

Writing a Teaching Philosophy Statement

Helen G. Grundman

This article is the second in an occasional series intended for graduate students. The series is coordinated by Associate Editor Lisa Traynor.

For many new to the academic job market, one of the most daunting steps of assembling a dossier is that of writing a teaching philosophy statement. What is a teaching philosophy? How do teachers and future teachers figure out what their philosophies are? Once you know what your philosophy is, how do you articulate it in a manner appropriate for a job application?

Of course, there are no cut and dried answers to any of these questions. The concept *teaching philosophy statement* is hardly well-defined. It means many different things to different people. The good news is that job applicants can use this to their advantage: the teaching philosophy statement can be crafted in whatever form best communicates the applicant's beliefs and strengths.

The following is a collection of suggestions for approaching the task of determining or refining your own teaching philosophy and of writing a statement suitable for job applications. Obviously, the advice reflects the beliefs and biases of the author, and following these suggestions is by no means the only way to write a statement. The hope is that at least some of the ideas presented here will be useful to many readers. This method for developing a statement of teaching philosophy is based on the one used in the course "Graduate Perspectives in Mathematics Pedagogy" (Math 670), taught at Bryn Mawr College during the fall semester of 2005. The design and implementation of the course was funded as part of the Mathematics and Science Partnership of Greater Philadelphia by the National Science Foundation (Grant #0314806).

Helen G. Grundman is professor of mathematics at Bryn Mawr College. Her email address is grundman@brynmawr.edu. She wishes to acknowledge the support of the National Science Foundation.

Getting Started

So you are entering the job market and therefore need to write a statement of your teaching philosophy. As mentioned above, the statement can include a variety of things. For some, the vastness of the topic leads to a sort of writer's paralysis. For others, the problem is simply coming up with something to write.

This section consists of a series of exercises designed to help with either of these problems as well as to provide an organized procedure for anyone wanting to write a teaching philosophy statement. The exercises ask you to express your views on some very specific topics and are aimed to help you to discover or to clarify your own feelings and beliefs about teaching. These are the sorts of ideas that you may want to include in your teaching philosophy statement.

The following exercises can be done on your own, but are much more effective when done with others who are also trying to write teaching philosophy statements. If you don't know anyone else on the job market just now, then find someone (preferably someone who teaches math) with whom you can discuss your responses. Input and reactions from other instructors will enable you to clarify your own beliefs and determine how to express them most effectively.

Exercise 1

This first exercise is an easy one. Sit down with some paper and write out answers to each of the following questions.

1. Why do you want to teach mathematics? (Try to give your answer in a single succinct sentence.)
2. When you go into an undergraduate classroom to teach, what are your goals? (List as many as you would like.)

3. What are the goals of undergraduate mathematics education? (Again, make your answer as short or long as you would like.)

Find out how some other teachers answer these questions. Feel free to change your answers after your conversations.

Exercise 2

Chances are that in the previous exercise, you found that you have many goals as a teacher. This exercise is about prioritizing your goals.

In the accompanying table is a (long) list of teaching goals. Add any of yours that are missing from the list.

Part I: Suppose you are soon to teach a Calculus I course. Choose your top 10–25 priorities from the list and order them from greatest-to-least importance for you. (This is not an easy task, but spending some time at it can help you to clarify what is most important to you.)

Part II: Now suppose that you are soon to teach an advanced course for senior math majors. How

does this change your prioritization of your goals? Repeat Part I of this exercise in this changed context.

Exercise 3

Now consider what you most like to teach and why.

Part I: Choose one of the following courses that you like to teach or would like to teach:

- Fundamentals,
- Pre-calculus,
- Calculus,
- Multi-variable calculus,
- Linear algebra,
- Differential equations.

Sit down with a friend or colleague and take about 3–5 minutes to explain your choice. While explaining, try to give specific clarifying examples and to articulate your enthusiasm.

Part II: As soon as possible after completing Part I, write a paragraph beginning with one of the phrases:

