GLOBAL TRENDS IN ENGINEERING ENROLLMENTS AND THEIR IMPACT ON US

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ABSTRACT

Over the past decade, as the global markets have opened for American corporations, the demand for technically educated workforce in those countries has risen considerably. Emerging countries such as China, India, Australia, New Zealand, Singapore, to name a few, have invested heavily into their technical education infrastructure and are producing quality talent that is now not only serving the needs in their own countries but also a portion of the global needs. Outsourcing of engineering functions overseas for American corporations is now a common occurrence because of the availability of quality talent at lower costs. Further, the investment in educational infrastructure is not limited to just increasing the undergraduate degrees awarded; it is also in developing a research infrastructure to potentially become leaders in high technology business opportunities.

This paper will review the trends in engineering enrollments in these emerging countries and compare them to US trends. It will specifically discuss strategies for American educated engineers to be and remain competitive in this highly global environment. We will conclude by assessing the impact of this environment on American engineering education the imperatives upon us as engineering educators.