I have no conflicts of interest.
I will not endorse use of any drugs or equipment—so it can’t be off label use!

Objectives

- Define characteristics of the “quiet learner” (Diagnosis)
- Compare and contrast features of the quiet learner with those of introverts (Cues—pertinent positives and negatives, definition and clarification—problem statement, Differential diagnosis)
- Develop strategies for teaching the quiet learner (Plan)—both in team and individual sessions.
- Develop strategies for giving the quiet learner effective feedback.
- Evaluating the quiet learner.

Engaging the Quiet Learner

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COMSEP, New Orleans 2015
Adapted further from talk I gave PAS 2015 Educational Scholars Faculty Development
Reflect on our own teaching... and learning....

- Who do I teach every day?
  - Medical students? What level?
  - Residents? Fellows?
  - Faculty?
  - Patients? Families?
  - Nurses? Lab techs? Respiratory therapy? Others in health care?
- Am I reaching my learners? Am I certain?

Characteristics of the Quiet Learner

- Think of a medical student or resident...
- We all teach learners of different levels. Most of us need to give advice to other faculty who call or email for help... What does that learner look like?

Problem Cues

- Pertinent positives and negatives....
- Behaviors....

Characteristics of the Quiet Learner

- Slow to warm up
- Does not ask questions
- Appear disinterested, unengaged
- Does not answer questions on rounds, gives one word answers
- Little eye contact
- May speak quietly
- “Too cool for school”
- Arrogant
- Not very smart
- Not well prepared
- Disorganized
- Anxious

Reasons to be a Quiet Learner

- Introvert
- Slow to warm up
- Temperament/personality
- Mental health issues-depression
- Anxiety
- Physical health issues
- Adverse life event
- Shyness, social anxiety
- Lack of preparation
- Lack of interest
- Lack of trust in those around-toxic environment
- Lack of understanding of expectations/ground rules
- Emotional challenge of seeing ill children
- Concern about perceptions
Introverts = Quiet Learners?

- And are all quiet learners introverts?
- Extrovert imperative- culture of personality, society values extroversion…Medical school does too…
- Are you a quiet learner?
- Are quiet learners less smart than their more talkative peers?

Introvert Definitions

- Carl Jung: Introversion is the extent to which one exhibits more self-reflective introspection and less outgoing social behaviors. Extroversion characteristics exist within all individuals, with one characteristic being more dominant.
- Meyers-Briggs:
  - Introverts - inward turning and thought oriented, enjoying specific deep personal relationships and feeling recharged from time alone
  - Extroverts: outward-turning, action oriented socially drawn individuals who get energy from spending time with others.

Great General Review

- Differently social: Need for intimacy expressed differently
  - Introverts often prefer smaller groups, one to one communication, deep conversations
  - Select group of close friends.
  - Tend to listen
  - Extroverts- better at small talk, large groups,
  - More friends, not necessarily as deep
  - Tend to talk

Amygdala

- Kagan and Snidman; temperament and reactivity
  - Individuals with a higher sensitivity to their environment (ie, low amygdala threshold for stimulation) regulate their behavior by introverted behaviors- shy, reflective, anxious, timid. Less seeking of reward, do not require as much novel stimulation.
  - Higher amygdala thresholds have a lower perception of environmental threat, lower sensitivity to stimulation, more likely to be extraverted… outgoing, exploratory and risk taking, reward seeking, novel and heightened stimulation sought.
Medical School Specific

- LCME ED-5A stressing active learning and group learning. Even the library is supposed to be open floor plan with lot of interaction
- Introverts tend to have higher academic success in the first year; lower evaluation related to interpersonal behavior in clerkships
- Higher stress levels overall than extroverted peers
- Small study of surgical clerkship with poor student evaluations differences between teachers and students were not in the extrovert/introvert area but rather that faculty expectations matched their sensing, thinking judging and students perceived expectations from intuition, feeling, and perceiving

Residents

- Anesthesiology Residents - no difference in standardized testing scores between extroverts and introverts.
- Clinical evaluations of overall performance was lower in introverts than extroverts.
- Did not depend on faculty evaluator personality type.
- Small study of surgical residents Contessa et al 2013, extraverted surgeons had a greater tolerance for risk than introverts in the domain of disclosing mistakes.

