

Support, education services offered

Community Counseling's Children's Treatment Program is currently offering two support and education services for parents in the Warm Springs Community:

Parenting class-a 10 week class for parents covering a variety of topics in parenting and family life such as nurturing, children's learning, discipline, family harmony, dealing with family problems. This class is held every Wednesday, 5:30 to 7:30 p.m. at the Community Counseling Center. For more information contact John Chambers or Marcella Courtney at 553-3205.

Parent Support Group-an ongoing support and educational group for parents of teenagers, designed to help these parents deal with such things as adolescent rebellion, increasing demands for independence, etc. The group meets Thursdays from 5:00 to 6:30 p.m. For information contact Lorraine Roberts at 553-3205.

Recovery elements—Continued from page 2

Power Act. The drawdown would speed juvenile salmon to the ocean during the critical spring migration period. Additionally, the Council called for a study of the potential biological impacts of such a drawdown on juvenile salmon.

* Called for an evaluation of other

possible sources of water to aid fish, including additional releases into the lower Snake River from Brownlee Reservoir in Hells Canyon and energy conservation in winter. Conserving energy in the winter would allow more water to be stored for release in the spring.

Minority students encouraged to pursue math, science careers

27, 34, 12 X 4, A+B=C=7, 42. To many, mathematics is numbers, symbols and formulas. And to be proficient in mathematics, a good memory is necessary.

A recent workshop for 509-J District teachers dispelled this belief. Mathematics can be something familiar and it can be fun.

Portland State University curriculum coordinator Linda Foreman facilitated "Math in the Mind's Eye" to help teachers become familiar with the concept that mathematics can be very visual. It can include visual materials other than symbols and numbers. Students learn that they can use experiences to solve mathematical problems and that mathematics really is a part of life.

The \$40,000 grant to the District and the SMILE Program from the U.S. Department of Energy was of-

fered to school "to encourage minority students to pursue studies of careers in math and science. According to recent research, the United States is not producing enough scientific, engineering and professionals in related fields to meet projected future needs. And minorities in particular are very underrepresented.

Studies have also examined barriers that obstruct Native Americans in these fields and ways to overcome these. Educators stress sensory input in teaching and learning as an effective tool in teaching. Visual imagery is important in developing mathematics insight and instruction, and presenting concepts and processes.

Many previous mathematics teaching methods have failed because they evoke no images or associations. "It is as if the words were uttered in

a foreign language, with only the most arbitrary connection between symbols and objects," says Robert Sommer in *The Mind's Eye*. He continues, "The problem is not the symbols themselves, but that current teaching of arithmetic detaches numbers from the stuff of life...."

Sommer further contends, that if mathematical concepts and processes are presented to the learner in an environment that engages the senses with the use of objects, models, sketches and hands-on activities, the concepts and processes become accessible to the learner and "insight and instruction are developed, understanding takes place and the learner has positive feelings about the experience." Otherwise, students who memorize and perform mechanical operations have little understanding and the learner lacks comprehension. Mathematics leads

to frustration, fear and dislike.

In using visual and sensory techniques in teaching students mathematics, Madras Jr. High Chapter 1 teacher Sandy Loomis states, "The majority of my Chapter 1 students are Mexican Americans and Native American. These students often enter junior high hating math and feeling like failures....I have witnessed a real change from the 'I can't' attitude to 'I can do this' attitude" with Visual Math concepts.

Visual Math workshops were presented last year to teachers in the 509-J District and again this summer. The grant provides instruction for two weeks to teachers, classroom materials and 15 follow-up visits. Portland State University curriculum specialist Linda Foreman conducts the class. Foreman is the 1986 Presidential Awardee for Excellence in Teaching Mathematics.

Riley continues visits to W.S.

School District superintendent Phil Riley visits Warm Springs each week on Wednesday from 10:00 a.m. to 12:00 noon. He welcomes community members to talk with him about school matters. Call the Warm Springs administrative offices at 553-3212 to make an appointment or just drop by the administration building.

Financial aid workshop set at MHS

Richard Thompson, Director of Student Financial Aid at Central Oregon Community College, is offering free Financial Aid Workshops at high school "Parent Nights."

