

## V. Highlighted achievements/activities

DOMAIN 1a Teaching (clinical) <span style="float: right; color: red;">Do not exceed 2 pages.</span>	
Name: [REDACTED]	Affiliation: [REDACTED]
<b>1. Name your teaching activity(ies):</b> Identify the impactful activity you've select to focus on.	
[REDACTED] Exotic Animal Medicine (Clinical Rotation) "Recall and Resources" case-based learning emphasis.	
<b>2. Your role(s):</b> Describe your role(s) and specifically what you contribute.	
Most weeks I am the lead faculty member on our exotics and wildlife clinical rotation. Along with other clinical duties such as patient care, client communication, and consultation with general practitioners I am responsible for instructing fourth year (clinical year) veterinary students on rotation. I have found the most effective way for me to teach in this busy environment is to focus my efforts on case-based learning. My goal is to help students realize how much applicable knowledge they do have and to help them practice recalling and applying that general knowledge in novel circumstances. Over the years I have developed and improved my method of guiding students through diagnostic and treatment plan development in unfamiliar situations. After they work through the plan in a real-life scenario, I provide them with reliable resources they can access beyond our rotation.	
<b>3. Learners and amount of contact:</b> Describe types, levels and numbers of learners; amount of contact you have with them.	
[REDACTED] is one-week optional rotation. Each week between one and three fourth year veterinary students take this rotation. Since my appointment is almost completely clinical, I am on clinics over 40 weeks per year. Much of the time I am the only faculty member on, so have extensive contact with the students. In the student evaluations provided in Appendix A, 84% of respondents report spending >20hrs of contact time with me and 34% report >40 hours during their rotation (we put in long weeks in our department).	
<b>4. Goals and learning objectives:</b> List goals and <u>learning objectives</u> of this activity. If these are extensive, provide just a few illustrative examples.	
Asking students to generate a diagnostic or treatment plan for a patient that presents to the teaching hospital is a common exercise on most clinical rotations. However, our unique clinical situation requires adapting this method to accommodate our student's wide spectrum of previous knowledge. No one appreciates being asked a lot of questions to which they don't know the answer. The goals of the guided recall portion of the exercise are to: <ul style="list-style-type: none"> <li>• Help students learn how to make good judgment calls despite high levels of uncertainty: What to do when you don't have all the information is an important clinical skill for students to develop.</li> <li>• Teach students to apply their general knowledge out of context, in other words show them what they already know in unfamiliar circumstances.</li> </ul> Applying basic knowledge to a case is important, but veterinarians they will need access to more species/disease information in order to provide adequate care to their exotic or wildlife patients. The goal of the second portion of this exercise is for students to: <ul style="list-style-type: none"> <li>• Know what resources to access and trust going forward. As I tell my students, being a good veterinarian isn't all about what you know, it's about knowing where to look.</li> </ul>	
<b>5. Methods:</b> Describe the methods used for instruction, how these align with objectives, and rationale for choices.	
1) Recall. My trademark question to students after they present a case history is "So, Almost Doctor, what do you want to do next?" This is a fun way of asking them to formulate a diagnostic/treatment plan while reminding them that they will be calling the shots very soon. I start with this question because there are only so many first-line diagnostics available to a veterinarian, and they are often the same in exotic species as they are in companion mammals. The student's answers then open up discussion about tailoring options to the situation at hand. Similarly, when I ask a student about a procedure (e.g., where can I draw blood from a hamster?) if they don't know the answer, we take a step back and work up to it using the knowledge they already have. In the hamster example, we would talk about how a vessel needs to be big enough to be useable. I have them work their way	