Other Facets of Personality

- 5 basic tendencies drive our personality…
- Extraversion, neuroticism, openness, agreeableness and conscientiousness
- Meyers Briggs Type Indicators: Extraversion/Introversion, Sensing/Intuition, Thinking/Feeling, Judging/Perceiving
- It's not just the introversion not talking…

What strategies might be helpful?

- Teaching quiet learner in clinic setting?
- On busy inpatient service?
- In small group?
- In large groups?
What strategies might be helpful?

- Depends on reason for being quiet….
- Anxiety?
- Health issues? Mental health issues?
- Life event?
- Apathy? Lack of preparation?
- Introversion….

Difference between introversion and anxiety

- Introvert - enjoys working quietly and focusing intently on task. May need a moment but will come up with something meaningful if it is important.
- Anxiety – worry about future events or places, have concerns about coping - esp in changing settings, tend to be avoidant. May be helped with increased exposure, cognitive restructuring.
- There may be overlap…

Tips for educators

- Don’t think of introversion as something that needs to be cured
- Re-examine “group work”
- Don’t place introverted learners in “high interaction areas”
- Balance teaching methods to serve all learners
- Mindfulness, reflection, active listening

Tips for educators

- Try “pair-sharing” techniques
- Wait five seconds after asking questions (give introverts time to prepare and extraverts time to analyze)
- Online teaching techniques/ asynchronous discussions
- Consider when grading on participation also grading on content knowledge.
- Broaden what is considered participation

Tips for small group learning

- Advance notice of expectations - must observe how learners think in order to evaluate them. Specific orientation.
- Allocation of expert roles to students, allow student to lead an activity
- Pair students with complementary strengths-coach
- Allocate time for reflection- learner can write down an answer then read to the group
- Model behavior expected of students
  - Don’t interrupt
  - Use names, eye contact, don’t single student out
Tips for clinical learning

- Speak with learner individually prior to oral presentations—suggest, practice (in front of a mirror), anticipate questions.
- Allow learner to speak from notes, with the understanding that as comfort increases, notes less important.
- Control the extroverts and gunners—wait 5 seconds after questions or select responder.
- Assign learning topics for the next day, make format for presentation clear.
- Evaluate written work.

- Is there time/space that can be carved out during the day for those who recharge from solitude to “get away” (i.e., Pediatrics more likely than some other specialties to allow time for lunch).
- Susan Cain’s TED talk on introversion can increase understanding. Quiet relief.
  http://www.ted.com/talks/susan_cain_the_power_of_introverts?language=en
- Our library has set aside a floor that does not have as much noise and open floor plan to allow for quiet study.

- Differences of productivity on a task or on a ward might be different depending on framing of activity.
- Introverts more productive in cooperative environment
  - Like people that they meet in a friendly environment
- Extroverts more productive in a competitive environment
  - Like people that they meet in a competitive environment

- Free Trait Theory
  - Fixed traits and free traits coexist.
  - We are born with certain personality traits but we can act “out of character” in the service of “core personal projects”.
  - Introverts under extrovert ideal— but can go the other way too—ie development of strong listening skills.

- Should the Quiet Learner change?
  - Best way to act out of character is to stay true to self and engage in activities you are passionate about.
  - Out of character time excessive, no good outlets, down time, take on too much—emotions leak out in negative ways, health suffers. Energy used acting out of character.
  - Private office for down time, seat toward the back or away from center of attention in meetings.
  - Free trait agreement.
Clinical evaluation methods generally are biased toward extroverted behaviors... willing to speak up, takes the lead, takes initiative. Evaluation of critical thinking skills may be limited by rapidity of expected response, situation in which it is considered...

Consider reflecting on learners...
- Thinks before speaks
- Offers a synthesis of the information
- Listens to peers (patients) before engaging...

Differences in conflict
- Voice may get quiet and flat, manner seeming distant- actually trying to minimize aggression
- May be viewed as emotionally distant. May shut down or become overwhelmed. May be conflict-avoiders.
- Voice raised , sound enraged but actually engaged in problem solving. Hurt if others don't match tone, . More confrontive copers. At ease with up-front , argumentative style.

