What do we want to know?

- What students think of WeBWorK
- How students interact with the system
- How changes to WeBWorK influence interaction
- How instructors interact with the system
What students think of WeBWorK: survey results

- **Positive – the top of the list**
  - Immediate feedback
  - Prefer WeBWorK to paper & pencil homework
  - Structured system supports homework completion

- **Negative – the top of the list**
  - Syntax--difficult to type in long answers
  - No partial grade
  - No way to tell if answer is almost correct


How students interact with the system

Students complete their problem sets

Score = # of successfully solved problems over the course of a semester. Each data point = % of students in the specific interval

N = 196, 158 and 135 students
Fall 2002, 2003, 2004

How students interact with the system, continued


- Responses to error messages could be categorized
  - Reworking the problem
  - Fixing an entry error
  - Resubmitting the same or equivalent answer--a surprise
  - Guessing
  - Nonsense

How changes to WeBWorK influence interaction

- Preview feature: before Fall 2003
- Resubmission alert: before Fall 2004
How changes to WeBWorK influence interaction

Distribution of entry errors
Data are averaged across 32 students for each year and across two raters.

How instructors interact with the system

*Improvements wanted:*

- Documentation (online, tutorials, community member communication, installation)
- Installation
- Problem library (organized by topic and linked to textbooks)
- Code for authoring problems
- Ranking system for problems
- Little or no IT support / Little programming knowledge
- More sophisticated problems (algorithmic steps, graphical representations, more interactive)
Contact us about WeBWorK assessment

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