Cool Stuff–2.0!
Report-Outs from VEC

Mee-Ja Sula, DVM, DACVP
Zenithson Ng, DVM, MS, DABVP
Facing the fear of failure: Turning a failing clinical rotation grade into an opportunity for success

Veterinary Educators Conference
June 22, 2018

Zenithson Ng, DVM, MS, DABVP
Mee-Ja Sula, DVM, DACVP (anatomic)
Amy Holford, VMD, DACVIM
Purpose

- To explore the challenges/barriers in failing a student
- To share participants’ experiences with failing students
- To provide resources and support for educators
### How confident do you feel identifying a failing student?

<table>
<thead>
<tr>
<th>Response options</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very confident</td>
<td>1</td>
<td>6%</td>
</tr>
<tr>
<td>Somewhat confident</td>
<td>8</td>
<td>50%</td>
</tr>
<tr>
<td>Neutral</td>
<td>1</td>
<td>6%</td>
</tr>
<tr>
<td>Somewhat unconfident</td>
<td>5</td>
<td>31%</td>
</tr>
<tr>
<td>Very unconfident</td>
<td>1</td>
<td>6%</td>
</tr>
</tbody>
</table>

### How confident do you feel identifying a failing student on a clinical rotation?

<table>
<thead>
<tr>
<th>Response options</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very confident</td>
<td>5</td>
<td>17%</td>
</tr>
<tr>
<td>Somewhat confident</td>
<td>21</td>
<td>70%</td>
</tr>
<tr>
<td>Neutral</td>
<td>2</td>
<td>7%</td>
</tr>
<tr>
<td>Somewhat unconfident</td>
<td>2</td>
<td>7%</td>
</tr>
<tr>
<td>Very unconfident</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>
I feel an obligation to fail an unsafe student

Response options

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>8</td>
<td>50%</td>
</tr>
<tr>
<td>Neutral</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Disagree</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

I feel an obligation to fail an unsafe student on a clinical rotation.

Response options

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>9</td>
<td>28%</td>
</tr>
<tr>
<td>Neutral</td>
<td>2</td>
<td>6%</td>
</tr>
<tr>
<td>Disagree</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>1</td>
<td>3%</td>
</tr>
</tbody>
</table>
### Have you or your service ever failed a student before?

<table>
<thead>
<tr>
<th>Response options</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>10</td>
<td>63%</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>6%</td>
</tr>
<tr>
<td>2–5</td>
<td>5</td>
<td>31%</td>
</tr>
<tr>
<td>More than 5</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

### In the last 5 years, have you or your service ever failed a student on a clinical rotation?

<table>
<thead>
<tr>
<th>Response options</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>10</td>
<td>32%</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>13%</td>
</tr>
<tr>
<td>2–5</td>
<td>15</td>
<td>48%</td>
</tr>
<tr>
<td>More than 5</td>
<td>2</td>
<td>6%</td>
</tr>
</tbody>
</table>

31 Responses
Have you or your service ever wanted to fail a student but felt unable to?

**Response options**
- Yes: 12 (75%)
- No: 4 (25%)

In the last 5 years, have you or your service ever passed a student on a clinical rotation that you feel should have failed?

**Response options**
- No: 33 (83%)
- 1: 7 (21%)
- 2-5: 17 (52%)
- More than 5: 4 (12%)

**33 Responses**
How confident do you feel to fail a student?

Response options
- Very confident: 3 (20%)
- Somewhat confident: 5 (33%)
- Neutral: 4 (27%)
- Somewhat unconfident: 2 (13%)
- Very unconfident: 1 (7%)

How confident do you feel to fail an unsafe student on a clinical rotation?

Response options
- Very confident: 8 (26%)
- Somewhat confident: 8 (26%)
- Neutral: 4 (13%)
- Somewhat unconfident: 7 (23%)
- Very unconfident: 4 (13%)

Engagement: 78%

Responses: 31
The 6 barriers

1. Evaluator’s professional consideration
2. Evaluator’s personal considerations
3. Trainee related considerations
4. Unsatisfactory evaluator development and evaluation tools
5. Institutional culture
6. Consideration of available remediation for the trainee
Of the 6 barriers just discussed, which do you find has the MOST impact on your decision to fail or not fail a student?

