

Council Adopts Position Statements

NCTM's Instructional Affairs Committee recently prepared the following statements, which have been approved by the Board of Directors.

STATEMENT ON MATHEMATICS AND BILINGUAL/BICULTURAL EDUCATION

Every student should receive a meaningful and timely mathematics education and none should be excluded because of language or cultural differences. Schools should actively seek to identify the educational factors which diminish a student's opportunity to learn mathematics and to remove such barriers without disruption of the integrity of the student's cultural world. Special instruction in mathematics, using material in the primary language of the student, should be provided until the student can function adequately in a mathematics class conducted mainly in English or in the predominant language of the area.

GUIDANCE/COUNSELING STATEMENT FOR BOTH COUNSELORS AND MATHEMATICS TEACHERS AT THE SECONDARY SCHOOL LEVEL

Today, more than ever before, the study and appreciation of mathematics are vital to the intellectual development and to the scientific, industrial, technological, and social progress of society. It is essential that teachers, counselors, supervisors, educational administrators, parents, and the general public work together to provide the best mathematics education possible for all students, regardless of sex, ethnic group, national origin, or ability. All students should be encouraged to keep options open by studying mathematics so as to make maximum use of their talents. Specifically, it is suggested that students include a maximum of mathematics appropriate to their abilities and interest in their high school programs.

The educational, vocational, personal-social choices and decisions made by students should lead to satisfying and worthwhile lives. The important members of the guidance team in each school, both the school counselor and the mathematics teacher, are responsible for helping students gain insight and understanding of themselves and their environment in this decision making. Therefore, they must work cooperatively in:

1. Planning mathematics programs for individual students.
2. Placing students in mathematics courses appropriate to their needs and abilities.
3. Anticipating developments in mathematics and fields that utilize mathematics.
4. Confering with the school administration with regard to mathematics course offerings.
5. Planning a mathematics program designed for a specific field.
6. Securing, evaluating, and making available to students a variety of career publications.

7. Planning career-oriented activities.
8. Keeping students informed about:
 - a. secondary school and college mathematics programs
 - b. vocational and technical school mathematics requirements
 - c. college entrance requirements in mathematics
 - d. mathematics requirements for majoring in specific areas
 - e. procedures for obtaining college credit for mathematics courses taken in high school
 - f. career opportunities in mathematics
 - g. mathematics needed for specific fields and professions

Basics in Junior High

by *Bernie Biedron*

Are basics the major emphasis in junior high school mathematics programs today? How well do your junior high students know their basics? How competent are your junior high students with their computations? These are only some of the questions which have rarely been seriously asked in the past ten years in the field of junior high mathematics. I believe it is time that we as junior high school mathematics teachers and for that matter, as mathematics teachers in general, seriously ask ourselves this question, for I believe that the basics are not the major emphasis in junior high school mathematics programs today and they definitely should be. Before proceeding any further, I will define the term basics. As far as I am concerned, basics refers to the basic elementary operations of addition, subtraction, multiplication, and division of whole numbers, fractions, and decimals.

The opinions expressed in this article are based not only upon scientific research but also upon personal experience. I have been teaching junior high school mathematics for the past seven years and I have also taught grades five and six mathematics for a period of four years. I really became concerned and preoccupied with this idea of basics approximately three years ago when I discovered, during the early portion of the school year, that several of my grade seven students had never mastered their three times multiplication table facts. Ever since I have come to believe that, in general, junior high school mathematics students do not know their basics. Stop for one moment and think of any one particular class that you teach and see if you can honestly answer 'no' to each of the following questions. Do any of your students construct mini-multiplication tables and attach them into their mathematics notebooks in inconspicuous places? Do any of your students hesitate, for some time, when they are asked to answer very simple addition or subtraction questions? Do any of your students use fingers to facilitate computation? Now, I could go on and on, but if the answer is 'yes' to any one of these questions, then your mathematics students do not know their basics. Students should learn to become so habituated to the basic elementary operations with numbers that they do not have to think about them. I believe that teachers should do all they can to make the basic elementary operations so habitual that students do not have to think about them any more than they think when they turn on the colour television set.