

Engineering Projects Are Vehicles for Missions

by Leslie Hancock

World View

“Being converted oftentimes seems superficial until the forces of darkness are removed from lives. Talk is not enough; we must show the evidences.”

Dr. Young-Gurl Kim, the mild-mannered professor of engineering and technology at JBU, speaks of such things from personal experience and with passion.

Kim has invested the last fourteen years instructing JBU engineering students in their career pursuits. At the same time, he has been working to take practical principles of engineering and technology to serve poor and developing countries, showing true evidence of Christ's love for the world.

Take, for example, the annual basic utility vehicle project—or BUUV, as it is called. Each year, engineering students build a fully operational, four-wheeled vehicle from scratch. Kim guides the students in the construction of everything from frame to engine. Then, he takes the students with their BUUV to a national competition, where the team races their creation against those of other universities, proving which vehicles are the fastest, most durable, and best constructed. In 2004, the JBU team took an impressive fourth place.

But it's not all about winning awards. Using this same BUUV technology,

the Institute for Appropriate Technology (IAT), founded by Kim, creates an overall best design of the BUUV and produces models for real life applications. Cost-efficient and equipped with an independent suspension system for a smooth ride over rugged terrain, these vehicles are currently utilized in Honduras with the assistance of World Vision. Whether enabling a poor farmer to carry goods to/from the market or helping a mother with daily tasks and providing transportation for her children at safe speeds, the BUUV is one answer to a practical need.

Kim's passion to bring God's holistic salvation to people in need has taken him to places such as Kenya, Uganda, Bangladesh, Tanzania, and Indonesia to be of practical assistance. These are places, Kim describes, where the disparity between the rich and poor are readily observed; where the forces of darkness are sadly apparent by an epidemic of ignorance, negligence, and unnecessary disease; and where a twenty-first century Macedonian Cry resounds to “come over and help us.”

One such visit took Kim to a Ugandan orphanage last year. In the main kitchen were two large pots positioned on rocks with wood placed underneath. Sadly, these stoves were primitive and hardly able to feed the more than 400 students present on school days. Surveying the situation and assessing the evident human need, Kim seized the opportunity to train a leader in the orphanage to build a simple and more efficient stove. And then, taking the lesson to a heightened level, he proceeded to share with the man the Bible story of Creation, the Fall, and Redemption—all by using the stove sitting before them.



Dr. Young-Gurl Kim teaches national missionaries in Bangladesh.

“When the stove is out of order,” Kim explained, “we experience the same characteristics of our fallen state: disorder, inefficiency, uncleanness, and other problems. But notice that when we start to learn ways to restore its right order—we can recover all of the benefits embedded in its function.”

The man from the orphanage whom Kim trained now trains others in “Stove-making 101.” Just this year alone, 18 efficient stoves have been constructed and each is capable of cooking meals for 20 people. Perhaps these, too, have become practical life illustrations for sharing the Good News.

So great is the need in many such countries that an Institute for Biblical Community Development (IBCD) is being formed. As director of this research hub, Kim will devote many of his energies to fundraising and hiring researchers in appropriate technology, agriculture, nutrition, and business. Individuals working through IBCD, many of whom are part of the JBU community, will travel to impoverished countries, meet with expatriate missionaries and indigenous leaders to survey the human needs, and train nationals with appropriate technology in water, nutrition, and energy management, and in environmental protection with a Kingdom perspective.

“By following God's principles, we can overcome poverty,” Kim says. “And then as advances are made, people gain confidence to see God as a good God.”



The BUUV built by JBU students is put to the test in competition. “The BUUV has tremendous potential to improve transportation and serve as a tool for evangelism in remote areas of developing countries,” says Kim.