
—Reviewed by ARTHUR W. COMBS, Professor of Education, University of Florida, Gainesville.

Of all the substantive areas elementary teachers are required to have competence in, none is approached by them with greater trepidation than the teaching of mathematics. Learning to "teach math" is usually complicated by the teacher's own personal doubts about himself and his abilities. Professor Olson has been extraordinarily successful in his own teaching at the University of Florida in helping students to overcome these fears and approach the teaching of mathematics with confidence and pleasure. His sensitivity to students and their peculiar hang-ups about mathematics has led him over the years to devise teaching strategies which seem natural and simple to the learner. This book is the result of those experiences.

The major thrust of Methods of Teaching Elementary School Mathematics is on understanding rather than on skills. Professor Olson's objective is the development in both teachers and students of the kind of security and interest likely to result in continuous study and effective use of mathematical concepts. The philosophy expressed throughout is that new confrontation with subject matter should be firmly based on experiences and perceptions the child already possesses.

When common algorithms are understood, the teacher can then branch out into various pathways challenging to the child. Language and relationships form the primary thread which ties all operations together. These relationships are carefully developed beginning with the student's already acquired experience and leading him on to next steps in most effective fashion. Presentations are couched in children's own understandings and a step-by-step sequence for teaching each operation is presented in detail. As the sequence is developed, activities are provided to carry the child beyond the normal range of accomplishment.

Sound principles of learning are applied to both children and teachers. Learning activities suggested in the text are designed to help children learn by continuous processes of discovery. In similar fashion the teacher, himself, is led by the text to discover effective techniques of teaching mathematics to children.

Especially strong features of the book are the generous use of illustrations and examples to convey mathematical concepts and relationships. Professor Olson's models are often ingenious. They effectively illuminate ideas and suggest effective strategies for use with children. Many are also so simple and inexpensive that teachers will find them easily adaptable to classroom settings almost anywhere.
Contemporary thought is well represented throughout the book. Often these ideas are skillfully woven into the discussions in such natural fashion that students may become aware of such concepts as “new math” only after they have already acquired and learned to use them. Similarly, problem solving is handled as a way of working with ideas which pervade all aspects of mathematics and is treated as a matter to be learned primarily from actual practice rather than a formal “subject” to be mastered abstractly.

Frequent review summaries are provided throughout the text as additional ways for students to take stock and perceive the logical step-by-step procedures by which concepts are developed one from another. Each chapter concludes with a list of well chosen references students may use for further enriching their experience. These include current references to the Arithmetic Teacher as a means of encouraging teacher education students to make use of contemporary professional literature.

The author has deliberately chosen not to include some aspects of mathematics often contained in standard texts, such as modular arithmetic and statistics. He has preferred to concentrate on developing understandings of vital concern to every elementary teacher through careful integration of the language and relationships of basic mathematics. He has sought to produce a book mathematically and pedagogically sound and authentically in touch with the real lives of teachers and children. In the opinion of this reviewer he has done this very well.


Reviewed by Samuel Tenenbaum, Professor, Guidance and Counseling, Long Island University, Zeckendorf Campus, Brooklyn, New York.

Freedom To Learn, by Carl R. Rogers, is not really a textbook in the conventional sense. It is a human document. It is a statement, in many instances impassioned, in which Carl Rogers communicates his deepest feelings, convictions, and insights that have come to him after a lifetime of living, thinking, and working in his discipline. Seldom does a book on education appear that so excites the imagination as to what is possible in education, so liberates the reader from viewing education in conventional ways.

In Freedom To Learn, one will find no cookbook recipes, specific directions set forth in measure and quantity, as to how to become a good teacher and to ensure learning in students. Instead Dr. Rogers seeks to release teachers and students so that they can work together in joint creative enterprises that will prove meaningful, relevant, and engrossing. What Carl Rogers always holds in view as the goal of education is the personal growth of the learner, helping him achieve a richer and more fulfilled life.

What stands out for me particularly is Carl Rogers’ strong faith in the student, even more than in the teacher; his dismissal of grades, examinations, and evaluation as apart
from and extraneous to the learning process, actually often hindering the learning process. He places his faith in the student’s wish to learn, the student’s capacity for self-directed growth. Rogers views good education as an adventure, full of excitement and novelty; in good educational experiences there is a quality of feeling and seeing things as if for the first time, brand new, never experienced before. In these joint, novelly developing student-teacher enterprises, students are encouraged to stretch themselves, their minds, and their imagination; to become bigger and grander than they ever were before; to become as big as they can manage; in fact, bigger than they ever thought possible.

If we follow Dr. Rogers’ view of education, there is always in the educational process a strong element of the mystery of creativity that resides in the person, the mystery of what may happen when human beings gather together to learn. What is strikingly new in Freedom To Learn is the emphasis placed by Dr. Rogers on the encounter group, a process in which human beings meet to learn how to become aware of feelings and to develop the courage to articulate them honestly and frankly. One will have to read Freedom To Learn to perceive how crucial for the educational process the group can become, how good it is for the development of the person, what lovable and desirable traits can emerge within and through him. The traditional school has for so long pitted students against teachers. That is still the horror of traditional education in an authoritarian setting. In emphasizing what group experiences may mean for education, Dr. Rogers has made, I believe, a profound contribution to educational philosophy and methodology. In this area, he is at his best and most brilliant.

Dr. Rogers sees the teacher as one who can release students as well as himself for growth. He, the teacher, also becomes a learner, eagerly seeking, as do his students, new meanings and insights. For Carl Rogers, education is not a mass of facts presented on examination papers, but a becoming process whose goal is ever richer and more meaningful living. In achieving these ends, the teacher is anything but an authoritarian figure, the processor of truth and wisdom, there to transmit it to students ignorant of this truth and wisdom. Each student in a good educational arrangement is given freedom to find his own truth and wisdom; and the adventure and the excitement lie in not knowing, in teacher and student finding out together.

As one who is acquainted with Carl Rogers’ writing and is an admirer of it, I am glad to say that Freedom To Learn is a worthy addition to his other books and this means that it is a highly personal book with original insights. Carl Rogers is not bound by conventional patterns of thinking, either in this or in his other books. What I admire about him is his courage to open himself to his readers, to reveal his person, to trust his feelings, and to dare voice his convictions, even if these run counter to what is deemed proper and respectable by academicians. In this quality lie for me his fascination and greatness.

This faith, this courage, this daring to state his convictions and feelings that have come to him as a result of a lifetime of work in his discipline make Carl Rogers a special kind of person, a novelty in the academic world. By some queer twist, unlike the rest of us, he does not need confirmation by some outside “authority” before setting forth his beliefs. Further, there is in Carl Rogers’ writings a transparent honesty, a willingness to share himself with his readers, and, more important, to trust his own feelings. Judging by hindsight, how remarkably accurate indeed have these insights proved to be!

As I read the book, I perceive Carl Rogers struggling with the meaning of experiences as he has lived them. As he shares with the reader these feelings, I find myself more open to my own experiences, more sensitively and more intelligently aware of my own feelings, more perceptive and more accepting of my own being. I find myself enriched by the life of another, and my own is added to.

In Freedom To Learn, one gains not only a philosophy and methodology of what is good education but also what is the life good to live.