Mathematics Society of the Philippines
NATIONAL CONVENTION
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Arrupe Hall, Ateneo de Naga University

Relevance of Mathematics in Nation-Building

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Ladies and Gentlemen:

I extend my warmest greetings to our guests, to the organizers, and participants to this year's national convention of the Mathematical Society of the Philippines.

Like Fr. Joel Tabora here and all the Nagueños, I am both honored and grateful that our beloved city has been chosen to host this prestigious and productive gathering of mathematics teachers, researchers and educators from various parts of the country.

I assure you that you will have a warm and memorable stay in our fair city. Please feel comfortable and be satisfied by the famed Bicolano hospitality, spiced up by its "hot" cuisine.

I welcome you, too, to the Ateneo de Naga, my high school alma mater. Once the home of Fr. James Reuter, the Ateneo de Naga is Bicol's well-spring of academic excellence. Through the years, it has nurtured the mathematical and problem-solving skills of its famous students such as former Senator and Education Secretary Raul S. Roco, the respected

constitutionalist Fr. Joaquin Bernas, the late Sandigan Bayan Justice Francis Garchitorena, IBP President Jose Anselmo Cadiz, my classmate, *Inquirer* Columnist Conrado de Quiros, and seasoned actors Jaime Fabregas and the late Ronald Remy, to name a few.

Declining Student Achievement Test Results in Math

Having had just gotten off from the sick bay, I was advised to discuss matters, private and official on a lighter plane and delve on the good news, for at least the next few days.

But looking at the state of our Philippine education today could make it difficult for me to heed my doctor's advice. It is your presence today that I think will balance things and give me hope that we all deserve to be feeling fine today.

My dear ladies and gentlemen, you have come and gathered together at an opportune time when our country's educational system and standards have skidded on the wayside, relegating us to the bottom, when measuring the academic achievements and ratings of our students compared to other countries.

In the Trends in International Math and Science Survey (TIMSS) Results of 2003, the Philippines was virtually in the rock bottom, 41st to be exact, among the 45 countries ranked on the basis of the students' mathematics achievement, where 5 Asian countries were on top. This was no better than the countrys performance in the 1999 TIMSS.

Malaysia was the only ASEAN country to make it to the last notch of the world's Top Ten which include Singapore, South Korea, Hongkong, Taipei, Japan, Belgium-Flemish, the Netherlands, Estonia, and Hungary, in that order. The United States, it was noted, was ranked 15th.

Where the international average score was 58.25%, the Philippines got 47.25%, or slightly higher than Botswana, Saudi Arabia, Ghana and South Africa, the latter ranked last.

Simply put, the Philippines is on the tailend.

The results of last year's High School Readiness Test virtually affirmed the decline in our academic achievement with less than 1% of incoming freshmen students getting a score of a least 75%.

If the state of education mirrors our state of development, then this can explains perhaps why we have a government under siege; an economy that finds it difficult to feed 70% of its people; a country that has failed to approximate its potential.

The Promise of Mathematics

According to a professorial lecturer, Ms. Anacleta M. Encarnacion of the Pamantasan ng Lungsod ng Maynila, Mathematics offerings like College Algebra, Trogonometry and Statistics underscore the importance of truth and honesty and analytical thinking. That is why, the challenge of promoting the subject and building students' proficiency is a foremost concern if we want to ensure a better future for our nation and the next generation that will inherit it.

The same professor underscored that when the great philosopher and teacher Plato recommended a course of study for political rulers, his conception was not a curriculum in political science or public administration. He prescribed Mathematics because, according to him, the habits of thought it developed would enable his rulers to have a conception of truth necessary to the act of governing.

Perhaps it would interest you to know that one of the favorite subjects of Ramon Magsaysay, one of the Philippines' very few well-loved presidents, was Mathematics -- that was why he took up Mechanical Engineering?

Did it occur to you that Bayani Fernando, before he became Marikina City Mayor and MMDA Governor was a construction engineer whose favorite subject was Mathematics?

Indeed, in the world of reality, the values drawn from training in Mathematics are the same ones people depend on as they unravel the practical problems that beset their lives. The ability to examine the many angles of a problem is important in finding better solutions. With critical alertness, one who is adept at Mathematics readily spots an error and exposes what is wrong, especially if such Mathematician chooses to become a public servant, a classroom teacher or educator, or an ordinary citizen who practices what is right and good for the country and his fellowmen.

The Challenge

My dear ladies and gentlemen, let me again congratulate you for aiming to provide a forum for Filipino mathematical researchers and educators to interact and share their work results towards the promotion of mathematics education and research in the country, and consequently towards the improvement of the educational capacities of our students who shall be the future leaders of our country.

Simply put, the clearest mandate that you do have is to teach them right, teach them well, while all of them are under your watch. The measure of success is not how better the well-endowed have become but how well the less-endowed have raised the norm.

By agreeing to come together and talk about our problems in education today is a hopeful sign. By realizing that we are confronted with problem about the declining achievements in Mathematics, for instance, we are all saying that we need to walk the extra mile to catch up with what we had lost in the past. By joining our hands and hearts together, we are employing the right approach: that we must all be willing to work hard within our respective professions and look hard enough at our problems so that we can apply the right solutions.

With your commitment and sincerity of purpose, the success of this national convention is assured.

Dios mabalos!