Research Brief
Institutional Ethnography: A Research Method to Investigate the Work-life Experiences of Women Faculty Members in STEM Disciplines
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Background
While there are a bevy of research papers published every year to address underrepresentation, there are few new or innovative ideas informing our theoretical groundwork for understanding underrepresentation. Institutional ethnography (IE) is a method used in sociology to understand institutions through the experiences of people considered marginalized in them. IE allows researchers to examine how institutions' rules and regulations impact the lives and work experiences of people who work in those institutions.

Purpose
In this paper, we outline how IE is an effective method of investigating the experiences of women in STEM faculty positions. Using IE as a method to study the career-based experiences of the women faculty members of the STEM disciplines, we ask how institutionally generated texts (at the departmental, college, and university levels) shape their experiences as faculty members. It is hoped this paper will serve engineering education researchers as an introduction to a new and useful method for investigating the experiences of underrepresented STEM faculty.

Methods
Our data are promotion and tenure (P&T) documents from different colleges/schools of the university that more-or-less include information about guidelines for tenure document, college/school level of strategic plans, timelines and, bureaucratic procedures regarding the promotion and tenure processes of the STEM faculty members. We analyzed the data through two specific issues of concern in the P&T documents: (1) inconsistency in the structures of the P&T documents and, (2) inconsistency in the content of the P&T documents.

Results
There exists a substantial level of inconsistency in the structures of the P&T documents. The university has its own statements of the criteria for the promotion and tenure policies. The colleges/schools follow more-or-less similar guidelines. However, the colleges/schools also modify the university level criteria according to their own requirements. The inconsistencies in the P&T policy documents underscore two primary issues: accessibility to the documents, and understanding of the documents. The accessibility to these documents may vary not only across departments but also across the faculty members. This is because many of the STEM colleges/schools do not provide easy online or off-line access to the P&T policy documents.

Conclusions
Inconsistencies in the structure and contents of the P&T policy documents as well as the lack of standardization of the documents across college/school and department/school levels may prevent faculty from preparing strong application documents. Disconnects between the institutional requirements and the understanding of these requirements may cost the faculty members their much coveted P&T, and disconnect in the structure and the contents of the texts may lead to gender and race inequalities.

Implications for Practice
- Policymakers should pay greater attention to preparing P&T documents that are uniform and standardized.
- Administrators should increase the accessibility of relevant documents and work to ensure standardized accessibility across STEM departments.

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