

# Teaching Logic Circuits with Interactive Media

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Class: Ignorance is NOT Bliss, Section B05

## Problem:

- Early high school students lack sufficient electronics literacy
- Electronics is not taught in high school
- Electronics is increasingly important

## Prototype:

- Uses the same design as the digital game
- A player interacts with another person, the "Administrator", who follows the same rules as the computer
- The administrator places the pieces out on a table in the same way the computer places things out on the screen

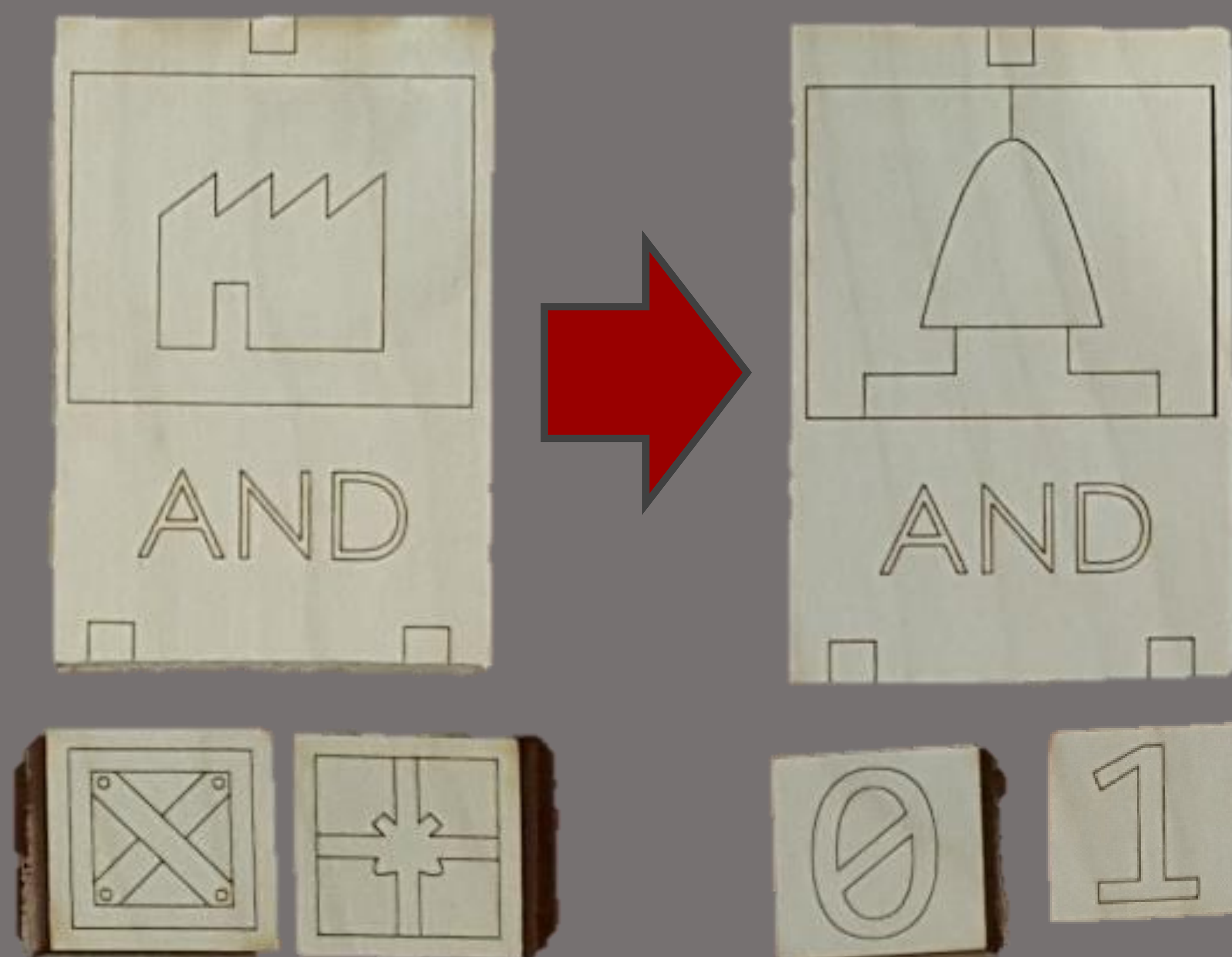
## Assessment Plan:

