Teaching Project: Part 2

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Pinsky and Irby wrote that teaching consists of three stages: planning, teaching, and reflecting (as cited in Halstead, 2007, p. 21). Formative evaluations help the teacher reflect on student progress in achieving outcomes (Oermann & Gaberson, 2009). This paper will focus on the evaluation and reflection of a lesson in a 300-level nursing course in pathophysiology. The first part of the reflection will concentrate on my evaluation of student learning, followed by an evaluation of my teaching from student and preceptor viewpoints.

Evaluation of Student Learning

A lesson was planned to promote student learning by using a variety of teaching strategies. It incorporated a PowerPoint presentation (see additional file) with blanks, questions and case studies for active student engagement. Even though there had been an exam in this class two days ago, the majority of students were prepared to answer the questions and fill in the blanks, providing formative assessment. Case study discussions were also employed as a formative evaluation strategy within the PowerPoint.

One case study was explored with a differential diagnosis concept map. In small groups, students were instructed to write two possible diagnoses on scratch paper after reading the case study, then list signs and symptoms and diagnostic tests for each. They highlighted signs and symptoms the patient had and then chose one diagnosis. With the full class, groups discussed the rationale for their selection. As I walked around listening to the groups, I found one choosing nursing diagnoses instead of medical diagnoses. I thought this was creative and it expanded the discussion, but it demonstrated that the concept map instructions were not clearly communicated. This part of the class could have been more efficient with clearer instructions on a pre-printed form (see Appendix A).
I also planned an ethical case study on HPV, but I developed it differently, with one part about legal and ethical issues and a second about signs and symptoms of disease, nursing diagnoses, and patient teaching (nurse role). Questions about pathophysiology, nursing diagnoses, and patient teaching in reference to two additional case studies from the text were discussed as well. Students appeared to have confidence with the pathophysiology aspect of the discussions and got quite excited talking about ethics and what they would like to say versus what they needed to say to maintain professionalism and patient confidentiality.

An end of class classroom assessment technique (CAT) provided formative evaluation, in which students were asked to note the most clear and least clear points of the lesson. Students were thoughtful in their comments and I informed them I would send a response online. Classroom Assessment promotes quality learning and improves the instructor’s ability to help students become more self-directed and effective learners (Angelo & Cross, 1993).

For me, the CAT results were quite informative. Students had vested interest in the topic of sexually transmitted diseases (STDs) in part because, as one student wrote, “I am in the at risk age group.” The majority of students listed STDs or female reproductive diseases as the “most clear” topics of the lesson. As for the “least clear” topics, my own opinion was confirmed with the CAT responses that I had spent less class time on male reproductive diseases and sexual dysfunction. Students also asked for more information on etiologies and further explanations of some diseases.

I created a document (see Appendix B) with detailed information about some of these topics, referred students to the readings for others, and tried to clarify what was important to learn in relation to the lesson objectives. For example, responses included that “least clear” topics were pregnancy disorders and treatment of diseases. In the document, I stated that these
were not important issues for this course, but if any further information was wanted on any topic, they could email the professor and I would reply.

As for summative evaluation, the students do not have an exam on this material until their final exam, so those results are not available. On the day of class, I thought the students were actively engaged in the learning experience. The CAT revealed that students would prefer greater explanation of topics. This was challenging for me to understand. To me, the lesson information was simple factual knowledge that was clearly stated in the readings. As in the narrative presented in Young and Diekelmann, (2002), I used the assumption that this course was to build on previous course knowledge and knew these students have had an anatomy and physiology course. However, after reflecting on the students’ replies, I realized it is vital to listen with care and connect with students before identifying their prior knowledge; it cannot be assumed (Young & Diekelmann, 2002).

If I was teaching this class again, I would work on making more connections within the lesson. I could have done more to relate normal anatomy and physiology to the pathophysiology and prepare explanations of how risk factors, etiologies, signs and symptoms, physiology and diagnostic tests fit together for each disease discussed. Self-reflection and formative evaluation strategies assess gaps in learning and provide information on how to improve teaching to better achieve learning outcomes in the future (Oermann & Gaberson, 2009).

