



# Survey of Recent Pharmacy Graduates on NAPLEX Preparation Strategies #85

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Donna Ohora, MLIS; Lara Gomez, PharmD; Linda Connelly, PhD; Paula Zeszotarski, PhD

The Daniel K. Inouye College of Pharmacy at the University of Hawai'i at Hilo



## Introduction

Based on an earlier study (Sutton Peak et al., 2006) that reported graduates identified the Pre National Pharmacy Licensing Examination (Pre-NAPLEX) as the best preparation tool for National Pharmacy Licensing Examination (NAPLEX), The Daniel K. Inouye College of Pharmacy (DKICP) had begun requiring completion of the Pre-NAPLEX before graduation starting with the Class of 2015. Correlation studies of pilot usage of the Pre-NAPLEX in the Classes of 2012, 2013, and 2014 and required completion of the 2015 showed weak and not significant correlation between Pre-NAPLEX and NAPLEX scores. Given that the College's first time pass rate had not equaled the national average for these graduating classes, the DKICP faculty looked for a better solution.

The DKICP Class of 2016 participated in a pilot program for licensing examination review using online questions and study materials in PharmacyLibrary NAPLEX Review question bank. Students were asked to complete 600 questions over a period of three months (February-April). Access to PharmacyLibrary study materials is provided free to DKICP students and there was no penalty for not completing the assignment. Previous graduating classes did not participate in these review activities.

The DKICP Assessment Committee surveyed 2016 graduates who had already taken the exam to answer the following research questions:

- **What are the most effective strategies and resources for preparing for NAPLEX?**
- **What can students do to improve their NAPLEX performance?**
- **What can DKICP do to help students improve their NAPLEX performance?**

### Contact Information

**Primary Author:** Paula Zeszotarski, PhD.  
Assessment Coordinator  
The Daniel K. Inouye College of Pharmacy  
University of Hawai'i at Hilo  
200 W. Kawili St. Hilo, HI 96720  
[paulaz@hawaii.edu](mailto:paulaz@hawaii.edu) 808-932-7141

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## Methodology

Between August 26, 2016 and September 16, 2016, the Assessment Coordinator sent weekly emails (total emails = 4) inviting all 2016 graduates (85) to participate in the online questionnaire. Graduates who completed the survey were excluded from follow-up emails. Respondents needed 10 minutes to complete the questionnaire. Subjects who indicated that they had not yet taken the exam were excluded and directed to the end of the survey. Respondents' completion and results of the NAPLEX were later verified by the Assessment Coordinator against the annual NABP roster of 2016 graduates who signed their score release forms. All subjects had signed the score release form.

## Results

The response rate was 52 of 85 graduates (61.2%), including three (3) students who had not yet taken the exam. Respondents reported using a variety of free and commercial (e.g. Kaplan, RxPrep) resources as well as the required Pre-NAPLEX and PharmacyLibrary. While all graduates had been required by DKICP to complete the Pre-NAPLEX, 13 did not indicate in their responses that they had done so. An even smaller number reported using the PharmacyLibrary question bank although all had turned in their certificates of completion.

<b>Table 1. How did you prepare for the NAPLEX? Check all that apply. (n=47)</b>		
Answer Choices	Responses	
Used RxPrep	95.9%	47
Took the Pre-NAPLEX administered by NABP	73.5%	36
Took practice questions available through PharmacyLibrary	34.7%	17
Reviewed my course notes	16.3%	8
Used APhA Complete Review for Pharmacy	12.2%	6
Formed a study group	10.2%	5
Used PassNAPLEXNow	4.1%	2
Used study guides provided by my employer (other than those listed above)	2.0%	1
Took a NAPLEX preparation course like Kaplan	2.0%	1
Used ProntoPass	0.0%	0

The majority (95.7%) selected a commercial test preparation service (RxPrep) as the best NAPLEX preparation resource.

<b>Table 2. Which was the <u>best</u> NAPLEX preparation resource? Choose only one. (n=47)</b>		
Answer Choices	Responses	
RxPrep	95.7%	45
PassNaplexNow (under Other)	2.1%	1
Highyield Med Reviews (under Other)	2.1%	1

Regarding the free PharmacyLibrary resource, none of the respondents selected it as the best resource, 48.9% would not recommend it as a good means of preparing for NAPLEX, and 46.8% would not recommend continuing with the assignment for future cohorts. Students noted errors in the question bank content, slowness of response-time within the question bank, and time conflict of the assignment with their APPE rotation responsibilities and assignments as reasons for not continuing with the assignment.

However, certain features of the PharmacyLibrary question bank were appealing to students.

<b>Table 3. What are the most useful aspects of the PharmacyLibrary test bank? Check all that apply. (n=38)</b>		
Answer Choices	Responses	
Receiving immediate feedback on whether you answered a question correctly	86.8%	33
Ability to complete the assigned modules at your own pace	50.0%	19
Availability of review/remediation materials for each question	42.1%	16
Ability to re-take questions an unlimited number of times	42.1%	16

Respondents reported that they could have better prepared by 1) starting to study earlier (more than 2 months) and 2) structuring their daily study time. Notably, the seven students who did not pass NAPLEX on the first attempt did not reflect (in their survey responses) on what they could have done better.

Despite significant changes to the NAPLEX exam for 2016 graduates, the first time pass-rate for the DKICP Class of 2016 was the closest to the national average since the inception of the College (81.4% v. 85.0%).

## Implications/Next steps

While the first-time pass-rate for the Class of 2016 improved relative to the national rate, problems with compressed timeline of the assignment and the PharmacyLibrary resource itself led the faculty to try a similar review program with a different resource. A one-unit NAPLEX preparation APPE course was devised for the Class of 2017, which ran concurrently with their rotations from January through May 2017 and included overall pre- and post-assessments plus 3 weekly assessments over the remaining 12 weeks. To access topic related content, students could use the College's subscription resources (PharmacyLibrary and Access Pharmacy) or a commercial resource of their choosing (at their own cost). Pre-NAPLEX vouchers were provided but completing the practice test was not required.

For the Class of 2018, the Pre-NAPLEX requirement was dropped and the funds diverted to supplement students' contribution to enrollment fees in a commercial test preparation vendor, PassNAPLEXNow. Starting summer of 2017, the 2018 NAPLEX Review APPE course that requires a minimum passing score on biweekly quizzes on topical modules. Starting in April 2018, the College started the Class of 2019 on the PassNAPLEXNow modules during their third year and continuing throughout fourth year.

The College is currently restructuring its curriculum to include more active and applied learning and using the *ACCP Toolkit on Pharmacotherapeutic Outcomes* as a guide to instructors in order to emphasize the key drugs and concepts associated with particular disease states.

### Acknowledgements

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## References

Sutton Peak, A., Heck Sheehan, A., & Arnett, S. Perceived Utility of Pharmacy Licensure Examination Preparation Tools. *Am J Pharm Educ.* 2006: 70 (2) Article 25.

**Human Subjects Statement:** This study was deemed exempt by the University of Hawai'i Office of Research Compliance Human Studies Program (Protocol Number 2017-00040). The study was originally conducted as a program evaluation so no formal consent process was used. After the data were collected, the Assessment Coordinator (Principal Investigator) determined that some of the results would be informative to other Pharmacy educators and obtained retrospective IRB approval.