

# Use of a Multi-Touch eBook to Teach SOAP Note Writing

Jeanne Moore, DNP, FNP-BC  
Director, FNP Program

THE CATHOLIC  
UNIVERSITY  
OF AMERICA



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## Use of a Multi-Touch eBook to Teach SOAP Note Writing

### SOAP Notes: History

#### Lawrence Reed – Problem Oriented Medical Record (POMR) format

Developed more than 50 years ago

Used to organize the documentation of patient encounters

After patient's initial visit, data is recorded as **SOAP** notes

- **S**ubjective
- **O**bjective
- **A**ssessment
- **P**lan

(Reed, 1968)

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## SOAP Notes: Today

The SOAP note is the tool most widely used by healthcare providers:

- A framework for data collection
- Communication
- Care continuity
- Medical billing
- Productivity surveillance
- Legal documentation

(Pearce et al., 2016)

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## SOAP Notes: Teaching Device

Provides a framework for students to:

Organize their thoughts

Collect data systematically

Develop diagnostic reasoning skills

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## AACN-Apple Digital Innovation Bootcamp: From Content to Action



July 9-12, 2018,  
Austin TX

Leverage  
technology to  
enhance learning

Agenda included  
presentations on  
creating digital  
content and studio  
time

- Multi-touch eBooks

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## Electronic Books (eBooks)

Digital versions of printed  
books that can be read on  
electronic devices

- Computers
- Tablets
- Smartphones
- Etc.

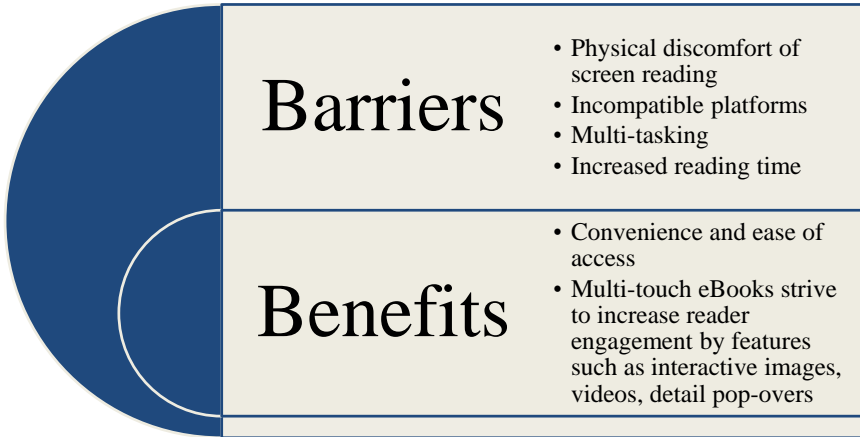
Effect of eBook use in  
education is mixed

- Enhanced student learning experiences and improved learning outcomes
- No significant difference in either engagement or outcomes

(Tang & Barnet-Ellis., 2016)

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## eBook Pros and Cons



(Daniel & Woody, 2012; Tang & Barnett-Ellis., 2016)

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## Problem

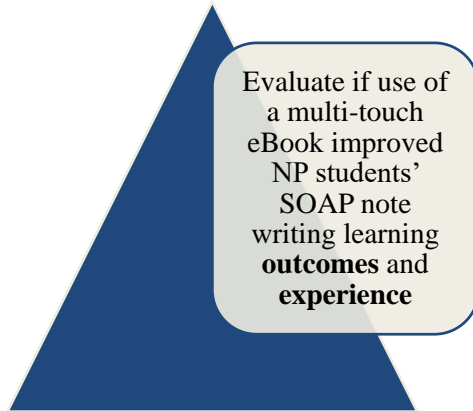
SOAP note writing is an essential skill for healthcare providers

We have observed NP Students struggle to master this competency

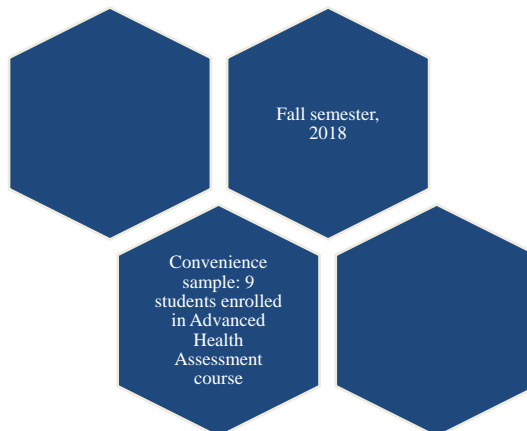
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## Purpose