Some Common Teaching Goals

- Communicate that mathematics is fun
- Detect and fill gaps in students' prior math knowledge
- Develop a mathematical sense about quantities, geometry, and symbols
- Develop a variety of problem-solving strategies
- Develop basic computational skills
- Enable and empower students
- Enable students to make judgments based on quantitative information
- Enable students to prove basic results
- Enable students to read mathematics effectively
- Enable students to understand their own thought processes
- Encourage a broader interest in math
- Ensure that students really understand concepts
- Establish constructive student attitudes about math
- Facilitate acquisition of life-long learning skills
- Foster a desire to ask mathematics questions
- Foster critical thinking
- Foster student discovery of mathematics
- Foster understanding of the proofs of key theorems
- Teach the beauty of mathematics
- Help students learn the key theorems and their applications
- Improve students' confidence
- Improve students' understanding of technology
- Improve students' writing abilities
- Increase the number of math majors
- Increase the students' mathematical knowledge
- Model expert problem solving
- Motivate students to make an effort to learn mathematics
- Open doors to other opportunities for students
- Prepare future mathematicians
- Prepare students for technical careers
- Prepare students to be knowledgeable adults
- Reduce math anxiety
- Teach applications to other fields
- Teach calculator and computer skills
- Teach fundamental concepts
- Teach generalizing
- Teach logical reasoning
- Teach mathematical writing
- Teach predicting
- Teach problem solving
- Teach proof-reading of mathematics
- Teach students how to translate back and forth between words and "math"
- Teach students to work collaboratively

"My favorite lower-level math course to teach is...."

OR

"The lower-level math course I most look forward to teaching is...."

Read over your paragraph, noting the degree to which you focused on the students you want to teach. If appropriate, rewrite your paragraph using student-centered rather than teacher-centered statements.

Exercise 4

What do you feel makes for great teaching?

Part I: Choose a truly excellent math teacher who taught you at some point in your life. Again, sit down with a friend or colleague. This time describe exactly what it was that made this teacher excellent.

Part II: Make a list of characteristics of what you think of as good undergraduate-level teaching. Consider the aspects you included in your description of the excellent teacher you had. Should any more of these be added to your list?

When your list is complete, put stars by the characteristics that you plan to try to adopt as your own.

Exercise 5

Write a synthesis of the above exercises, expressing your interest in and enthusiasm for teaching at the college level. Be sure to discuss your goals and include "students" as the focus of your teaching. Although length is not terribly important at this point, aim for approximately one typed page.

Some Generalizations

Although teaching philosophy statements are different things to different people, there are some generalizations that are commonly (though perhaps not universally) held to be true about them.

Your teaching philosophy statement is about *you*, not about some abstract topic. It's about *your* beliefs about a major portion of the career you have chosen. It can tell a hiring committee a great deal about your approach to teaching, your knowledge about teaching, and, if you so choose, your experience of teaching.

At the same time, your teaching philosophy statement is about teaching and therefore about your students and their learning. Don't lose track of your students while writing about your teaching. When possible, make statements about teaching that are student-centered.

Be careful that the word *philosophy* doesn't lead you to using a dry, passive writing style. Express your enthusiasm! (If you have no enthusiasm for teaching, consider redirecting your job search.) This is your chance to communicate to the hiring committee your passion for teaching and how it will lead you to being effective at your new job.

If at all possible, your statement should enable the reader to imagine you in the classroom, teaching. You want to include sufficient information for picturing not only you in the process of teaching, but also your class in the process of learning. This does not mean that you need to describe a class explicitly. It means that in explaining your beliefs, your goals, and your methods, you should allow the picture to form for the reader. It means that you should clearly state your strengths: your energy, your organization, your love of the subject, etc., and in what way these strengths will benefit your students.

Exercise 6

Write a draft teaching philosophy statement. Start from scratch or use your writing from previous exercises, making modifications as you see fit. This is only a first draft, so don't feel that you need to strive for perfection. At the same time, make sure that what you write clearly expresses what you are trying to communicate. Aim for a length of at most one typed page.

Time for Research

Now that you have something in writing, it's time to do some research. Find out what others believe does and doesn't belong in a teaching philosophy statement. The easiest way to do this is to search on the Internet, but you can also ask any younger faculty you know whether they have statements they would be willing to share with you. (You can certainly also ask older faculty, but they may not have any since these statements were less commonly used before the last decade or so.) You want to collect a variety of statements, including ones that you don't particularly like, to help you identify what aspects you want to avoid. Try to collect around 15–25 statements.

Read each teaching philosophy statement carefully. Make notes on what you do and do not like about each. Be sure to consider both the content and the style. Make note of the topics that you do and do not want to include in your statement. Decide whether there is a particular style or format that you think will work best for you.

Now you are ready to take your first draft and develop it into a clear and effective statement of your teaching philosophy, keeping in mind what you've learned from your research. Although you want to use your first draft as a starting point, don't feel restricted by it. You may decide that much of your earlier writing will not make it into the final statement. Alternatively, you may decide that your first draft is very close to being your final draft. In any case, allow yourself to write a series of drafts instead of trying to write a final draft on the very first edit.

Take full advantage of the fact that the teaching philosophy statement really isn't well-defined. Focus

your attention on what you most want to communicate to the hiring committee about teaching, be it your thoughts and beliefs, your experience, your plans, something else, or a combination of these. In the following section are some thoughts to keep in mind as you rewrite and edit.

Rewriting and Editing

Again, there are no hard and fast rules, but here are some suggestions and reminders to think about as you edit.

