Shining Light on the Dark Night - Developing Curricula for Night Experiences

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APPD meeting 2012
• Separate into groups
  ❖ Pre-duty hours: q2/q3
  ❖ Pre-duty hours: q4
  ❖ Post-duty hours: 80 hr work week
1. When was the most productive learning time?

2. When was the least productive learning time?

3. What did you learn most during your time spent on call at night?
Objectives

- Understand Pediatric Program requirements for nighttime teaching
- Review the basics of curriculum development
- Develop instructional strategies and evaluation methods for a nighttime curriculum
• **Night Call**
  - “traditional” night call - working in the day and staying overnight
  - PGY-2 and above
  - Limited to 24+4 hours
  - No additional clinical responsibilities after 24 hours
  - Strategic napping after 16 hours of duty
Definitions from Pediatrics RRC news July 2011

• **Night float**
  - Episodic coverage of patients just at night
  - Residents come from another rotation
  - No more than 6 consecutive nights
  - Limit: one consecutive week and no more than four total weeks per year
Definitions
from Pediatrics RRC news July 2011

• **Night Shift**
  - Scheduled series of nights to provide consistent care at night that mirrors the day shift
  - This is the new paradigm for PGY-1 year
  - Limit of 16 hours per shift
  - **Should** have 10 hours between shifts, and **must** have 8 hours between scheduled periods
  - No more than 6 consecutive shifts
  - No limit on night shifts per month
    - Balance day to night must be appropriate
    - Education must occur during shifts
Purpose of Night Rotations

• Patient care
• Learning the evolution of disease through continuity of patient care over an extended period of time
• Cumulative acquisition and maintenance of skills
• Fostering progressive independent decision-making.

• Structured night-float rotations for which there are formal goals, objectives, and a specific evaluation component, and which provide an educational experience, may count for 1 of the 5 required months of non-intensive care inpatient experience.
I changed these from Red to Yellow. Red is a slide no-no :-)  
Cindy Ferrell, 3/9/2012
Nights vs. Days

What is learned might be different, how the learning experiences are planned should always be the same.
The Basics of Curriculum Development
Developing Competency Based Curricula: 3 Easy Steps

- Competency based objectives
- Instructional strategies
- Evaluation of the learner
For you visual learners

<table>
<thead>
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<th>Instructional Strategy</th>
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Goals vs. Objectives

• Goal
  - General statement of knowledge, skill, or attitude
  - An overall learning outcome
  - What the learner will achieve

• Objective
  - Represents an accomplishment toward goal
  - How the learner will achieve
  - Precise and measurable

Hint: Objectives are the specific outcomes you want!
Step 1: What is a Learning Objective

✓ Related to a goal
✓ Answers the question: “What will the learner be able to do?”
✓ Stated in precise, observable, measurable terms (i.e. the evaluation)
✓ Realistically attainable during the time frame of the curriculum
Using the Milestones

Work in interprofessional teams to enhance patient safety and improve patient care quality

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<td>❖ Seeks answers and responds to authority from only intraprofessional colleagues. Does not recognize other members of the interdisciplinary team as being important or making significant contributions to the team. Tends to dismiss input from other professionals aside from other physicians.</td>
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<td>❖ Beginning to have an understanding of the other professionals on the team, especially their unique knowledge base, and is open to their input. However, still acquiesces to physician authorities to resolve conflict and provide answers in the face of ambiguity. This individual is not dismissive of other health care professionals, but she is unlikely to seek out those individuals when confronted with ambiguous situations.</td>
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<td>❖ Aware of the unique contributions (knowledge, skills, and attitudes) of other health care professionals. Seeks their input for appropriate issues. As a result, is an excellent team player.</td>
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<td>❖ In addition to the above features, individuals at this stage understand the broader connectivity of the professions and their complementary nature. Recognizes that quality patient care only occurs in the context of the interprofessional team. Serves as a role model for others in interdisciplinary work and is thus an excellent team leader.</td>
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Step 2: Select an Instructional Strategy

What is an instructional strategy?

- Way that learners will learn the curricular objectives
- Can be teacher-centered or learner-centered

*Hint: What are you already doing?*
Nighttime instructional strategies (examples):

- Independent Learning:
  - reading
  - completion of asynchronous online modules

- Group Learning:
  - lectures by faculty or by learners
  - midnight rounds
  - discussion
Nighttime instructional strategies (examples):

- Interactive Learning:
  - Case presentations
  - Phone or in person discussion with attendings or consultants
  - Direct observation of patient care by attendings or senior residents
  - Procedures
Nighttime instructional strategies (examples):

• Independent skill building:
  - Interprofessional collaboration and communication
  - Handoff practice
  - Teaching other learners
  - Patient interaction, clinical decision making, and triage
How do nighttime instructional strategies apply to the Milestones?

• Example 1

- COMPETENCY: PATIENT CARE

- Milestone. “Organize and prioritize responsibilities to provide patient care that is safe, effective and efficient“
How do nighttime instructional strategies apply to the Milestones?

