Engaging Students in Real- World Statistical Analysis: A Description of Statistics Hell's Kitchen
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Overview of Presentation

- The need for a collaborative statistics activity

- Faculty and student perceptions

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Need For a Collaborative Activity

- Students need to be confident in their ability to conduct statistical analyses and defend their choices before their committee
 "(Students) have to understand far more than just the 'bottom line' p-value on an output sheet." (Geedey & Dudycha, 2004, p. 50)
 Students needed to gain experience working collaboratively to analyze "messy data"











Statistics Hell's Kitchen

- Students work in groups of 4-5
- Given a real, 'messy dataset
- Asked to create a codebook, analysis plan, clean dataset, analysis report, and presentation



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Statistics Hell's Kitchen



- Groups are given specific research questions to address
- Must clean data first and provide rationale for decisions
- Must conduct data reduction, correlational, and group difference statistics

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Suggestions for Implementation

- Make it challenging and offer guidance on how to split up the workload
- Give students some freedom as to how to analyze the data
- Make the presentation similar to a mock dissertation defense



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Student Feedback

- Benefits from collaborative learning
 - grading and feedback helpful
- Confidence gained defending analyses
 - purpose of presentation to





Student Feedback



- Real-World Preparation
- Data Driven

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