The presentation covers forms preferred or required at all Oregon colleges. Thompson will explain in non-technical terms the types of aid available, the forms and the process. He will go through the forms question by question and give information from the point of view of the person who reviews the completed forms.

The following High School "Parent Nights" are scheduled:

December 2-Madras High School, 7 p.m.
December 3-North Lake High School, 7 p.m.
December 4-Crook County High School, 6:30 p.m.
December 5-Culver High School, 7 p.m.
December 10-Redmond High School, 7 p.m.
December 11-Bend and Mountain View High Schools at Mountain View, 6:45 p.m.
For more information, contact Thompson at 385-5521 or your local high school.

Old days

Sir

I have the honor to transmit herewith the reports of my Physician and Teacher for the month ending Dec 31st 1880, and submit the following as my own report, for the same month.

The Inspector etc.

The principal event of the month was the arrival of Hon W. J. Pollock Inspector, who reached this Agency on 12th and left on the 16th of the month. He seemed quite well satisfied with the general management of affairs at this Agency; particularly the advancement made by these Indians. I thought it very necessary that I should immediately procure some needed clothing and subsistence supplies, for the Putes located at this Agency, and also purchase the grist mill stones you gave me authority to buy, and so accompanied the Inspector as far as the Dalles. Proceeding to Portland I made the aforementioned purchases, and consider that by being there in person I fully saved to the Department enough to pay my necessary expenses. It was my purpose to return by the 31st inst but upon reaching Tygh Valley, I found the roads so blocked with snow that it was uncertain and even dangerous to proceed further, hence had to delay several days, which explains the delay in forwarding this report and other papers.

The Indian Population

remains unchanged in numbers. Nearly all belonging to this Reservation are now at home, and in winter quarters. The Indians at this Agency or near to it commenced preparing for the holiday festivities about the 21st of the month. Many of the families moved in, and the school houses were turned over to them. All who saw the Christmas dinner prepared by the Indian women say it excels [sic] any previous meals ever prepared at this Agency, by Indians, an improvement over former years as so marked that even those who have been among them for years, can note the change. To strangers it is perfectly surprising.

Births during the month

There were three of these 1 male and 2 females.

The Deaths

were also three, one a very old woman.

Number Treated

This was 75 of which 52 were restored leaving 21 on sick list.

The Boarding and Day School

During the month this was principally superintended by the Asst Teacher, assisted by the gratuitous services of Hon J. N. Smith and a portion of the time by the Industrial Teacher. The regular Teacher M. W. Walker being a good mechanic, it was found almost absolutely necessary that he should instruct the Indian apprentices in running the new saw mill, and also make some necessary repairs to Department Wagons, hence he could not consistently sign the school report, as regards the attendance etc, so the Asst has signed. The school was dismissed on the 30th of the month. Number of scholars enrolled and attending was 75, with an average of 45 5/7. Many came in towards the close of the school or the average would have been larger.

The Apprentices

have done all that could be done, considering the severe winter weather we had during the entire month.

The Policemen

have done all that was required of them. Some arrests were made, but no severe service was required. Those out with the various hunting parties, have all returned and bring no unfavorable reports regarding the conduct of the Indians, nor have any complaints been made to me by the white settlers.

The Mills

During most of the month the saw mill was frozen up. The Grist mill was frozen up a few days. ?? has done all the grinding that was required. It is difficult to give the number of bushels ground as it is mostly in small grists and while the Indian Miller and his Assistants understand weighing, they cannot write down the several amounts. The amount of lumber sawed is more readily arrived at. About 2,000 ft was sawed, during the month.

Our Annual Supplies

These are nearly all hauled out from the Dalles. The two last trips made were unusually difficult and expensive, owing to heavy snow storms, which blocked the roads and delayed the teams. It is to be regretted that all our supplies cannot be purchased and shipped so as to be in the Dalles by not later than the 15th of October. After that time it is uncertain about making quick trips, and the expense is correspondingly great. Aside from this in the earlier years up to within 3 or 4 years last passed, there was plenty of grass and good camping places, while now many of the camping places are fenced up and the grass eaten off so that the teams have to be stabled and fed, this making more expense.

