

Not All Cases Are Created Equal

Tailoring Cases to Meet Your
Needs

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Why Cases?

- More interesting
- Interactive learning
- Mirrors clinical reality
- Memorable
- Fun

What can we teach with a case?

- INFO: Basic scientific facts
- SKILLS: Hx and Physical, etc.
- ANALYSIS: Clinical Reasoning or Thought process
- AWARENESS: Broader picture/ Reflection/Personal or Professional Development – learn something about yourself, gain insight into the system

How to frame it?

- Example of something to clarify or expand student understanding vs. Learner self-discovery – the “ah-hah” moment
- Review and practice previously learned material vs. de novo presentation of content
- Case as a single, self-contained experience, or does learning continue on outside the classroom experience?

Well, it depends...

- Who are your learners?
- Who are your teachers?
- What is the environment?
- What resources do you have?
- How much time do you have?

Getting started...

- Pick your points – write clear and achievable objectives for the case
- Gather your materials
- Know your audience (and your teachers)
- Select your format
- Make it count

HAVE FUN!

Start with you...

- Why are you writing this case?
 - Brainstorm list of teaching points/objectives for the case
 - What do you want learners to gain in the short-term? The long-term?
 - Do NOT limit yourself at this stage, be broad in your thinking

Reality Check

- What are your time limits? How many objectives can you REALISTICALLY cover?
 - Between patients in a busy clinic – likely 1
 - As a longitudinal small group course over 9 mos, maybe several
- Organize your list in order of importance
 - Try to tease out which items seem crucial to this particular learning opportunity, and which are less vital

Think about your audience

- Number of students
 - 1 on 1 vs. a lecture hall full of 200 students?
- Baseline knowledge level
 - Med 1 vs. Med 3 vs. resident?
 - What else are they learning right now?
 - What do they need to know for the case?
- What types of cases have they done before?
 - Do you want to be consistent with these, or do you want to shake things up a bit?

Think about your audience

- Do they know each other? Do they know you?
 - Students are generally more comfortable speaking in front of peers if they know each other already, especially important if the content matter is controversial or emotionally-charged.
- What are their goals for the session?
 - Focused on testable material
 - Clinical pearls
 - Improve their skills

Write your objectives

- Using what you now know about your audience, go back to your list of goals
- Which of the 4 categories (INFO, SKILLS, ANALYSIS, AWARENESS) are your goals designed to cover?
 - Ideally have one category (2 at most) that is primary focus of the case, unless it is a longitudinal case that evolves over several sessions.
 - Recommend only one new skill set or content area per case to maximize retention

Write your objectives

- Take a moment to start writing up some draft objectives.
- Ask yourself for each one:
 - How does this build on something the learner already knows?
 - Is this realistically achievable in the time I have for this case?

Know your teacher(s)

- Whether this is you or a large group of faculty, it is very important to know something about the instructor as well
 - Comfort level with the subject matter
 - Teaching style
 - Relationship with the learners

Know your resources

- Online case banks
- Video clips from TV or movies
- Case reports or personal accounts from journals
- Library
- Technology in the classroom – Turning point, online references, game show

Choose your format

- Biggest factor is teaching environment:
 - Large group
 - Small group
 - Clinical precepting
 - PBL or Team-based model

BUT – there is room for creativity

Overview of common formats

- “Case examples” – vignette or patient that clearly demonstrates a particular point you are trying to make to the students
 - Melissa, a 24 yo school teacher with 2 day hx of sore throat, large red tonsils with exudate and petechiae on exam, no cough or nasal sx, and a history of several cases of strep throat in her class last week.
- Usually focus on INFO
- No significant dilemma to solve
- Works in any size group, Can be brief or long
- Generally teacher-driven

Overview of common formats

- “Case discussions” – cases or situations that raise some dilemma or puzzle that needs to be solved by the learners
 - Typically presented as a clinical case, but could be newspaper article or other source
 - Usu INFO, ANALYSIS, AWARENESS, less SKILLS
 - Works in most size groups, tends to take at least moderate amt of time
 - Can be student- or teacher-driven
 - Can be verbal, written, video, online
 - Important to provide some closure at end

Overview of common formats

- Clinical role-plays – actual clinical scenario acted out by students, teacher(s), or standardized/actual patients
 - Great for SKILLS, can cover other objective areas as well
 - Usually NOT large group, can take long time
 - Generally student-driven
 - Can raise a dilemma or conflict for discussion
 - Easier in a group that knows each other

Overview of common formats

- Non-medical role-plays – Legal trial, Professionalism Council Hearing, Simulated ethics committee mtgs, etc. where students/teacher(s) take on non-medical roles to debate an issue
 - Typically Small Group, take a long time
 - Great for AWARENESS and ANALYSIS, some INFO
 - Generally student-driven
 - Can generate intense debate, easier in a group that knows each other

Develop your idea

- Personal experience
- Online
- Student/Resident experience
- Colleagues
- News
- Journals/etc.

