EFFECTS OF HIGH STAKES TESTING & REMEDIATION ON NURSING SCHOOL SUCCESS

MARY L. McHUGH, PhD, RN
CHAIR, DEPARTMENT OF NURSING
Background

- Graduates of Nursing schools must pass a licensure exam (NCLEX) in order to work as a professional nurse.
- Nursing schools are highly regulated by state Boards of Nursing (BON).
- Many states have a minimum pass rate for new graduates of a school.
- The only test that counts is the first test the graduate takes.
- Thus the school’s NCLEX pass rate represents the proportion of grads that pass on the first attempt.
BACKGROUND

• **Failure to achieve the minimum pass rate will ultimately result in the BON closing the nursing school, after a period of correction, which varies by state.**

• **Private schools are more stringently policed by BONs due to concerns about potential for exploitation of students by unscrupulous owners of private schools or poorly run public schools.**
Background

- Repeat exam NCLEX pass rates are low (NCSBN, 2012) at an average of 53.4%
- Anecdotal reports indicate pass rates decline exponentially with each subsequent attempt
- A nursing school graduate who has failed 3 times is unlikely to ever pass without re-education
BACKGROUND

• **In addition to the threat of closure of the school, low pass rates cheat graduates out of the career for which they have prepared**

• **Graduates who cannot pass NCLEX cannot work as an RN**

• **For many students, loans allowed the student to attend school. Without a good paying RN job, they cannot repay their student loans**

• **The school then incurs a high loan default rate.**
Nursing schools have special oversight by the State Boards of Nursing (BON). The result of failure to follow BON regulations is forced closure of the school.

Most states have a regulation about the minimum pass rates on the nursing licensure exam (NCLEX). Schools with substandard pass rates are subject to closure by the BON.
INTRODUCTION

Minimum pass rates range from 70% to 80%, or are defined as 1 standard deviation below the national pass rate. Low pass rates = probation & possibly loss of the nursing program.

Nursing students today:
- Busy lives that compete with study time
- A different world view of school and the meaning of education and educational degrees
**Introduction**

**Nursing students today:**
- View the degree as the outcome.
- View themselves as customers.
- View teachers as their employees.
- Believe the school is responsible for their learning—“*Teachers should teach me*”

**Teachers today:**
- View knowledge/expertise as the outcome.
- View students as subordinate.
- View themselves as knowledge imparters and gatekeepers against incompetence.
- Believe students are responsible for their own learning & academic success.

Mary McHugh, 2013
Introduction

This is a PERFECT STORM!
1. School’s existence depends on high pass rates
2. Mismatch between student and teacher expectations of each other

Mary McHugh, 2013
Introduction

This report describes the outcomes of implementation of an NCLEX pass rate improvement program in four nursing programs with 6 different campuses that were in jeopardy of closure due to low NCLEX pass rates and/or high flunk-out rates.
## National Pass Rates

<table>
<thead>
<tr>
<th>YEAR</th>
<th>1&lt;sup&gt;st&lt;/sup&gt; Time Pass Rate</th>
<th>Repeat Pass Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>86.70</td>
<td>53.3</td>
</tr>
<tr>
<td>2009</td>
<td>88.42</td>
<td>55.9</td>
</tr>
<tr>
<td>2010</td>
<td>87.41</td>
<td>55.0</td>
</tr>
<tr>
<td>2011</td>
<td>87.89</td>
<td>55.8</td>
</tr>
<tr>
<td>2012</td>
<td>92.09</td>
<td>53.4</td>
</tr>
</tbody>
</table>
Four nursing programs located in three different States are included in the sample.

School 1: in the Midwest, BSN program that admits 128 students per year, approximately 90% white and 10% male. Pass rate was below 70%
SAMPLE

School 2 is: In the Southwest, BSN program, admits approximately 40 students per year, most of whom are minorities from disadvantaged school system, approximately 15% white and 8% male.

Pass rate of 85% achieved by failing out 60% of students in 1st cohort. 2nd cohort was scoring in 8th percentile on predictor & content achievement tests before intervention.
SAMPLE

School 3 is: In the Southwest, is a BSN program and admits approximately 300 students per year, with a highly diverse student body including White, Asian, and African American students. Quarterly pass rate was approx. 64%.

School 4: In the Southwest, is an ASN program that admits approximately 60 students per year with a highly diverse student body similar to School 3. Pass rate was approx. 40%.
METHODS

Administration evaluation of a change project is not properly research, but has long been called, “action research”

Sample: 6 nursing programs—1 in the Midwest and 5 in the West.

Design: Action “research”—measurement of “before and after change project” NCLEX pass rates
Methods

Method: Project evaluation with pre and post measures. Each school may have variations in the intervention, however, the basic model is the same.

Data Analysis: Descriptive Statistics, qualitative descriptions of project processes, interventions, & outcomes.
**INTERVENTION**

The key interventions were:

1. Changing rigor of the courses
2. High stakes testing in every nursing course
3. Preparation for rigor of nsng. school
4. Early identification of academic performance problems
5. Immediate intervention for low academic performance--Contracts
6. Supervised study
7. Tutoring for challenged students
8. Program of teaching study skills

Mary McHugh, 2013
Remediation Programs

School 1 Interventions
1. Minimum passing grade changed to 78%
2. Exam Proficiency Requirement: Students had to achieve an overall average of 78% over the collection of tests and quizzes in each course
3. Achievement tests given throughout program but did not count toward grade or progression
Remediation Programs

