# Department of Statistics 2019: Mapping Inequalities Online Using Data

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### 1 Introduction

#### Aims:

- 1. Literature review on natural language processing for GH/SE data and information retrieval
- 2. Exploratory and descriptive analysis of small dataset
- 3. Explore small dataset and employ ML methods to get predict quality of question/commit

4.

# 2 Brief Literature Review

### 2.1 A Summary of the Research

Brinton et al. (2014)

Stadtfeld et al. (2019)

Currarini, Jackson and Pin (2010)

## 3 Datasets I Have Found

#### 4 Empirical Methodology

#### 4.1 Empirical Model

This is an equation:

$$A_{it} = f(T_i^{(t)}, S_i^{(t)}, P_i^{(t)}, B_i^{(t)}, I_i),$$
(4.1)

Table 1: Learner achievement (%)

Subject	Mean	Q1	Median	Q3
Maths	27	15	23	35

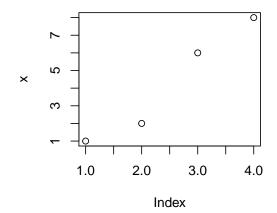
Source: Own calculations in Stata using 2004 Grade 6 Intermediate Phase Systemic Evaluation.

Figure 1: Cumulative graph for subject scores

Source: Own calculations in Stata using 2004 Grade 6 Intermediate Phase Systemic Evaluation.

Again, you can reference the figure in-text: figure 1 is a figure and it displays etc. etc. etc.

This is an organic figure generated with an R chunk that is executed when the document is knitted (the image is also saved in the folder final-article-template\_files):



Regarding R chunks: If you want a chunk's code to be printed, include set echo = TRUE. message = FALSE stops R printing package loading details and setting warning = FALSE should suppress most warnings.

5 Recommendations for Further Research

6 Concluding Remarks

#### 7 References

Brinton, C. G. et al. (2014) 'Learning about social learning in MOOCs: From statistical analysis to generative model', *IEEE Transactions on Learning Technologies*. IEEE, 7(4), pp. 346–359. doi: 10.1109/TLT.2014.2337900.

Currarini, S., Jackson, M. O. and Pin, P. (2010) 'Identifying the roles of race-based choice and chance in high school friendship network formation', *Proceedings of the National Academy of Sciences*, 107(11), pp. 4857–4861. doi: 10.1073/pnas.0911793107.

Stadtfeld, C. *et al.* (2019) 'Integration in emerging social networks explains academic failure and success', 116(3), pp. 792–797. doi: 10.1073/pnas.1811388115.

#### References