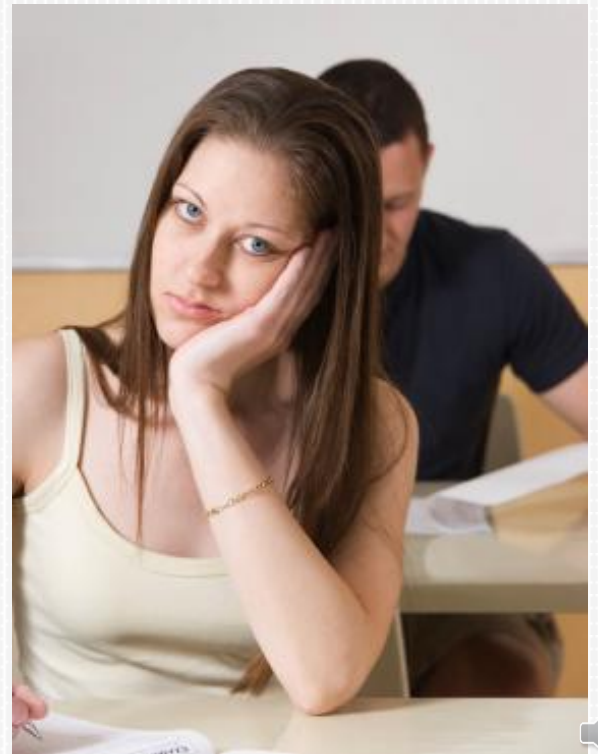


WRITING YOUR TEACHING PHILOSOPHY STATEMENT



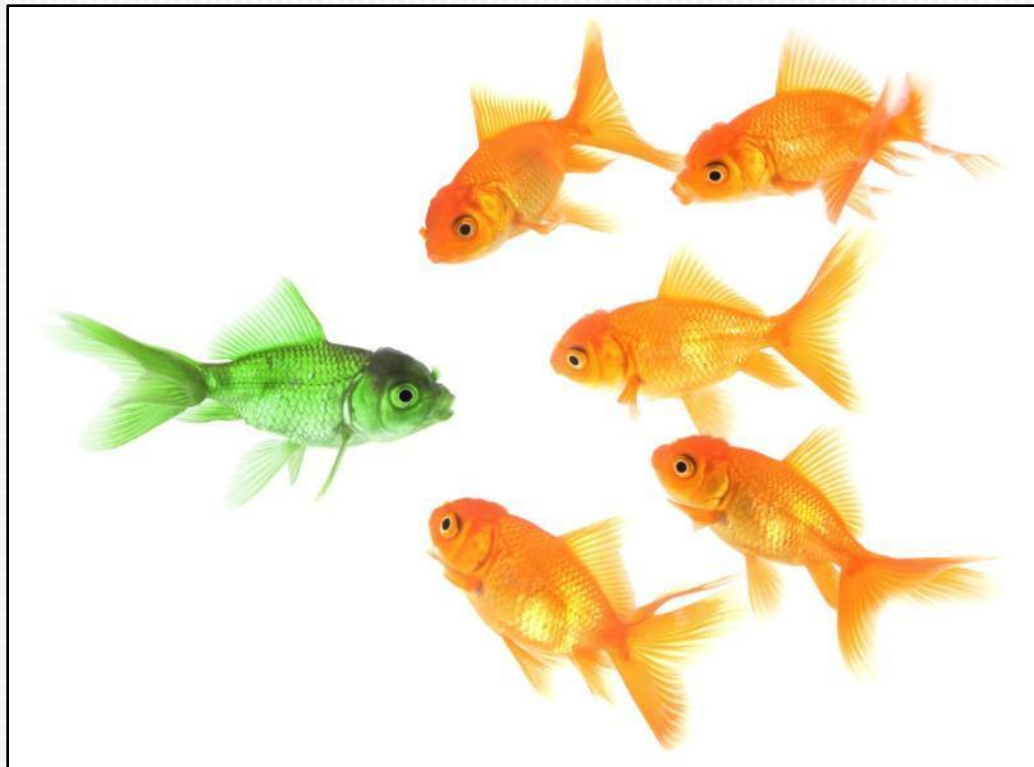
TEACHING PHILOSOPHY STATEMENT GOALS

- ✘ To SHOW your prospective colleagues or employer that you know the fundamentals of effective teaching:
 - + Engaging your students
 - + Assessing your students
 - + Organizing your instruction



GOALS - CONTINUED

- ✦ To STAND OUT from dozens (or hundreds) of other teaching philosophy statements



THE NAME IS WRONG – SORT OF

- × THINK about your teaching ideas
- × EXPLAIN a little bit about what you believe teachers should do; support with research
- × PROVIDE EXAMPLES of your beliefs
- × It's less about philosophy and more about your practices
- × SHOW – don't TELL



