

REVIEWS

Don M. Beach.
REACHING TEENAGERS:
Learning Centers For The
Secondary Classroom.
Santa Monica, Calif.:
Goodyear, 1977.
167 pp. \$10.35.

There is no question that the concept of the learning center is an exciting and useful one for classroom teachers. It permits flexible scheduling, encourages integration and individualized programming, and allows for accountability to be built-in. The author of *Reaching Teenagers* might be accused of believing that it also cures dandruff, heals acne, and curbs flatulence — so great is his enthusiasm for the concept in this interesting and practical book.

But then excessive enthusiasm may not be out of order in this case. Don Beach is writing for secondary school teachers. Learning centers have been essentially an elementary school phenomenon. No doubt he is fully aware of the increasing resistance to change among instructors, as one goes “up” the educational scale. Although secondary schools are not as guilty of ossified methodology as are universities, they are often close, and the author has obviously felt a need to meet this attitude head-on.

His methods, by and large, are successful. Anyone afraid of or

resistant toward, or even contemptuous of learning centers cannot resist at least a token attempt after examining this book. For all the bases have been covered. Anyone with a modicum of ingenuity can follow Beach’s step-by-step plans. “Where Are Learning Centers Used? When? How? Learning Center Planning Chart, Managing Classroom Routine and Scheduling” — these are just a sample of some of the sub-headings. And they fulfill their promise too. Each sub-section reveals a classroom teacher talking to other classroom teachers. There is no doubt as to exactly how one should operate.

The largest section of the book by far is one called “Some Ready-Made Ideas”. Here the author presents sample units in English and Language Arts, History, Science and Mathematics, Art and Music, Languages. Again the material is all specifically practical, how-to-do stuff. If a teacher should try Beach’s suggestions and find them wanting, it certainly will not be for lack of direction and advice.

Ironically, what should be one of the greatest strengths of the book may ultimately undermine it. *Reaching Teenagers* is replete with illustrations. In fact, they constitute about half the book. But for a volume that is intended to reach *teenagers*, the illustrations by Patricia Cox are unforgivably juvenile in appearance and approach. Not that this is so great a sin. But it is a fact that the

learning center approach is more likely to be tried with teenagers who for whatever reason have demonstrated some lack of facility with the educational process. Their "brighter" counterparts, who are more adept at playing the game of "school," are more likely to encounter traditional teacher-centred methods. The "special" or exceptional teenagers, as any classroom teacher will attest, are very sensitive about, and will reject out of hand, any material that even hints of a watered-down or deliberately juvenile approach. Hopefully, since the book is intended for teachers and not students, the former will use Beach's excellent ideas, and modify the illustrations to a level appropriate to secondary school.

There are other small problems. Some of the teaching ideas, for example, are presented in that obtusely American fashion which assumes that there are no other education systems, or even other countries, in the world. But this is a minor irritant to most of us who are accustomed to regarding the habit with a bemused chuckle.

These objections aside, *Reaching Teenagers* is a compilation of excellent principles and practical ideas. If you are a classroom teacher, it is definitely worth your time.

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Peter Whitehead.
HOW FISHES LIVE.
London:
Elsevier Phaidon, 1975.
160 pp. \$11.95.

How Fishes Live is an easy-to-read, fun book on a large subject. Although it is not possible to include examples of the ways of life of all 30,000

known kinds of fishes, the book presents a great deal of general and very useful information. The color photographs and diagrams are clear and easy to understand.

However, the organization of the book is somewhat confusing. In many areas, the reader is referred to another section after being stimulated about a particular subject, only to find that, later in the book, the discussion of original interest is treated in a cursory fashion.

Although many sections of the book, particularly those on deep-sea distribution, feeding, breeding, and development, are well-written and correct, obvious errors and contradictions in other parts of the book detract significantly. Some examples are easy to point out. On page 33, the tail of the shark is described as producing lift, whereas on page 35, it is described as creating a downward thrust, with fins providing lift.

In another section, the myth of the African butterfly fish's flying capability is once again affirmed. The large fins are not used for flying; instead, they function as hydrostatic stabilizers which enable the fish to float nearly motionless near the surface of the water, waiting for insects to fall in. Although known as a jumper in aquariums, this fish has never been recorded as flying by flipping its fins.

Contradictions in biology and physics are noted in the chapter, "Life Under Water and the Senses." On page 24, the discussion about the use of the air bladder to maintain buoyancy states that when a fish is rising, it burps out a bubble of air to control its equilibrium. For many species this is true, but in the same paragraph, the author mentions that air is swallowed as the fish descends. To me, this seems to be a rather fascinating phenomenon: Where does a fish get the air to swallow when it is totally submerged and descending in the sea?

In the chapter on senses, a basic error has been made in referring to