

Baby Boy Jones: Using Technology to Engage Nursing Students in an Interactive Case Based Learning Activity (CBLA)

Lisa M. Cleveland PhD, RN, PNP-BC, IBCLC
Assistant Professor

Bonnie Taylor MA, CAPM
Educational Development Specialist

Linda Solis PhD
Educational Development Specialist

Bruce Paper BA
Research Area Specialist Associate I

Authors are employed by the University of Texas Health Science Center at San Antonio(UTHSCSA)

We have nothing to disclose and no conflict of interest to report

There is no sponsorship or commercial support for this presentation

Why Was A CBLA Needed?

- Nursing & faculty shortage
- Large undergraduate class sizes; limited classroom space
- Different learning styles and needs among students
- Learning objectives that may be difficult to address in a lecture style activity

Theoretical Framework for CBLA's

- Relevant
- Realistic
- Engaging
- Challenging
- Instructional

(Kim et al., 2006)

The CBLA: Baby Boy Jones



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Developing the CBLA

- Unfolding scenario: context of inter-professional care
- Maternal-newborn care: neonatal infection
- SoftChalk® e-learning authoring software was used including text, graphics, and multimedia elements
- Web-based delivery through the Blackboard course management system
- Use of branching decision points, immediate feedback, opportunities for reflection, and formative assessment

Start with a Good Story Line

NAVIGATION

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Don't worry if your score on the quiz was less than perfect. By the end of this module, you'll have more experience with this topic and you'll have another opportunity to check your knowledge.

The Beginning of Your Story

You are the nurse working the night shift in the admissions nursery. At 1:00 a.m., Mrs. Jones arrives to labor and delivery, and delivers her fourth child within 15 minutes of arrival. You are called to labor and delivery to take the baby to the nursery.



Think about this: what do you need to know to be able to care for this baby?

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Date last modified: April 4, 2012.

Content developed by Lisa Cleveland PhD, RN and Bonnie Taylor MA, CAPH



Decision Point: Where Do You Locate Needed Information?

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[Labor Record](#)



Think about this: where might you locate the information you need?

You decide to open the labor record.

(Hint: Check the links on the left side of the screen)

Decision time:

What should you do?

[Option 1: Contact the person](#)

[Option 2: Contact the company](#)

[Option 3: Assess the background](#)

Decision points help engage and challenge the learner.

To continue with the story, select one of the options above.

Interpreting the Information

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Clicking this link opens the labor record



Think about this: where might you locate the labor record?

You decide to open the labor record.

(Hint: Check the links on the left side of the screen.)

Decision time:

What should you do next?

[Click here to contact the pediatrician on call](#)

[Click here to contact the obstetrician on call](#)

[Click here to assess the baby](#)

With the story, select one of the following options.

Labor Record

Name: Jones, April

DOB: 11/25/1985

MR: WR30458

Attending physician: Michael Jones, MD

Gestational Age	40 2/7
Gravida	5
Term	4
Para	0
Abortion	1
Living	4
Blood Type	A+
Group B Strep	positive
Gonorrhea	negative
Medications	none
Chlamydia	negative
VDRL	nonreactive
HIV	negative
HBsAg	negative
Rubella	Immune
Prenatal care	began at 10 weeks gestation
Length of labor	1 hour
Length ROM	30 mins
Color	Clear
Odor	Normal
Maternal temp. at delivery	101
Sex of infant	male
Apgars	8/9
Resuscitation	none

Decision Point: What Should You Do Next?

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Think about this: where might you locate the information you need?

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Decision time:

What should you do next?

[Option 1: Contact the pediatrician on call](#)

[Option 2: Contact the obstetrician on call](#)

[Option 3: Assess the baby](#)

To continue with the story, select one of the options above.

Learners can
“try out”
alternatives

Role Modeling Inter-Professional Communication

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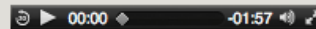
[End](#)

.....
[Labor Record](#)

[SBAR](#)

[Physician's Orders](#)

Physician's Orders



Listen to the conversation with the physician.

(Click the link at left to view the telephone call transcript.)

Following your telephone conversation, these are the orders that you documented in the chart:

"Complete blood count (CBC) with a manual differential, blood cultures, and a C-reactive protein (CRP).

Start Ampicillin 300 mg Q 8 hrs. IV and Gentamicin 14 mg Q 8 hrs. IV. Call physician back if there are any abnormal labs."