A WORD ABOUT DIVERSITY STATEMENTS

- ✘ More applications require one
- ✘ Do not try to include it with your teaching statement
- ✘ It must be tailored to each institution
- ✘ No more than a single page



KEY ELEMENTS OF A TEACHING STATEMENT

- × Formatting
- × Introduction with a personal story
- × Previous experience/training /mentoring
- × Student goals/mentee goals
- × How you help students achieve your goals
- × Examples of teaching/mentoring strategies
- × Reference the literature to support your claims



KEY ELEMENTS OF A TEACHING STATEMENT

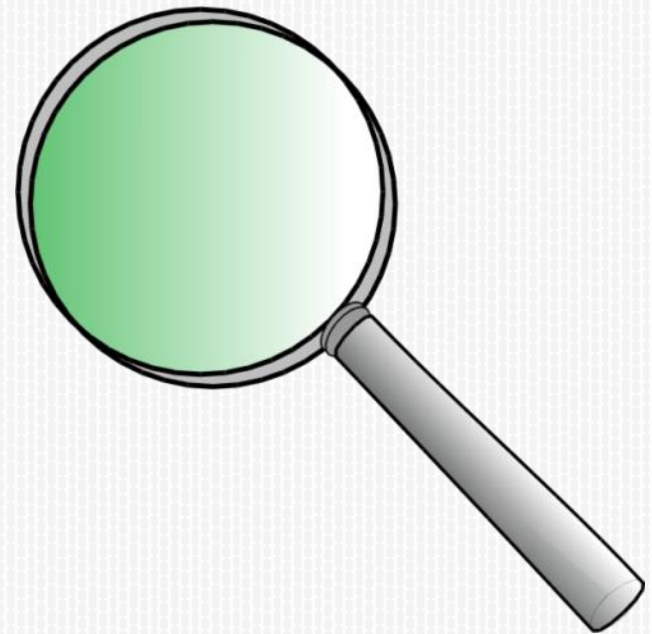
- × A list of courses, both undergraduate and graduate, that you would feel comfortable teaching
- × A single statement about your willingness to create and/or teach an online class (this is a highly sought-after skill)
- × A mention of the institution's or department's mission, goal, or diversity statement and how you can help meet it
- × Conclusion



FORMATTING

- × Length – No more than 2 pages
- × 1” margins
- × Double or 1.5 inch spacing
- × 10 - 12 point standard font

× You don't want to have a lot of text jammed closely together.



“What do I want
someone to
remember
about me?”

“How do I
want to be
perceived?”

“How can I **create**
the right
first impression?”



INTRODUCTION

- ✘ A personal story to capture the reader's attention
 - + A time you struggled to learn something
 - + A student or mentee you successfully helped
 - + An obstacle you overcame in your educational career
 - + How this influenced your ideas about teaching
- ✘ You only have a few seconds to make a first impression



PREVIOUS EXPERIENCE / TRAINING

- × BRIEFLY mention your previous teaching or mentoring experiences (and any awards for teaching)
 - + Teaching or graduate assistant in graduate school
 - + Mentoring or training high school summer interns, undergraduate or graduate students
 - + Adjunct position
- × Include a mention of training or workshops / seminars you've taken about teaching
- × **One paragraph at most**
- × **If you have NO previous experience, don't mention it**



STUDENT GOALS

- ✘ Picture a student walking out of your class for the last time.
- ✘ What **SKILLS** or **ABILITIES** do you want your student to have long after your class is over?
- ✘ What will your student do with the **KNOWLEDGE** s/he has learned?
- ✘ Not **ALL** of your students will become doctors, scientists, researchers, etc.



SPECIFIC STUDENT GOALS

- Becoming **scientifically literate**, which means “the knowledge and understanding of scientific concepts and processes required for personal decision making, participation in civic and cultural affairs, and economic productivity.”
- Effectively communicating complex scientific topics to others



SPECIFIC STUDENT GOALS

- × Learning to collaborate with a diverse group
- × Being able to apply scientific knowledge to real-world and personal problems
- × Improving critical thinking skills
- × Improving self-learning habits



TEACHING STRATEGIES – SHOW, DON'T TELL

- ✘ Provide EVIDENCE for how you will help students achieve your goals.
- ✘ If you have NO previous experience, pretend you are teaching an introductory class.
- ✘ Provide examples of effective teaching strategies.
 - + BE SPECIFIC: Explain what you did (or will do) and what you had (or will have) your students do.



GENERAL STATEMENT (TELLING)

- ✘ “I value helping my students understand difficult information. I am an expert, and my role is to model for them complex ways of thinking so that they can develop the same habits of mind as professionals in the medical field.”



