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Profile: Richard Calusdian

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Not since the Sputnik era of the 1950's has science education been elevated to a position of prominence in our schools. Here at Bridgewater Physics professor Richard Calusdian is in the front ranks of those educators trying to broaden the skills of science teachers and advance science education for students of the 21st century.

Dick Calusdian is currently working with Chemistry Professor Henry Daley and Mathematics Professor Jean Prendergast on a three year National Science Foundation Grant to teach science education to middle school and high school instructors. For the last three summers, Dick has conducted classes in astronomy and electricity at the college as a way of rekindling interest in physics. As Dick quickly points out, there is a crying need to reemphasize the importance of physics and to encourage students to become involved in the study of physics. Unfortunately, today's students grow up in a culture where physics is not encouraged and where there is a resulting fear of studying a discipline that is viewed as difficult.

Dick Calusdian's passion for spreading the word about physics and science education began in high school in Watertown where, as a student of future Bridgewater State professor Robert MacCurdy, he developed a deep interest in studying the basic laws of nature. After gaining his bachelor's degree at Harvard, a Masters at the University of New Hampshire and a Ph.D. at Boston University, Dick worked for a time at the Watertown Arsenal and the U.S. Army Natick Lab doing solid state physics for the United States Army. But as with many Bridgewater faculty, Dick longed to get into the classroom and share his love of physics with students. In 1966 Dick arrived at Bridgewater as chair of the Physics Department, a position he held till 1988. In his years at Bridgewater, Dick Calusdian has gained a reputation as a champion of physics and a mentor to numerous students, many of whom have gone on to successful careers as engineers, scientists and educators.

After spending twenty-seven years on the Bridgewater faculty Dick speaks with authority on the state of science education at the college and the interest of students in physics. Dick makes the comparison of science education in Asia and in the United States and sees the Asian culture as more receptive to the study of science. In Dick's view, the people of Asia see man as part of nature and therefore are more interested in the various fields of science, while American culture often stresses man being apart from nature, therefore distancing our people from science. Dick hopes that the recent recognition by educators of the need to bolster science education will renew interest in this vital area.

Although Dick is disappointed that the study of the basic laws of nature is not at center stage among the students of the 1990's, he remains upbeat and committed to advancing his passion. Dick is currently preparing to take a long deserved sabbatical in which he will study elementary particle physics and prepare a course in the topic when he returns to the classroom. To Dick, elementary particle physics is at the foundation of the laws of nature and a critical link to answering the questions of who we are. Like many students of elementary particle physics, Dick is deeply disappointed the congress stopped funding for the completion of the supercollider in Texas. Dick feels strongly that the collider, which was originally a multi-billion project designed to further define the fundamental elements of matter, is a critical technology that should be built.

The commitment of Dick Calusdian to physics and science education is reassuring in this era of a global economy when countries are scrambling to train scientists and engineers and gain that competitive edge. Dick may be fighting an uphill battle to reinvigorate the sciences in the classroom, but he is fighting and transmitting his spirit to a new generation of young people at Bridgewater State.