- Pre and post test
- 15 questions
- 10 minutes
- 7 levels of the game
- T-test with 95% confidence



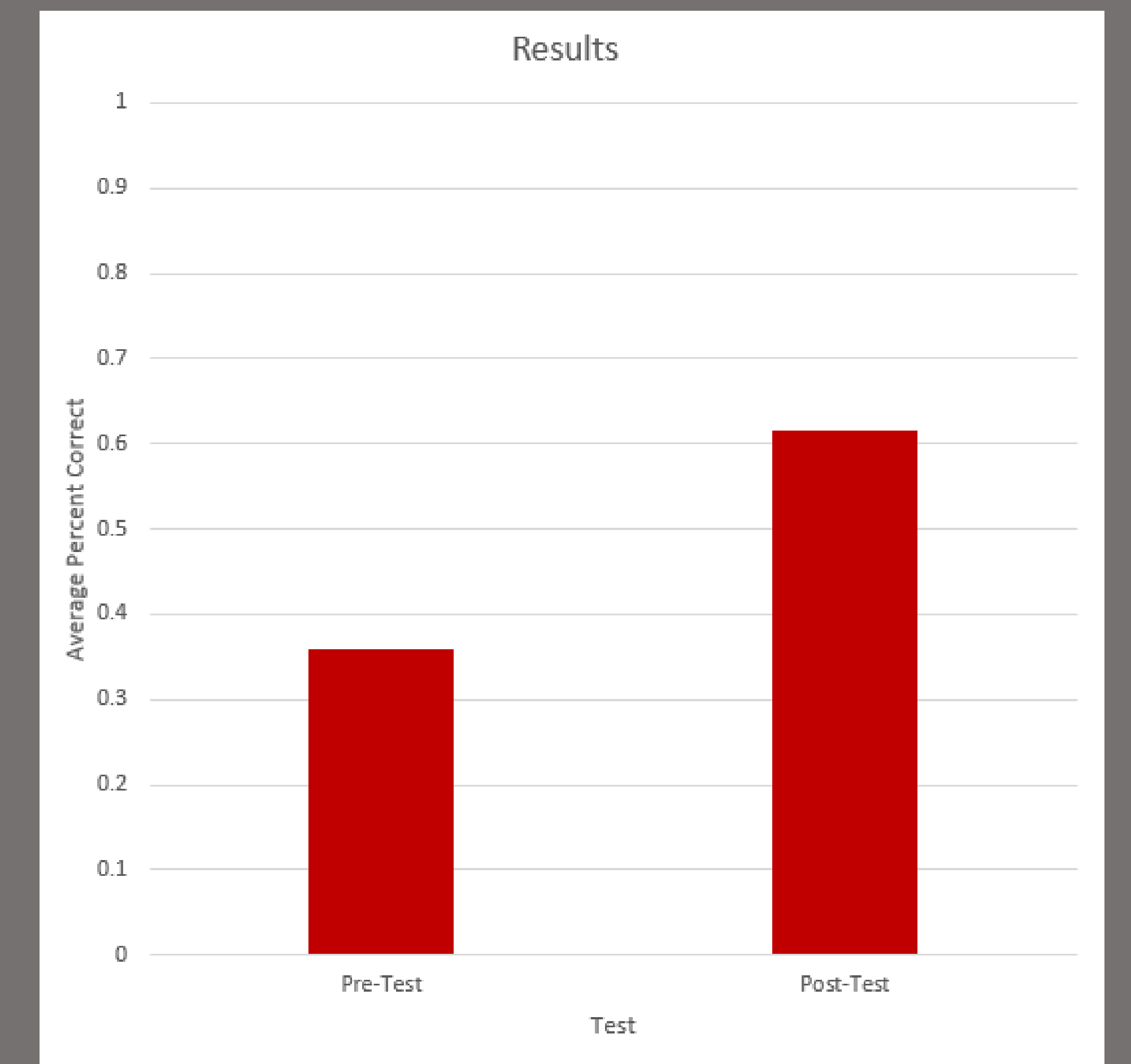
From friendly factories...

...To formal notation



## Solution:

- Digital game
- The player combines inputs to get the right output
- Start with friendly graphics, move to professional graphics



The post-test was statistically significantly higher than the pre test (95% confidence t-test)

## Acknowledgements:

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## Key References:

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