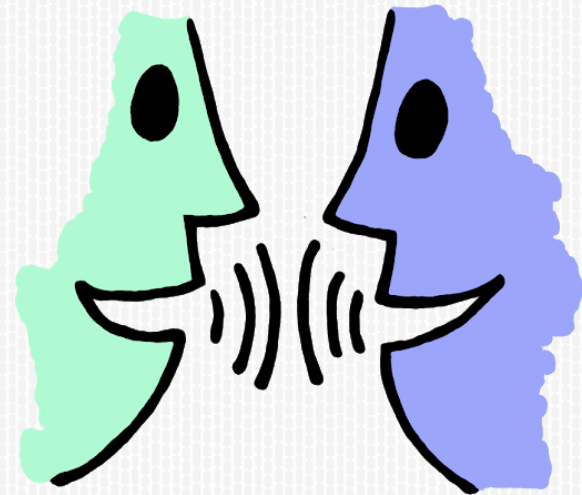
GENERAL STATEMENT (TELLING)

- × "I believe that beginning science students should be introduced to the principles of creating hypotheses, designing experiments, data collection and analysis, and drawing conclusions. By learning the scientific method, they develop critical thinking skills they can apply to other areas of their lives. Small group work is a crucial tool for teaching the scientific method."



GENERAL STATEMENT (TELLING)

- ✘ “I always make an effort to engage and motivate my students when I lecture. I use several active learning techniques: small group discussions, real-world problem solving, and thought-provoking questions.”



SPECIFIC STATEMENT (SHOWING)

- ✘ *I always make an effort to engage and motivate my students in class. For example, when introducing how energy is produced by the mitochondria, I would first ask students how the food they eat is used for energy by their bodies.*
- ✘ *Then students would talk in small groups and share their thoughts. After presenting information about the Krebs cycle, I would have them create a flow chart illustrating how glucose is broken down and transformed into ATP.*



TEACHING STRATEGIES – SHOW, DON'T TELL

- ✘ Include 1 or more references to how you will use modern technology to enhance your instruction and your students' learning
 - + The clicker system or related app ([Socrative.com](https://www.socrative.com) or [Nearpod](https://nearpod.com))
 - + Online databases
 - + Videos, animations, simulations
 - + Interactive white space
 - + Webinars
 - + Online discussion boards, blogs, Twitter feeds, social media



EXAMPLE OF INCORPORATING TECHNOLOGY

- × *I always make an effort to engage and motivate my students in class. For example, when introducing how energy is produced by the mitochondria, I would first ask students how the food they eat is used for energy by their bodies. Then students would talk in small groups and share their thoughts.*
- × ***I would use a short animation** about the Krebs cycle when introducing the topic. Afterwards, I would have them create a flow chart illustrating how glucose is broken down and transformed into ATP. **This could be done on an interactive white space or using an app on a smart phone.***



REFERENCE THE LITERATURE ON TEACHING

- ✘ CITE YOUR SOURCES to support your ideas on effective teaching strategies.

- + Don't give the impression that every single idea you have is based on your personal, subjective experiences.



- ✘ This shows the reader that you are knowledgeable about current findings in science education or teaching & learning.



LITERATURE RESOURCES

Active learning increases student performance in science, engineering, and mathematics:

× <http://www.pnas.org/content/111/23/8410.abstract>

A Program Aimed toward Inclusive Excellence for Underrepresented Undergraduate Women in the Sciences

× <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5332037/>



LITERATURE RESOURCES

Vision and Change: A Call to Action 2010 Summary Report (about changing undergraduate biology education):

× <http://visionandchange.org/chronicling-change/>

Carl Wieman Science Education Initiative – papers and presentations (can be used to support any STEM education at the undergraduate level):

× http://www.cwsei.ubc.ca/SEI_research/index.html



REFERRING TO A MISSION STATEMENT

- ✘ Include a very brief mention of the institution's mission, goal, or diversity statement (all American & Canadian colleges and universities have these).
- ✘ The purpose is twofold:
 1. It shows the reader that you want to work THERE, and aren't just randomly sending out applications.
 2. It gives the reader a clear idea of how you can help their institution meet its goals.



COLUMBIA'S STATEMENT

- ✘ It seeks to attract a diverse and international faculty and student body, to support research and teaching on global issues, and to create academic relationships with many countries and regions. It expects all areas of the university to advance knowledge and learning at the highest level and to convey the products of its efforts to the world.



LIST OF COURSES & ONLINE TEACHING

- ✘ List 2 – 3 undergraduate courses you'd be able to teach, including the course(s) in the job description.
 - + Include graduate courses only if the job is for a 4-year university, tenure-track position.
- ✘ **Clearly state if you are willing to create and/or teach an online course.**



- ✘ Adapt this section based on the job description.



