

Integrating Earthquake Education Into the Elementary School Curriculum: A Whole Language Approach

by **Tori Zobel**
Teacher, CleveHill Middle School

During the 1989-90 school year, I expanded the fourth grade Earth Science Unit to incorporate earthquake education and awareness. After mentally reviewing various instructional methods and then carefully selecting materials, I decided to teach the unit using a Whole Language approach. Using Earthquake Education as the theme, this approach necessitated webbing the other subject areas into this central topic.

The ideas for webbing earthquake education are endless and many content areas will, and should, overlap. For 3-4 weeks the classroom takes on the earthquake atmosphere. The theme can be envisioned as an umbrella, with different subject areas falling under it. It is a subtle way of integrating a topic into the curriculum (see Figure 1). The advantage of this approach is that if a particular day goes by and you haven't gotten to "science," it's all covered because of the central science theme.

While using the Whole Language approach,⁷ lessons can be incorporated into learning centers, hands-on-activities, readings, writings, and extra-curricular activities that reflect the theme of earthquakes. After selecting a time frame for the unit, it is often necessary to consider introductory lessons, developmental lessons, and culminating activities.

Teachers who use Whole Language can present language learning in highly meaningful ways. Rather than focusing on separate skills, the development of a thematic approach exposes children to an integrated curriculum. By focusing on earthquake awareness, teachers can then prepare lessons that surround this theme (see Figure 2). During a language arts period, students can review words associated with earthquake awareness. A vocabulary booklet is a helpful tool for children to construct and consult. Using these words, the theme can be further integrated into the language arts program by writing folk tales or legends, composing newspaper stories that relate to precautions and/or hazards, creating safety booklets for parents, or discussing the cause and effect of earthquakes. In the realm of written and oral language, the possibilities for integration are endless.

During our weeks of study, the children discussed the safety and survival techniques needed in the event of an earthquake. While in small groups, students listed what they would do should an earthquake occur. From those suggestions, each child wrote and illustrated his or her own survival manual. Afterwards, the students read their books to and discussed the information with a first grade class. While the teachers provided supervision and direction, the children learned from each other. The use of this peer tutoring approach was beneficial for both classrooms.

Social studies is another area that teachers must address. By displaying maps that depict earthquake epicenters, children can become more familiar with the different countries and continents. Comparison of earthquake activity in two different areas can be expanded to include an investigation of a particular area. For example, Charleston, South Carolina and San Francisco, California could be compared because both cities have experienced earthquakes. Students could work together in small groups and gather information about the designated regions. All of these activities enhance language skills, integrate the curriculum, and allow for dynamic interaction among students while the earthquake theme remains constant.

⁷ "Whole Language is not a methodology but a philosophy, the major premise of which is that language should not be separated into its component parts but is best learned through use in authentic situations that have meaning to the learner." *English and Reading Education News*, Bureau of English and Reading Education, New York State Education Department, Spring, 1989

