Intro to LaTeX

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1 Line, Paragraph and Page Breaks

Hello World! This is our first LaTeX lesson. I really know nothing about it. But I'm very excite to learn about it.

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This is a new line. (But don't use \\ to force a new paragraph.)

2 Basic Text Typesetting

2.1 Text formatting

You can format words in many ways:

This is important.

This is *important*.

This is **important**.

This is super-duper ***important***.

I use `R` programming.

This is special.

2.2 Special Characters and Symbols

These symbols are reserved and need a backslash: # $ % ^ & _ { } ~ \

For quotation marks, you need to use two grave accent (under tilde) and two vertical quote: "Please be careful."

There are three types of dashes: -, –, —

Other common symbols include: ~ /...

2.3 Environments: Itemize, Enumerate, and Description

- First item
- Second item
  - Sub-item
    - Sub-sub-item
- Third item

1. First lab
2. Second lab
   (a) LaTeX is really useful

3 Table

Week	Date	Content
1	Jan 10	Intro to `R`
2	Jan 17	Intro to LaTeX
3	*No class this week*	
4	Jan 31	Intro to `ggplot2`

Table 1: Schedule of CSSS 569 labs

Please refer to Table 1 for the labs schedule on page 2.

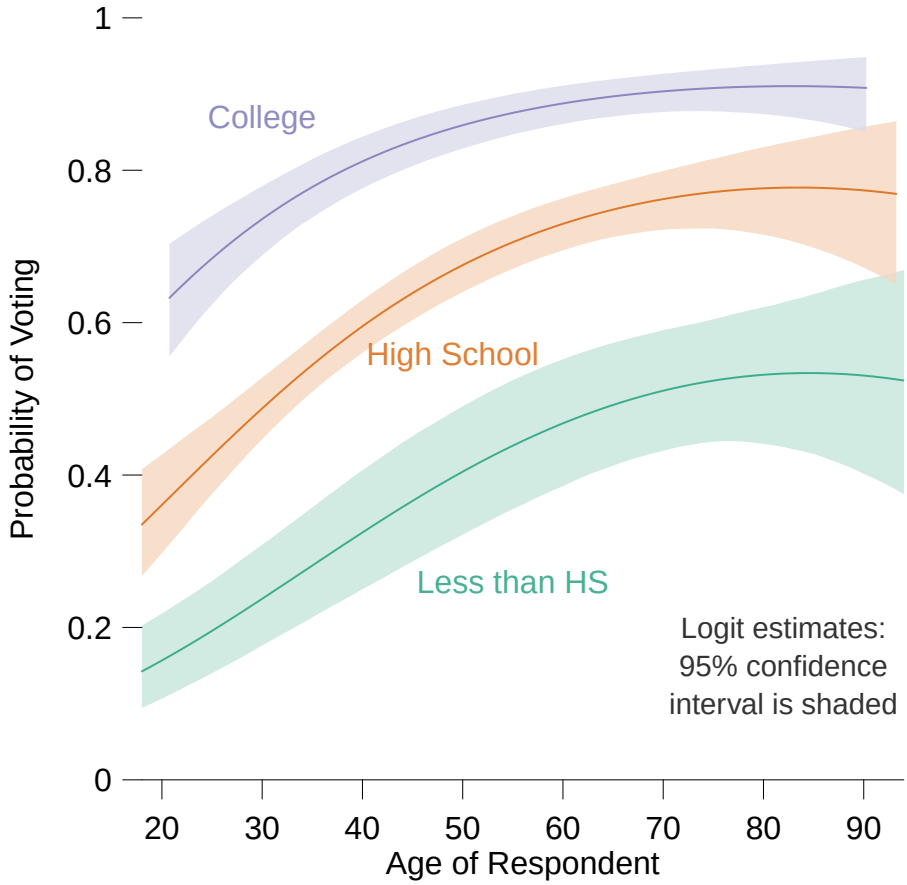

Figure 1: Expected probability of voting conditional on education levels

4 Graphics and Images

5 Math formulas

There are modes of writing maths in LaTeX.

The first mode is inline mode: $E = mc^2$ is an equation discovered by Einstein.

The second mode is display mode: Einstein proposes the following equa-

tion

$$E = mc^2 \tag{1}$$

Typesetting mathematics is easy in LaTeX:

$$e = \lim_{n \to \infty} \left(1 + \frac{1}{n}\right)^n \tag{2}$$

To split and align equations:

$$\begin{aligned} f(x) &= (x + 5) \times (x - 7) \\ &= x \cdot (x + 5) - 7 \cdot (x + 5) \\ &= x^2 + 5x - 7x - 35 \\ &= x^2 - 2x - 35 \end{aligned} \tag{3}$$

6 Bibliography management

Data visualization is fun (**wilke˙fundamentals˙2019**). It is also beautiful (**healy˙data˙2018**).