The Employees

During the month the Supt of Farming and Sawyer each of them made a trip to the Dalles after Indian Supplies. The Sawyer has put the balance of his time in, in making repairs to wagons etc. The Supt of Farming has looked after the Agency teams, and Department animals within range. The regular Teacher since the 24th of Dec has been studying and noting down the Warm Springs language so as to enable him to properly take the census and write the Indian names. The Millers time has been divided between the Mill the wagon shop and blacksmith shop. The Clerk has been very busy in the performing of his varied duties.

Moral and Religious Work

This has been successfully and satisfactorily carried on and good results are hoped for.



Warm Springs Elementary fifth grade teachers (left to right) Kathy Bishop, Earline Anderson and Harry Phillips learn to use blocks to teach students mathematics. Workshop provided participating teachers with classroom aids and knowledge about "Visual Math" concepts.

Math students sometimes fear, misunderstand, lack enthusiasm for subject

Mathematics is a science of pattern and form. It does not explore molecules and cells, but it looks at numbers, chance, change and logic. It uses observation and experimentation to arrive at answers. It requires thinking.

The need for a strong educational background in mathematics is apparent. Yet mathematics curriculum remains stagnant, unable to reach the majority of students.

Students can't be blamed for their

lack of interest in mathematics. All they see are abstract concepts. They see math as a series of strict rules which require accuracy and memorization.

Excessive emphasis on the rules keeps a student from having enthusiasm for mathematics. Math as a natural mode of thought is never stressed. The feeling left at the end of a math course is misunderstanding and fear.

Students should be learning con-

fidence in problem-solving along with mathematical literacy. They should be seeing mathematics in every day life and utilizing it. Students should be learning "number sense."

Students, as they continue mathematics study, should be moving from concrete mathematics to conceptual mathematics. Students should have enough mathematical knowledge to leave school and enter society and participate as a citizen.

Practical applications of math should be stressed.

Over three-fourths of the courses in degree programs at colleges and universities require courses in calculus, discrete mathematics, statistics or other math. Mathematical ideas form the foundation for science, business and engineering. A strong basic math background is needed by all students.

Mathematics learning must be improved to ensure success

The way children learn mathematics must be improved. Most children leave school without sufficient preparation in mathematics to fulfill problem-solving job requirements or to meet college mathematics literacy requirements.

Mathematics play a major role in determining the strength of the nation. It is the basis of science and technology. But changes in mathematics education are necessary to meet the demands of society and to provide opportunity for students.

Mathematics filters students out of programs leading to scientific and professional careers. On the average, half the students in mathematics drop from mathematics study each year. Mathematics is rated as being very effective in creating failure in students.

Mathematical literacy is necessary today simply to know what is occurring in society. Graphs, logic and business activities are explored daily in newspapers. Mathematics is the language used to discuss health and environmental issues.

Low performance in mathematics has become socially acceptable. Low expectations for students does not put demands on them to learn mathematics. Peer pressure also has its impact, making it socially unacceptable to do well in math. Women and minorities are particularly affected by these attitudes.

Adults remember mathematics as being torture, an extreme test of memorization skills. This unpleasant experience is unnecessary. Most adults have not applied math in their adult careers, so they put little value on it. It also creates the image that mathematics is only for geniuses. Children's attitudes toward math is generated by adult attitudes.

As much is spent on remedial mathematics programs beyond high school than is spent on mathematics education in schools, colleges and universities. Sixty percent of college mathematics courses are those ordinarily taught in high school.

Even these remedial programs are not very effective. Mathematics stu-

dents continue experiencing low achievement and failure. Repetition in previous teaching and learning techniques does not work.

By the year 2020, minorities will be the majority in this nation. These minorities are significantly underrepresented in all scientific, engineering and professional fields. A lack of mathematical education keeps these minorities from many scientific and business careers.

Women too, are underrepresented in fields requiring mathematical skills. Women perform as well as men in college mathematics courses, but usually drop out at a high rate. Lack of ability is not the reason. Often it is the role model. Women are stereotyped with the message that math is not feminine of "girls can't do math."

Americans are a minority in mathematics graduate programs. Many foreign students take up the slack in the employment market, by securing jobs in the United States. This calls attention once again to the fact that American mathematics education is not healthy.



Fourth grade student Darreck Palmer says he likes math. In class he enjoys using blocks which help him visualize mathematics concepts better. He hasn't thought much about what his future plans may be, but he is giving some thought to a career which involves math.