**Developmental Milestones**

- **Struggles to organize** patient care responsibilities, leading to focusing care on individual patients rather than multiple patients; **responsibilities are prioritized** as a **reaction to unanticipated needs** that arise (those responsibilities presenting the most significant crisis at the time are given the highest priority); even **small interruptions in task** often lead to a prolonged or permanent break in that **task** to attend to the interruption, making return to initial task difficult or unlikely.

- Organizes the simultaneous care of a **few patients** with efficiency; **occasionally prioritizes** patient care responsibilities to **anticipate future needs**; each additional patient or interruption in work leads to **notable decreases in efficiency and ability to effectively prioritize**; permanent breaks in task with interruptions are less common, but **prolonged breaks in task are still common**.

- Organizes the simultaneous care of **many patients** with efficiency; **routinely prioritizes** patient care responsibilities to **proactively anticipate future needs**; additional care responsibilities lead to decreases in efficiency and ability to effectively prioritize only when patient volume is quite large or there is a perception of competing priorities; **interruptions in task are prioritized** and only lead to prolonged breaks in task when workload or cognitive load is high.

- Organizes patient care responsibilities to **optimize efficiency**; provides care to a large volume of **patients** with marked efficiency; patient care **responsibilities are prioritized to proactively prevent those urgent and emergent issues** in patient care that can be anticipated; **interruptions in task lead to only brief breaks in task in most situations**.

- Serves as a **role model of efficiency**; patient care responsibilities are **prioritized to proactively prevent interruption by routine aspects** of patient care that can be anticipated; unavoidable interruptions are prioritized to **maximize safe and effective multitasking** of responsibilities in essentially all situations.
How do nighttime instructional strategies apply to this Milestone?

• Strategies:
  - Discussion with senior resident
  - Discussion with attending
  - On line modules - i.e. learn PEWS criteria
  - Direct observation by attending to assess ability of resident to prioritize responsibilities - provide ongoing formative feedback
How do nighttime instructional strategies apply to the Milestones?

• Example 2:

• COMPETENCY: INTERPERSONAL AND COMMUNICATION SKILLS

• Milestone: *communicate effectively with physicians and other health professionals*
How do nighttime instructional strategies apply to the Milestones?

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<td><strong>Rigid rules-based</strong> recitation of facts. Often communicates from a template or prompt. Communication does not change based on context, audience, or situation. <strong>Not aware of the social purpose of the communication.</strong></td>
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<td>Begins to <strong>understand the purpose of the communication</strong> and at times adjusts length to context, as appropriate. However, will often still <strong>err on the side of inclusion of excess details.</strong></td>
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<tr>
<td>Successfully <strong>tailore communication strategy</strong> and message to the audience, purpose, and context in most situations. <strong>Fully aware of the purpose of the communication;</strong> can efficiently tell a story and effectively make an argument. <strong>Beginning to improvise</strong> in unfamiliar situations.</td>
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<td>Uses the <strong>appropriate strategy for communication.</strong> Distills complex cases into succinct summaries tailored to audience, purpose, and context. <strong>Can improvise</strong> and has expanded strategies for dealing with difficult communication scenarios (e.g., an interprofessional conflict).</td>
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<td><strong>Master of improvisation</strong> in any new or difficult communication scenario. Recognized as a highly effective public speaker. Intuitively develops strategies for <strong>tailoring message</strong> to context to gain maximum effect. Is sought out as a <strong>role model</strong> for difficult conversations and mediator of disagreement.</td>
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How do nighttime instructional strategies apply to this Milestone?

• Strategies:
  - Direct observation by attending via phone calls, case presentations, and observed interactions leading to formative feedback for learner
  - 360° evaluations
Step 3: Evaluation

Why evaluate?

- To determine if learners achieved the objectives (met the criteria)
- To document competency
- Makes formative feedback easier
Step 3: Evaluation (Examples)

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<th>Examinations</th>
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<td>Case logs</td>
<td>Resident projects</td>
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<td>Self-Reflection</td>
<td>Attendance logs</td>
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<td>Self-Assessments</td>
<td>Medical record completion</td>
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<td>360° evaluations</td>
<td>Global evaluations</td>
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<td>Patient outcomes</td>
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Group Activity
### Group Activity – Now let’s try one!

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Resources

• ACGME program requirements
• The Pediatric Milestones Project
• The Clinician Educator’s Handbook
  - TL Turner, DL Palazzi, MA Ward
  - [http://www.bcm.edu/pediatrics/?pmid=16210](http://www.bcm.edu/pediatrics/?pmid=16210)
• Curriculum Development for Medical Educators
  - DE Kern, PA Thomas, MT Hughes
• Entrustable Professional Activities
  - J Grad Med Educ. 2010 September; 2(3): 419-422
  - Academic Medicine. 2010;85(9):1408-1417
  - BMJ. 2006 October 7; 333(7571): 748-751