CONCLUSION

- ✘ Have a strong, sweeping conclusion about your goals for your students.
- ✘ The goals should be **ACHIEVEABLE** and practical, not vague and overly optimistic.



EXAMPLES OF CONCLUSIONS

- ✘ “Whether my students will ever choose a scientific career or not, they will all leave my classes being able to use current and future scientific knowledge to make reasoned decisions that affect their lives.”



EXAMPLES OF CONCLUSIONS

- ✘ “The skills my students learn will help them be productive and capable citizens, regardless of the career path they take.”
- ✘ *“I am dedicated to improving the scientific literacy of all my students to better prepare them for the challenges, both global and local, they will face in the future.”*



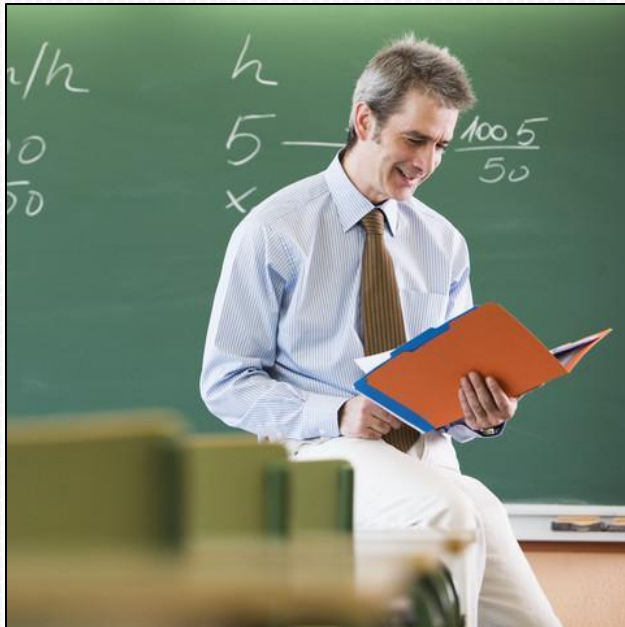
WHAT NOT TO SAY

- × Start with a quote about teaching.
- × Describe your lack of experience.
- × Reference poor teaching techniques.
- × Use words with overly emotional tones:
 - + “I would be delighted...”
 - + “I am passionate about...”
 - + “It would be a great pleasure to...”
 - + “I am thrilled when...”
 - + “It would be an honor to teach...”



ADAPTING YOUR STATEMENT

- ✘ Know your audience
- ✘ How your research relates to your teaching



KNOW YOUR AUDIENCE

ONLY TEACHING

- × Community colleges offering associate degrees or certificates
- × Many smaller liberal arts colleges offering bachelor's degrees
- × Instructional faculty at 4-year universities
- × Adjunct faculty at any institution

RESEARCH + TEACHING

- × Many smaller liberal arts colleges
- × 4-year universities offering bachelor's, master's and doctoral degrees



TEACHING VS RESEARCH + TEACHING

ONLY TEACHING

- ✘ You are focused on the student as a whole more than just teaching skills and knowledge.
- ✘ You are highly knowledgeable about the latest research regarding STEM education.
- ✘ You are supportive, communicate with students regularly, acknowledge the differences between traditional and non-traditional students.

RESEARCH + TEACHING

- ✘ You were inspired to become a doctor/scientist, and you want to inspire others.
- ✘ Teaching helps prepare the next generation of scientists/doctors.
- ✘ You are more focused on skills and knowledge than the student as a whole.



HOW RESEARCH RELATES TO YOUR TEACHING

ONLY TEACHING

- ✘ Your EXPERIENCE with research will help you bring real-world examples into your instruction.
- ✘ You are KNOWLEDGEABLE about current findings in your field.
- ✘ You can help TRAIN students to think like a scientist.

RESEARCH + TEACHING

- ✘ Your RESEARCH RESULTS can be discussed in your classes, bringing in real-world examples.
- ✘ You are KNOWLEDGEABLE about current findings in your field.
- ✘ You can PROVIDE OPPORTUNITIES for students to do authentic research.



SUMMARY

- ✘ SHOW, don't TELL
- ✘ Demonstrate your KNOWLEDGE about effective teaching and using TECHNOLOGY to enhance your instruction
- ~~✘ Avoid NEGATIVE statements~~
- ✘ Have achievable student goals and outcomes
- ✘ Tailor each statement for a SPECIFIC position and need



FIRST DRAFT

- ✘ This statement takes much longer to write than you can imagine.
- ✘ Be sure to follow the directions about formatting, and include all the required elements without going over the page limit
 - + 2 pages, maximum, at 1.5 or double spacing



QUESTIONS?



barbara.houtz@gmail.com