School 2 Interventions
1. Minimum passing grade changed to 78%
2. Examination Proficiency requirement: Overall average of 78% over the collection of tests and quizzes to pass a nursing course
3. Intensive program of remediation if a grade below 80% received on any test
4. All students scheduled to attend 8 hour study hall each week

Mary McHugh, 2013
Remediation Programs

School 2 Interventions

5. All students received study & test taking skills training

6. ATI materials integrated into all relevant courses through reading and graded homework assignments

7. High risk (failing) students attend 2nd 8-hour study hall each week

8. Instructors staffed study hall days for students in their classes to provide tutoring where needed

Mary McHugh, 2013
Remediation Programs

School 2 Interventions

9. High Stakes Final Exam in last course: ATI Predictor exam equivalent to a 95% probability of passing NCLEX required in final course

10. Free, three day NCLEX intensive live review provided immediately after completion of final course, but prior to graduation
Remediation Programs

School 3 Interventions
1. Minimum passing grade changed to 76%
2. Exam Proficiency Requirement: Overall average of 76% over the collection of tests and quizzes in the course required
3. ATI materials integrated into all relevant courses through reading and graded homework assignments (achievement of this component varied among instructors)
Remediation Programs

School 3 Interventions

4. Remediation program for any student scoring below 80% on any test: 8 hour study day, tutoring available

5. All students received study & test taking skills training

6. Instructors staffed study hall days for students in their classes to provide tutoring where needed

7. PT Tutor hired to support students
Remediation Programs

School 3 Interventions

8. Free, three day NCLEX intensive live review provided immediately after completion of final course, but prior to graduation.

9. High Stakes Comprehensive Exam: Average ATI Predictor exam score equivalent to a 95% probability of passing NCLEX required to pass last course (and graduate)
Remediation Programs

Schools 4 - 6 Interventions

1. Minimum passing grade changed to 76%

2. ATI materials integrated into all relevant courses through reading and graded homework assignments (achievement of this component varied among instructors)
Remediation Programs

Schools 4 - 6 Interventions

3. Exam Proficiency Requirement: Overall average of 76% over the collection of tests and quizzes in the course required.

4. Students at high risk instructed to attend voluntary 8-hour study hall each week in which close monitoring of study & tutoring was provided.
Remediation Programs

Schools 4 - 6 Interventions

5. Students at high risk instructed to attend voluntary 8-hour study hall each week in which close monitoring of study & tutoring was provided.

6. All students received study & test taking skills training.

7. Intensive program of remediation if a grade below 80% received on any test.
Remediation Programs

Schools 4 - 6 Interventions

8. High Stakes Final Exam in last course: ATI Predictor exam equivalent to a 95% probability of passing NCLEX required in final course

9. Free, three day NCLEX intensive live review provided immediately after completion of final course, but prior to graduation
Results

Program-1: midwest—2 years after implementation, NCLEX pass rates were 98%, 97% & 100% for following 3 years

This first school increased rigor without dealing with attrition (failure) problem when rigor is increased.
RESULTS

School 1
Pass rates increased from below 1 standard deviation below national average to the following Rates:

2005 – 98%
2006 – 97%
2007 – 100%

Graduation rate decreased from 92% to 76%
Results

Program-2: Western U.S.—Year after plan was implemented the program had a 91% pass rate, and a 96% graduation rate (down from a 40% graduation rate).
RESULTS

School 2
Only 1 grad from 1st cohort tested in 2008/2009, rest tested in 2009/2010

2009 – 100.00% Only 40% graduated
Single student tested. ATI CPE test for next 2 cohorts predicted a 20% pass rate prior to emergency implementation of NCLEX success plan. Scores were at 8th Percentile nationally

2010 – 90.91% Graduation rate increased to 92% for this cohort

2011 – 70.59% New school leadership discontinued the program

Mary McHugh, 2013
Results

Program-3: Western U.S.—Year following implementation plan, three graduating cohorts had 100% pass rate
2011 — 66.67%
2012 — 100.0%

Original first year pass rate = 40% with some quarters as low as 20%
As a result, the program was ordered to close after teach-out by the BON.
RESULTS

Schools 4-6 (3 campuses, 1 program)
Quarterly reports demonstrated rapidly declining pass rates during 2011/2012 time period. Rate of 68% recorded in 2nd Quarter prior to NCLEX success plan implementation

2009 – 79.70%
2010 – 77.70%
2011 – 75.53%
2012 – 81.56%
2013 – 94% to date

Graduation rates have remained fairly constant at approximately 12%

Mary McHugh, 2013
Results

Program-4: Western U.S.—Six months after implementation quarterly NCLEX pass rate was 82%. One year following implementation the Quarterly pass rate was 92%

Program-5: Western U.S.—Year following implementation pass rate was 100%

Program-6: Western U.S.—One year following implementation pass rate = 85%
CONCLUSIONS

Conclusion and Recommendations

1. Low pass rates can be reversed through increased academic rigor
2. High stakes testing is key to ensuring that students have mastered the content
3. Academic rigor alone will improve pass rates, but will also result in lower graduation rates
4. Supervised study & remediation + increased rigor achieved high NCLEX pass rates & high graduation rates
References

1. Indiana State Board of Nursing,
   http://www.in.gov/pla/nursing.htm
2. Nevada State Board of Nursing.
   http://nevadanursingboard.org/education-and-continuing-
   education/approved-nursing-program-2/
3. California State Board of Registered Nursing,
   http://www.rn.ca.gov/schools/passrates.shtml
4. National Council of State Boards of Nursing. Pass Rate Tables. Downloaded from:
   https://www.ncsbn.org/Table_of_Pass_Rates_20082.pdf
   Nursing: 23(6); 322-329.