facilitator of change . . . and as exerting a unifying influence on the curriculum.

A more precise picture of the effects of the publishers' products can be gotten by looking closely at what the publisher does and how he does it.

A publishing project starts with a study of school needs and a survey of materials currently available to meet those needs. This information comes to publishers in a steady flow from researchers, observers, school administrators — and from the hundreds of bookmen who call upon the schools and colleges of the country. These representatives listen alertly to the wishes of their customers.

Having discovered that educational change requires a new product, the publisher commits his resources to its development. His first step is creative, and in every succeeding step until publication, his contribution is creative. He begins with plans for a better instructional tool. He seeks out educators who can effectively criticize and contribute to these plans and who may also write the manuscripts required. He advances sums of money to support the writers while they carry out the research and the developmental activities necessary to produce the materials. The publisher supports his editorial staff and artists or illustrators who prepare the graphic materials for the enterprise: pictures, charts, maps, diagrams, filmstrips, records and the entire audio-visual materials that accompany printed materials.

The time involved in preparation of most materials ranges from three years to an occasional maximum of 10 years. This time is required not only to produce the text and art but also to test and validate the materials at various stages of development. It is not unusual to test, say, a mathematics series of texts and their satellite materials with thousands of pupils; or to place a spelling book series in experimental classes for two to three years before actual publication. A single high school textbook will require an investment of \$50,000 before the first copy is available for sale. A series of elementary school textbooks with many components may require as much as a \$3,000,000 investment before it is ready for marketing.

His international role: At least one window in every publisher's office is open on the world.

Together with educators, the publisher no longer looks for arguments to justify greater attention to non-Western studies and world problems. He is now concerned with better ways to present to American

ORDERING BY LIST PRICE:

"Principals provide for the rising cost of books by ordering each book by its list price. This gives the principal a 10% to 20% margin in his budget that can safeguard an adequate supply of books, if prices go up between the time the school budget is made up in December, and when the books arrive during the summer months." — VESTAL CENTRAL SCHOOLS, NEW YORK.

students the life and problems of peoples all over the globe. He works with author and illustrator to assure that instructional materials deal adequately with emerging new nations, efforts of world organizations to promote understanding and cooperation, and with new responsibilities of the United States as a world power.

Administrator's role

Who is the chief agent for instructional innovation—including use of the widening range of teaching materials?

The school administrator.

The studies of Henry M. Brickell document this answer. In his report on the dynamics of instructional change in elementary and secondary schools of New York State, Dr. Brickell concludes: "Instructional changes... depend almost exclusively upon administrative initiative. Even... in schools where administrative authority is exercised with a light hand and faculty prerogative is strong teachers seldom suggest distinctly new types of working patterns for themselves..."

A host of forces are at work to convince the school administrator to take leadership for instructional innovation.

These forces have their origin in science and industry — with their inventions of technological teaching aids; in psychological research — with its stress on the need for exposing learners to many media; and above all, among national policymakers — with their challenge to the administrator to create the climate and the machinery for innovation in the school system and in the classroom.

Innovate! This was the chief challenge emanating from the 1965 White House Conference on Education.

Organize for instructional change! This is, similarly the challenge of the Elementary and Secondary Education Act of 1965, and the National Defense Education Act passed earlier.

"The Federal Government has a right to say what things worry it most," said former U.S. Commissioner of Education Francis Keppel recently, "(and one of them is) the lack of any built-in systems for school improvement."

Yet, each school system does have the elements of a built-in improvement system.

It begins with administrative initiative. And it includes at least three elements:

School board policies — Existence of written policies is the hallmark of effective school systems. Policies give the school board more control over the goals of the school; but they also give the administrator and his staff more freedom to operate.

In-service education — Developing teachers skills in new techniques places still another responsibility on the administrator. He must see that his school system