THE LABEL, THE DIVIDE AND THE COST: A COMPARATIVE ANALYSIS OF GENDER IN TECHNOLOGY, ENGINEERING AND MATHEMATICS EDUCATION

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ABSTRACT

The label that STEM (Science, Technology, Engineering and Mathematics) fields are not for women and the consequent gender divide comes at a great cost. This paper focuses on the gender divide in Technology, Engineering and Mathematics (TEM) education in Sri Lanka, alongside comparative insights drawn from the United States, India and the European region, with a view to identify the key drivers of the gender gap. In examining low female representation in these fields, the paper engages in two core analysis: first, the profound impact of disassociating female identity with STEM has affected the female representation in STEM fields, leading to life-long gender discrimination; second, the label that STEM fields are not for girls is socially constructed rather than biological. Additionally, the gender digital divide is deemed a key determinant in women's access to technology, engineering and mathematics fields. These contentions are unpacked against a conceptual framework based on Gender and Development, rights-based development approaches and international norms that underlie equal access and opportunity. In the light of Sri Lanka's case on gender gap in TEM (Technology, Engineering and Mathematics) and the gender digital divide, the paper engages with the international discourse on enhancing female representation in STEM to highlight the importance of legislative intervention and proactive State commitment in addressing this matter.

1. INTRODUCTION

As female literacy rates improve globally, the gender gap continues to remain in education and employment in Science, Technology, Engineering and Mathematics (STEM) fields across the world.¹

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