Response options

- Assessor's professional considerations: 3 (21%)
- Assessor's personal considerations: 3 (21%)
- Trainee related considerations: 1 (7%)
- Institutional / Administrative culture: 6 (43%)
- Consideration of available remediation: 1 (7%)

Total responses: 14

Of the 6 barriers just discussed, which do you feel MOST prevents you from failing an unsafe student on a clinical rotation?

Response options

- Assessor's professional considerations: 4 (12%)
- Assessor's personal considerations: 2 (6%)
- Trainee related considerations: 5 (15%)
- Unsatisfactory assessor tools: 8 (24%)
- Institutional / Administrative culture: 8 (24%)
- Consideration of remediation: 6 (18%)

Total responses: 33
Greatest pearls from small group activities

• Faculty are not alone in recognizing that failing a student is difficult
• There are a variety of barriers to failing a student
• Frequent feedback is key
• Administration needs to provide clear guidelines, then support faculty’s decisions when failure is warranted
A roundtable on giving student feedback

- Literature supports that you *actually say the word feedback*
- What are your expectations for the next 10 days / what do you want to accomplish

Some Ideas discussed during the roundtable

- *Evalue – online*
  - Monday of week 2 – student do own self eval best three strengths, worst three / things they wish to work on.
  - Tuesday they do not have cases in afternoon to allow for time for face to face. Faculty members split the students between each other
    - Students who have borderline (c’s) not told they are passing, told they are borderline
    - Great because get to spend time with the good students
More on feedback

• Worksheet / checklist you could use on the clinic floor
  • In the moment – could you give a grade out of 1-10 on their necropsy protocol? Could you have a circle sheet for samples and methodology, and understanding of case.

• Online journal every day students are given time to write self assessment of each procedure / case that they did. Self assessment each day and each faculty member has access to see.
  • Make the case log part of their professionalism. Same as doing medical records.

• When there are multiple faculty – they have a group meeting to talk about each of the students just to confirm that each agrees on the quick final grade.
Clinic as a classroom

- Clinical teaching in hospitals provide unique challenges and opportunities. This session explores the role of both the academic institution and the individual clinical teacher in fostering instructional excellence in the teaching hospital.
Prerounding!
Prerounding

**Perceived Challenges**
- Inefficient during receiving
  - Unfocused history with gaps
  - Unorganized case presentation
  - Struggle with clinical reasoning
- Poor case transference
  - Absences
  - Unexpected events
- Missed learning opportunities
  - Diagnostic procedures
  - Rushed paperwork

**Perceived Benefits**
- Ensures all review cases
- Students hear about all cases: better transference
- Stay on schedule / more efficient receiving
- More cohesive history
- Stay with patient diagnostics
- Start paperwork earlier

---

**How does pre-rounding affect your clinical reasoning skills?**

- I am more comfortable making a problem list.
- I can make a list of initial differentials.
- I can make a diagnostic plan based on my differential list.
- The group discussion is helpful for learning about a problem.
- Pre-rounding helps me apply didactic information for a clinical case.
- My clinical reasoning skills have improved.

**Qualtrics**

$n = 12$ clinical veterinary students
Discharges – to do or not to do?

• Clinician does discharges
• Students may or may not do case summaries
• Takes way too long for students to do
• Does it truly add to student learning?
Clinical reasoning

- This is a black box, but this is what we are trying to assess...
What can we assess (observables)

1. Knowledge base (MCQs, Key features, verbal examination)
2. Decision making / Problem solving

**No right process in the black box of reasoning because the learner has different background and experiences to process the info - also non-cognitive factors (stress, fatigue, self efficiency, motivation)**
**Context specificity**

- Old thinking is that thinking process different between expert and novice
  - Experts have better processes

- Difference is knowledge
- In the correct CONTEXT
  - Need to test students in many contexts (in hospital, out of hospital, typical and atypical presentations)
Why MCQs are less than optimal

• MCQs correlate only about 10% to clinical reasoning
  • Fill in the blanks much stronger correlation

• Simplification to eliminate red herrings
  • With MCQs, can’t give too many red herrings because makes not a valid question, so we end up simplifying the case - but life obviously has red herrings!

• Cuing
Key Feature Examination

1. Step essential to solve the problem
2. Area where students often make mistakes

An open scenario with a specific problem

Followed by 2-4 questions which are designed to assess clinical decision making and action - NOT factual and not reasoning process - the point is to assess application of knowledge to the resolution of a problem

Question is designed to assess most critical / challenging steps
The pros and cons of key features

- Pros
  - Clinical relevance
  - Assesses hypothesis generation without prompting
  - Good validity and reliability
  - Tests effectiveness, not thoroughness

- Cons
  - Learning curve to develop tests
  - Short answer questions take longer to grade
  - Complex scoring system
Why not thoroughness?