Evaluation of Teaching

To evaluate my teaching of the lesson, I developed a student evaluation form (see Appendix C). A non-standardized evaluation tool such as this may lack reliability and validity (Sauter, Johnson, & Gillespie, 2009). However, student evaluations of teaching effectiveness are necessary, and the literature generally points to them as legitimate source for evidence (Berk,
2005). A meta-analysis on student ratings concludes they should be interpreted and used in combination with many other sources of evidence to judge teaching effectiveness (Cashin, 1995).

Some broad categories to have students evaluate include teaching skills, student interactions, coverage of subject matter, and overall teacher evaluation (Oermann & Gaberson, 2009). The National League for Nursing’s *Hallmarks of Excellence in Nursing Education* (2007) provides areas to evaluate such as the students’ preparation and interest in asking questions, cooperative learning, student commitment to quality education, and course learning experiences including value development, creativity, and role socialization. Evaluation questions were developed with these topics in mind. To create questions I searched various forms found online and one provided by Ferris State University.

Student evaluation scores are totaled in Appendix C. Questions that received the lower ratings included clear and concise explanation, effectiveness in teaching the subject matter, explained difficult concepts well, and students were effectively involved in discussion. These results correlate with the CAT results to demonstrate that students felt they needed more supplemental and explanatory information on the content that was taught. Comments included “go into detail about subjects,” and “needs to elaborate more on topics.” Other comments perceived a lack of comfort and confidence in speaking in front of the group, along with a need for better voice projection.

A strength noted in the evaluations was that the PowerPoint and case studies were meaningful for students, the lesson was well organized, and lesson material related to real life or clinical experiences. Students reported the case study discussions, group work, and video clips in the PowerPoint were the most helpful learning activities. Other higher scores were for response to student questions and lesson feedback. Evaluations stated, “well prepared for class
and had good case studies that engaged learning,” “greatest strength is being knowledgeable about the material and being able to relate it to real life situations,” and “strengths: organized, clear, explained difficult topics well.” The average overall rating was 3.5 out of 5, with 3 being good and 4 being very good. As a novice teacher, I appreciate the students’ honest feedback and feel satisfied with this rating. I plan to create goals for myself to improve my teaching skills.

My preceptor evaluation noted my improvement over the semester in areas of student engagement and confidence (see Appendix D). These are still areas in need of improvement. She continually encouraged me to go around the class using the Socratic questioning method and engage each student during each class session. At the end of the semester, I was still not comfortable with this method, but the students mentioned “forced participation” and “asking specific questions, not just asking ‘any questions?’” as helpful learning activities.

Using the framework of Applying the Seven Principles for Good Practice in Undergraduate Education (Codde, 2006) I will review my teaching and make recommendations for improvement. The first principle is to encourage student-faculty contact. I did try to learn student names, and got to know part of the class more personally through clinical, but some students were completely unfamiliar to me. I encouraged contact via responses to my lesson feedback. Being with a class more regularly is sure to improve this. Cooperative and active learning were encouraged in group work. Students appreciated real life examples. Prompt feedback involved questions answered and feedback on the CAT. Time on task and high expectations are difficult to assess in one class, but my plan to improve is to use frequent assessment of student learning and spend more time making connections when teaching new concepts. I will also strive to advance my teaching through assessment of student learning styles and prior knowledge, and use a variety of evidence-based teaching activities to enhance learning.
References


### Appendix A

**Differential Diagnosis Concept Map**

<table>
<thead>
<tr>
<th>Etiology, Risk Factors</th>
<th>Possible Diseases</th>
<th>All Possible Signs and Symptoms</th>
<th>Diagnostic Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Instructions**

You are being asked to think critically to analyze relationships between the patient’s signs and symptoms, etiologies and risk factors of diseases, and diagnostic tests. Your critical analysis will help you identify the primary and most appropriate nursing actions (for identified nursing diagnoses) for this patient, and help you create a teaching plan for this patient.

1. **Possible Diseases column**
   
   Select two potential diagnoses based on the patient’s story in the case study.
2. Etiology and Risk Factors column
   In this column list all etiology and risk factors that may have led to each disease.
   - Match these with their disease in the middle column (draw arrows, some may go to both)
   - Check your textbook to make sure you are including all factors.
   - Highlight etiologies and risk factors the patient has

3. Signs and symptoms
   a. Include all possible signs and symptoms for that disease whether your patient had them or not. You can find these in your pathophysiology text.
   b. Match the sign or symptom to the diseases in the middle column (some may match with both).
   c. Star the abnormal signs and symptoms your patient actually has
   d. Do not put signs and symptoms in this column if they are not the result of the diseases you are analyzing. Your patient may have another illness that explains the additional symptoms. For example, do not put in the symptom of shortness of breath due to emphysema when you are analyzing the patient with a fractured hip.

