

Progress Testing of Basic Science Application During a Clinical Competency-Based Curriculum Pilot

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- Larry Gruppen
- Chris Ricketts
- Ken Pituch
- Paul Gauger
- Marilyn Roubidoux
- Joseph Fantone
- Tamara Stein
- David Stern



<http://deepblue.lib.umich.edu/>

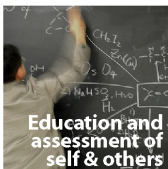
- 1 ENCORE: A student-centered, experimental curriculum
- 2 A Progress Test made Fast, Frequent, Formative
- 3 Results
 - Students learn from feedback
 - Topic differences remained consistent
 - Students were frustrated
- 4 Conclusions

ENCORE: A Clinical competency-based curriculum

ENCORE

MEDICAL STUDENT EDUCATION PROGRAM

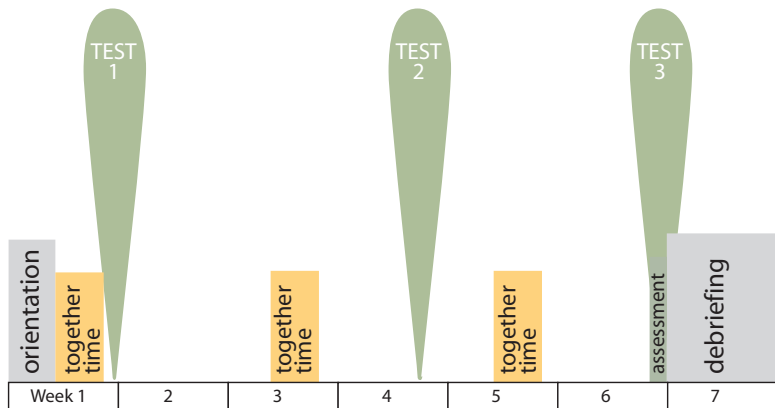
Outcomes: The Michigan 9



Hyperglycemia 3.08-1: “Determine if changes need to be made to the anti-diabetic treatment regimens. Propose and justify specific recommendations to your attending. Review and implement them with your patient.”

Fast, Frequent, and Formative





Three tests: *pre*, *mid*, and *post*

Renal failure



Hyperglycemia



Trauma

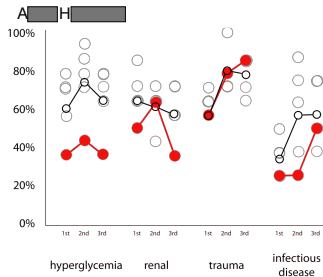


Infectious disease



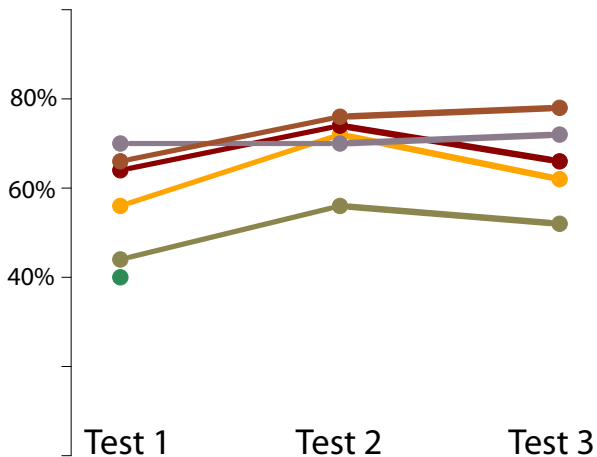
Repeating items to probe learning from feedback

Progress Test 3 Student Summary Report

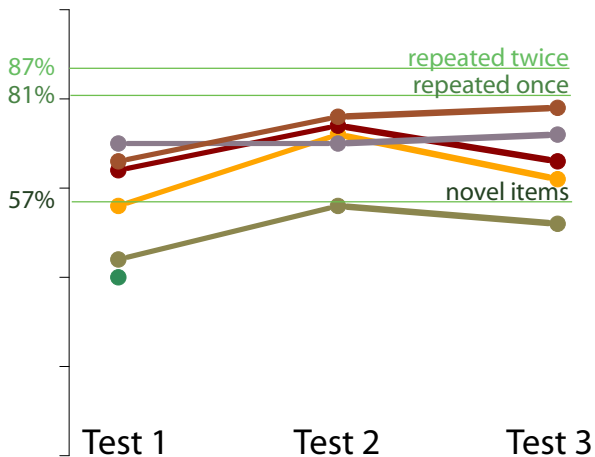


The red dots represent the student's score. The black circles represent the mean score of the student's cohort. Gray circles are other students' scores.

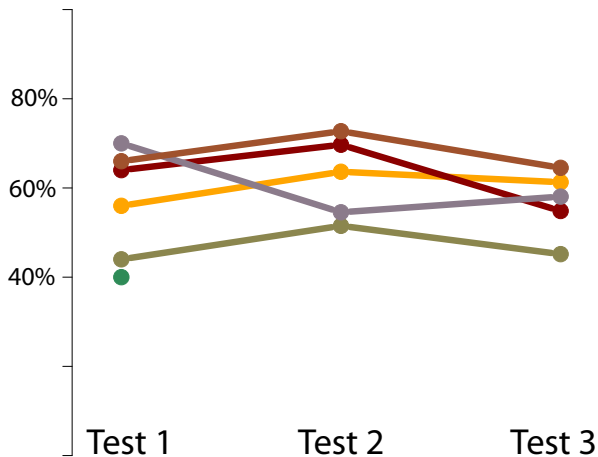
Students' scores improved slightly



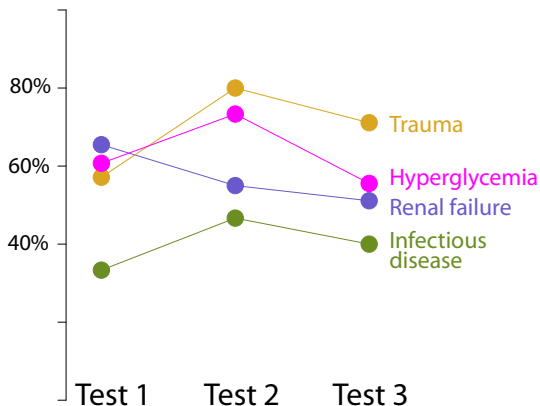
Students' scores improved slightly



Removing repeated items: no score improvement



Target topic performance consistently above control



Means of student topic subscores; novel items only

“At first I was counting on the progress test to tell me what to learn. After the second progress test I realized it didnt help me at all.”

“Sometimes I felt like the questions did not apply to what I was learning. They were more detailed than the learning objectives.”

- Fast, Frequent, and Formative is Feasible
- More harmony between learning objectives and items
- Focused tests (maybe 50 items per topic)
- Best frequency? Probably > 2 weeks

Thank You