## Pilot Study



## Digital Product: eBook

Created using Creative Book Builder (CBB)

### Compatibility

- Created using iPad
- Saved in ePub format to ensure interoperability with non-iOS devices

### Sections

- Purpose
- General principles
- Process
- Structure

### Use of color

- Section headers colored differently to visually organize content

### Interactive text

- Used to describe detail and exemplify concepts

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## Method

NP students read a patient-practitioner dialogue and physical exam description



NP students wrote SOAP notes capturing patient-practitioner interaction at

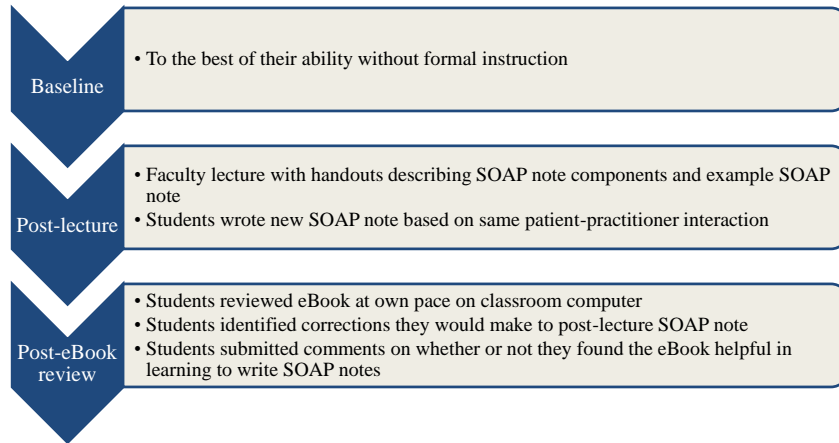
Baseline

Post-lecture

Post-eBook review

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## Data Collection



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## Variables and Measures

### Learning outcomes

- **SOAP note structure**
  - All S-O-A-P components were present
  - Physical Exam (PE) findings documented in order of:
    - System (head to toe)
    - Assessment method (inspection, palpation, percussion, auscultation)
  - + History (Hx) and PE finding highlighted
- **SOAP note completeness**
  - All pertinent information included
  - Systems explored fully in HPI using OLDCARTS or similar method
- **SOAP note appropriateness**
  - Hx recorded in Subjective section, PE recorded in Objective section
  - Hx (HPI and ROS) and PE sections contain same body systems
  - Brevity – absence of extraneous words and information

### Learning experience

- Student comments on eBook utility

(Seo et al., 2016)

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## Results: Learning Outcomes

- **SOAP Note Structure** – no notable improvements as students progressed from baseline, to post-lecture, to post-eBook SOAP note writing

SOAP Note Structure	Baseline		Post-Lecture		Post-eBook	
	Yes	%	Yes	%	Yes	%
All S-O-A-P components present	8	89	9	100	9	100
PE exam documented by system (H to T) and assessment method	4	44	5	56	6	67
+ Hx and PE findings highlighted	0	0	3	33	4	44

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## Results: Learning Outcomes

- **SOAP Note Completeness** – improvements observed as students progressed from baseline to post-eBook note writing

SOAP Note Completeness	Baseline		Post-Lecture		Post-eBook	
	Yes	%	Yes	%	Yes	%
Symptoms explored fully in HPI with OLDCARTS or similar method	0	0	2	22	5	56
All pertinent information included	0	0	5	56	8	89

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## Results: Learning Outcomes

- **SOAP Note Appropriateness** – some improvements observed as students progressed from baseline to post-eBook note writing

SOAP Note Appropriateness	Baseline		Post-Lecture		Post-eBook	
	Yes	%	Yes	%	Yes	%
Subjective and objective data recorded in appropriate sections	7	78	7	78	8	89
HPI/ROS and PE have same systems	0	0	1	11	6	67
Concise, succinct	3	33	5	56	8	89