Section 2 - Curricular Issues

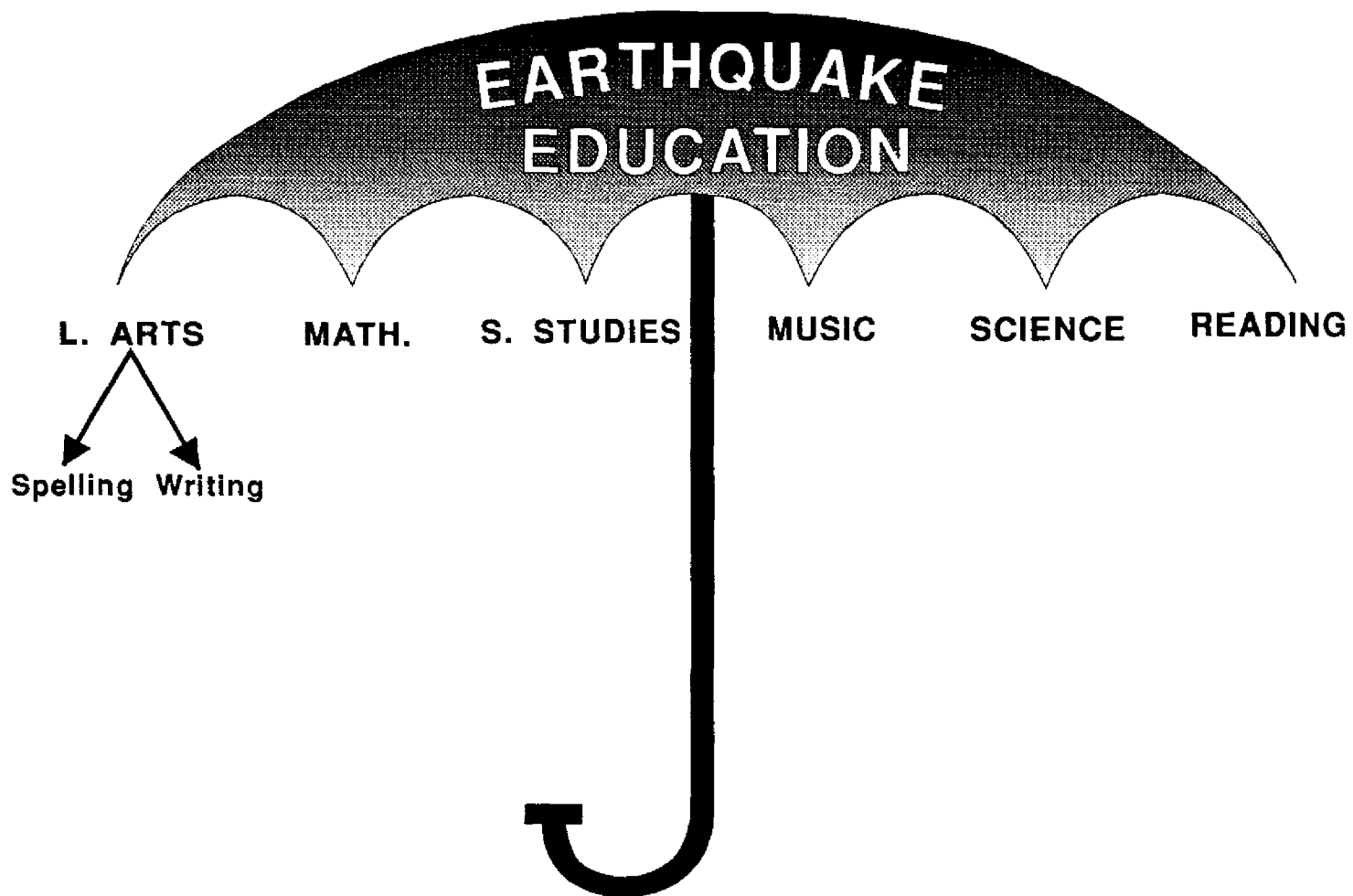
Charts, bulletin boards, mobiles, and projects reflecting the theme can surround the students. Pictographs, bar graphs and line graphs can be displayed and studied, thus combining the math curriculum with the study of earthquakes. Reading, in and of itself, can be difficult for teachers to incorporate in the thematic approach. In the primary grades, reading groups often consume a large portion of the day. The Whole Language philosophy emphasizes that children learn to read by regularly reading and through exposure to integrated subject matter. With this in mind, there are many books that educators can display in the classroom and read to the children on a daily basis. For example, Scholastic, Inc. has published a soft-cover edition of *...If You Lived at the Time of the Great San Francisco Earthquake*, written by Ellen Levine and illustrated by Richard Williams. It is a perfect book to use in grades three through five. Intermediate grades can utilize some of these books for book reports, poems, drama, or pleasure reading.

The purpose of Whole Language is to expose children to reading and writing through an integrated curriculum; in this case, when they are learning science. Why make science a separate entity and isolate it from the other subject areas and real life experiences? Taking the time to plan, to explore ways of integrating a theme, and to provide enrichment activities allows children to experience and learn new scientific concepts in a natural and non-threatening environment. In addition, because this type of atmosphere allows for plenty of interaction, students can learn from their peers.