- Make it short: 1–2 pages. Keep in mind that a long application is often only skimmed over and you'd rather have yours actually be read.
- Sell yourself. Discuss your strengths and why you feel they are important. (Remember that strengths can be in the form of beliefs and potential as well as experience.)
- Explain your main priorities as a teacher.
- Remember that teaching is about students and so your philosophy should be, too. Avoid sounding pompous or condescending towards students.
- Be concrete. General principles are fine, but can be interpreted in many ways. As possible, support your statements with specific examples of what you want to do while teaching. Help the reader visualize you in the classroom.
- Don't repeat what is in your curriculum vitae. You will certainly discuss some of your teaching experience in both. Yet in your philosophy statement, your emphasis is on your beliefs and how they motivate and improve the way you teach. In your vita you want to list all of your teaching experience and, if you so choose, expand on it a good deal. You have plenty to say, so there's no need to be repetitive.
- Be careful about your grammar and spelling. Verb tense can be particular tricky since you might change multiple times between your present beliefs, your past experiences, and your hypothetical future.
- Try to make your teaching philosophy statement unique to you. If you complete the exercises in this article before reading other teaching philosophies, your individuality is likely to come through in your statement without additional effort on your part. Still, be careful that your statement does not end up too similar to any others that you've read. The hiring committee is likely to read a great many of these statements and you don't want yours to be just like the rest.

Further Ideas and Final Thoughts

Congratulations! You're almost finished!

At this point you should have a draft teaching philosophy statement with which you are quite happy. This section has some final points for you

to consider when making final changes before sending out your statement in your application package.

First a few points to consider. Depending on your particular statement, any one of these might lead to a significant improvement.

- Consider including a sentence describing or listing courses that you feel confident about teaching. (If you'd like, you can go on from this to discuss what your favorite is and why.) Be sure that you do not leave the hiring committee with the impression that you could teach only a very small number of courses.
- If you have ideas for involving undergraduates in mathematics research, try to work this into your statement. For many schools, your interest in such activities is a definite plus.
- You might want to mention ways in which you want to grow as a teacher, describing the kind of teacher you hope to become. Be careful, however, to present such information in a positive way. The last thing you want to do is draw attention to a weakness.

Next, if you are applying to a wide range of schools with varying emphases on teaching, you may find it easiest to write multiple versions of your statement. Some schools want evidence that you will be a good teacher, but not spend too much of your time on teaching. Others want to know that you truly care about teaching as well as research. Some departments state explicitly in their advertisements that they are interested in specific aspects that you may want to address for them.

Now that you are almost finished, you need to make sure that you do not have any "surprises" hidden in your statement. Unfortunately, it's all too easy to have a sentence that, while being perfectly clear to you, may be read in a very different way by a hiring committee. Often the problem is that the sentence suggests something that you never meant.

A simple statement of your beliefs might be read as your not being open to other views. A statement of your preferences might be interpreted as saying that you have no interest in any other teaching. Your goal is to find a balance between making a clear statement that might make you sound too rigid and making an overly vague statement that makes you sound cooperative, but without a vision.

The best way to find these "surprises" is to have others read your statement and tell you what they think it says. At this point, you might want to solicit input from friends outside of mathematics as well as from your peers and from faculty with whom you are comfortable.

If you know other mathematicians who are on the job market, this is a great time to get together as a group and read each others' statements. In giving feedback, be very careful to be constructive

rather than destructive. Also, try to avoid general discussions on which style or choice of content is *best*, since what is best depends on the individual whose statement you are considering.

Importantly, if you are not happy with your teaching philosophy statement, and editing doesn't seem to help, you are not stuck with it. Sometimes early in the process of developing a teaching philosophy statement, one makes a decision that then leads to a statement that just doesn't feel right. At this point, writing a brand new statement will probably be much easier than you think. Go back to your notes on what you want to include and not include and what style you like best. Revisit those decisions to see if any should be changed. Is there something that was cut that you'd like to reincorporate? Did you add something that now doesn't sit right with you? Look back at your original writings to reconnect with what is most important to you, then sit down and write a fresh version, trying to make it different from what you have now. Set it all aside for at least a few hours. When you return, review the previous section of this article, read over both of your last drafts, and write a new version incorporating the best of each. Chances are you'll be happier with the resulting statement. Proceed to rewrite and edit, as before.

Once you have a teaching philosophy statement with which you are happy, incorporate it with your other application materials and have someone proof-read the entire package. (It's amazing how many typos can find their way into an application, even after each piece was carefully checked!) Along with a well-thought out and well-written teaching philosophy statement, a well-organized and clear application package can go a long way in convincing a hiring committee that your teaching will be of equally high quality.