4. Expected diagnostic test column
   a. List all the expected diagnostic tests for each disease from your text
   b. What is each test specific for (what are the significance of results)?

Adapted from Ventura College (n.d.). *Pathophysiology concept map*. Retrieved from academic.venturacollege.edu/…/NS10%20syllabusblankPATHO%20CONCEPT%20MAP.doc
Appendix B

Response to Classroom Assessment Technique: One Minute Paper

This document was sent to students by the next class session in response to their statements of the “most clear” and “least clear” points of the lesson.

NURS 300 Pathophysiology

Response to questions on reproductive diseases lesson

If you have any further questions after reading this handout, please email Professor Morton and I will be happy to respond.

General:

- The lesson did not include great content detail on all topics. Please refer to the assigned readings for more detail on individual topics
- Please do not concern yourselves with the subject of pregnancy/placental disorders. As discussed in class, you will have a course on this topic next semester
- Treatments are not a focus of this course, keep your focus on etiology, signs and symptoms, diagnostic testing, prevention (where applicable) and any special considerations

Disease/Disorder Specific

- Sexual Dysfunction (from your text)
  - **Dyspareunia** is pain with sexual intercourse, more common in females.
    - Not a disease but a symptom of a psychological or physical disorder
    - “What causes it:” Psychological or physical conditions
      - Physical examples include intact hymen, vaginal deformity, insufficient lubrication, sensitivity to spermicide, STD, bladder infection, PID, endometriosis, penile deformity, phimosis, prostatitis, epididymitis
      - Psychological examples include history of abuse, anxiety, guilt
  - **Female Arousal-Orgasmic Dysfunction** is lack of sexual desire/responsiveness
    - Etiology: Neurological disorders (diabetes, multiple sclerosis) or more commonly psychological conditions such as stress, depression, fatigue, h/o abuse, guilt, anxiety
    - S/Sx is inability to reach orgasm
• Prevention: Education on healthy sex attitudes, sexual stimulation, communication for couples
  o **Impotence/Erectile Dysfunction** is inability to achieve/maintain erection sufficient to complete sexual intercourse
    • Common problem
    • Etiology: vascular insufficiency in the penis
      • Physical causes of this include endocrine disorders, drug and alcohol abuse, neurologic disorders, spinal cord injury, urologic disorders, radical prostatectomy, diabetes, arteriosclerosis, medications
      • Psychological causes (not as common) include depression, stress, guilt, anxiety, sexual trauma, unpleasant relationships
    • Prevention: Control heart disease and diabetes (healthy lifestyle)
  o **Infertility** is inability to achieve pregnancy after 1 yr unprotected sex
    • Etiologies: (Female) STD, hormonal disorders, reproductive organ abnormality, endometriosis, scarring from PID or blockage of fallopian tubes, vaginal antibodies that kill sperm, (Male) STD, chronic GU infection or blockage of tract, structural abnormalities, hormone imbalance
    • Prevention: No smoking, no drinking alcohol, healthy diet, no excessive exercise, check all medications & herbal remedies with physician, avoid STDs, maintain healthy weight.

• Amenorrhea
  o How does excessive exercise cause this? (FYI): *Excessive* exercise plus not enough food (energy) intake puts the body into a starvation state where it saves all its resources, shutting down non-essential functions, and does not want to get pregnant. Athletes who eat plenty still may have amenorrhea related to stress hormones which interfere with production of reproductive hormones. Women with amenorrhea are estrogen-deficient, and risk infertility, osteoporosis, etc. Treatment may be to increase estrogen levels

• Pelvic Prolapse (from the American Urogynecologic Society)
  o **Anterior Vaginal Prolapse (cystocele)-bladder**
    The wall between the vagina and the bladder stretches or detaches from its attachment on the pelvic bones. This loss of support allows the bladder to fall down into the vagina.
  o **Posterior Vaginal Prolapse (rectocele)-rectum**
    Weakening and stretching of the back wall of the vagina allows the rectum to bulge into and out of the vagina. Most often, the damage to the back wall of the vagina occurs during vaginal childbirth, although not everyone who has delivered a child vaginally will develop a rectocele.
  o **Uterine Prolapse**
    When the supporting ligaments and muscles of the pelvic floor that keep the uterus in the
pelvis are damaged, the cervix and uterus descend into and eventually out of the vagina. Often, uterine prolapse is associated with loss of vaginal wall support (cystocele, rectocele).