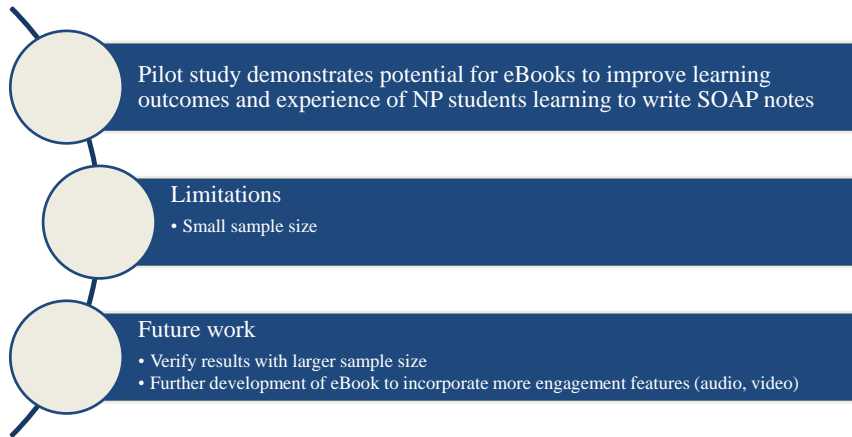
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## Results: Learning Experience

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• Several students identified the need to make their documentation clearer, more detailed, and more succinct after reviewing the eBook</li> <li>• Multiple students indicated they found the eBook useful, and one specified they would use it as a reference when writing SOAP notes</li> <li>• One student commented that the eBook contained the same information as the lecture and they would benefit most from practice writing SOAP notes</li> </ul> | <ul style="list-style-type: none"> <li>• Two students indicated their confusion regarding documenting subjective data in HPI/ROS and objective data in the physical exam was clarified after reviewing the eBook</li> <li>• Multiple students found the eBook presentation of information in short, concise segments easier to understand and digest</li> <li>• One student preferred the eBook's larger font size and use of color preferable to the black and white handouts</li> </ul> |
|--|---|

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## Conclusion

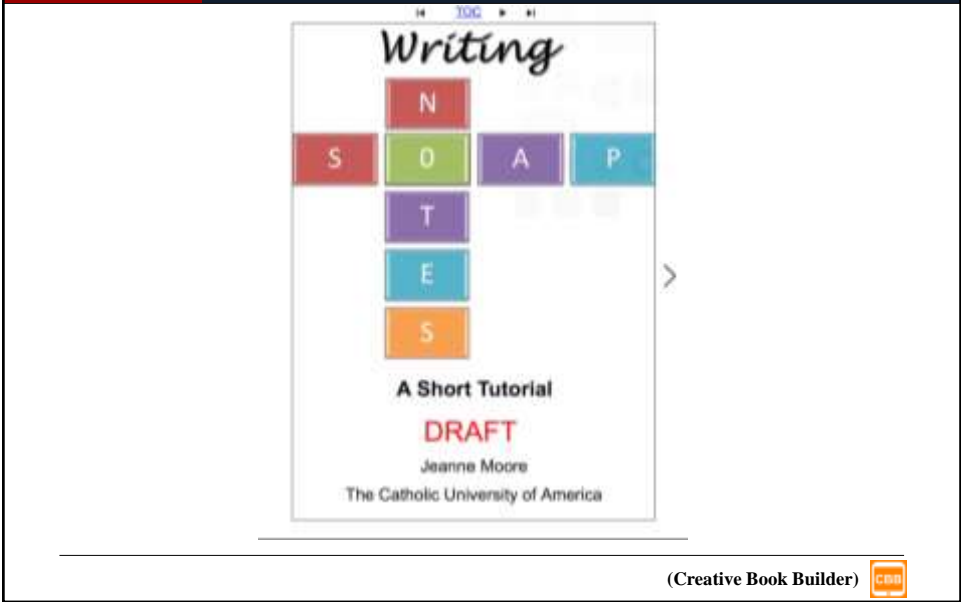


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## Revising eBook this Semester



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