- Maria, a 16 year old young lady, comes in to clinic very anxious, with questions about the morning-after pill...

How would YOU teach it?

Lecture: Reproductive Phys.

- Objectives: (INFO)
 - Use the case to introduce the concept of the hormonal signals involved in early pregnancy and the mechanism of action of hormonal contraceptive options.
- Audience:
 - Med 2 – case simple, minimal jargon, perhaps change the patient to 19 year old pre-med student for greater identification
 - Resident – More participation, maybe they have to ask for patient hx before details are revealed

Lecture: Reproductive Phys.

- Teacher:
 - Can personalize this with case from your own clinic
 - Can walk the aisles, inviting student participation
 - Comfort with AV options
- Resources:
 - Can use turning point to elicit student interaction
 - Video clips to make the case more real
- Humanizing the concept makes lecture more interesting and shows students why they need to memorize the hormonal cycle.

Clinical rotation - Precepting

- Objectives:
 - INFO: Understand how morning-after pill works
 - SKILLS: Sexual hx taking
 - ANALYSIS: What makes this patient a good/NOT good candidate for the morning-after pill
 - AWARENESS: Cost/other issues for this patient? Barriers to her receiving appropriate contraception
- Audience:
 - Med 1,2 – likely focus more on either INFO or SKILL
 - Med 3,4 – moving more toward the Analysis
 - Resident – Focus on the how to give appropriate therapy and education to the patient

Clinical rotation - Precepting

- Teacher:
 - Extend teaching opportunities beyond the actual patient scenario: “What WOULD make her a good candidate for the morning after pill?” or “What would you do differently if she were 21? If she were 12? What if the sexual contact was NOT consensual?”
- Resources:
 - Engage student in looking up community resources for contraceptive access, safe sex education

In Small Group – M2

- Audience: 18 Med 2 students in PCM
- Objective: (SKILLS) Sexual history taking
 - Paper case of 18 yr old Maria requesting morning-after pill at visit to student health center, where med student is volunteering.
 - Standardized patient encounter to discuss taking a sexual history or to model adolescent interviewing techniques.
 - Discussion of video clip of Maria's clinic encounter, perhaps done poorly, so that students can discuss what works and what does not in taking a sexual hx.

In Small Group – M3

- Audience: 10 Med 3 students on OB/GYN rotation, didactic session
- Objectives: (INFO,SKILLS) Understand basic contraceptive options, practice safe sex educ.
 - Role play with students practicing how to counsel “Maria” on safe sex, how to explain contraceptive options.
- Objectives: (AWARENESS) Spiritual/ethical conflicts in medicine.
 - Intro to class debate about physician spirituality, ethical/moral implications of providing contraception to patients in different situations.

In Small Group – Health Policy Elective

- Audience: 20 Med 4 and pharmacy students interested in health policy
- Objectives:
 - INFO – Process of drug becoming OTC
 - ANALYSIS – Critical eval of safety literature
- Simulated FDA hearing about whether or not the morning-after pill should be approved for over-the-counter use, with students preparing their case ahead of time.

Longitudinal approach

- Audience: PBL-type group of Med 2 students
- Objectives:
 - INFO: contraception, morning-after pill use
 - SKILLS: sexual hx taking, screening for dom violence
 - ANALYSIS: practice formulating assessments, plans
 - AWARENESS: spiritual conflicts, community resources
- PBL case with first session addressing the patient's concern about the morning after pill.
- Follow up demonstrates red flags for dom. violence, complicated social situation, with students assigned to learn more about community resources, interventions.
- Could be done as a series of emailed cases for residents or discussion groups, as well.

Finishing touches

- Reel ‘em in – Make sure your opening line has a hook to grab the learner's attention
- Personalize – The more personal details and dialogue, the more interesting the case is.
- Teaching notes – put some time and thought into prep for the teacher(s) (even if this is yourself)– it will pay off in the long run
- Make it count – provide some sort of follow-up assignment, or at least a summary to show students they learned something worthwhile.
HAVE FUN!

Additional Resources

- National Center for Using Case Study Teaching in Science
<http://ublib.buffalo.edu/libraries/projects/cases/case.html>
<http://ublib.buffalo.edu/libraries/projects/cases/teaching/teaching.html>
** this site has LOTS of great links to others as well
- The Case Method and the Interactive Classroom (By John Foran)
<http://www2.nea.org/he/heta01/images/s01p41.pdf>
- Using Cases In Teaching (from Penn State)
<http://ltl.its.psu.edu/suggestions/cases/index.html>