

## AV Reviews

Rachel Hays

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### HOMEOSTASIS

**Mechanisms of stability and change.** 1991. Optical Data Corporation (30 Technology Dr., Warren, NJ, 07060-0990, 1-800-524-2481). Video Laser Disk Life Science sides 7 and 8. Two thousand still images plus 55 minutes of motion video segments. Purchase \$995.



This two-sided videodisc is the most recent installment in a series of videodiscs that Optical Data Corporation has produced for the life science classroom. It is the latest addition to Principles of Biology—"The Living Textbook." This disc focuses on the maintenance of stability/homeostasis in the dynamic function called life. The concepts of stability and change are covered in the topic areas of physiology, genetics, evolution theory and ecology. As in the entire series, one of the stereo soundtracks has English and the other has Spanish narration.

The disc is produced for high school and introductory college courses, but many clever middle school teachers can adapt much of the material for their students as well.

On 10 occasions I used the videodisc in my classroom. During three of these uses, students at lab stations were aided in their understanding of the concepts of blood clotting, immunity and blood pressure. At the end of the process students determined clotting time and blood type and took each other's blood pressure. They compiled a data sheet on class and individual

results from these exercises. The videodisc was perfect for this situation. The students, in groups of three, came up to the video player as part of their lab rotation.

The video player operates with a sending unit much like those found on TV sets. Bar codes are also available and can be attached to handouts given to the students. Students can scan what they read about in the handout with an optical reader. As a result, they can see that subject on the video screen. It works well! The youngsters can instantly review areas they didn't understand the first time.

The computer-generated graphics are stunning. Most students understood the complex concept of wound healing in a very detailed manner. I hope that Optical Data uses more graphics like these in future releases.

This series also contains computer software allowing the videodisc player to be interfaced with a computer. This facilitates completely interactive student curriculum. Using Hypercard, I found it very easy to use the still photos and moving sequences to make very effective presentations to my biology class.

I strongly recommend that you add this videodisc to your science department's library. It is indeed a very powerful resource. The only reservation I have is the price.

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### SCIENCE EDUCATION

**Windows on science, Life Science.** 1992. Optical Data Corporation. (30 Technology Dr., Warren, NJ 07060-0990, 1-800-524-2481.) Videodisc. Two volumes. Purchase \$895.



*Windows on Science* is a comprehensive curriculum program built around videodiscs. Supporting materials can be purchased, such as ready-made science kits for hands-on activities directly relating to topics covered on the videodisc. A language laboratory includes nonfictional reading passages and student activities. Also included is a curriculum publishing kit of Macintosh software on a CD-ROM disc and update discs of recent scientific events.

These volumes feature information about 12 topics with catchy titles including "Don't Get Nervous," "You Are What You Eat" and "Rooting for Plants." Each topic is explored through a selection of still images and a short movie narrated in English and Spanish on parallel sound tracks. The still images and movies are well organized and of excellent quality. The materials are right on target for most middle school science curricula.

The accompanying teacher's guide includes vocabulary lists, worksheets and formatted lessons. Few of these materials offer an innovative approach to science education and reflect a standard workbook style. The titles and materials often don't link together in a coherent fashion and will require considerable revising and upgrading by the teacher.

This videodisc compares favorably with others currently available. It does not include a Hypercard stack for computer multimedia presentations. However, teachers can use other software programs to develop stacks incorporating images from this videodisc.

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