- **Causes and Risk Factors:** Genetics, race, vaginal childbirth, pelvic surgery, back and pelvic fractures, constipation and chronic straining, smoking, chronic cough, heavy lifting, and obesity. Aging and menopause also contribute to decreased pelvic floor strength therefore more risk for prolapse

- **Cervical and Ovarian Cancers**
  - **Cervical** – Etiology: HPV (presence of HPV does not mean the woman has ca.)
    - Risk factors that may increase chances of HPV developing into cancer
      - Immune deficiency, smoking, sexual intercourse with males who smoke, marriage to a male whose previous spouse had cervical ca., obesity, excessive drinking of alcohol
    - **S/Sx:** abnormal cervical bleeding
    - **Diagnosis:** Pap smear
  - **Ovarian** – Etiology: unknown
    - **S/Sx** (From the Gynecological Cancer Foundation): Frequent or urgent urination, lower abdominal or pelvic pain, bloating, difficulty eating or feeling full quickly – over several weeks
    - **Diagnosis:** Visualization with exploratory laparotomy
    - **Prevention:** History of taking oral birth control pills, giving birth, breastfeeding for at least 1 year.

- **Women and Aging (from your text)**
  - Thinning and graying of pubic hair, external anatomy atrophied, less elastic, internal organs shrink, decrease in vag. secretions - all may lead to need for lubricants or hormone cream to improve sexual intercourse. Uterine and ovarian ca. more common with aging. Menopause- women over 50 have increased risk of breast ca.

- **Prostate**
  - For function review your anatomy/physiology
  - **Prostatitis:** (itis = inflammation)
    - **Etiology:** UTI or STD
    - **S/Sx:** dysuria, pyuria, fever, lower back pain
    - **Diagnosis:** urinalysis (UA), urine culture (UC), digital rectal exam
    - **Prevention:** Not smoking, adequate oral hydration, early treatment for any urinary sx, good hygiene
  - **Benign Prostatic Hyperplasia (or Hypertrophy)**
    - **Etiology:** Unknown – possibly hormonal changes related to aging
- S/Sx: nocturia, inability to start urine stream, weak urine stream and inability to empty bladder
- Diagnosis: from symptoms and digital rectal exam
- Prevention: none known – have annual exam
  - **Prostate Cancer** – *this is in your text.* Symptoms similar to BPH, blood test (PSA) is not definitive – biopsy for diagnosis
- **Other Male Reproductive Disorders** – I did not give these much attention - in the readings take note of etiology, symptoms, diagnostics, and prevention.
- **HPV**
  - A couple of statements on transmission:
    - HPV is passed on through genital contact, most often during vaginal and anal sex. HPV may also be passed on during oral sex and genital-to-genital contact. HPV can be passed on between straight and same-sex partners—even when the infected partner has no signs or symptoms (CDC, 2009, see hyperlink below).
    - Most people who are infected with HPV have no signs or symptoms. It is therefore easy to unknowingly spread the virus to a sexual partner through intimate contact. Direct skin-to-skin contact between the genitals, mouth or anus can transmit the virus. Oral warts do not generally develop after having oral sex with a partner who has genital HPV infections. There are a few reports linking oral HPV with dysplasia in the mouth. For oral sex, consider dental dams/condoms to decrease transmission of the virus (University of Illinois at Urbana-Champaign, 2009 see hyperlink below).
  - A couple of good fact sheets:
    - [http://www.mckinley.illinois.edu/handouts/human_papillomavirus.html](http://www.mckinley.illinois.edu/handouts/human_papillomavirus.html)
    - [http://www.cdc.gov/std/hpv/stdfact-hpv.htm](http://www.cdc.gov/std/hpv/stdfact-hpv.htm)
  - **HPV in men:**
### Appendix C

**Student Evaluation Form**

(Totals of student scores inserted)