<p>from the small peripheral vessels they're more used to using in companion animals towards the heart until they get to the answer (cranial vena cava).</p> <p>2) Resources: I try to have a short, 5-10 minute, conversation with every student about the exotic animal resources available to them after they graduate. It includes the most useful reference books, most reliable websites, and an explicit invitation to reach out to me in the future with questions and consults. Often this conversation arises naturally over the course of the week when I access one of these resources for a client communication sheet or when a species or disease is new to me (it's good for them to see that even a specialist doesn't always have all the answers right away). This interaction gives them the next step from the "Almost Doctor" exercise. I provide them with responsible and trustworthy resources to use out in general practice after they have applied all of their relevant knowledge and need to know where to go for the specifics.</p>
<p><b>6. Rationale:</b> Describe why and how you chose the method(s) you used.</p> <p>Exotic animal species and wildlife medicine are not a part of the required curriculum. Most students come to our rotation with little or no species-specific knowledge. This is intimidating to veterinary students who are used to always knowing the answer. My goal is to use our heavy caseload to facilitate student learning. I want to teach students 1) how to apply the knowledge they already have 2) where to go for additional information.</p> <p>1) Recall: Case-based learning suits our clinical rotation because our heavy caseload leaves no time for structured topic rounds. In this environment, good practice makes better. Having students practice accessing information they have already learned in novel circumstances will make it more accessible and useful to them in our often-unpredictable profession.</p> <p>2) Resources: Our goal and our value to the hospital is not in creating exotics-specialty veterinarians in one week. We have a much bigger impact by providing students with easily accessible resources they can access out in practice. They cannot retain all the novel information presented to them on this rotation, so in practice I would rather they have proven resources at hand than spend time trolling online trying to find legitimate sources themselves.</p>
<p><b>7. Results and impact:</b> Describe evidence of learner satisfaction (<i>e.g. student ratings of teaching/course</i>), learning outcomes, application of knowledge in other settings at your institution, impact on educational programs within the institution, and/or teaching awards.</p> <p>Students consistently provide positive feedback about my teaching style in their anonymous end-of-rotation evaluations. Clinicians are rated from 1 (Unsatisfactory) to 5 (Excellent) in five areas of teaching competency. Over the last five years I have averaged ratings between Very Good and Excellent in all five categories. Please see Appendix A for a full breakdown of my scores. Additionally, students are given space for optional comments. Examples of positive feedback on my recall and resources emphasis:</p> <p>"Dr. [REDACTED] facilitates learning by asking the students questions and showing them what they already know."</p> <p>"Dr. [REDACTED] is very knowledgeable and took time to ask if I needed more reference materials for when I am out in practice, which was very appreciated"</p>
<p><b>8. Reflective critique:</b> Describe your reflections, what went well and plans for improvement. If applicable, briefly explain how the information obtained through this teaching activity and its evaluation changed your overall educational practices?</p> <p>One of the biggest challenges with this rotation is balancing student learning with a continually increasing caseload. Many students have appreciated and commented on my efforts to prioritize teaching despite the other demands on my time. In my educator evaluations from students the most common constructive criticism involves the busy nature of our rotation interfering with student learning. This method of recall and resources strikes the necessary balance well enough that my efforts are focused on expanding its use throughout the rotation. I cannot do anything to decrease our patient load and I cannot create time that we don't have, but I can make the effort to use every single case as a teaching opportunity. Just like for my students, practice makes better. The more effort I actively put into including teaching in my clinical duties the more naturally it happens. Please see student review summary in Appendix A.</p>
<p><b>9. Dissemination:</b> If applicable, describe how your efforts have been recognized by others externally through peer review, dissemination, use by others, or teaching awards nationally.</p>
<p>N/A</p>

## VI. Appendices

### Appendix A: Summary of student evaluations ( [REDACTED] Exotic Animal Medicine Clinical Rotation)

The following is a summary of student feedback on my clinical teaching over the last five years. ([REDACTED])




[REDACTED] Overall, I receive very positive feedback from students regarding my clinical teaching abilities. At the end of each rotation students are required to complete an anonymous evaluation about their experience. One section of the evaluation focuses specifically on the instructor. They provide ratings on five areas of teaching competency and answer one question on amount of contact with clinician.

#### Subjective Scores:

Clinicians are scored on the following scale of 1-5 (1=Unsatisfactory, 2=Satisfactory, 3=Good, 4=Very Good, 5=Excellent). Below are my average scores over the last five years:

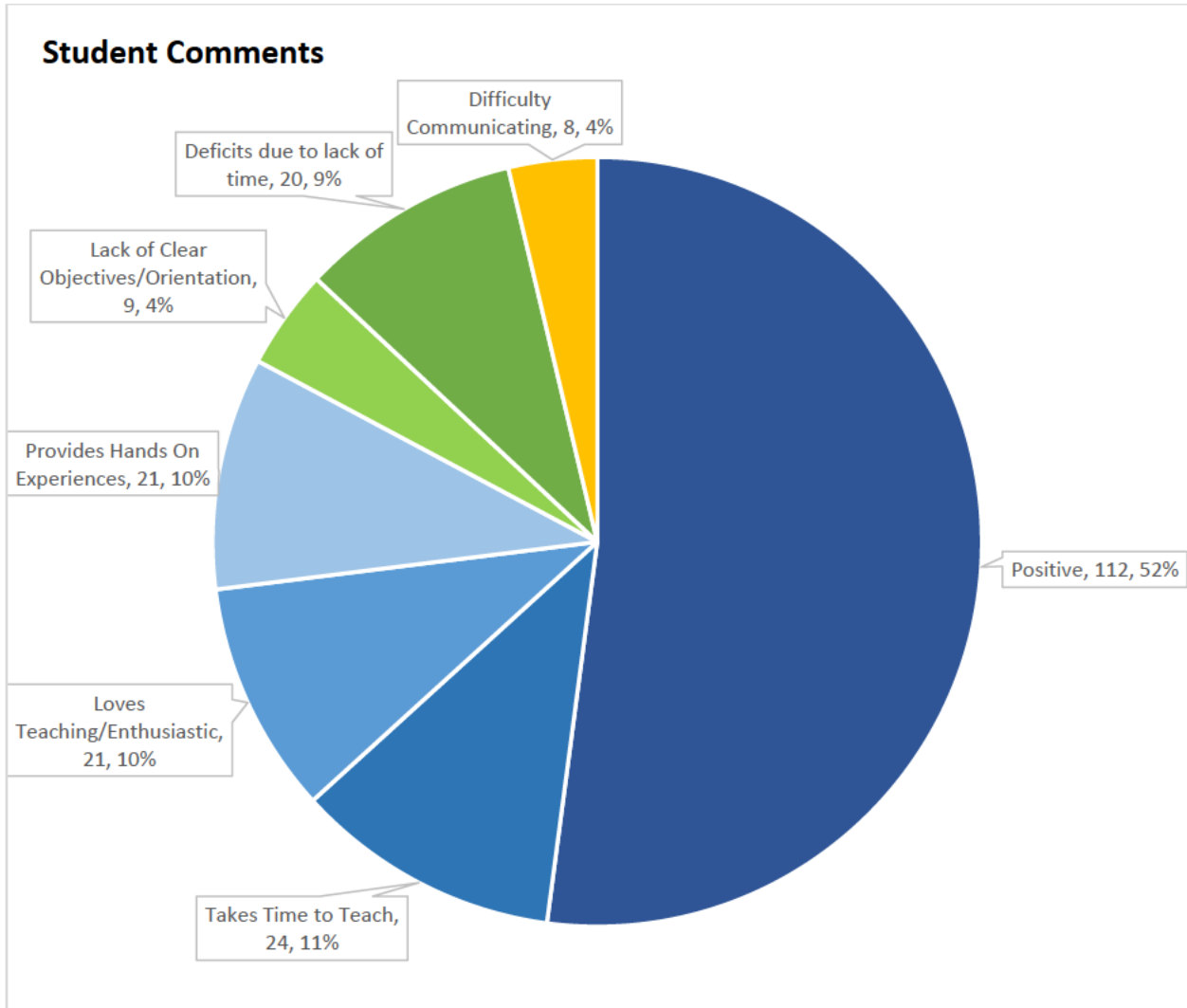
Category	My average rating over the last five years
Knowledge and Competence	4.68
Interest in teaching and ability to communicate	4.15
Ability to motivate achievement of objectives	4.12
Development of skills and confidence during contact	4.11
Extent of help in attaining objectives	4.05

Additionally, students report a high level of contact time with me. This reflects my commitment to be available to them during clinic hours.

Extent of Contact with Clinician	Number of Responses	Percent of All Answers
Minimal <5 hours	5	3.85%
Moderate 5-20 hours	15	 11.54%
Substantial 20-40 hours	65	 50.00%
Extensive >40 hours	45	 34.62%

### Student Comments:

Students are also given space to provide comments justifying their scoring. I have summarized the content of student comments in the following pie chart. Over the last five years 83% of the comments have been positive (blue), 13% have reflected constructive criticism (green), and 4% have been negative (yellow). Students can comment on more than one area and can repeat the rotation so individual viewpoints may be represented more than once.



