

Congratulatory Remarks for Entering Students (April 5, 2021)

On behalf the Nara Institute of Science and technology faculty and staff, I would like to welcome the 320 students entering the master's course and the 68 new and continuing students entering the doctoral course of Graduate School of Science and Technology today.

Among the new students we welcome to NAIST today are 40 international students from 12 countries/regions. Including the entering class today, our international population has reached 284 and, with roughly one in every four students coming from abroad; this is a truly global campus.

Big congratulations also to those who have decided to leave their home countries and entered our graduate programs today. About 30 years ago, I also left my home country, Japan, to study and work abroad. I believe that you have made a challenging but worthwhile decision.

Considering the prevention of the spread of new coronavirus infection (COVID-19), this entrance ceremony is being broadcasted on NAIST's Academic Channel and on the internet. We have been fortunate in that none of NAIST's students have been infected, but the current situation, both domestically and abroad, is far from being safe. While there have been many losses since the virus appeared in December 2019, much has been learned about COVID-19 through the persevering efforts of healthcare professionals and researchers.

What is particularly important at this time is that each one of us can contribute to controlling the spread of infection through our actions. We are being asked to be conscious that our own actions can affect the people around us and our society. As you are well aware of, we have to avoid the Three Cs.

The Three Cs here are Closed spaces, Crowded places, and Close-contact settings, and they should be avoided to prevent coronavirus outbreaks.

I would like to introduce to you an entirely different set of Three Cs as you become graduate students studying and performing research at NAIST at the forefronts of science and technology. These Three Cs were proposed by Professor

Matthew Lipman of Columbia University. Professor Lipman, famous as the founder of the 'Philosophy for Children' movement, approached the issue of how to teach rational thinking in his book *Thinking in Education* and proposed 'Three Cs' as three essential aspects of thinking.

This book was published back in 2003, but the Three Cs he proposed are recently attracting attention once again. This is due to Audrey Tang, who was appointed as the Taiwanese Digital Minister at the age of 35 and now is considered a modern hero for her contributions to stopping COVID-19 in Taiwan. When Minister Tang was in third grade she attended a philosophy school for children, where she learned how to think and debate according to these Three Cs. From then on, it is said that she keeps these Three Cs in mind when approaching any problem or issue to reach her conclusions.

The first C is Critical thinking. Being critical here is not being critical of others' ideas. Instead, it is the process of objectively analyzing logic and thoughts of yourself and others, and also any related proof or information, and then evaluating the choices and outcomes from such analysis.

The second C is Creative thinking. This is the thinking to produce new innovative and original ideas that cross over and surpass established ideas and concepts for existing problems. As students pursuing advanced science and technology, you must be familiar with this Creative thinking.

The final C is Caring thinking, which may be described as considerate or compassionate thinking. While consideration and compassion are emotional, Professor Lipman felt that emotions are the basis of our decision making and that Caring thinking cannot be separated from either Critical thinking or Creative thinking. By considering in your thought process how other people would react to or perceive your ideas and opinions, you can avoid falling into egocentric thoughts.

The studies you will undertake in graduate school will be centered on your research work, which will be an unparalleled opportunity to train your Critical thinking, Creative thinking and Caring thinking. From elementary school to high school and college, the education was mostly focused on lectures and tests to measure your understanding of the lecture material, but in graduate school you can earn your degree and graduate by an original breakthrough in some way in

your research field. The Three Cs for thinking are essential for you to make a breakthrough in your research.

In closing, let me stress that, even without the example of Minister Tang, the Three Cs for thinking are extremely useful when faced with problems in our society and everyday life, as well as in science and technology research. As NAIST provides an advanced research environment to perform education, we hope that each of you will learn to use these Three Cs in addition to acquiring knowledge so you can become the heroes of tomorrow in different areas of society.

Welcome to NAIST

April 5th, 2021

Kazuhiro Shiozaki

President, Nara Institute of Science and Technology