In what sequence should these medical orders be carried out?

 [Sequence Activity](#)

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Sequencing Events

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In what sequence should these medical orders be carried out?

Sequence Activity

Clicking this icon opens an activity

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Sequence Activity

Move items up and down using the arrows. Click the bottom right arrow to go to the next set. Click the checkmark (available on the last set) to submit all your answers.

What will you do first?

▼	Look up medications	▲
▼	Give medications	▲
▼	Draw blood for labs	▲

✓

Decision Point: Administer Medication?

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More of Your Story...

You've drawn your labs, sent them to the laboratory and started your IV. You are preparing to administer the prescribed antibiotics.



Click below the question to view the answer.



Is there anything you should do before you give the medications?

Show Answer



After thinking about the question, the learner clicks here to show the answer.



Is there anything you should do before you give the medications?



You should check your dosage.

- a. Give the antibiotics as prescribed
- b. Reassess the baby
- c. Talk to the baby's mother
- d. Call the physician

Check Answer

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Embedded Resources

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More of Your Story...

You've drawn your labs, sent them to the laboratory and started your IV. You are preparing to administer the prescribed antibiotics.



Click below the question to view the answer.



Is there anything you should do before you give the medications?



You should check your dosage.



Do you have a [drug reference](#)?

Quiz Me



Value: 1

What should you do next?

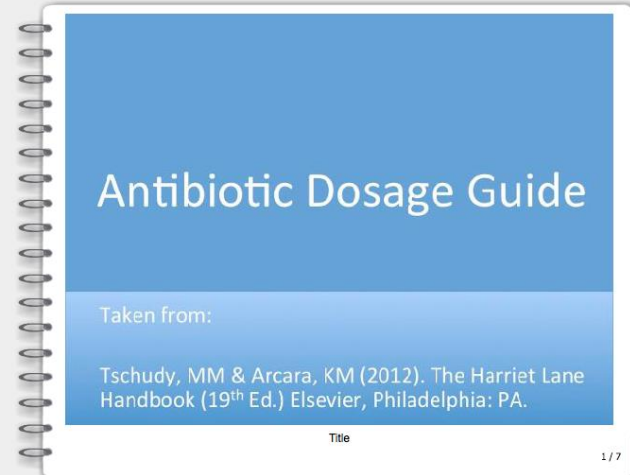
- a. Give the antibiotics as prescribed
- b. Reassess the baby
- c. Talk to the baby's mother
- d. Call the physician

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Look up the information you need in these sample drug manual entries. Click [here](#) to return to the story.



Turn the pages by clicking on the right or left side of each page.



[<return>](#)

Outcomes

- Pre/post-activity assessments
- Improved learning and incorporated decision making and feedback
- Visually compelling and thought provoking
- Improved transfer of knowledge to clinical setting
- Areas for improvement:
 - More immediate feedback on self-assessment items
 - Partial credit for answers with multiple responses
 - Increase the speed of transition between pages
 - Reduce the length of pages

Narrative Data

- *“I took care of a baby in clinical with this same history last week. This learning module is true to life. Everything that happened in clinical and the way the nurses responded happened just like it did in the module. Please keep this module for future nursing classes!”*
- *“I liked how the module was interactive. Case studies written in a paragraph are helpful but being able to actually see what we would be doing and saying as a nurse is very informative. I've never seen an actual SBAR report used in clinical as of yet so it was great to at least get exposed to it before.”*
- *“Please, give us more of these!”*

Narrative Data

- *“I found this activity extremely helpful! It really encouraged me to think through a patient situation. I liked having to look at the patient's lab values and other pertinent information in order to begin putting all of the pieces together. I would really love to do a lot more of these activities - they are very practical and are a good way for us to practice our critical thinking skills. Simulations are helpful, but I think these case studies are even better right now because we are only juniors and we need more time to think through things and look up information. This case study allowed me to do that. At this point, my knowledge is very limited and I get extremely nervous during simulation because I don't know what to do.”*

Future Plans

- Refine the pre and post assessments
- Continue to collect outcomes data
- Improve tracking of performance on related items on the summative course assessments
- Adapt to other learning cases
- Evaluate transfer of knowledge to psychomotor and affective domains using a simulated patient environment
- Translation and cross-cultural validation with Brazilian undergraduate nursing students (Dr. Elenice Carmona from University of Campinas - UNICAMP)

Questions?



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