## Positive Feedback

Themes covered in the positive comments include my enthusiasm for and love of teaching, acknowledgment and appreciation that I make time to teach students on rotation and that I provide lots of hands-on opportunities for practical skill development. Below are a sample of positive comments I have received:

“Dr. [REDACTED] seemed to really enjoy teaching myself and the other student on rotation with me. [REDACTED] would always ask us pertinent questions to a case that we were assigned and whenever we asked questions, she answered openly and honestly as if we were already clinicians. [REDACTED] showed us respect and made us feel like we deserved to be there learning from [REDACTED]. If we ever answered a question wrong or made an educated guess, there was never any judgement on her part. [REDACTED] was a fantastic clinician to work with!”

“Dr. [REDACTED] worked hard to build me as a practitioner.”

“[REDACTED] was also very hands-on and fostered our development of skills including palpation and restraint.”

“Dr. [REDACTED] seems like [REDACTED] loves to teach students. [REDACTED] was very helpful and often created teaching moments that I appreciated.”

“Dr. [REDACTED] is an excellent educator and should be commended for [REDACTED] ability to make students feel competent, fulfilled, and confident. I honestly didn't notice any major weaknesses. I wish I had more time to work with [REDACTED]!”

“Dr. [REDACTED] is sensitive to the many different shades of exotic knowledge of rotating students and teaches each individual accordingly.”

“Great at balancing efficiency and still letting students get hands on experience.”

“Strengths: getting students to think critically and extend general medicine mechanisms to exotics”

“Dr. [REDACTED] was always willing to take an extra minute or two to teach us something interesting about a case or show us interesting diagnostics. [REDACTED] was very busy but never acted like [REDACTED] was bothered by having students there and in the way, [REDACTED] seemed to enjoy teaching us new things.”

“Dr. [REDACTED] is extremely even-keeled and dedicated to student learning. [REDACTED] adjusted to unexpected changes in schedule and emergencies with total aplomb, and used every available opportunity to teach.”

## Constructive Criticism

The constructive criticism I received falls mostly into two categories: our busy schedule negatively affecting teaching opportunities, and a need for more explicit rotation expectations and objectives.

High caseload challenge: Our caseload is both the greatest challenge and the greatest asset to teaching on the exotics rotation. Some aspects of this I cannot change. For example, I cannot provide topic rounds on weeks when the caseload already has us all (students, faculty, technicians) working until seven o'clock or later. However, I can make sure that I actively resist getting caught up in the "just get things done" mentality. I believe this is a strength of mine but as some of these reviews show I still have room for improvement. This is a skill that I know takes practice and that I actively work to improve.

Clear expectations: Currently our lead technician handles the initial orientation, and she does a wonderful job conveying rotation expectations to our students. However, as these comments show I need to do a better job of explicitly making my expectations as their supervising clinician clear. I plan to set aside a small amount of time at the beginning of the rotation to address the standards that I hold students to and in turn the standards that they can hold me to.

"Overall, Dr. [REDACTED] was enjoyable to work with and was very understanding and willing to teach when time allowed it. [REDACTED] was very knowledgeable and explained well about the concepts/knowledge of exotics/wildlife we worked with. I would recommend [REDACTED] to explain more of [REDACTED] expectations since I felt this was lacking in the rotation. Otherwise, [REDACTED] is a great clinician to work with."

"Dr. [REDACTED] shows interest in teaching when [REDACTED] has the time to do so. While [REDACTED] was very knowledgeable in [REDACTED] work, [REDACTED] appeared to sometimes show disinterest and focus solely on the task at hand. This discouraged me at times to ask questions since we were caught up with completing a task rather than learning a concept. I think explaining the expectations that this would happen would be helpful for the rotation."

"I wish there were rounds. We were quite busy."

## Negative Feedback

I do receive a small number of negative comments. These fall almost exclusively into the realm of poor communication or that I can come across as brusque. A small number of students have found me unapproachable or grumpy. While it's true that you can't please everyone, this is the exact opposite of my goal as an educator so I pay attention

to these reviews and try to adjust my behavior accordingly. I am also very fortunate in that I have an effective lead technician who feels comfortable enough with me to point out when I am coming off as abrasive.

"Sometimes I felt like a burden to [REDACTED]. [REDACTED] didn't communicate with me as well as I would hope."

"I felt as though the questions I asked were not taken seriously or that I should have known the answer already. This was mainly due to tone of response and facial expression/body language which I understand is difficult to regulate, but it frequently made me feel inadequate"