12 - Cultural, Social and Gender Issues in Science and Technology Education | Empirical

SP - (16641) - "AS IMPORTANT AS TRAINING IN MATHEMATICS": MILITARISM WITHIN CANADIAN ENGINEERING EDUCATION ACTIVITIES

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Short Abstract

Even before their large-scale participation in the First World War, Canadian engineering students in the province of Ontario underwent training as military engineers through the establishment of engineering-specific military engineering corps on their respective universities' campuses. This training, seen "as important as training in mathematics," was meant to complement the civilian engineering education they were receiving inside the classroom as well as imbue them with militaristic ideals that the faculty, administrators, and military were trying to promote. After returning home from the battlefields of Europe, many of these "sappers" continued to promote the same ideals they had learned as students onto the next generation of student engineers. Over one century later, although less explicitly obvious and existing in an entirely different societal context, those ideals, specifically militarism, still exist within the non-, co-, and extra-curricular activities within Canadian engineering education. And as the battlefields of warfare shift towards cyberspace, and even space itself, the implications of this reality are ones that have yet to be seriously explored or analyzed within the existing academic literature examining engineering education within the uniquely Canadian context. Therefore, what this paper and presentation will seek to do is present findings from research analyzing non-, co- and extra-curricular activities involving Canadian engineering students at two Ontario universities: the University of Toronto and the Queen's University at Kingston. Relying primarily on an interpretive content analysis of contemporary student, alumni, faculty, and departmental publications, it will seek to highlight the parallels between the promotion, and presence, of militaristic ideals that existed within Canadian engineering education's non-, co- and extra-curricular activities during the late 19th and early 20th centuries and the ways in which they continue to persist within these institutions up until the present day. It will conclude by exploring the future implications for engineering education in Canada.