Techniques that can be helpful
- Most helpful in teaching but techniques of checking for meaning also helpful in patient engagement.
- Have written expectations, written format for presentations, notes, etc.
- One Minute Preceptor

The One Minute Preceptor
- 6 microskills
  - Useful in clinical teaching
  - Allows you to have educational impact in a hurry.
  - Allows you to choose one aspect of care and teach about it.

6 microskills
- 1. Get a commitment
- 2. Probe for supporting evidence
- 3. Teach general rules
- 4. Reinforce positives
- 5. Correct mistakes
- 6. Identify next learning steps
Example

- You are in NBN, the student has done their newborn PE… "I think that there is a murmur…"
- Term infant, AGA,
  - You want the student to tell you about the murmur—where maximal, character/how loud, other associated features (HSM, pulses—pre and postductal, perfusion, i.e. 2nd heart sound appropriately split… for PDA systolic murmur ULSB, likely not harsh, 2/6, full pulses, no other sx. If harsh or diastolic, very bad potentially need to check O2 sats.
  - Get them to draw conclusion
  - Then listen together

Example number 2

- 30 hour old 28 week infant, birthwt 940g, AM wt 980g
- Na= 132 on AM chem
  - Student quickly breezes through the FEN part of morning presentation, unconcerned about hyponatremia…
  - Information to ask to lead to conclusion—urine output 1.5 ml/kg/h, fluid amount 100 ml/kg and what getting D10w with AA and Ca. Does have Uac with ½ N Na acetate—but student does not know this. K 3.4, Cl 00, CO2 16, BUN 6, Cr 0.6. Does not know ABG.
  - Key learning points: increased total body water, need to limit fluid intake, add electrolytes if rest of chem OK.

Demonstration

- 1. Get a commitment
  - Give the student responsibility
  - Don’t fill in pauses. Let them come up with their answer.
  - “What do you think is going on?” “Why do you think the patient has been noncompliant?”

- 2. Probe for supporting evidence
  - Identifies for the student the mental process they went through to get the answer
  - Identifies knowledge gaps
  - “What findings led you to that conclusion?” “What else did you consider?”

- 3. Teach General Rules
  - Generalizes the specific educational point.
  - Don’t have to do it every time
  - No more than 1-3 rules at a time
  - “Patients with ___ usually present with ___.”

- 4. Reinforce positives
  - Specific behaviors.

- 5. Correct Mistakes
  - We tend to jump to this
  - Should be non-judgmental
  - Be specific, behaviorally based
  - Focus on how to correct the problem in the future

- 6. Identify next learning steps
  - Fosters/encourages self-directed learning.
  - Role model your own learning approaches.
  - Agree on a plan
  - “A good place to read about ___ is ____.”
  - Feedback! Why yes it is!
Patients/families

- Consider 4 first steps- may correct but less likely…
- 1- Check for understanding- what do you understand is going on?
- 2- Supporting evidence- why are we doing this procedure? Changing this med?
- 3- Teach general principles- antibiotics don't work for viral infections. But, increased rest, drinking plenty of fluids and nasal saline sprays will help with the cold symptoms…
- 4- Reinforce positives- you did a great job switching from drinking soda with meals to drinking water! It sounds like you are ready to take the next step…

Let’s practice!

- What is a challenging situation for you to teach in?
- Pair up… Student and resident, flip…
- Potential areas…
  - Have the student go in and perform part of the PE- ie abdominal, lungs, heart, neuro with finding.
  - Choose a part of the history
  - Discuss a lab finding, xray interpretation
  - Diagnosis, differential
- At the end, the feedback that I would give is….

Some other quick and easy tips

- **Narrate, narrate, narrate!**
  - Esp important with physical exams- explain what you are doing, seeing, hearing, feeling. Why? Why are you doing what you are? What are you thinking?
  - Paraphrase what struggling student says in more precise terminology- this will reflect back to them what you expect from them.
  - These actions give the students words to use going forward
  - Engage student, call them by name, look them in the eye.

Some other quick and easy tips..

- Make appointment: In 20 minutes we will talk about x. Tomorrow we will talk about y…
- Give them jobs to do, esp if difficult to engage. Might be lost and want to help out but not know how..
- Grab them to go along when you need to go check on a pt. If they are hesitant, insist.
- Body language- be certain that your is open. In time, may point out what you are interpreting of theirs.

THANK YOU!

- If I can be of help individuals, please let me know!
- Bibliography available- but few great studies… maybe we need to do them…