*Experts tend to be less thorough and more effective than novices*

- When in doubt - collect more data!
  - This does not improve diagnostic accuracy but is instead an indicator of uncertainty and increased probability of diagnostic error
**Location/Setting**
Outpatient Clinic

**Patient's Age**
Older adult (55-65 years)

**Patient's Gender**
N/A

**Key Features**
Given an adult patient presenting with a painful, swollen calf, the candidate will:

1. Include deep venous thrombosis in the differential diagnosis
2. Elicit a history of risk factors for deep venous thrombosis: cigarette smoking, previous knee problems, previous neoplasia, recent intercontinental air travel, recent surgery, and recent work environment

<table>
<thead>
<tr>
<th>Question</th>
<th>KF-1</th>
<th>KF-2</th>
<th>KF-3</th>
<th>KF-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
Question 1  Format W1
What diagnosis(es) are you considering at this time? You may list up to two.

1. 

2. 

Key Feature 1.
Given an adult patient presenting with a painful, swollen calf, the candidate will include deep venous thrombosis in the differential diagnosis.

Scoring Key

<table>
<thead>
<tr>
<th>Score</th>
<th>Criteria</th>
<th>Synonyms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>Deep venous thrombosis</td>
<td>Deep vein thrombosis, DVT</td>
</tr>
<tr>
<td>0</td>
<td>Listing more than two responses</td>
<td></td>
</tr>
</tbody>
</table>
Question 2  
Format SM  
With respect to your diagnosis(es), what elements of his history would you particularly want to elicit? You may select up to seven. Select option #27 if no other information is needed at this time.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Alcohol intake</td>
<td>Score</td>
</tr>
<tr>
<td>2.</td>
<td>Allergies</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Angina pectoris</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Anti-inflammatory medication</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Cigarette smoking</td>
<td>1.0</td>
</tr>
<tr>
<td>6.</td>
<td>Colour of stools</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Cough</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Headache</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Hematemesis</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Impotence</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Intermittent claudication</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Low back pain</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Nocturia</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Palpitations</td>
<td>0</td>
</tr>
<tr>
<td>15.</td>
<td>Paresthesias</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>Paroxysmal nocturnal dyspnea</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>Polydipsia</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>Previous back problems</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Previous knee problems</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>Previous neoplasia</td>
<td></td>
</tr>
</tbody>
</table>
Key Features

Given an adult brought to the emergency room with multiple seizures and without having regained consciousness, the candidate will:

1. Generate a provisional diagnosis of status epilepticus;
2. Begin initial therapy including administration of intravenous vitamin B complex (thiamine), hypertonic glucose bolus (50% dextrose), and lorazepam or diazepam or clonazepam or phenobarbital AND phenytoin;
3. Elicit a history to identify possible causes of the seizures (including alcohol use, medications, illicit drugs, and diabetes history); and
4. Order immediate investigations to identify potentially treatable causes of the seizures, including electrolytes, glucose, calcium, arterial blood gases, drug screen, and CT or MRI of brain.

<table>
<thead>
<tr>
<th></th>
<th>KF-1</th>
<th>KF-2</th>
<th>KF-3</th>
<th>KF-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Q3</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Q4</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
Our challenges when we tried this in a workshop

“A kitten has been vomiting for three days.

What are the key features?

**NE consortium trying to develop key feature exams in veterinary medicine**
Preparing our students to be graduate ready

- **VetSet2Go** was a collaborative, multi-national project that set out to define the capabilities most important for employability and success in the veterinary profession, and create assessment tools and resources to build these capabilities.

- The focus on employability led to a focus beyond initial employment and graduate competency towards sustained success in the profession, regardless of the context.
• VetSet2Go project identified **18 key capabilities** that are consistently important to employability in veterinary contexts. These aligned to broad, overlapping domains defined by their outcome orientation.

