Abstract: Civic Statistics: Conceptualization of a new Perspective on Statistical Literacy

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Democracy thrives on arguments based on evidence. Vibrant democracies need well-informed citizens who can understand and discuss relevant social issues and engage in public decision-making processes. Effective citizen engagement with social issues requires active participation and a broad range of skills, including understanding data and statistics relevant to these social issues. Extending the concept of Statistical Literacy, this paper introduces a sub-discipline we call Civic Statistics. Civic statistics focuses on understanding statistical information about society as provided by the media, statistical agencies, and other statistical providers. The challenge of empowering people to make sense of these data is as much for educational institutions (schools and colleges) as it is for the media and statistics providers. In this paper, we describe the specific characteristics of Civic Statistics and justify the need for this sub-discipline, which lies at the intersection of statistics, social sciences, and - because of its educational mission - education. We describe a framework for competencies in Civic Statistics. Our analyses result in curricular and educational policy recommendations that conclude this talk.

Keywords: Statistical Literacy, multivariate reasoning, active citizenship, open data, curriculum