

**Off line**
- Guest speakers
- Newspapers, magazines
- Internet sites
- Library books on related topics, encyclopedias
Process
Tips
There are 8 centers in this middle school interdisciplinary unit on change. These centers could be
used in a variety of subject area classrooms over a period of time. The centers should be set up
in advance of class and have the class discussion/introduction of centers away from computer
centers to encourage students to participate in class discussion.

Materials
Art Center: samples of political cartoons, paper, pencils, markers
Career readiness: Internet sites, library books, clip art from Internet, word processing program
Health: Newspaper and magazine articles on effects alcohol and smoking have on adolescent
bodies, books, Internet sites
Language Arts: Publishing program, Inspiration, paint/draw program, Internet connection
Mathematics: National/State/Community drinking statistics, spreadsheet program, database
program, word processing program
Modern, Classic & Native Languages: presentation programs, spreadsheets, word processing
program
Science: Internet connection, word processing program, desktop publishing, HyperStudio or
PowerPoint presentation programs
Social Studies: word processing program, Internet sites, maps of New Mexico.

Preparation
Make signs for subject centers with the driving question for each of the centers.
Check all hardware and software applications to ensure they are all running properly.
Set up stations with necessary materials.

SEE TASK TABLE

Presentations
When all groups have cycled through the Centers, bring them back together. Have each group
present its products.

Assessment
Presentations (PowerPoint®, HyperStudio®, Desktop Publishing)
Spreadsheet and database exercises
Survey results map exercise
Teacher observation/evaluation

Extension
Interviews utilizing audio and/or video
Guest speakers
Peer surveys on Alcohol and Smoking use
Writing/sharing articles on activity findings
| Center 1: Art | How are my friends and I changing? | Develop a political cartoon addressing the thematic question. You may use MS Publisher®, paint program, HyperStudio®, or PowerPoint®. |
| Center 2: Career Readiness | What type of jobs can I do now, in high school, and in the future? | This involves researching selected career areas using 10 Internet sites, various library books, community speakers, etc. The research will be used in developing a final presentation. The presentation could be a typed report using a word processing program with inserted graphics and clip art, or a presentation tool such as PowerPoint® or HyperStudio®. |
| Center 3: Health | What effects do alcohol and smoking have on the adolescent body? | Research these effects through the Internet as well as books, magazine and newspaper articles, and other related articles and examples passed out in class. The information collected could be presented in graph format using a spreadsheet program. |
| Center 4: Language Arts | How are adolescents characterized by genre? | If time allows read and summarize "The Outsiders." Address the question in one of several activities: compose a poem, develop a characterization chart or create a newsletter. The tools you might want to use are Inspiration®, a paint/draw program, desktop publishing, and do research on the Internet. |
| Center 5: Mathematics | What are the statistics for adolescent alcohol and smoking use in my community? | Research National/State/Community drinking statistics. Use the information to create a spreadsheet presenting the statistical findings. A spreadsheet program, database program could be used as well as a word processing program. |
| Center 6: Modern, Classic & Native Languages | How does using alcohol and smoking affect communication? | Prepare a presentation using research information you have collected and the spreadsheet examples. You may use the Internet, a word processing program, presentation programs, spreadsheets, etc. |
| Center 7: Science | What are the effects of underage drinking and smoking on the adolescent student? | Research the physical, emotional and social effects of underage smoking and drinking on the adolescent. Use the information gathered to create a presentation. Some of the tools you could use include: the Internet, a word processing program, desktop publishing, HyperStudio® or PowerPoint®. |
| Center 8: Social Studies | In the state of New Mexico, which area has the highest drinking and smoking usage among adolescents? | Create a survey to email to different regions of New Mexico. Research the Internet for statistics and develop a map of New Mexico with the findings. |
Oral History on Community Change
Elementary Interview Questionnaire

**Food**
Tell me about what you liked to eat when you were my age.

How did you get your food then? (Grocery Store, Fast Food, Corner Market)

Describe where in town was the place you got your food? Show me the building; locate it on a map for me. What did it look like then?

**Hobbies**
What did you do for fun or as a hobby when you were my age?

Show me an example or teach me how to do it, please.
Middle School Interview Sheet
How do changes in my community affect who I am?

<table>
<thead>
<tr>
<th>Category</th>
<th>Past</th>
<th>Present</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jobs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hobbies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recreation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Products Used</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Information</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Microsoft Word Concept Map

**Math**
- Organize statistics into a spreadsheet
- Graph Statistic

**Science**
- Library and Internet research on drinking or smoking. The effects of Drinking on Middle School Students – (ProQuest)

**Language Arts**
- Read "Outsiders" (view video – make video of one scene)
- Create a vocabulary list and use the Vocabulary list in a poem using Desktop publishing (Submit to NM Culture Net)
- Characterization Chart using Inspiration (Show on Word too)

**Social Studies**
- E-mail survey to another school
- Scan a map of New Mexico and plot the data to the map.

Create a Newsletter using statistics, graphs, data

**Create a Political Cartoon using Draw or Point**

**How are my friends and I changing?**

**Create a Survey for Classroom**
### Alcohol Use by Age

<table>
<thead>
<tr>
<th>Age</th>
<th>Percents of Any Use</th>
<th>Percents of Binge Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-17yrs</td>
<td>50%</td>
<td>10%</td>
</tr>
<tr>
<td>21-25yrs</td>
<td>60%</td>
<td>20%</td>
</tr>
<tr>
<td>26-29yrs</td>
<td>60%</td>
<td>35%</td>
</tr>
</tbody>
</table>

#### Binge Drinking Vs. Any Use 12-17 Yrs of Age

- 0%
- 20%
- 40%
- 60%

#### Binge Drinking vs. Any Use 21-25 Yrs

- 0%
- 10%
- 20%
- 30%
- 40%

#### Binge Drinking vs. Any Use 26-29 Yrs

- 0%
- 20%
- 40%
- 60%

#### Graphs

- Binge Drinking Vs. Any Use 12-17 Yrs of Age
- Binge Drinking vs. Any Use 21-25 Yrs
- Binge Drinking vs. Any Use 26-29 Yrs
## Smoking Use by Age-Gender-Ethnicity

<table>
<thead>
<tr>
<th>Age</th>
<th>% Current Smoker-Cigarettes</th>
<th>% Current Cigar-Smokers</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-17 yrs</td>
<td>18.20%</td>
<td>5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>% Current Smoker-Cigarettes</th>
<th>% Current Cigar-Smokers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females</td>
<td>17.70%</td>
<td>2.30%</td>
</tr>
<tr>
<td>Males</td>
<td>18.70%</td>
<td>11.90%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>% Current Smoker-Cigarettes</th>
<th>% Current Cigar-Smokers</th>
</tr>
</thead>
<tbody>
<tr>
<td>African-Amer</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>Whites</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>Hispanics</td>
<td>26%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>24%</td>
<td></td>
</tr>
</tbody>
</table>

### Charts

- **Current Smokers 12-17 yrs**
- **Gender Smokers**
- **Ethnicity of Smokers**
HOW ARE MY FRIENDS AND I CHANGING AND HOW DOES THAT AFFECT ME?

A MID-SCHOOL THEMATIC UNIT
TEEN ALCOHOL USE

- About 10.4 million current drinkers were age 12-20 yrs. old in 1998
- In 1998 about 52% of the total population age 12 and older were current alcohol users
- About 4.1 million youth (12-17) were smokers in 1998.
- Youths who smoked were 11.4 times as likely to use illicit drugs and 16 times as likely to drink heavily as nonsmoking youths.