• We aimed to make the capabilities that contribute to employability more explicit in education, to help students better prepare for the challenges they may encounter in transition to practice.
Rank order statistics (most to least important) for Recent Graduate Vets (i.e. less than 3 years since graduation)
Rank order statistics (most to least important) for Academics

Veterinary employability capabilities / themes

Communicating with Clients: 3.14
Teamwork: 3.89
Communicating with colleagues: 4.45
Motivation: 4.68
Working behaviour: 5.08
Self-education: 5.47
Technical skills and knowledge: 6.18
Resilience: 6.89
Work-life balance: 7.78
Personal efficacy: 7.99
Business skills: 10.44
<table>
<thead>
<tr>
<th>Recent Grads</th>
<th>Employers</th>
<th>Academics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1   Communicating with clients</td>
<td>Communicating with colleagues</td>
<td>Communicating with clients</td>
</tr>
<tr>
<td>2   Communicating with colleagues</td>
<td>Teamwork</td>
<td>Teamwork</td>
</tr>
<tr>
<td>3   Teamwork</td>
<td>Working behavior</td>
<td>Communicating with colleagues</td>
</tr>
<tr>
<td>4   Working behavior</td>
<td>Technical skills and knowledge</td>
<td>Motivation</td>
</tr>
</tbody>
</table>
Least important

<table>
<thead>
<tr>
<th>Recent Grads</th>
<th>Employers</th>
<th>Academics</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Personal efficacy</td>
<td>Work-life balance</td>
</tr>
<tr>
<td>9</td>
<td>Self-education</td>
<td>Self-education</td>
</tr>
<tr>
<td>10</td>
<td>Business skills</td>
<td>Business skills</td>
</tr>
</tbody>
</table>
Lessons Learned from a simulated client scenario

• Communication styles of veterinary students with a client presenting his seeing-eye dog for hindlimb weakness
• Students (n=10) were not prepared to address the psychosocial impact of disease
• When client asked if the dog would work again
  • I think so...depends on recovery
  • Depends on what he sees in surgery
  • You'll have to ask the agency
  • It's hard to tell
• Uncomfortable about talking about disability
Cross-sectional assessment of Emotional Intelligence of trainees in a teaching hospital

- EQi2.0
- Training level was found to have effect on EQi
- 3rd year residents had lowest EQi
Immersive opportunities using synthetic models

- **Benefits**
  - Welfare concerns
  - More realistic than cadavers
  - Increased confidence and competence in students

- **Disadvantages**
  - Cost
  - Maintenance
There’s Always Enough Time to Build Cultural Competency: 10 minute exercises you can learn to lead

• Unlike traditional lecture delivery, facilitated activities around clinical cases provide opportunities for exploration of self-understanding and empathy for others

• Introspective exercises
  • Personality Pie
  • Glasses
Equity Bingo!

<table>
<thead>
<tr>
<th>Volunteers at a food pantry</th>
<th>Is part of the LGBTQ community</th>
<th>Is part of a mixed race family</th>
<th>Has been or met someone without housing</th>
<th>Grew up speaking a language other than English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Becky</td>
<td><em>Amy</em></td>
<td></td>
<td><em>Christine</em></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Is paying off education loans</th>
<th>Voted in the last election</th>
<th>Does not currently have any pets</th>
<th>Has ever not had insurance</th>
<th>Has a family member or friend with a physical disability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Becky</em></td>
<td><em>Free</em></td>
<td><em>Lauren</em></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attends a Mosque</th>
<th>Has lived in a foreign country</th>
<th>Has relied upon food stamps or knows someone who has</th>
<th>Has a service animal</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Becky</em></td>
<td><em>Free</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Has a learning disability or neurodevelopmental abnormality (ADHD, autism, dyslexia, etc.)</th>
<th>Has worked with a counselor or therapist</th>
<th>Has served or is an active member of the military</th>
<th>Was adopted</th>
<th>Has an educational background other than science</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Is atheist or agnostic</th>
<th>Has a same sex life partner</th>
<th>Has traveled south of the Equator</th>
<th>Celebrates holidays different from yours</th>
<th>Has a mental health diagnosis (anxiety, depression, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Jennifer</em></td>
<td><em>Same</em></td>
<td><em>South</em></td>
<td><em>Different</em></td>
<td></td>
</tr>
</tbody>
</table>

**INSTRUCTIONS:** Find a person who fulfills the criterion for each square and record their name in the box. The first person to earn a “Bingo” wins a prize.
Enhancing teaching with a college-wide peer review of teaching program

- Observation feedback rubric:

  **Time**  **Observer Log of what is happening in class**

- Sit in the back of the room and focus on what the students are doing – be objective
  - “I noticed that when you asked this question … the students did this”
Thanks!