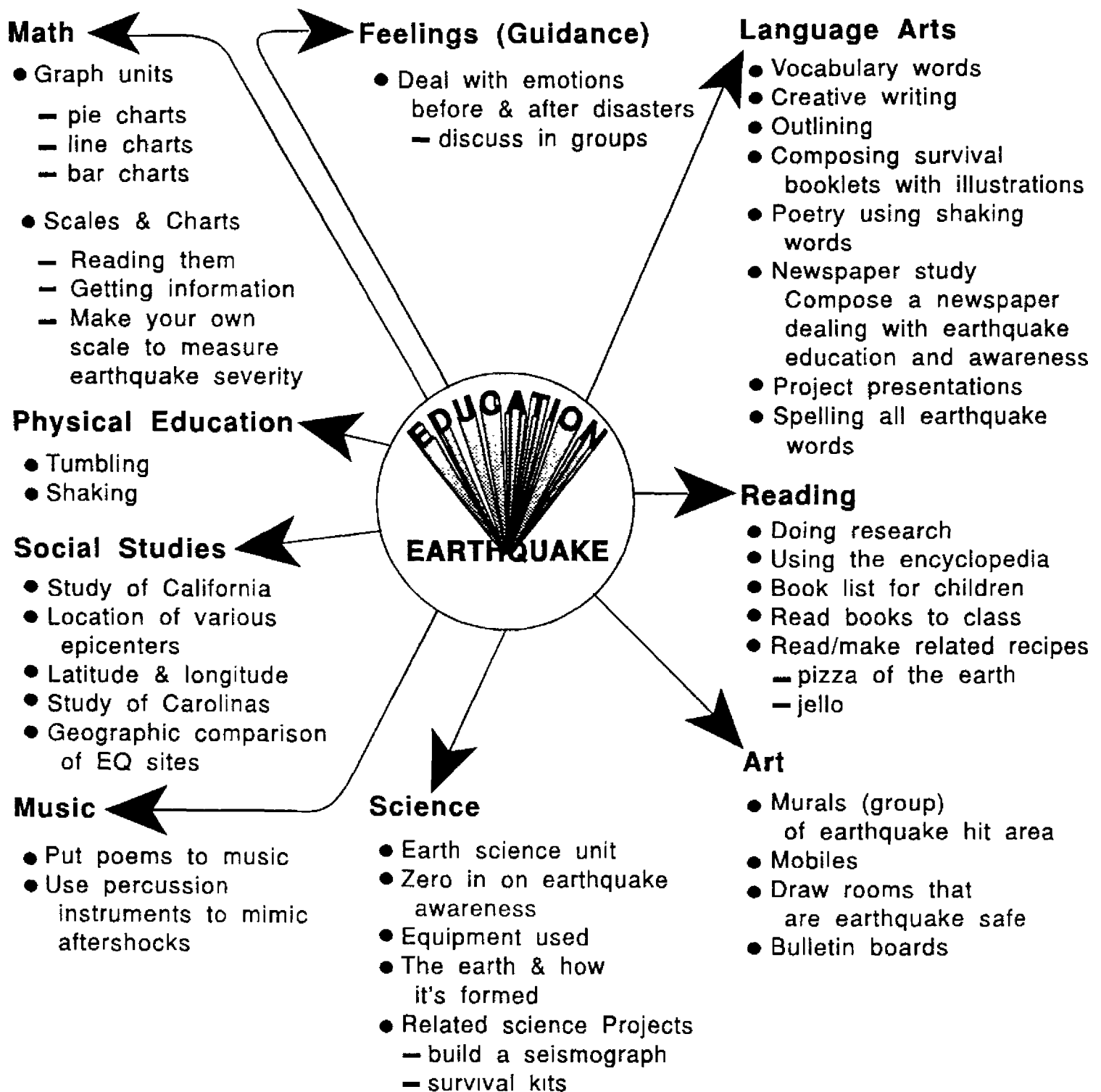
Earthquake education and awareness can provide a perfect classroom focus. Children become excited and want to explore as well as discover on their own. By creating a total atmosphere across the curriculum, teachers can create a more stimulating environment. A Whole Language approach facilitates this.

References

- Brand, S. (1989). Learning through meaning. Academic Therapy, 24, 305-314.
- Edelsky, C., Atwerger, B., & Flores, B. (1991). Whole language: What's the difference? Portsmouth, NH: Heinemann Educational Books.
- Goodman, (1986). What's Whole in Whole Language? Portsmouth, NH: Heinemann Educational Books.
- Goodman, K., Smith, E. B., Meredith, R., & Goodman, Y. (1987). Language and thinking in school: A whole language curriculum (3rd edition). New York: Richard C. Owen.
- Harp, B. (Ed.) (1991). Assessment and evaluation in whole language programs. Norwood, MA: Christopher-Gordon Publishers.
- Manning, G., & Manning, M. (Eds.) (1989). Whole language: Beliefs and practices, K-8. Washington, DC: National Education Association.
- Mills, H., & Clyde, J. A. (Eds.) (1990). Portraits of whole language classrooms: Learning for all ages. Portsmouth, NH: Heinemann Educational Books.
- Newman, J. (1985) Whole language: Theory in use. Portsmouth, NH: Heinemann Educational Books.
- Vail, P. L. (1991). Watch out for the hole in whole language. The Education Digest, 56, (8), 23-29.
-



For 3 - 4 weeks the classroom takes on the earthquake atmosphere. When you integrate a theme into the curriculum, that theme is like an umbrella.



Typical Webbing of Curriculum for a 4th and 5th Grade Class