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Displayed a personal interest in students and their learning</td>
<td>7</td>
<td>10</td>
<td>6</td>
<td>2</td>
<td></td>
<td>3.7</td>
</tr>
<tr>
<td>2. Students were encouraged to ask questions</td>
<td>7</td>
<td>12</td>
<td>4</td>
<td>4</td>
<td></td>
<td>3.8</td>
</tr>
<tr>
<td>3. Students were effectively involved in class discussion</td>
<td>2</td>
<td>8</td>
<td>9</td>
<td>7</td>
<td></td>
<td>3.2</td>
</tr>
<tr>
<td>4. Explained lesson material clearly and concisely</td>
<td>4</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>5. Answers to students’ questions were helpful</td>
<td>7</td>
<td>12</td>
<td>8</td>
<td></td>
<td></td>
<td>3.96</td>
</tr>
<tr>
<td>6. The lesson was well organized</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>1</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>7. Lesson material related to real life situations or clinical experiences</td>
<td>7</td>
<td>12</td>
<td>6</td>
<td>2</td>
<td></td>
<td>3.89</td>
</tr>
<tr>
<td>8. Effectiveness in teaching the subject matter was</td>
<td>1</td>
<td>10</td>
<td>7</td>
<td>8</td>
<td></td>
<td>3.15</td>
</tr>
<tr>
<td>9. The pace of the lesson was</td>
<td>2</td>
<td>12</td>
<td>10</td>
<td>3</td>
<td></td>
<td>3.48</td>
</tr>
<tr>
<td>10. Quality of examples used in the lesson were</td>
<td>2</td>
<td>8</td>
<td>9</td>
<td>3</td>
<td></td>
<td>3.41</td>
</tr>
<tr>
<td>11. Asked questions to gauge student understanding</td>
<td>5</td>
<td>10</td>
<td>5</td>
<td>6</td>
<td></td>
<td>3.53</td>
</tr>
<tr>
<td>12. Power point and case studies were meaningful</td>
<td>10</td>
<td>13</td>
<td>4</td>
<td>1</td>
<td></td>
<td>4.96</td>
</tr>
<tr>
<td>13. Explained/explored difficult concepts well</td>
<td>4</td>
<td>7</td>
<td>10</td>
<td>6</td>
<td></td>
<td>3.33</td>
</tr>
<tr>
<td>14. Lesson feedback was helpful</td>
<td>7</td>
<td>13</td>
<td>6</td>
<td>1</td>
<td></td>
<td>3.96</td>
</tr>
</tbody>
</table>

Please use the following key and mark the box that reflects your appraisal of the graduate student and the lessons she taught:

5 Excellent  
4 Very Good  
3 Good  
2 Fair  
1 Poor  
NA Not Applicable  

Please rate the overall effectiveness of the graduate student’s teaching in class:

POOR 1 2 3 4 5 EXCELLENT

What activities in class are most helpful for your learning?

Please identify what you perceive to be the greatest strengths and weaknesses of the graduate student’s teaching (other than my need for a microphone!).
Appendix D
Classroom Observation Evaluation

I. **Instruction:** Jennifer prepared and delivered 1 class in NURS 441, Theory 3, and 2 classes in NURS 300, Pathophysiology for Nurses. She also assisted in the NURS 442 skill’s fair and some of the on-campus simulations that include high fidelity case simulations and paper case studies. Jennifer was very open to suggestions in preparing for and delivery to the class. This resulted in very interactive power point presentations which included not only important concepts but also pictures, video clips, critical thinking questions, and case studies. She also learned how to engage all of the students in the discussions and activities. She was able to demonstrate her nursing knowledge, and explain terms and concepts clearly.

II. **Student Interaction:** Jennifer learned to move about the classroom and choose students to participate in answering questions and discussing case studies. She was able to guide discussions effectively and was able to complete the class content in the allotted time frame. At the end of the class she asked for student input on information they were confused about. She then answered these questions in an attachment which was sent to the students.

III. **Media/Handouts:** As stated above, Jennifer was able to make her power points interesting and engaging by using a variety of media sources. She also provided handouts which she obtained from Mecosta County Medical Center.

IV. **General Comments:** As I stated above, Jennifer was very open to suggestions. Throughout the semester I saw an improvement in her self-confidence as an instructor. She tends to have a quiet, subdued voice so we came up with strategies to increase her projection and ability to engage the students. She has a great deal of nursing experience and has much to offer. With practice, I think she can become a very effective educator.